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COMMUNICATIONS SATELLITE CORPORATION

Initial Stock Offering

1964

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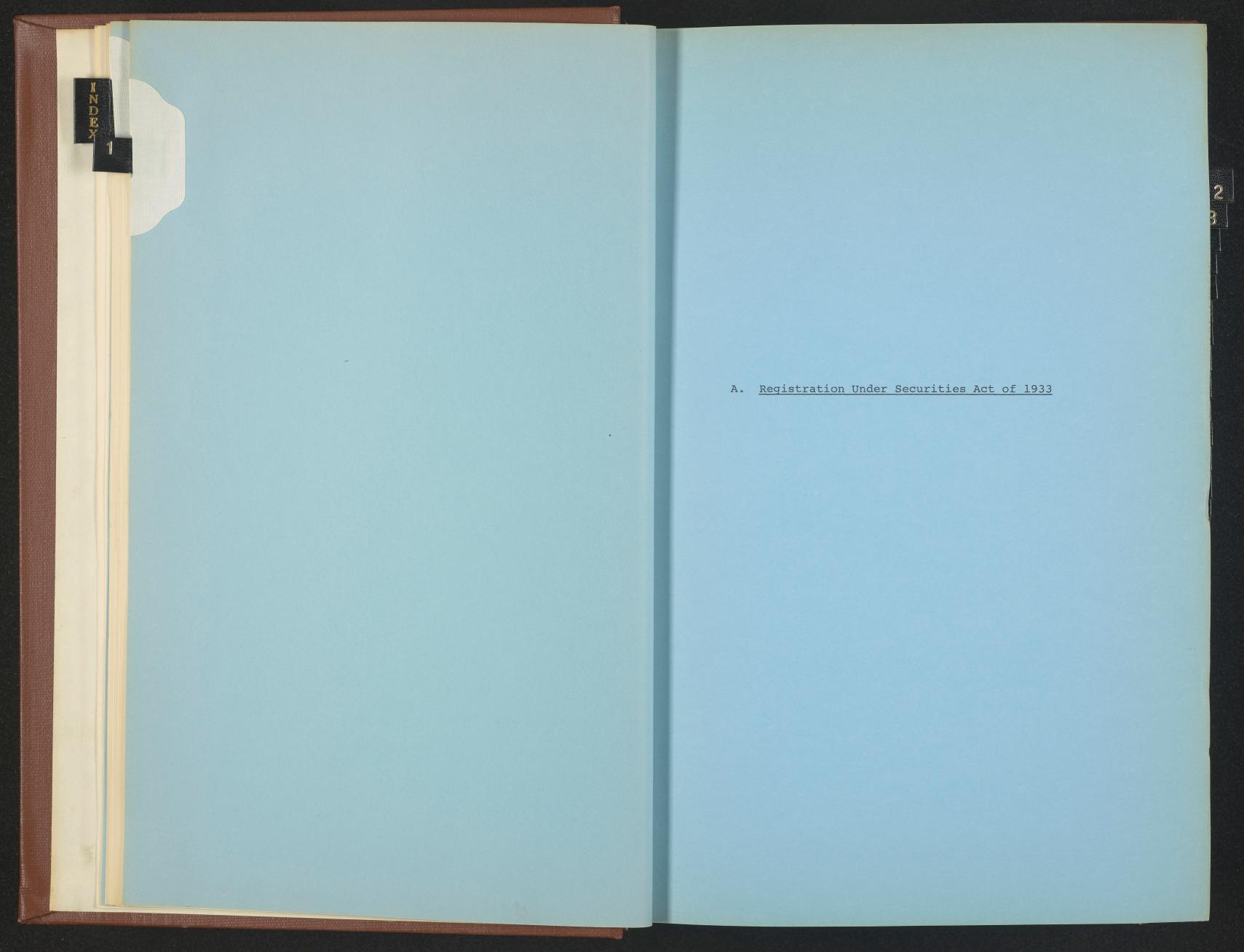
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SECURITIES AND EXCHANGE COMMISSION

WASHINGTON 25, D. C.

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

COMMUNICATIONS SATELLITE CORPORATION

(Exact name of registrant as specified in charter)

3029 Klingle Road, N.W. Washington 8, D.C.

(Address of principal executive offices)

ALLEN E. THROOP, Esq.

Vice President
and

General Counsel

3029 Klingle Road, N.W. Washington 8, D.C. (Name and address of agent for service)

It is requested that copies of notices and communications from the Securities and Exchange Commission be sent to:

LLOYD N. CUTLER, Esq.

WILMER, CUTLER & PICKERING
FARRAGUT BUILDING
900 17th Street, N.W.
Washington 6, D. C.

J. COURTNEY IVEY, Esq.
BROWN, WOOD, FULLER,
CALDWELL & IVEY
70 Pine Street
New York 5, New York

Approximate date of commencement of proposed sale to the public:

As soon as practicable after this Registration Statement becomes effective.

CALCULATION OF REGISTRATION FEE

Title of each class of securities being registered	Amount being registered	Proposed maximum offering price per unit	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, without par value	10,000,000 shs.	\$20	\$200,000,000	\$20,000

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

COMMUNICATIONS SATELLITE CORPORATION

CROSS REFERENCE SHEET

Pursuant to Rule 404(c) Showing the Location in the Prospectus of the Answers to the Items of Part I of Form S-1

	Item Number and Caption	Heading or Page in Prospectus
1.	Distribution Spread	Cover Page
2.	Plan of Distribution	Offering of Common Stock; Underwriting; Carrier Subscription Matters
3.	Use of Proceeds to Registrant	Application of Proceeds
4.	Sales Otherwise than for Cash	*
5.	Capital Structure	Capitalization
6.	Summary of Earnings	*
7.	Organization of Registrant	The Corporation
8.	Parents of Registrant	*
9.	Description of Business	The Corporation; The Venture and Its Risks; Satellite Communications; Program of the Corporation; International Arrangements for System; International Telecommunications; Competition; Regulation
10.	Description of Property	Program of the Corporation
11.	Organization within 5 years	The Corporation; Management
12.	Pending Legal Proceedings	*
13.	Capital Stock Being Registered	Description of Common Stock
14.	Long-Term Debt Being Registered	*
15.	Other Securities Being Registered	*
16.	Directors and Executive Officers	Management
17.	Remuneration of Directors and Officers	Management
18.	Options to Purchase Securities	*
19.	Principal Holders of Securities	*
20.	Interest of Management and Others in Certain Transactions	Management
21.	Financial Statements	36-40
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^{*} Item inapplicable or answer thereto in negative and omitted from Prospectus.

Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Drinting Desistantia Color	
Printing Registration Statement, Prospectus and other documents	\$ 75,00
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	,,,,,,,,,
capital	50 400

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PRELIMINARY PROSPECTUS DATED MAY 27, 1964

PROSPECTUS

10,000,000 Shares

Communications Satellite Corporation

Common Stock (without par value)

The Corporation is not an agency or establishment of the United States Government.

In conformity with the Communications Satellite Act of 1962, 50% of the shares of Common Stock to which this Prospectus relates were reserved for subscription by communications common carriers authorized by the Federal Communications Commission to own stock of the Corporation. As of the close of business on June 1, 1964, there were in effect subscriptions of authorized carriers, revocable until accepted by the Corporation, for all the reserved shares. The Underwriters are purchasing from the Corporation for sale to the public the 5,000,000 unreserved shares. See "Offering of Common Stock".

There is at present no market for the Common Stock of the Corporation. The New York, Midwest and Pacific Coast Stock Exchanges have approved the listing of the Common Stock on such Exchanges, subject to certain conditions. See "Description of Common Stock".

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION NOR HAS THE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	Offering Price	Underwriting Discount	Proceeds to Corporation*
Per Share:	ations Satel-	nental Communica	no explication
Public (5,000,000 shares)	\$20	\$	\$
Authorized Carriers (5,000,000 shares)	\$20	None	\$20
Total:	\$200,000,000	\$	\$

* Before deducting expenses payable by the Corporation estimated at \$650,000.

Merrill Lynch, Pierce, Fenner & Smith Incorporated
Blyth & Co., Inc.

The First Boston Corporation
Kidder, Peabody & Co.
Incorporated
Kuhn, Loeb & Co.
Incorporated

Lazard Frères & Co.
Lehman Brothers

Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co.
Incorporated

Dean Witter & Co.

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June , 1964.

Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50 400

service which compares favorably, in cost and efficiency, with the service provided by other telecommunication facilities. See "Competition".

- (9) The venture depends on the cooperation of telecommunications entities in other countries. Although many of such entities have indicated interest in the venture, the Corporation has not obtained the commitments of any such entities to provide the foreign terminal stations essential to the operations of a satellite system, or to join with the Corporation in the ownership (and payment of the costs) of the space segment of the system, or to use the system.
- (10) The negotiation and carrying out of international arrangements for the system may be impeded or prevented by international political developments that are not directly related to the system. Moreover, the system may not be designed to operate in spite of intentional interference (e.g., jamming) and, if the operations of the system are purposely interfered with by a foreign government, elimination of the interference would depend on action by the United States Government (or other interested governments).
- (11) Other countries may have or may acquire the ability to establish and operate a satellite system which would compete with the system the Corporation proposes to establish. Governments of certain foreign countries from time to time have announced that communications satellite development activities are being pursued or considered in such countries; but the Corporation does not know of any plan for the establishment by any other country of a communications satellite system which would compete with the system contemplated by the program of the Corporation. Under provisions of law presently in effect, any such competing system could not provide telecommunications service between the United States and overseas points without authorization by the FCC.
- (12) Under the provisions of the Act, the activities in which the Corporation has authority to engage are, in general, those related or incidental to the development, ownership and operation of a commercial communications satellite system as defined in the Act. In the event that future technological developments provide a basis for new types of communications systems which do not use earth satellites and satellite terminal stations on the earth's surface, the Corporation might be unable to take advantage of such developments without appropriate legislation. Such legislation might not necessarily be required by other enterprises.
- (13) The Corporation has public responsibilities under the Act, as well as responsibilities to its shareholders. Among other things, in the interests of national policy, the Corporation may be required to provide certain communications services to particular foreign points in circumstances in which it would be contrary to the business judgment of the Corporation to do so.
- (14) The Corporation does not presently hold any patent rights. The manufacture and operation of the equipment and facilities required for a commercial communications satellite system may involve the use of inventions which are or may be subject to patent rights held by others. Furthermore, it is expected that although equipment and facilities for the system will generally be procured on a competitive basis, some items may be available only from a single source of supply because of know-how, production capacity or other unique qualifications possessed by such source. However, it is believed that access to such patent rights or single sources of supply, or to satisfactory alternatives, should be obtainable on reasonable terms.

OFFERING OF COMMON STOCK

Offering to Authorized Carriers

In conformity with the Act and the Corporation's Articles of Incorporation, 50% of the 10,000,000 shares of Common Stock to which this Prospectus relates were reserved until the close of business on May 26, 1964, for subscription by communications common carriers authorized by the FCC to own stock of the Corporation (authorized carriers). As of that time, 163 authorized carriers had submitted subscriptions, revocable until accepted by the Corporation, for an aggregate of 6,354,250 shares of Common Stock. There are set forth below, as of the close of business on June 1, 1964, (a) the name of each authorized carrier whose subscription relates to 5% or more of the 5,000,000 reserved shares and the number of shares to which the subscription of each such carrier relates, and (b) the aggregate number of shares to which the subscriptions of authorized carriers (other than those named) relate. The number of shares shown opposite American Telephone and Telegraph Company is the number of shares subscribed for by it, reduced by the application of the allocation formula set forth under "Carrier Subscription Matters".

Name	Number of Shares	
American Telephone and Telegraph Company International Telephone and Telegraph Corporation General Telephone & Electronics Corporation RCA Communications, Inc. Other Authorized Carriers	2,895,750 shares* 1,050,000 shares 350,000 shares 250,000 shares 454,250 shares*	
Total	5,000,000 shares	

* May be subject to minor adjustment on determination of certain matters.

The subscriptions referred to above are subject to revocation (in full but not in part) at any time prior to the acceptance thereof by the Corporation after the effectiveness of the Registration Statement covering the shares of Common Stock to which this Prospectus relates (the Registration Statement).

The obligations of authorized carriers to purchase shares subscribed for by them are subject to certain conditions, including the conditions that (a) the Registration Statement shall have become and shall remain effective, and (b) the sum of the aggregate purchase price for shares covered by accepted subscriptions of authorized carriers and the net proceeds (after underwriting discount but before expenses) received by the Corporation for shares purchased by the Underwriters under the Purchase Contract referred to below shall amount to not less than \$190,000,000. The subscription of each authorized carrier which has subscribed for shares includes the agreement of such carrier that, unless compelled by the FCC in accordance with the provisions of the Act to transfer shares to another carrier, it will not, during a period of 60 days after the delivery to it of the shares of Common Stock purchased by it pursuant to the offering made by this Prospectus, sell or otherwise dispose of such shares otherwise than to an authorized carrier affiliated with it which is a party to a similar agreement with respect to the sale or other disposition of such shares during such 60-day period.

Offering to Public

The Underwriters have agreed to purchase from the Corporation for sale to the public the 5,000,000 unreserved shares. In the Purchase Contract between the Underwriters and the Corporation, the Underwriters have agreed to use their best efforts to offer the Common Stock in a manner to encourage the widest distribution of the shares to the American public. In addition to offering a portion of the shares directly to the public, the Underwriters will offer shares to over 800 dealers for resale to the public.

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Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50 400

No person is authorized to give any information or to make any representations not contained in this Prospectus, and any information or representation not contained herein must not be relied upon as having been authorized by the Corporation or by any Underwriter. This Prospectus does

not constitute an offer of Common Stock by any person in any State or other jurisdiction to any person to whom it is unlawful to make such offer in such State or other jurisdiction, or an offer by the Corporation or any Underwriter to sell Common Stock to any person ineligible under the Communications Satellite Act of 1962 or the Articles of Incorporation of the Corporation to own

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shares of Common Stock of the Corporation.

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Application of Proceeds	

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IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMMON STOCK AT A LEVEL ABOVE THAT WHICH MIGHT OTHER-WISE PREVAIL IN THE OPEN MARKET. SUCH TRANSACTIONS MAY BE EFFECTED ON THE NEW YORK, MIDWEST OR PACIFIC COAST STOCK EXCHANGES OR IN THE OVER-THE-COUNTER MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THE CORPORATION

Communications Satellite Corporation (the Corporation) was incorporated under District of Columbia law on February 1, 1963, as authorized by the Communications Satellite Act of 1962 (the Act). The Act states that it is the policy of the United States to establish, in cooperation with other countries, as expeditiously as practicable, a commercial communications satellite system, as part of an improved global communications network, and that United States participation in the system shall be in the form of a private corporation, subject to appropriate Government regulation. The Corporation has been created in pursuance of such national policy, but the Corporation is not an agency or establishment of the United States Government. The United States Government has not guaranteed funds invested in the stock of the Corporation, the payment of dividends on shares of such stock, or the profitability of the venture in which the Corporation proposes to engage.

In accordance with the Act, the Corporation plans to establish and operate a global commercial communications satellite system in cooperation with telecommunications entities in other countries, certain of which are agencies of foreign governments. Such a system would use satellites placed in orbit around the earth to relay telecommunications between terminal stations in the United States and in other countries. Terminal stations in the United States would be connected with communications systems owned and operated by common carriers that provide telephone and other telecommunications service to the public. Terminal stations in other countries would be connected with communications systems that provide such service there.

It is expected that (i) telecommunications entities in other countries will provide and operate terminal stations in such countries (without which there cannot be a satellite system for international telecommunications), and (ii) such entities will share with the Corporation the costs of establishing the space segment of the system (comprising the satellites and the command and control facilities on earth), which would be jointly owned by the Corporation and such entities in proportion to their respective investments. It is contemplated that equitable allocations of the communications capacity of the space segment would be made to such joint owners and others. The Corporation would utilize its allocation to furnish satellite channels for hire to United States communications common carriers and other authorized users. It is expected that the charges made to United States carriers for use of such channels would be a principal source of the Corporation's revenue. Arrangements with telecommunications entities in other countries have not yet been made. The Corporation intends to proceed with its program for the establishment of the system while such arrangements are being negotiated. See 'International Arrangements for System".

The Act embodies a comprehensive plan for the conduct of the business and affairs of the Corporation. It includes provisions governing the Corporation with respect to matters that, in the case of other communications common carriers in the United States, are not ordinarily subject to Government supervision or control. The Act defines the powers of the Corporation and the relationships of the Corporation to the President of the United States and various agencies of the United States Government which have responsibilities in carrying out the purposes of the Act. Under the provisions of the Act, the President of the United States has approved the Corporation's Articles of Incorporation, and he is directed by the Act, among other things, to exercise authority over the relationships of the Corporation with foreign governments and entities. The Act directs the Federal Communications Commission (the FCC) to exercise authority over certain aspects of the affairs of the Corporation, including the rates charged by it. See "Regulation".

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Printing Registration Statement, Prospectus and other documents	\$ 75,000
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Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50 400

Underwriters and dealers will not be required to accept or fill all orders received. In the Purchase Contract the Underwriters have agreed, except under certain circumstances, in making sales to persons other than dealers, to limit the number of shares allotted to any purchaser and to require each dealer to enter into an agreement to the same effect covering the shares sold by such dealer. The text of the provision of the Purchase Contract stating such agreement of the Underwriters is set forth under "Underwriting".

At the request of the Corporation, an arrangement has been made whereby up to 25 shares of Common Stock will be allotted at the public offering price to any employee of the Corporation who may enter an order with Merrill Lynch, Pierce, Fenner & Smith Incorporated. The maximum number of shares purchasable under this arrangement is approximately 2,000 shares.

The decisions of authorized carriers to purchase shares may be based on business considerations not applicable to purchasers other than carriers.

CAPITALIZATION

The following table sets forth the capitalization of the Corporation as of June 1, 1964 and as adjusted to give effect to the sale of 5,000,000 shares of Common Stock to authorized carriers, the sale of 5,000,000 such shares to the Underwriters and the application of a portion of the proceeds of such sales to the payment of bank loans of the Corporation, as described under "Application of Proceeds":

Title of Class	Authorized	Outstanding	Adjusted
Bank loans due June 30, 1964	otopetin <u>ar system</u> ted	\$1,850,000	None
Common Stock, without par value*	10,000,100 shs.	14 shs.	10,000,014 shs.

* The shares of Common Stock are issuable in two Series, designated Series I and Series II. As more fully set forth under "Description of Common Stock", and subject to the provisions of the Act and the Articles of Incorporation of the Corporation referred to therein, Series I shares are issuable to the public and Series II shares are issuable to communications common carriers authorized by the FCC to own stock of the Corporation.

APPLICATION OF PROCEEDS

The net proceeds from the sale of the 10,000,000 shares of Common Stock are estimated at approxi-, after deducting estimated expenses. Approximately \$1,903,000 of such net proceeds will be applied to the payment of bank loans of the Corporation. The balance of such net proceeds) will be applied to pay the costs and expenses to be incurred by the Corporation in carrying out its program over the next few years for the development and establishment of a commercial communications satellite system, and for related purposes. See "Program of the Corporation". It is contemplated that funds not at the time required for such purposes will be invested in obligations of the United States Government or in other interest-bearing obligations or deposits.

As indicated under "Program of the Corporation", the range of the costs which it is estimated will be incurred in carrying out the program of the Corporation is from \$190,000,000 to \$230,000,000. It is believed that the net proceeds from the sale of Common Stock, together with interest income and possible revenues from the operations of the experimental operational satellite proposed to be launched in 1965, will provide an amount sufficient to pay substantially all of the program costs which will be required to be paid by the Corporation. However, in view of the risks associated with the program and the possibility of changes in the program (including such changes as might result from modification of the program so as to satisfy certain requirements of the National Communications System), the actual costs may considerably exceed present estimates. See "National Communications System Program". The Corporation has not made any arrangements to provide such additional funds as may be required.

It is expected that telecommunications entities in other countries may become joint owners with the Corporation of the space segment (comprising the satellites and the command and control facilities) of the communications satellite system and may provide part of the capital necessary to pay the costs of establishing the space segment. The Corporation has not obtained the commitment of any such entity to bear any part of such costs. Other than as indicated above, the Corporation at present has no plans for the use of any of the net proceeds of this financing which, because of the sharing of costs by the telecommunications entities in other countries, or for any other reasons, may not be required by it to defray the costs of the program.

SATELLITE COMMUNICATIONS

Nature of Satellite Communications

A communications satellite system would consist of satellites placed in orbit around the earth for the purpose of relaying telecommunications between terminal stations at different places on the earth's surface. Telecommunications which would be so relayed would include telephone messages, television signals, and "record traffic" of various types (message and other telegraph traffic, teleprinter exchange traffic (telex), and facsimile, photogram and data transmissions). Terminal stations would be operationally connected with telephone systems and other telecommunications facilities. Telecommunications would be transmitted (i) from the place of origin, through telephone lines or other facilities, to a terminal station, (ii) from the terminal station to a satellite in orbit, (iii) from the satellite to another terminal station, and (iv) from the receiving terminal station, through telephone lines or other facilities, to the place of destination.

Communication by satellite between two terminal stations is possible only when a satellite is above the horizon (is "visible") at both terminal stations. If the satellite's orbit carries it below the horizon of one of the terminal stations, communication between the stations will not be possible until the satellite again becomes visible to both stations or another satellite becomes visible to both stations. In such a case, to enable continuous communication between two terminal stations, a number of satellites would be necessary, so that before the last satellite visible to both terminal stations moves below the horizon of one of the stations, at least one other satellite will have become visible to both stations.

The number of satellites necessary to enable continuous communication between a pair of terminal stations depends primarily on the altitude and inclination of the orbits from the plane of the Equator and on whether the spacings between the satellites are controlled. Fewer satellites would be necessary at any altitude than would be necessary in an orbit of the same inclination at a lower altitude. The spacings between satellites at the same altitude will not be uniform unless such spacings are established, after the satellites are in orbit, by use of "position control" equipment included in the satellites. A system of satellites the spacings between which are controlled during orbit (a controlled system) need include fewer satellites than a system of satellites at the same altitude which are not subject to such control (a random system). Altitudes within the range of from 5,000 to 10,000 miles are generally proposed for a system (controlled or random) which is to consist of a number of satellites that in turn disappear below

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Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50.400

Provisions of the Act also govern the ownership of shares of Common Stock of the Corporation and the composition and manner of selection of its Board of Directors. Among other things, such provisions contemplate that up to half the total number of shares of Common Stock of the Corporation is to be owned by United States communications common carriers, and direct that, effective upon completion of the first meeting of shareholders, the Board of Directors shall consist of six directors elected by those shareholders which are communications common carriers, six directors elected by other shareholders and three directors appointed by the President of the United States with the advice and consent of the Senate. See "Management" and "Description of Common Stock—Voting Rights". In the Act, Congress expressly has reserved the right to repeal, alter or amend the Act at any time.

THE VENTURE AND ITS RISKS

The Corporation proposes to engage solely in operations based on recent developments in space and communications technology. Careful consideration should be given to the matters referred to in the following summary, as well as to the information set forth elsewhere in this Prospectus.

- (1) Experimental communications satellites have been placed in orbit and operated in programs conducted by the United States Government and private United States firms (other than the Corporation); but the establishment of a communications satellite system, capable of providing commercially useful service, has never before been attempted.
- (2) Satellite systems of several different types are believed to be practicable for commercial purposes. To provide further information relevant to the selection of a type of system, the Corporation plans to conduct experiments and limited operations by means of a satellite to be launched by mid-1965. The program of the Corporation contemplates that the type of system to be established will not be determined before the latter part of 1965. It is anticipated that the system selected will be ready to provide service between certain areas beginning in 1966, but that the system will not be in full operation before the latter part of 1967. The dates referred to in this paragraph are approximations only, and every reference in this Prospectus to an anticipated date of a particular step in the program of the Corporation is subject to that qualification and to the qualification that unforeseen developments may either delay or prevent the carrying out of the program.
- (3) It is anticipated that the Corporation will not have significant operating revenue until the system is in full operation. In view of the risks of the venture, the Corporation may not realize significant operating revenue for a period after full system operations commence, and the Corporation may operate at a loss for several years after commencement of full system operations. In view of such risks, the period during which operations are conducted at a loss may be even more extended. No dividends will be paid on the Common Stock for an indeterminate period.
- (4) A communications satellite system of any type requires rockets or other launch vehicles that will place the satellites in the intended orbit, and the costs of launch vehicles will represent a major element in the costs of establishing a communications satellite system. It is contemplated that satellites for the system will be launched by vehicles developed in United States defense and space programs. The reliability of such vehicles is being further improved, but the risk of launch vehicle failure is an important risk inherent in an attempt to establish a satellite system of any type.

Consequences of launch vehicle failure will include loss of the vehicle and of the satellite or satellites carried by the vehicle, and, if the failed vehicle causes injuries or damage, may also include liability therefor.

- (5) A communications satellite system of any type requires satellites which will remain operable for a considerable period. On the basis of information derived from experimental communications satellite programs, it is believed that satellite operating lifetimes of the duration necessary for a commercial system can be achieved, but the risk of early failure of satellites in orbit also is an important risk inherent in an attempt to establish a satellite system of any type. Failure of satellites in orbit may necessitate the launching of replacement satellites (involving additional launch vehicle costs) and may also cause interruption or suspension of service, with consequent loss of revenue.
- (6) Certain techniques and devices, not yet proved in actual operations, are regarded as important to the commercial feasibility of certain types of satellite systems, or as important to highly efficient operations of any type of system. These include the launching of several communications satellites by a single launch vehicle (of importance to the commercial feasibility of a system consisting of a large number of satellites); techniques or devices to enable more than two terminal stations to communicate simultaneously via a single satellite without significant reduction in the satellite's communication capacity; and devices to control the attitude of satellites in orbit so that signals emitted by the satellite are directed toward the earth only.
- (7) The demand for international telecommunications services (particularly telephone service) has increased continuously since the end of World War II, and, if the demand continues to increase, additional facilities of some kind will be required within the next few years to assure adequate telecommunications service between North America and Western Europe (commercially the most important route at present) and over certain other routes. The program of the Corporation to establish, in cooperation with other telecommunications entities, a commercial communications satellite system is based on the belief that the demand for international telecommunications services will continue to grow and on the expectation that the satellite system, in competition with facilities operated by others, will serve an important and increasing volume of international telecommunications traffic. It is expected that, in the early years of system operations, revenues from the use of satellite channels for telephone service will constitute by far the most important element in total revenues from system operations, and that revenues from television transmissions will not be significant in terms of such total revenues.
- (8) The satellite system will compete with submarine telephone cable systems between North America and Western Europe and on certain other routes, and with high-frequency radio facilities generally. Such cable systems and radio facilities are owned by certain of the United States carriers and telecommunications entities in other countries which are prospective users of the satellite system. American Telephone and Telegraph Company (AT&T) is the principal United States owner of submarine telephone cable systems. The submarine cable systems with which the satellite system will compete may include cable systems of greatly increased efficiency now under development by AT&T and others. AT&T has stated an intention, subject to certain conditions, to lease satellite system channels of commercial quality, and other United States carriers have indicated an interest in so doing; but the Corporation has not obtained firm commitments therefor. The competitive position of the Corporation will depend on its ability to develop and operate a satellite system that will provide

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Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50.400

the horizon and in turn become visible again. Satellites in orbit at such altitudes (medium altitudes) could be used for communication between terminal stations over transoceanic distances.

The orbital period of a satellite and the length of the time that a satellite would be above the horizon of a particular terminal station increase as the altitude of the orbit increases. In particular, if the velocity of a satellite in orbit above the Equator at an altitude of 22,300 miles is effectively controlled, the orbital period of such a satellite would be 24 hours—an orbital period synchronized with the rotation of the earth. A satellite in such an orbit (synchronous orbit) would be visible to terminal stations within an area including approximately one third of the earth's surface and would be visible to terminal stations within that area during its entire orbital period of 24 hours. To an observer at such a terminal station, the satellite would appear to remain stationary in the sky. A satellite in such a synchronous orbit could be used at any time for communication between terminal stations within that area located up to 10,000 miles apart. The orbit of a satellite at an altitude of 22,300 miles, which deviates slightly from the plane of the Equator, is also referred to in this Prospectus as a synchronous orbit. The usefulness for communications of a satellite in such an orbit would be substantially the same as that of a satellite in a true "stationary" orbit, exactly above the Equator. A true "stationary" orbit (or an orbit of such slight deviation) has not yet been achieved.

The quality of telephone communication by means of a satellite in synchronous orbit would be reduced by reason of the length of the time (approximately three-tenths of a second) required for transmission of the signal to the satellite and back to earth (a delay which tends to interfere with the normal rhythms of conversation), and by the inter-acting effects of echo suppressors of existing types which must be used. There is not yet sufficient experience to indicate clearly whether or not telephone service by means of satellites in synchronous orbit will be of a quality that is generally acceptable to the public.

The principal components of any satellite which relays signals between terminal stations are (i) a receiver and related antenna, for the reception of signals from terminal stations, (ii) a transmitter and related antenna, to amplify and return signals to terminal stations, and (iii) a system to provide electrical energy for the satellite's receiver and transmitter. The principal components of a terminal station for any satellite system are, in addition to a source of electric power, a transmitter, a receiver, and at least one antenna. The orbital configuration of a satellite system greatly influences the nature of additional equipment which satellites and terminal stations must include. Placing and maintaining a satellite in synchronous orbit require that the satellite itself have position control equipment, to help achieve the synchronous orbit in the first instance and to overcome the effects of drift from such orbit. Satellites in a controlled medium altitude system also must have position control equipment, to establish the desired spacings between the satellites. Satellites in a random system need not include such equipment. To conduct the same operations, a terminal station for a medium altitude system must include twice the number of antennas required in a terminal station for a synchronous satellite system.

Command and control facilities (including computers and other equipment for tracking, guidance and control of satellites) also are necessary to satellite system operations.

Launching of Satellites

Rockets or other launch vehicles capable of placing objects of substantial weight in orbit are essential to a communications satellite system. Such vehicles have been developed in the United States in recent

years in connection with United States Government space and defense programs. The reliability of such vehicles has been improved in the course of such programs, and agencies of the Government and others engaged therein are carrying out activities intended to increase launch vehicle reliability to a further degree; but the risk that one or more launch vehicles will fail to place satellites in a planned orbit may continue to be a significant factor throughout the period during which the Corporation proposes to create a commercial satellite system.

Costs of launch vehicles, and related vehicle launching expenses, are a major part of the aggregate cost of creating any satellite system. A medium altitude system may not be commercially feasible unless several satellites can be placed in the intended orbit by a single launch vehicle. In experiments conducted by agencies of the United States Government, as many as five objects have been placed in orbit by a single launch vehicle. Such objects were not communications satellites, and the orbits achieved were orbits at substantially lower altitudes than those contemplated for the satellites of a medium altitude system. The techniques necessary for a "multiple launch" of communications satellites would be the same as those successfully employed in such experiments; but no attempt has thus far been made in the United States to place more than one communications satellite in orbit by use of a single launch vehicle.

Satellite Lifetime

Satellites in orbit are subject to being damaged by radiation, by collision with natural objects and by other events in space. Damage resulting from any of such causes, or a failure of satellite components for other reasons, may interrupt or terminate the operation of the satellite. Certain of the experimental satellites launched in the United States experienced damage or failure of components within relatively short times after being placed in orbit. Three of the experimental satellites have operated for periods of nine months or longer (the longest such period being approximately 16 months). Certain of the experimental satellites launched in the United States are still in operation. See "Experimental Communications Satellites".

Failure of a satellite in orbit may impair or prevent communication service between the terminal stations to which the satellite is visible. In the case of a medium altitude system, the failure of a satellite is likely to result in interruptions of service during periods of predictable occurrence and length, corresponding to the periods during which the inoperative satellite is the only satellite visible to the terminal stations. Such periods of interruption will be longer if the system is a controlled system than if the system is a random system. If communication between two terminal stations is provided by a single synchronous satellite and there is not a "standby" satellite in orbit, failure of the satellite will prevent communication at any time until the satellite is replaced. Costs of replacing a satellite that has failed in orbit include the costs of the replacement satellite, the costs of a launch vehicle and related vehicle launching expenses. For a commercial system, the impairment or suspension of service resulting from satellite failure may also result in loss of substantial revenue until service can be restored by the successful launching of the replacement satellite.

Experimental Communications Satellites

Experimental communications satellites have been developed and placed in orbit in programs conducted by agencies of the United States Government and by private American companies other than the

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Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
capital	50.400

Corporation. The following table sets forth information with respect to the principal experimental communications satellites (other than passive "reflector" satellites) launched in the United States:

Experimental Communications Satellites (United States)

	Zaperiment		one batemies (onice	edate a commercial sarchine avai
Name(a)	Launch Date	Altitude of Initial Orbit (statute miles)	Operating Lifetime of Telecommunications System	Telecommunications Transmissions
	December 18, 1958		13 days (design life)	Voice and telegraph, including delayed signal repetition and rebroadcast of recorded mes- sage.
Courier I-A	August 18, 1960	Failed to orbit (launch vehicle exploded)	utynfora a f multiplerlä	vere orbits at <u>su</u> bstantiálly lowe ystem: ¡¡The techniques necess ume las those successfully emplo
Courier I-B	October 4, 1960	586 to 767	17 days	Voice, telegraph and telephoto, including voice transmission to Puerto Rico.
Telstar I	July 10, 1962	593 to 3,503	189 days(b)	Television, voice, telegraph, data and telephoto, including trans- Atlantic transmissions.
roRelay I modo	December 13, 1962	819 to 4,612	483 days(c)(d)	Television, voice, telegraph, data and telephoto, including transmissions between the U. S. and Western Europe and South America, and between the U. S. and Japan.
Syncom I	February 13, 1963	21,268 to 22,974	Communication lost at injection into orbit.	tellites launcined in the Unite
Telstar II	May 7, 1963	604 to 6,713	358 days(d)(e)	Similar to Telstar I.
Syncom II	July 26, 1963	22,240 to 22,247 (orbit very nearly circular and synchro- nous)	305 days(d) (pm 110 open 110 o	Voice, telegraph, data and telephoto, including transmissions between the U. S., Western Europe and Africa.
Relay II	January 21, 1964	1,325 to 4,600	127 days(d)	Similar to Relay I.

(a) Of the satellites referred to in the table, (i) Telstar I and Telstar II were designed and constructed by American Telephone and Telegraph Company, (ii) Relay I and Relay II were designed and constructed by Radio Corporation of America (RCA) under contract with the National Aeronautics and Space Administration (NASA), (iii) Syncom I and Syncom II were designed and constructed by Hughes Aircraft Company under contract with NASA, (iv) communications equipment for Score was constructed by RCA for the Department of Defense, and (v) Courier IA and IB were constructed by Philos Corporation for the Department of Defense.

(b) Exclusive of a 40-day interruption (attributed to damage caused by radiation) in the operating lifetime stated. Termination of lifetime is attributed to damage so caused.

(c) Exclusive of (i) a 20-day period, immediately following launch, during which malfunction in satellite components prevented telecommunications transmission, and (ii) a 26-day period in April and May, 1964, during which the telecommunications system was inoperable.

(d) Computed to May 26, 1964, at which time the telecommunications system of the satellite was still operable.

(e) Exclusive of a 27-day interval during which the telecommunications system was inoperable for unknown reasons.

The experimental satellites Telstar I and II and Relay I and II have been used successfully for transmission of the principal kinds of telecommunications which a commercial system would serve over distances comparable to those which commercial service would require. The experimental satellite Syncom II has also been used successfully for the transmission over such distances of the principal kinds of telecommunications which commercial service would require, except that television signals transmitted through Syncom II have not been of commercial quality. In addition, the experimental satellite programs have provided much information relevant to the design of satellites for a commercial system.

The improvements in experimental satellites which are essential for the satellites of a commercial system are primarily those related to the achievement of reliability of components through careful selection and intensive testing. In addition, certain anticipated developments in components or techniques generally are regarded as important to communications satellite operations of highest efficiency, viz., (i) development of techniques which will enable a satellite to communicate simultaneously with more than two terminal stations without material reduction in the satellite's overall communication capacity, and (ii) development of devices which can be used to control the attitude of satellites for extended periods of time, so that signals emitted by the satellite are directed toward the earth only.

The terminal station facilities principally used in connection with the operation of the experimental satellites referred to in the table have been, in respect of facilities in the United States, experimental terminal stations constructed by communications common carriers or facilities of the United States Government, and, in respect of facilities outside the United States, experimental terminal stations constructed by foreign telecommunications entities, including such facilities in the United Kingdom, France, Italy, Brazil and Japan. Telecommunications entities in other foreign countries (including Canada and the Federal Republic of Germany) are engaged in the construction of terminal station facilities in such countries.

PROGRAM OF THE CORPORATION

Activities to Date

The Corporation has been engaged in various activities leading to the creation of a commercial communications satellite system. It has established its offices in leased premises in Washington, D. C. Technical and economic studies are being carried out by the staff of the Corporation and by firms under contract with the Corporation, including studies of factors affecting the design of a satellite system, studies with respect to potential telecommunications traffic which such a system might serve, and studies relating to the minimum specifications and characteristics of an initial communications satellite system. Expenses incurred in connection with these activities have been financed by bank borrowings.

Summary of Program and Estimated Costs

The Board of Directors of the Corporation has approved a program for the development and establishment of a commercial communications satellite system. The principal elements of the Corporation's program, and the estimated costs of each element in the program, are summarized below. The cost estimates shown are approximations only, and, in view of various factors referred to below, the actual costs of the program as a whole, or of particular elements in the program, may considerably exceed such estimates. The estimates do not reflect such additional costs as would be involved if the program were modified to satisfy certain requirements of the National Communications System. See "National Communications System Program". The cost estimates in the summary do not include any amount covering the expenses to be incurred in maintaining an established system.

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Countries 1 E 1 C	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50.400

EXPERIMENTAL	OPERATIONAL	SATELLITES	
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Conduct of certain communications tests and limited operations by
means of an experimental operational satellite proposed to be placed
in synchronous orbit above the Atlantic Ocean in mid-1965

\$ 14,000,000 - \$ 20,000,000

System Development

1	reparation of satellite engineering designs and development of proto-
	type satellites of various types, preparatory to a decision, proposed
	to be made in the latter part of 1965, as to whether the commercial
	satellite system will be a medium altitude system or a synchronous
	system

\$ 55,000,000 - \$ 65,000,000

\$ 75,000,000 - \$ 90,000,000

\$ 9,000,000 - \$ 10,000,000

Proposed Terminal Stations

\$ 17,000,000 - \$ 20,000,000

RESEARCH AND DEVELOPMENT AND ADMINISTRATION

Additional research and development and administrative activities .. \$ 20,000,000 - \$ 25,000,000

The Corporation has entered into an agreement for the design and manufacture of the experimental operational satellites, and has received proposals for the preparation of the satellite engineering designs, referred to in the foregoing summary. Except with respect to the equipment and services to which such agreement and proposals relate, the cost estimates in the foregoing summary are not based upon bids to provide equipment or services. Such estimates are based on information furnished to the Corporation by the United States Government and United States firms which have engaged in satellite experiments and in other phases of space programs. The Corporation expects to invite at the appropriate time competitive bids or proposals for the equipment and services required by its program, and does not presently plan to manufacture itself any of such equipment. The actual costs of the program summarized above may vary considerably from estimated costs, depending upon the characteristics of the system, unforeseen factors affecting adversely launching costs or costs of components, and technological developments or other factors. In view of the risks of the venture, the taking of any particular step in the program may be delayed for extended periods beyond the approximate date for such step referred to in the summary above.

The program of the Corporation summarized above may be changed in material respects by reason of unforeseen developments. Whether or not any such development occurs, the program is also subject to change by the Board of Directors of the Corporation that will succeed the present Board. See "Management". Changes in the program may also be made by reason of modification of the program to satisfy certain requirements of the National Communications System or by reason of the nature

or terms of the international arrangements to be negotiated for the system. See "National Communications System Program" and "International Arrangements for System". The carrying out of any program for the establishment of a commercial communications satellite system is subject, among other things, to the continued effectiveness of the provisions of the Act which authorize the Corporation to carry out such a program, and to the authority of the agencies of the United States Government referred to under "Regulation".

Experimental Operational Satellites

The Corporation plans to conduct communications tests and to provide certain commercial communications services by means of a satellite to be placed in synchronous orbit over the Atlantic Ocean in mid-1965. The principal objectives of the program for such a satellite are to obtain information relevant to the selection and design of a commercial system (including information about public attitudes toward the time delays and echo suppression effects involved in telephone conversation via satellite in synchronous orbit) and also to provide experience in the conduct of operations. The particular satellite to be used in the program will be designed to provide up to 240 two-way telephone grade circuits between appropriately equipped terminal stations in North America and Western Europe. Such circuits could be used for telephone conversations, or for record traffic, or for the transmission of television signals. The capacity provided by one two-way telephone grade circuit is sufficient for the simultaneous transmission of 22 or more telegraph messages, depending on the terminal equipment used. The construction, launching and operation of the satellite are subject to the approval of the FCC. The Corporation has obtained such approval for the construction of the satellite, but has not yet made application for the other necessary approvals.

The Corporation has entered into an agreement with Hughes Aircraft Company, Culver City, California (Hughes Aircraft), for the design, manufacture, assembly and testing of two such satellites, for the manufacture of components for a third such satellite and for the performance of certain related services. The agreement provides for delivery of the first satellite in April, 1965, and for delivery of the second satellite later that year. Under the provisions of the agreement, the aggregate amount payable by the Corporation to Hughes Aircraft depends on whether the satellites are successfully implaced in orbit and, if successfully implaced, on the length of the period during which either of the two satellites is operable in accordance with certain operating standards specified in the agreement. Under such provisions, if neither satellite is successfully implaced in orbit, the aggregate amount payable by the Corporation to Hughes Aircraft would be \$7,885,000. If both satellites are successfully implaced, the minimum aggregate amount payable by the Corporation, whether or not either satellite is operable for any period, is \$6,335,000, and the maximum aggregate amount payable by the Corporation, which would be payable if each of the two satellites is operable for a period of 18 months or longer, would be \$10,835,000. The agreement also provides for additional payments by the Corporation to Hughes Aircraft in the event of the delivery of the first satellite in advance of the scheduled delivery date.

The Corporation expects to enter into an agreement with the National Aeronautics and Space Administration (NASA), an agency of the United States Government, for the furnishing to the Corporation by NASA of launch vehicles and launching services for two such satellites. The Act provides that NASA shall furnish launching services to the Corporation on a reimbursable basis. The Corporation has held preliminary discussions with NASA with respect to the furnishing by NASA of such launching services, but the terms of an agreement between the Corporation and NASA have not been determined.

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^{*} Contingent on matters referred to under "Proposed Terminal Stations".

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000	
Printing and engraving of Common Stock certificates	85,000	
Federal original issue tax	200,000	
Fees of Transfer Agents and Registrars	79,000	
Listing fees of stock exchanges	37,000	
Legal Fees	45,000	
Accountants' Fee	10,000	
Securities and Exchange Commission Registration Fee	20,000	
Fees of District of Columbia in connection with increase in authorized	_0,000	
capital	50.400	

It is expected that the vehicle to be used in the launching of each such satellite would be a Thor Delta rocket vehicle with three augmenting rockets attached. A total of 24 launchings of the Thor Delta rocket vehicle (without such augmenting rockets) has been attempted to date in connection with national space programs. Of such launching attempts, 22 were successful, including the launchings of the experimental satellites Syncom I and Syncom II. The launchings of Syncom I and Syncom II are the only launchings of the Thor Delta rocket vehicle to date for the purpose of placing an object into synchronous orbit. The Thor Delta rocket vehicle with such augmenting rockets has not been launched to date in national space programs.

The program of the Corporation contemplates that, in the event the first launch attempt fails or the first satellite is inoperable, an attempt will be made to launch the second satellite into synchronous orbit over the Atlantic Ocean. If the first launch is successful, it will then be determined whether to launch the second satellite into orbit over the Atlantic Ocean (to provide additional or stand-by capacity) or to launch it into orbit over the Pacific Ocean, or to hold it in reserve.

The Corporation is discussing with AT&T the terms of arrangements for the modification of AT&T's experimental terminal station facilities at Andover, Maine, and for the use of such facilities in the conduct of tests and operation of such satellites. Such arrangements and use will be subject to the approval of the FCC. It is expected that experimental terminal station facilities now existing or to be constructed in other countries will be used in the conduct of such tests and operations, but arrangements therefor have not yet been made. The Corporation proposes to offer to United States communication common carriers and other authorized users, for hire, channels of communication by means of the satellite in synchronous orbit above the Atlantic Ocean, between such terminal station in the United States and such terminal stations in Western Europe. AT&T has advised the FCC that it intends to seek FCC authorization to lease 100 circuits in the experimental operational satellite as soon as such circuits are commercially available; but the Corporation has not obtained the commitment of AT&T (or of any other carrier or entity) to lease any such circuits.

System Development

In December, 1963, the Corporation invited 15 United States firms to submit proposals for the preparation of engineering designs of satellites for a commercial system. In response to such invitation, proposals were submitted by (i) AT&T and Radio Corporation of America (RCA), jointly, (ii) Hughes Aircraft, (iii) Philco Corporation, and (iv) Space Technology Laboratories, Inc. (STL) in association with International Telephone and Telegraph Corporation (ITT). The AT&T-RCA proposal and the Philco Corporation proposal are each for the design of satellites for a medium altitude random system. The STL-ITT proposal is for the design of satellites for a medium altitude controlled system. The Hughes Aircraft proposal is for the design of satellites for a synchronous satellite system. The Corporation expects to negotiate and enter into agreements with certain of such firms for the preparation of engineering designs on the basis of the proposals submitted by them. Each such agreement would provide for the completion of the designs within a period of six months from the date thereof. The Corporation may enter into other agreements for the conduct of studies relating to satellite design.

The program of the Corporation for the development of a global commercial satellite system contemplates that (a) in the latter part of 1964, after evaluation of the engineering designs referred to above, the Corporation will enter into an agreement or agreements for the development of prototype satellites for systems of one or more types; and (b) in the latter part of 1965, it will be determined whether the commercial system will be a medium altitude random system, a medium altitude controlled system

or a synchronous system. It is expected that the choice of a system type will be made after evaluation of the results of the operation of the synchronous satellite to be launched in 1965, and in the light of other information then available. The construction and technical characteristics of any operational system are subject to the prior approval of the FCC. See "Regulation".

The satellites of the system selected would be designed to provide at least 270 two-way telephone grade circuits initially, which could be used for the simultaneous transmission between two terminal stations of up to that number of telephone conversations or for the transmission of other forms of telecommunications. If development of efficient attitude stabilizing devices is completed in time and such devices are incorporated in the satellites, the design capacity of the satellites may be increased to up to 1200 such circuits.

There is set forth below, with respect to each of the alternative projected systems, information as to the characteristics of the system and the contemplated development schedule for such a system, should it be selected as the commercial system.

Medium Altitude System. A commercial medium altitude system would consist of satellites in orbit at an altitude of approximately 6,000 miles. Such a system might be either (i) a random system of approximately 18 satellites at that altitude, or (ii) a controlled system of a lesser number of satellites at that altitude, with desired spacings between the satellites being achieved through the use of position control equipment included in each satellite. It is expected that such a medium altitude system, when in full operation, would provide channels of communication on a substantially continuous basis between appropriate pairs of suitably equipped terminal stations located in various parts of the world.

Plans for such a system (if selected) contemplate that the first satellites would be launched in mid-1966, and that launchings necessary to complete the system would be carried out within a period of approximately a year from the date of such launchings. It also is contemplated that more than one satellite would be placed in orbit by each launch vehicle. The program of the Corporation for the replacement of satellites of a medium altitude system assumes that the satellites will have operating lifetimes of not less than three years. To date, none of the experimental communications satellites launched in the United States has had an operating lifetime in excess of 16 months, and the "multiple launching" technique has not yet been attempted with communications satellites. See "Satellite Communications". A series of failures in "multiple launching" attempts, or a general failure of satellites to achieve planned operating lifetimes, would have a serious adverse effect on the commercial feasibility of such a system.

Synchronous System. A commercial synchronous system would consist of at least three satellites in synchronous orbit at an altitude of approximately 22,300 miles. Such satellites would be stationed at appropriate points so as to be able to provide channels of communication on a continuous basis between appropriate pairs of suitably equipped terminal stations located in various parts of the world.

Plans for such a system (if selected) contemplate that, in mid-1966, two satellites will be placed in synchronous orbit above the Atlantic Ocean and one satellite will be placed in such an orbit above the Pacific Ocean. A second Pacific Ocean satellite or an Indian Ocean satellite, or both, might be launched in the following year. It is expected that satellites would be launched singly. The program of the Corporation for the replacement of satellites of a synchronous system assumes that the satellites will have operating lifetimes of not less than one year. The satellites of such a synchronous system would be in addition to those referred to under "Experimental Operational Satellites".

Combined Systems. It is envisioned that the initial global system to be established will not combine the use of satellites in synchronous orbit and random orbit. However, since the program of the Cor-

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Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital and	50 400

poration involves placing an experimental operational synchronous satellite in orbit in 1965, it is possible that for a time use could be made of two different types of satellites. It is also possible that a commercial communications satellite system could ultimately consist of a combination of satellites of different types.

Command and Control Facilities. The Corporation plans to arrange for the design, construction and equipping of a command and control center for the system, to be located in the continental United States. The center would include computers, and would include or be linked to equipment for the tracking, guidance, control and command of the satellites constituting the system. It is expected that the construction and equipping of such center will be completed by mid-1966, to provide for the type of system theretofore selected.

Launching Services. The Corporation expects to enter into agreements with NASA providing for the purchase from NASA of the launching and associated services necessary to establish and maintain the system. The Corporation has held preliminary discussions with NASA with respect to the launching schedule contemplated by the program of the Corporation, the types of launch vehicles proposed to be used, and related matters, but the terms and provisions of such agreements have not been negotiated.

The Corporation expects that launch vehicles of types developed (or under development) in connection with the national space programs will be used in the launchings of satellites of the commercial communications satellite system. Several launch vehicle types are believed to be suitable for such use. The Corporation has not yet determined the type of vehicle which would be used to launch the satellites of a medium altitude system or the satellites of a synchronous system. It is expected that such determination will be made at the time it is decided whether the system is to be a synchronous system, or a medium altitude random system or a medium altitude controlled system.

Proposed Terminal Stations

The program of the Corporation contemplates that (i) if the commercial communications satellite system is a medium altitude system, there would initially be three terminal stations in the continental United States (northeast, northwest and southeast quarters) and a terminal station in the State of Hawaii, and (ii) if the commercial system is a synchronous system, there would initially be two terminal stations in the continental United States (eastern half and western half) and a terminal station in the State of Hawaii. Under the provisions of the Act, a license to own and operate any of such terminal stations may be granted by the FCC only to the Corporation or to one or more communications common carriers, or to the Corporation and one or more such carriers jointly. The number and location of terminal stations in the United States actually licensed by the FCC may differ from the number and location of the stations contemplated by the program of the Corporation. As of the date of this Prospectus, neither the Corporation nor any carrier has filed with the FCC an application for such a license. AT&T and ITT each have constructed and own experimental terminal station facilities in the United States. Pursuant to authorizations by the FCC under the Communications Act of 1934, such stations have engaged in various telecommunications experiments.

AT&T and certain other carriers engaged in international telecommunications have stated, expressly or in substance, an intention to apply to the FCC at the appropriate time for authorization to own and operate, or to participate in the ownership and operation of, one or more United States terminal stations. The Corporation intends to apply to the FCC at the appropriate time for authorization to own and operate

each terminal station in the United States (including the State of Hawaii) or to carry out arrangements with carriers which would give the Corporation operating control over United States terminal stations to be owned by such carriers. The Corporation has not negotiated any such arrangement with AT&T or any other carrier. It is possible that the ownership and operation of terminal stations in the United States will be the subject of contested proceedings before the FCC among the Corporation and one or more communications common carriers.

The construction and operation of suitably equipped terminal stations in foreign countries are essential to the operations of the commercial communications satellite system. It is presently expected that terminal stations in foreign countries will be constructed, owned and operated by telecommunications entities or authorities other than the Corporation.

In the event that the proposed program referred to under "National Communications System Program" is undertaken, terminal station facilities required for the use of the Government in connection with such program would be owned by the United States Government. See "National Communications System Program".

National Communications System Program

By Executive Order of the President there was established in August, 1963 the National Communications System, which is responsible for the administration of all communications facilities serving the Government of the United States, including the Department of State, the Department of Defense, the General Services Administration, the Federal Aviation Agency, and all other governmental departments and agencies. Under this Executive Order, the Secretary of Defense is the Executive Agent for the President.

For some time there have been discussions, which are continuing, between the office of the Secretary of Defense and the Corporation with a view to ascertaining whether a feasible program can be developed under which the National Communications System would be provided with satellite communications capability adapted to its needs, consistently with the development and establishment of a commercial communications satellite system.

As stated above under "System Development", the program of the Corporation contemplates active research and development on both synchronous and medium altitude communications satellite systems, with the ultimate decision to be made in 1965 as to whether the commercial system will be a medium altitude random system, a medium altitude controlled system, or a synchronous system. The office of the Secretary of Defense has advised the Corporation that, in order to minimize the risks of "jamming", and for other reasons, a medium altitude random system is needed. Accordingly, the discussions which have been had with the office of the Secretary of Defense have sought, on the one hand, to explore the possibilities of satisfying the requirements of the National Communications System if such a medium altitude system is selected, and on the other hand to spell out arrangements whereby the products of work done on a medium altitude random system could be utilized for the benefit of the Government on terms satisfactory to the Corporation and the Government in the event that another type of system is selected for the commercial satellite system.

If agreement should be reached with the Government under which, in the event of selection of a medium altitude random system as the commercial system, the National Communications System would be provided with capability to satisfy certain of its requirements, the range of estimated costs for the manufacture and placing in orbit of satellites constituting the system would be substantially greater than

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Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	20,000
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the \$75,000,000-\$90,000,000 range of such estimated costs in the case of a purely commercial system, as shown under "Summary of Program and Estimated Costs", and the time required for the complete establishment of the system would probably be somewhat increased. However, the parties are continuing to explore in their discussions whether, as the result of such a program, the portion of the total cost properly allocable to the establishment and maintenance of the commercial system would be reduced, with a resulting advantage to the Corporation and such others as may participate in the ownership of the commercial system, and with a similar reduction in cost to the Government. It is also contemplated that if agreement were reached with the Government under which the National Communications System were provided with a portion of the capability of a medium altitude random system, charges would be made to the Government which would be such as to provide a reasonable return on the portion of the total cost of the system properly allocable to such capability. Such charges may be subject to regulation by the FCC.

Many technical and administrative problems would be involved in carrying out a program such as that outlined above, and many aspects of it are subject to the approval of the FCC, as well as other participants. Furthermore, the nature of such international arrangements as are made with the telecommunications entities in other countries, discussed below under "International Arrangements for System", may affect the feasibility of any such program or the manner in which it would be carried out. Although the Corporation believes that, if the proposed program could be carried out, it would offer advantages to both the Corporation and the Government, there is substantial question whether the problems inherent in the program can be resolved and as to the extent to which modifications in the program would affect the costs thereof or the time or manner in which it would be carried out.

Research and Development

The Corporation proposes to engage in communications satellite research and development activities as a part of the program for the establishment and operation of a commercial system. Certain of such research and development activities will be related to matters affecting the design of satellites which would be launched to establish the commercial satellite system. Other such activities will be directed toward matters affecting the design of satellites which would be launched after the system is in being, either as replacements for inoperative satellites of the system or for the purpose of increasing the capability of the system.

INTERNATIONAL ARRANGEMENTS FOR SYSTEM

In accordance with the policies of the United States Government, which favor the development of a single global system, telecommunications entities in other countries have been and will be given the opportunity of participating with the Corporation in the establishment of the space segment (comprising the satellites and the command and control facilities) of the commercial communications satellite system. Officers of the Corporation and representatives of the United States Government have met with representatives of other governments and other telecommunications entities for the purpose of discussing international arrangements for such participation. In these discussions, the Corporation and the United States Government have proposed that the telecommunications entities in other countries might share with the Corporation the costs of establishing the space segment, which would be jointly owned by the Corporation and such entities in proportion to their respective investments. According to this proposal, each participant's share of the total investment in the space segment would be based upon its share of world telecommunications traffic which is suitable for transmission by a communications satellite system and upon the participant's anticipated use of the system. On this basis, the Corporation's share would exceed the shares of all other participants combined.

Under the proposal a committee representing the joint owners would be established, to which would be delegated the responsibility and authority for certain major decisions relating to the design, establishment and operation of the space segment. Thus, in the event that the proposed arrangements become effective, such decisions would not be made by the Corporation alone, but would require the concurrence of some of the other participants. However, the other participants would not have the power to make such decisions without the concurrence of the Corporation.

The proposal contemplates that the Corporation would act as manager on behalf of the joint owners in the designing, establishing and operating of the space segment and would be compensated for such services. It also contemplates that each of the investing participants would be allocated an equitable portion of the space segment capacity and that the Corporation would utilize its allocation to furnish satellite channels for hire to the United States communications common carriers and other authorized users. It is expected that the charges made to United States carriers for use of such channels would be a principal source of the Corporation's revenue.

The Corporation and the United States Government have proposed that appropriate interim arrangements covering the establishment and operation of the proposed system in its early stages be negotiated as soon as possible among prospective participants who are prepared to make immediate commitments for substantial investments of capital in the space segment, with provision for new investors to become participants at a later date. Certain of these arrangements would be among governments and other arrangements would be among the participating communications entities. Preliminary discussions are taking place in London with representatives of the governments and telecommunications entities of a number of countries, including Western European nations, Canada, Japan and Australia with respect to the proposed interim arrangements. It is expected that such discussions will be followed by negotiations with the governments and telecommunications entities of the above-mentioned countries during the middle and latter part of June. The outcome of such discussions and negotiations, and the terms of the interim arrangements which may result from them, cannot be predicted. In order to insure the development of a communications satellite system as promptly as possible, the Corporation intends to proceed with its program while discussions and negotiations with other governments and other telecommunications entities are pending, and it is prepared if necessary to finance the entire cost of establishing the system (exclusive of the costs of foreign terminal stations). Early in 1963 the United States Government suggested to the Government of the U.S.S.R.' that it might be useful to have discussions relative to the establishment of a single global commercial communications satellite system. Recently that Government indicated that it would be prepared to hold such discussions, and the United States Government responded with the suggestion that a meeting for that purpose, in which the Corporation would participate, be held in June of this year.

The international allocation of frequency bands for space radio-communication services is a prerequisite to the conduct of the operations of a commercial communications satellite system. Important
steps in this area were taken at the Extraordinary Administrative Radio Conference on Space Communications, held in Geneva, Switzerland, in October and early November, 1963. The Conference, which
was held under the auspices of the International Telecommunication Union (ITU), a specialized agency
of the United Nations, allocated for communications satellite services (a) two 50 megacycle bands of
frequency space, on an exclusive basis, and (b) 2500 to 2700 megacycles of frequency space, on a shared
basis with existing radio services. A number of ITU members (including certain countries in Western
Europe) have stated that, in their countries, certain existing radio services would continue to use either
or both of the two 50 megacycle bands allocated by the Conference to communications satellite services

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Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
capital	50.400

on an exclusive basis. The Corporation believes that the frequency allocations so made by the Conference, which are subject to ratification by ITU members, make satisfactory provision for the requirements of the communications satellite system contemplated by the program of the Corporation.

INTERNATIONAL TELECOMMUNICATIONS

Facilities for International Telecommunications

Telecommunications service between the United States and overseas points is provided by United States communications common carriers (U. S. carriers), in most instances in collaboration with telecommunications entities in foreign countries. The U. S. carriers are subject to regulation by the FCC under the Communications Act of 1934, and other provisions of law, with respect to the construction and operation of facilities for such service and the rates charged therefor. The collaborating telecommunications entities in foreign countries are either government-owned or privately owned, but subject to regulation or control by the governments of such countries. International service between points outside the United States is provided by agencies of foreign governments, by other foreign telecommunications entities and by U. S. carriers.

International telecommunications service is provided primarily by means of submarine telephone cables, high-frequency radio facilities and submarine telegraph cables, and, in respect of service between contiguous countries, also by terrestrial (overland) facilities.

Submarine Telephone Cables. Submarine telephone cables carry all forms of record traffic, as well as telephone traffic. Existing telephone cables, and those planned to be in service by December 31, 1965, are not designed to transmit high-quality television signals. The first oceanic telephone cable (Florida-Cuba) began service in 1950 and the first trans-Atlantic telephone cable was placed in operation in 1956. Other important submarine telephone cable systems have been placed in operation at various times since 1956. Further advances in cable and related technology have greatly increased the initial capacity of telephone cables most recently placed in service. In addition, significant increases have been made in the capacity of earlier telephone cables, primarily by the installation of additional cable terminal equipment ("TASI equipment"), which automatically utilizes capacity resulting from intervals in one conversation for the transmission of another conversation. AT&T and others are carrying out programs to place additional telephone cable systems in operation at various future dates.

The following table sets forth information with respect to the principal submarine telephone cable systems in operation at December 31, 1960, and December 31, 1963, or scheduled to be in operation at December 31, 1965, other than those within Europe or between Europe and North Africa:

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Cable System(a)	1960(b)	1963(b)	1965 (Est.) (b)	
North Atlantic U.S. or Canada—U.K. or France Primarily for U.S. traffic Other systems	170 —	298 104(d)	426(c) 104(d)	
Western Hemisphere(e) U.S.—Alaska U.S.—Puerto Rico U.S.—Bermuda		48 85 80	48 85 80	

	Number of Two-way Telephone Grade Circuits in Service at December 31		
Cable System(a)	1960(b)	1963(b)	1965 (Est.) (b)
U.S.—Jamaica	Stem <u>son</u> a C	128	128
Jamaica—Canal Zone	. / I	128	128
Canal Zone—Colombia	m pagegna	5 IR 8 15(110)	80
U.S.—Virgin Islands	-745	-	128
Virgin Islands—Venezuela	-1194	13. 67	80
PACIFIC AREA	racimies		
U.S.—Hawaii	48	85	213
Canada—Hawaii	DINOWE SHIP	80	80
Hawaii—Guam—Japan	s nourousid	et to lading,	128
Guam—Philippines	res e vi suelx	ties be can e	128
Hawaii—New Zealand	AM-TARA	80	80
Australia—New Zealand	W GO	80	80
Australia—Malaysia—Hong Kong	I no berre	ilities) was c	80
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(a) As used in the table, U.S. refers to points within the 48 contiguous States of the United States and U.K. refers to the United Kingdom.

(b) Numbers of circuits in service at December 31, 1960 and December 31, 1963 include circuits provided by TASI equipment installed at said dates. Estimates of circuits to be in service at December 31, 1965, are based on assumptions that (i) systems planned for completion by that date will be so completed and will then provide planned capacity, and (ii) systems in operation at December 31, 1963, will be in operation at December 31, 1965, and will then provide the same capacity as provided at December 31, 1963. The design capacity of cable systems planned to be constructed before December 31, 1965, and the capacity of certain of the cable systems in service at December 31, 1963 (including certain of the North Atlantic systems) could be increased substantially for traffic of certain types (including message telephone service) by the installation of TASI equipment. The FCC, which heretofore has not required that its authorization be obtained for installation of TASI equipment, recently has stated that such authorization should be required of U.S. carriers for future installation of such equipment.

(c) Includes the initial planned capacity (128 two-way telephone grade circuits) of a cable between New Jersey and France, the construction of which by mid-1965 the FCC, on March 17, 1964, determined to be required by the public interest, convenience and necessity. Such determination was made in proceedings upon applications of AT&T for authority to construct such a cable over that route, and of Mackay Radio and Telegraph Company (Mackay), an affiliate of ITT, for authority to construct a trans-Atlantic cable over a different route. AT&T's application estimated that its share of the costs of the cable proposed by it (in which AT&T would have an ownership interest of approximately 65%) would be \$34,347,000. The FCC's determination provided that the new cable should be authorized in the name of all the United States overseas telecommunication entities (both record and telephone) which desire to participate in such ownership. Pursuant to such determination, upon applications by the entities hereinafter referred to, the FCC on May 6, 1964, authorized AT&T, Mackay, Press Wireless, Inc., RCA Communications, Inc. and Western Union International, Inc. to construct and operate such cable.

(d) Includes the capacity (24 two-way telephone grade circuits) provided by cable systems extending from Canada to Iceland and from Iceland to the United Kingdom, used exclusively by the international airlines of North Atlantic countries to provide communication services necessary for the conduct of their operations.

(e) In addition to the Western Hemisphere cable systems shown above, the Corporation is advised that ITT and AT&T propose, subject to the obtaining of various requisite governmental approvals, jointly to construct and operate a cable, with a design capacity of 160 two-way telephone grade circuits, from the Canal Zone down the west coast of South America to Chile, which it is contemplated would be completed by the end of 1965. See "Competition".

Of the cable systems included in the foregoing table, AT&T owns, or has ownership interests in (or, in respect of systems to be constructed before December 31, 1965, is expected to own or have ownership interests in), (i) all the North Atlantic cable systems reflected in the numbers of circuits shown opposite "Primarily for U. S. Traffic", (ii) each of the cable systems referred to under the

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PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	20,000
capital	50 400
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heading "Western Hemisphere", (iii) the U. S.-Hawaii cable systems, and (iv) the Hawaii-Guam-Japan and the Guam-Philippines cable systems. Hawaiian Telephone Company also has ownership interests in the U. S.-Hawaii cable systems and the Hawaii-Guam-Japan cable system. Affiliates of ITT have ownership interests in the U. S.-Puerto Rico, the U. S.-Virgin Islands, the U. S.-Jamaica and the Jamaica-Canal Zone cable systems.

AT&T and others are engaged in the development of improved submarine telephone cables. See "Competition".

High-Frequency Radio Facilities. High-frequency radio (HFR) facilities serve telephone and record traffic on routes served by telephone cables and, in addition, provide the only telephone and record service to the many areas of the world which do not have cable connections. Communication by HFR circuits is subject to fading, distortion and blackout because of disturbances in the ionosphere.

HFR facilities began extensive service for international record traffic shortly before World War I, and for international telephone traffic in 1927. All international telephone traffic (except that carried by overland facilities) was carried on HFR circuits until the introduction of submarine telephone cables in 1956. Submarine telephone cables now carry a far greater part of international telephone traffic than is carried by HFR facilities between places having both telephone cable and HFR service. On routes which have submarine telephone cable service, HFR facilities are operated primarily on a standby basis.

In addition, communications circuits for all forms of telecommunication are provided by tropospheric scatter radio systems and ionospheric scatter radio systems. Tropospheric scatter systems are used for communication over relatively short distances (i.e., 300 miles or less). Ionospheric scatter systems are also used for communication over longer routes. The capacity of scatter systems in comparison with the capacity of submarine telephone cables is not significant.

Submarine Telegraph Cables. Service provided by submarine telegraph cables is limited to message telegraph and other telegraph transmissions. The capacity of such cables in comparison with the capacity of submarine telephone cables is not significant. Beginning in 1960, U. S. carriers which operate submarine telegraph cables have leased circuits in submarine telephone cables for transmission of telegraph and other forms of record traffic, and since that time an increasing proportion of the record traffic between the United States and overseas points has been transmitted through such leased circuits. With the approval of the FCC, certain U. S. carriers recently have abandoned submarine telegraph cables (including trans-Atlantic telegraph cables) theretofore operated by them.

Traffic and Revenues

Telephone traffic and record traffic between the United States and overseas places constitute an important part of all telephone and record traffic between different continents or areas of the world. It is estimated that, in 1963, overseas telephone messages originating or terminating in the continental United States represented approximately 70% of the total number of intercontinental telephone messages, and that approximately one-half the revenues from overseas telephone messages originating or terminating in the United States were received by U. S. carriers.

Telephone and record traffic between the United States and overseas places has increased continuously since the end of World War II. In respect of record traffic, the most rapid growth has been in forms of service other than message telegraph service, principally teleprinter exchanges service (telex) and leased circuit services. The following table sets forth information, for each of the years indicated, with respect to telephone traffic between the continental United States and places outside

the continental United States (except Canada and Mexico). The table shows, in respect of such routes, the total number of chargeable telephone calls transmitted by the principal U. S. telephone carriers, and the gross revenues of the U. S. telephone carriers from such calls:

	No. of Chargeable Calls (Thousands)	Gross Revenues from Chargeable Calls (Thousands of \$)*
1947	517	\$ 5,833
1950	745	8,198
1955	1,194	13,001
1956	1,394	15,802
1957	2,178	22,679
1958	2,427	27,841
1959	2,736	33,110
1960	3,301	42,322
1961	3,945	50,906
1962	4,461	61,387
1963 (est.)	4,825	69,410

*Exclusive of any revenues (approximately \$12,700,000 in 1962) derived by U. S. telephone carriers from leases of circuits, principally to U. S. telegraph carriers and to agencies of the United States Government. Information in the table (except estimates for 1963) is from statistical publications of the FCC for the years indicated.

The revenues of the U. S. carriers shown in the table reflect (1) charges for the domestic segment of the telephone calls (including terminal handling), as well as charges for the overseas segment of the calls, and (2) rates established for a "retail" communications service, rendered directly to the public. In contrast, any revenue which the Corporation would receive from leases of satellite system channels would relate only to the overseas segment of the service, and would reflect rates to be established for a "wholesale" service rendered to the carriers and not directly to the public. Accordingly, any revenues of the Corporation under leases of satellite system channels to U. S. carriers would be less than the revenues which the U. S. carriers would receive from their customers for providing overseas telephone service through such satellite system channels. The revenues shown in the table include revenues of U. S. carriers from calls over certain routes (e.g., between the U. S. and places in the Caribbean) which would not necessarily be served by satellite system channels in the early years of a commercial satellite system.

Of the gross revenues of the U. S. telephone carriers from overseas chargeable calls in 1962, as shown in the foregoing table, \$22,668,000 (37%) relate to chargeable calls classified as "Trans-Atlantic and Bermuda", \$21,927,000 (36%) relate to chargeable calls classified as "Central America, South America and Caribbean" and \$16,792,000 (27%) relate to chargeable calls classified as "Trans-Pacific".

The aggregate amount paid by U. S. telegraph carriers for the rental of circuits in submarine telephone cables from U. S. telephone carriers and others is estimated at approximately \$4,662,000 for 1963. The gross revenues of the U. S. telegraph carriers from record traffic service between the United States and overseas places are a much larger amount, reflecting not only such leased circuit costs but charges in respect of the HFR or telegraph cable facilities operated by them for traffic not transmitted through such leased circuits, charges attributable to transmission services in the United States from points of origin to gateways for overseas transmission, and charges in respect of non-transmission services.

The demand for telecommunications service between Western Europe and North America, and on certain other overseas routes, exceeded the capacity of available facilities during peak demand hours in 1963.

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Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
capital	50 400

Future International Telecommunications Traffic

The rate of growth in the demand for international telecommunications service is influenced by many factors, including population growth, the extent of international trade and travel, the extent of improvements in domestic telecommunications systems and rates for international telecommunications service. Estimates with respect to the demand for international telecommunications service at various times through 1980 have been published in recent years by U. S. carriers, by representatives of such carriers and by international bodies and other persons. Such estimates, which are not necessarily based on the same information with respect to relevant matters or on the same assumptions with respect to factors which may affect the demand for international telecommunications service, differ substantially from each other in certain respects. All such estimates of which the officers of the Corporation have knowledge, however, reflect the view that, during the periods to which such estimates, respectively, relate, there will be a continuous growth in the demand for telephone and record traffic service between the continental United States or North America and other areas of the world, and that the demand for telephone and record traffic service between the continental United States and Western Europe will exceed the capacity of telephone cables now in existence or now scheduled for construction through 1965 within a period of not more than a year thereafter. Estimates of future demand for international telecommunications service necessarily are based on assumptions and predictions with respect to factors which may affect the growth of such demand, and the accuracy of such estimates may depend upon the substantial correctness of the assumptions and predictions on which the estimates are based.

Although the need for a commercial communications satellite system derives primarily from the anticipated growth in demand for international telecommunications services and the relationship of such demand to the capacity of present and proposed submarine telephone cables, it is possible that, once such a system has been established, it may be used to provide service between intracontinental points separated by long distances. The Corporation is unable to predict the extent of such intracontinental use of the proposed system.

Submarine cable systems (and/or other telecommunications facilities), in addition to those now planned, may be constructed and placed in operation at or before the time the commercial communications satellite system is established, to meet the anticipated increase in demand for international telecommunications service. See "Competition".

COMPETITION

The U. S. carriers and telecommunications entities in other countries to which satellite system channels will be offered own and operate the submarine telephone cable systems and HFR facilities with which the satellite system will compete. In respect of telephone and record traffic between the continental United States and overseas points, the facilities of the satellite system will compete principally with those of AT&T and the U. S. telegraph carriers.

The amount of the revenues from the operations of the satellite system will depend in the first instance on the ability of the system to provide communication channels of commercial quality. The amount of such revenues will also be affected by the extent of the growth of international telecommunications traffic and the extent of the construction of submarine telephone cable systems or other telecommunications facilities. The competitive position of the Corporation will depend on its ability to develop and operate a satellite system which compares favorably, in cost and efficiency, with service provided by cable systems or other telecommunications facilities.

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AT&T and others are engaged in the development of improved submarine telephone cables. The cables under development by AT&T include cables in which transistors would be used for the first time in certain submerged components of the cable. A 3,000-mile cable in which transistors are so utilized would have a design capacity of up to 720 two-way telephone grade circuits and could provide service, between the places connected by such cables, for all the forms of telecommunications traffic which the satellite system might serve. None of the trans-oceanic cables shown in the table under "International Telecommunications—Facilities for International Telecommunications" as scheduled to be in operation by December 31, 1965, will be a transistorized cable. The design capacity of the trans-Atlantic telephone cable recently authorized by the FCC to be constructed in 1965 is 128 two-way telephone grade circuits.

Under the Communications Act of 1934, and other provisions of law, the construction and operation of a submarine telephone cable between the United States and an overseas point may not be undertaken unless the FCC has determined that the present or future public convenience and necessity require or will require the construction and operation of the cable.

In December, 1963, AT&T advised the Corporation, among other things, to the effect that (a) AT&T sees a place and a need for both satellite and cable communications, in order to provide for anticipated increases in the volume of trans-oceanic communications and to provide diversity in means of communication, (b) if satellite system circuits of satisfactory quality and costs reasonably related to the costs of providing communication circuits by alternative means are available in late 1966 or early 1967 on North Atlantic routes, AT&T would prefer, in order to provide diversity of facilities in meeting additional needs, to use satellite circuits instead of placing additional cables in service on such routes, subject to the giving to AT&T during 1964 of assurances that suitable satellite circuits would be available in 1966 or early 1967, the obtaining of the agreement of the interested European telecommunications entities (which AT&T would take all reasonable steps to help obtain), and the obtaining of necessary authorizations from the FCC, and (c) it appears to AT&T that such preference for satellite circuits would continue until North Atlantic routes were served by approximately equal numbers of cable system voice circuits and satellite system voice circuits. Regardless of the type of system selected, the present program for system development contemplates the emplacement by early 1967 of at least a number of satellites providing North Atlantic circuits satisfactory in quality and having costs bearing a reasonable relationship to alternative methods, which would be sufficient to provide an average grade of service (percentage of total number of customer calls for which circuits are available immediately) equivalent to that obtained by means of North Atlantic cable circuits at the present time. See "System Development".

The Corporation is informed that ITT (subsidiaries of which operate telecommunications systems in various South and Central American countries) and AT&T have recently transmitted letters to the Department of State stating that they desire to construct by the end of 1965, and participate in the ownership and operation of, a submarine telephone cable which would extend from the Canal Zone down the west coast of South America to Chile. This cable, which would have a design capacity of 160 two-way telephone grade circuits, would constitute a continuation of a submarine telephone cable recently put in operation between the United States and the Canal Zone via Jamaica. The Corporation is informed that this cable may subsequently be connected with facilities, to be constructed, which would provide a continuation of similar telecommunications service across the Andes to Argentina and, by submarine cable, along the east coast of South America, to Brazil. In their letters to the Department of State, ITT and AT&T expressed the view that both cable and satellite facilities are needed. In its letter ITT also stated that it had initiated discussions with the governments of various South American countries looking toward the granting of franchises for both cable facilities and satellite terminal stations. The Corporation is

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Fees of District of Columbia in connection with increase in authorized	20,000
capital rational with mercase in authorized	50 400

unable to state the extent to which the cable program described above, if the requisite approvals of governmental authorities in the United States and other countries are obtained and the cable system is constructed, might adversely affect the establishment of or the revenues from satellite communications services between the United States and South American countries or between South American countries.

In respect of telecommunications traffic between places outside the United States, the facilities of the satellite system will compete principally with facilities of foreign telecommunications entities, which may include facilities not now scheduled to be constructed.

REGULATION

The Corporation is subject to regulation by the FCC under the provisions of the Act and, as a communications common carrier, under certain provisions of the Communications Act of 1934. The matters as to which the FCC has regulatory authority include, among other things, (a) the procurement by the Corporation of equipment and services required for the establishment and operation of the satellite system and terminal stations, (b) the use by communications common carriers of the facilities of the satellite system and terminal stations, including the charges to be made therefor, (c) the making of additions with respect to the facilities of the satellite system or terminal stations, including authority to insure that no substantial additions are made by the Corporation or carriers with respect to facilities of the satellite system or terminal stations unless such additions are required by the public interest, convenience, and necessity, and authority to require the establishment of service to particular foreign points upon advice of the Secretary of State of the United States that such service should be established in the national interest, (d) the technical characteristics of the satellite system and terminal stations, including the technical compatibility and operational interconnection of the system and terminal stations with each other and with existing communications facilities, (e) accounting systems, and (f) the issuance of securities (other than the issuance of the shares of Common Stock to which this Prospectus relates) and the borrowing of funds. Under the provisions of such Act or Acts, in respect of rates charged by the Corporation for service to communications common carriers and other authorized users, the FCC may limit the Corporation to a reasonable rate of return, and the FCC is also directed by the Act to engage in such rate-making procedures as will insure that any economies made possible by a communications satellite system are appropriately reflected in rates for public communications services. The Act also provides that the FCC shall authorize the construction and operation of each satellite terminal station by the Corporation or one or more communications common carriers authorized to provide services by means of communications satellites, or by the Corporation and one or more such carriers jointly, without preference to either the Corporation or such carriers, as will best serve the public interest, convenience and necessity.

Under the provisions of the Act, the Corporation is required to meet certain responsibilities to representatives or agencies of the United States Government other than the FCC. The Act provides that (a) the President of the United States shall exercise such supervision over the relationships of the Corporation with foreign governments, foreign entities and international bodies as may be appropriate to assure that such relationships are consistent with the national interest and foreign policy of the United States, and that the President shall exercise various other powers relating to the establishment and operation of a commercial communications satellite system; (b) the Corporation shall notify the Department of State whenever it enters into business negotiations with a foreign or international entity relating to the Corporation's facilities, operations or services, shall receive the advice of that Department with respect to relevant foreign policy considerations and, throughout

such negotiations, shall keep the Department informed with respect to such considerations; (c) NASA shall, among other things, consult with the Corporation with respect to the technical characteristics of the satellite system; cooperate, to the extent deemed appropriate by it, in the Corporation's research and development program; and provide, on a reimbursable basis, satellite launching and associated services deemed necessary by NASA in connection with the research and development program of the Corporation or required for the establishment, operation and maintenance of the communications satellite system; (d) the Corporation shall transmit to the President of the United States and to the United States Congress, detailed reports of its operations, activities and accomplishments under the Act; and (e) the Attorney General of the United States may institute appropriate court proceedings to prevent or terminate actions by the Corporation which are inconsistent with the policies and purposes declared in the Act or which involve or threaten a refusal or failure by the Corporation to comply with the provisions of the Act.

Under the provisions of the NASA Authorization Act for the 1964 fiscal year, the Corporation is required to reimburse NASA for any scientific or technological services furnished at the request of the Corporation for its exclusive benefit.

Communication via the satellite system with a telecommunications entity in any other country may also be subject to regulation or control by the government of such country.

MANAGEMENT

Directors

In accordance with the provisions of the Act, the present Board of Directors of the Corporation consists of persons appointed by the President of the United States, with the advice and consent of the United States Senate, as incorporators of the Corporation. The name and principal occupation of each such person are as follows:

	he Corporation. The name and principal occupation of each
person are as follows:	
Name Name	Principal Occupation
Joseph V. Charyk	President of the Corporation, Washington, D. C.
John T. Connor	President, Merck & Co., Rahway, New Jersey
George J. Feldman	Vice President and Counsel, Mastan Co., New York, N. Y.
Beardsley Graham	President, Spindletop Research, Inc., Lexington, Kentucky
Sam Harris	Attorney, New York, N. Y.
Edgar F. Kaiser	President, Kaiser Industries Corporation, Oakland, California*
David M. Kennedy	Chairman, Continental Illinois National Bank and Trust Company of Chicago, Chicago, Illinois*
George Killion	President, American President Lines, San Francisco, California
Byrne Litschgi	Attorney, Tampa, Florida
Leonard H. Marks	Attorney, Washington, D. C.
Bruce G. Sundlun	Attorney, Washington, D. C.
Sidney J. Weinberg	Partner, Goldman, Sachs & Co., New York, N. Y.
Leo D. Welch	Chairman and Chief Executive Officer of the Corporation, Washington, D. C.*
	Vice President, UAW-CIO, Detroit, Michigan
Continental Illinois National Bank and Tr	rust Company of Chicago, of which Mr. Kennedy is a director and

* Continental Illinois National Bank and Trust Company of Chicago, of which Mr. Kennedy is a director and Chairman of the Board, Bank of America National Trust and Savings Association, of which Mr. Kaiser is a director, and First National City Bank, of which Mr. Welch is a director, are among the banks which are parties to the Corporation's bank credit agreement. See "Notes to Financial Statements".

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Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	,_,
capital capital	50 400

The present Board of Directors will serve until the first annual meeting of shareholders following completion of the offering made by this Prospectus. It is expected that such shareholders meeting will be held on or about September 1, 1964. As provided in the Act and the Articles of Incorporation of the Corporation, the Board of Directors thereafter will consist of 15 individuals, of whom (a) three will be appointed by the President of the United States, by and with the advice and consent of the Senate, for terms of three years (except that the first three directors so appointed will continue in office for terms of one, two and three years, respectively), (b) six will be elected annually by those holders of Common Stock which are communications common carriers (holders of Series II shares), and (c) six will be elected annually by holders of Common Stock who are not communications common carriers or persons having specified relationships to any such carrier (holders of Series I shares). See "Description of Common Stock—Voting Rights", below. The Articles of Incorporation provide that each director, regardless of the method of his appointment or election, shall have the same fiduciary duty to the Corporation and its shareholders.

Under the provisions of the By-laws of the Corporation presently in effect, no vote may be counted for the election of any person as a director unless (a) such person was proposed for nomination to be a candidate by written notice signed by a shareholder of the appropriate Series and mailed to the Secretary of the Corporation not less than 10 nor more than 50 days before the date of the meeting, (b) such person has filed with the Secretary of the Corporation a statement of his interests in any communications common carrier, and (c) a statement of the interests of such person in any communications common carrier shall have been included in each written solicitation of proxies in favor of his election, made by such person or by his proposer.

It is the intention of the present Board of Directors, as holders of Series I shares, to nominate six candidates for election as directors by holders of Series I shares (public shareholders) at the first annual meeting of shareholders, and to solicit proxies for the election of such candidates. Such candidates may include members of the present Board of Directors. The identity of such candidates has not been determined.

Officers and Staff Division Heads

The names of the executive officers and heads of the principal staff divisions of the Corporation are as follows:

Name	Office or Position
Leo D. Welch	Chairman and Chief Executive Officer*
Joseph V. Charyk	President*
Allen E. Throop	Vice President and General Counsel*
Siegfried H. Reiger	Vice President (Technical)*
Lewis C. Meyer**	Treasurer*
Frederic M. Mead	Comptroller*
David J. Melamed	Secretary*
John A. Johnson	Director of International Arrangements
Sidney Metzger	Manager, Engineering Division
Matthew Gordon	Director of Information

*Executive officer elected by the Board of Directors.

** Mr. Meyer is also Finance Coordinator of the Corporation.

Mr. Welch has served as Chairman and Chief Executive Officer of the Corporation since March 31, 1963. From 1944 to that date, he served in various capacities with Standard Oil Company (New Jersey), including service as a vice president (September 6, 1956 to April 2, 1958), executive vice president and member of the executive committee (April 3, 1958 to April 30, 1960) and chairman of the board and vice chairman of the executive committee (May 1, 1960 to March 31, 1963).

Dr. Charyk has served as President of the Corporation since February 28, 1963. From January 1959 to that date, he served in various civilian capacities with the United States Department of the Air Force, including service as Chief Scientist of the Air Force (January, 1959 to June, 1959), Assistant Secretary of the Air Force for Research and Development (June, 1959 to January, 1960), and Under Secretary of the Air Force (January, 1960 to February, 1963). Before such service with the Department of the Air Force, Dr. Charyk was General Manager of the Space Technology Division of Aeronutronic Systems, Inc. (a subsidiary of the Ford Motor Company) and was a director of the Aerophysics and Chemistry Laboratory of Lockheed Aircraft Corporation.

Mr. Throop has served as Vice President and General Counsel of the Corporation since May 31, 1963. From 1945 to that date he was a member of the law firm of Messrs. Shearman & Sterling, New York, N. Y.

Mr. Reiger was elected Vice President (Technical) of the Corporation, effective May 15, 1964. From June 3, 1963 to that date he served as the Corporation's Manager for Systems Analysis. From January, 1959 to June 3, 1963, he served as a Senior Staff Member of The Rand Corporation, Santa Monica, California.

Mr. Meyer has served as Finance Coordinator of the Corporation since June 2, 1963, and as Treasurer and Finance Coordinator since April 10, 1964. From July, 1958 until his employment by the Corporation, he served in various civilian capacities with the United States Department of the Air Force, including service as Chief, Missile and Space Systems Division, Office of the Comptroller of the Air Force (July, 1958 to August 1962), and as Deputy for Financial Analysis, Office of the Assistant Secretary of the Air Force (Financial Management) (August, 1962 to June 2, 1963).

Mr. Mead was elected Comptroller of the Corporation, effective May 1, 1964. From March 1, 1958 to April 30, 1964, he served in various capacities with Mallinckrodt Chemical Works, St. Louis, Missouri, including service as Controller (April 4, 1961 to April 30, 1964).

Mr. Melamed served as Assistant Counsel to the Chairman of the Incorporators of the Corporation from November 6, 1962 to January 31, 1963, as Assistant Secretary of the Corporation from February 1, 1963 to September 15, 1963, and has served as Secretary of the Corporation since that time. From August 11, 1956 to November 5, 1962, he was an associate with the law firm of Messrs. Cravath, Swaine & Moore, New York, N. Y.

Mr. Johnson has served as Director of International Arrangements since December 9, 1963. From October, 1958 to that date, he served as General Counsel of the National Aeronautics and Space Administration.

Mr. Metzger has served as Manager, Engineering Division, since June 6, 1963. From 1954 to that date, he served in various capacities with Radio Corporation of America (RCA), including service as Manager, Communications Engineering, of the Astro-Electronics Division of RCA and Manager of RCA's New York Communications System Laboratory.

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capital	50 400

Mr. Gordon has served as Director of Information, including public relations and government relations, since May 20, 1963. From March, 1946, to September, 1961 Mr. Gordon was in charge of press services at the United Nations. From the latter date until May 20, 1963, he was in private business, primarily as a consultant to technological companies.

Remuneration

The following table sets forth the aggregate direct remuneration for services in all capacities estimated to be payable by the Corporation in 1964 (a) to each director, and each of the three highest-paid officers, of the Corporation whose aggregate direct remuneration in such year is estimated will exceed \$30,000, and (b) to all directors and officers of the Corporation as a group:

Name of Individual or Identity of Group	Capacities In Which Remuneration Was Received	Aggregate Direct Remuneration*
Leo D. Welch	Chairman and Chief Executive Officer	\$125,000
Joseph V. Charyk	President	80,000
Allen E. Throop	Vice President and General Counsel	50,000
All directors and officers as a group (including those named above)		404,000

*It is estimated that the following additional amounts will be payable by the Corporation in 1964 as life insurance premiums in respect of the officers named under policies other than the Corporation's contributory group insurance policy: Mr. Welch, \$4,481; Dr. Charyk, \$714; Mr. Throop, \$1,183.

The Corporation does not have an employment contract with any of its officers or employees, or any plan or arrangement for the payment of retirement benefits to any of its directors, officers or employees.

Personne

At April 30, 1964 the Corporation employed 72 persons, of whom 37 were administrative or professional employees. None of the employees of the Corporation is represented by a collective bargaining agent. It is expected that increases in the number of employees of the Corporation will be required in the carrying out of the program to establish a commercial communications satellite system, and also in the operation of the system, including command and control facilities and such of the terminal stations in the United States as may be operated by the Corporation.

DESCRIPTION OF COMMON STOCK

For a full description of the Common Stock of the Corporation, reference is made to the Communications Satellite Act of 1962, and to the Articles of Incorporation, as amended, of the Corporation, a copy of which is filed as an Exhibit to the Registration Statement. The statements herein summarizing certain provisions of said Articles and the Act are qualified by such reference.

The New York Stock Exchange, the Midwest Stock Exchange and the Pacific Coast Stock Exchange each has approved the listing on such Exchange of the shares of Common Stock to which this Prospectus relates, subject to official notice of issuance, the furnishing of evidence of satisfactory distribution of the shares and the furnishing of certain other documents. The date for the commencement of trading of such shares on these Exchanges has not been determined, and is subject, among other things, to the prior registration of such shares under the Securities Exchange Act of 1934.

The transfer agents for the Common Stock are Continental Illinois National Bank and Trust Company of Chicago, Chicago, Ill.; Manufacturers Hanover Trust Company, New York, N. Y.; and Wells Fargo Bank, San Francisco, Calif.

The registrars for the Common Stock are The First National Bank of Chicago, Chicago, Ill.; The Chase Manhattan Bank, New York, N. Y.; and Bank of America National Trust and Savings Association, San Francisco, Calif.

By amendment of the Articles of Incorporation effective May 6, 1964, the authorized capital of the Corporation was increased from 100 shares of Common Stock, without par value, to 10,000,100 such shares.

Series I and Series II Shares

Shares of Common Stock are issuable in two series designated respectively Series I and Series II. Except as stated below under "Restrictions on Ownership and Transfer of Shares" and "Voting Rights", the rights of a holder of a Series I share, as such, and the rights of a holder of a Series II share, as such, are the same.

Shares issued or transferred to persons other than authorized carriers are Series I shares. Shares issued or transferred to authorized carriers are Series II shares. Authorized carriers are those communications common carriers, as defined below, which have been authorized by the FCC to own shares of stock of the Corporation. Shares of either Series may not be issued or transferred to a communications common carrier which is not an authorized carrier or to persons having certain relationships with a communications common carrier. See "Restrictions on Ownership and Transfer of Shares".

Under the provisions of the Act and the Articles of Incorporation, in any offering by the Corporation of Common Stock, 50% of the shares to be offered must be reserved for offering and offered for purchase by authorized carriers. Shares reserved and offered to authorized carriers but not purchased by them may be offered to other persons.

Dividend Rights

Holders of Common Stock are entitled to receive such dividends, in cash, in property or in shares of stock of the Corporation, as may be declared by the Board of Directors. Holders of Common Stock, as such, have equal dividend rights, irrespective of the Series of shares of Common Stock held by them.

Liquidation

Upon any liquidation, dissolution or winding up of the Corporation, holders of shares of Common Stock, irrespective of the Series of such shares held by them, are entitled to receive, pro rata, the assets of the Corporation available for distribution.

Restrictions on Ownership and Transfer of Shares

Subject to the limitations referred to below, holders of Series I shares or of Series II shares may at any time sell or otherwise dispose of such shares to any person to whom shares of either Series may be issued and, upon surrender of the share certificate for transfer, the transferee will receive a certificate, representing the same number of shares as the surrendered certificate, for shares of the Series appropriate to him.

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Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	20,000
capital	50 400

The ownership and transfer of shares of Common Stock are subject to the following provisions:

- (i) Except for an authorized carrier, shares of Common Stock may not be owned or held, directly or indirectly, by any communications common carrier, or by a subsidiary or affiliated company of any communications common carrier, or by a trustee, director or officer of any of the foregoing. For these purposes, the term "communications common carrier" has the meaning of the term "common carrier" as used in the Communications Act of 1934, and also includes any person or entity which owns or controls, directly or indirectly, or is under direct or indirect common control with, any such carrier, but does not include the Corporation. Reference is made to the definition, in the By-laws of the Corporation, of the terms "subsidiary" and "affiliated company" of a "communications common carrier". See "Voting Rights".
- (ii) The aggregate number of shares of Common Stock owned or held, directly or indirectly, by authorized carriers may not at any time exceed 50% of the total number of shares of Common Stock issued and outstanding.
- (iii) Not more than an aggregate of 20% of the number of shares of Common Stock owned or held by persons other than authorized carriers may be owned or held by persons of the classes described in paragraphs (1) through (5) of Section 310(a) of the Communications Act of 1934. The classes as described consist of aliens, foreign governments, representatives of aliens or foreign governments, and corporations organized under the laws of foreign governments (hereinafter collectively called Alien Persons); corporations of which any officer or director is an alien or of which more than 20% of the capital stock is owned of record or voted by Alien Persons; and a corporation which is directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens or of which more than 25% of the capital stock is owned of record or voted by Alien Persons.
- (iv) As provided in the Act, the number of shares of Common Stock owned or held by any person (other than an authorized carrier) or syndicate or affiliated group of such persons may not at any time exceed 10% of the total number of shares of Common Stock at the time outstanding, or, as provided in the Articles of Incorporation, such lesser percentage thereof as the Board of Directors may from time to time determine for the purpose of encouraging the widest distribution of shares of Common Stock to the American public. Notice of any such determination by the Board of Directors must be mailed to each record holder of Common Stock not less than ten days prior to the effective date of such determination. The ownership of shares acquired before the effective date of any such determination is not affected thereby. Pursuant to such provisions of the Articles of Incorporation, the Board of Directors has fixed 1% as the maximum percentage of the outstanding shares of Common Stock which may be owned or held by any shareholder (other than an authorized carrier) or syndicate or affiliated group of such shareholders. The FCC has advised the Corporation that it has determined that any action by the Corporation fixing such a maximum percentage of less than 10% is subject to review by the FCC to ascertain its reasonableness in the light of the purposes and objectives of the Act. The Corporation has been advised by its special counsel, Messrs. Wilmer, Cutler & Pickering, Washington, D. C., that, in the opinion of such firm, the FCC does not have authority to review and set aside such action of the Board of Directors, and that any such action of the Board may be determined to be invalid under the Act only by the courts.
- (v) No authorized carrier or affiliated group of such carriers may sell or transfer to persons other than authorized carriers shares of Common Stock totalling, in any consecutive 12-month

period, more than 2% of the greatest number of Series II shares issued and outstanding at any time during such period, except pursuant to a general public offering or in conformity with regulations adopted by the Board of Directors to encourage the widest distribution of shares of Common Stock to the American public.

(vi) The FCC is authorized, upon application by any authorized carrier and after notice and hearing, to require any other authorized carrier which owns shares of Common Stock to transfer to the applicant, for a fair and reasonable consideration, such number of shares as the FCC determines will advance the public interest and the purposes of the Act.

Voting Rights

Holders of Common Stock have exclusive voting rights. Except as otherwise stated in the following three paragraphs, each share of Common Stock, irrespective of Series, is entitled to one vote on each matter submitted to a vote at a meeting of shareholders.

Holders of Series I shares of Common Stock are entitled to elect six directors. In voting for directors, each holder of Series I shares has the right to vote the number of shares held by him for six candidates, or to cumulate such shares and give one candidate as many votes as the number of his shares multiplied by six shall equal, or to distribute such votes on the same principle among any number of candidates not exceeding six. No Series I share may be voted for the election of directors if such vote is subject to the direction or control of a person ineligible to own or hold Series I shares. See "Restrictions on Ownership and Transfer of Shares", above.

Holders of Series II shares of Common Stock are entitled to elect six directors. In voting for directors, each holder of Series II shares has the right to cumulate such shares and give one candidate as many votes as the number of shares held by him multiplied by six shall equal, or to distribute such votes on the same principle among any number of candidates not exceeding three. Under the Act and the Articles of Incorporation no holder of Series II shares and no trustee for such a holder may vote, either directly or indirectly, through the votes of subsidiary or affiliated companies, nominees or any persons subject to his direction or control, for more than three candidates. The By-laws of the Corporation provide that, in the event that any holder of Series II shares or a trustee for such holder casts votes, either directly or indirectly, through subsidiary or affiliated companies, nominees, or persons subject to his direction or control, for more than three candidates, only the votes so cast for those three of such candidates who receive the highest number of the votes so cast shall be counted, and the votes so cast for any other such candidates shall not be counted. The By-laws also provide that an association, joint-stock company, trust, corporation or other entity shall be deemed to be a subsidiary of a communications common carrier, as defined above, if more than 50% of its shares entitled under normal circumstances to elect a majority of its board of directors or trustees are owned or controlled directly or indirectly by such carrier, and that any such entity shall be deemed to be an affiliated company of a communications common carrier if it is otherwise directly or indirectly subject to the control of, or is under direct or indirect common control with, such carrier.

No share of Common Stock, irrespective of Series, may be voted on any matter at a meeting of shareholders if, at the time of such meeting, the share is owned or held in violation of the Act or any regulation promulgated thereunder or in violation of the Articles of Incorporation or any regulation or determination made by the Board of Directors thereunder; and the Corporation may, in accordance with

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Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement Days	
Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	
	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50 400

regulations adopted by the Board of Directors, require that the holder of shares furnish appropriate information to this effect in connection with the voting of his shares.

The By-laws of the Corporation provide that, at any meeting of shareholders for the election of directors (a) a majority of the shares of Series I Common Stock entitled to vote thereat constitutes a quorum for the election of directors by holders of shares of such Series, and (b) a majority of shares of Series II Common Stock entitled to vote thereat constitutes a quorum for the election of directors by the holders of shares of such Series, provided that, with respect to each Series, if such quorum shall not have been attained within 30 days from the date of the meeting as originally called, one-third of the shares of such Series entitled to vote thereat constitutes a quorum for the purpose of election of directors by holders of shares of such Series. Except where a greater proportion is required by law, one-third of the total number of shares (Series I and Series II) entitled to vote thereat constitutes a quorum for the transaction of any business other than the election of directors.

It is the intention of the present Board of Directors, in the event that, upon completion of the distribution of the shares offered by this Prospectus, the aggregate number of shares of Common Stock held by authorized carriers constitutes substantially less than 50% of the total number of shares of Common Stock then outstanding, to submit to the Congress a request in substance to the effect that the Act be amended to provide that, as nearly as may be, the number of directors to be elected by shareholders which are authorized carriers (holders of Series II shares), and the number of directors to be elected by other shareholders (holders of Series I shares), shall be in proportion to the respective aggregate numbers of shares of Common Stock held by the holders of shares of each such Series.

Transfer Procedures

The Board of Directors is authorized to establish procedures with respect to the transfer of shares of Common Stock to enforce the limitations referred to under "Restrictions on Ownership and Transfer", above. Procedures established by the Board of Directors require that, in connection with each transfer of shares on the books of the Corporation, the transferee complete an application for transfer of the shares. Such application calls for information about the transferee's citizenship status, relationship with communications common carriers and other matters related to the limitations on ownership and transfer of shares of Common Stock. Such an application for transfer must also be completed by each person who purchases shares from any of the Underwriters.

Neither the Act nor the Articles of Incorporation define the respective rights, as between themselves, of the seller and purchaser of shares where, because of the restrictions on the ownership and transfer of shares, the purchaser is not entitled to have the shares transferred to him on the books of the Corporation. The respective rights of the seller and purchaser in such a case would be determined under the laws or other rules applicable to such sale. The Articles of Incorporation provide, however, that nothing in the provisions thereof limiting the ownership and transfer of shares shall be deemed to affect the right of the purchaser in such a case to transfer his interest in the shares to any person who, under the provisions of the Act and the Articles, lawfully may acquire such interest.

Miscellaneous

No conversion rights, preemptive rights, redemption rights or sinking fund provisions are applicable to the Common Stock. Shares of Common Stock offered hereby will be fully-paid and non-assessable.

Under the provisions of the Act, shares of Common Stock owned by an authorized carrier are not eligible to be included in the rate base of such carrier.

The Corporation will furnish to its shareholders annually a report containing certified financial statements.

Under the provisions of the Act, the Corporation is authorized to issue, in addition to shares of Common Stock without par value, non-voting securities, bonds, debentures, and other certificates of indebtedness as it may determine. The Articles of Incorporation at present provide for the issuance only of Common Stock without par value having the voting rights described above. The issuance of any securities other than the shares offered by this Prospectus, and the borrowing of moneys or assumption of any obligation in respect of securities of others, are subject to authorization by the FCC.

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PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000	
Printing and engraving of Common Stock certificates	85,000	
Federal original issue tax	200,000	
Fees of Transfer Agents and Registrars	79,000	
Listing fees of stock exchanges	37,000	
Legal Fees	45,000	
Accountants' Fee	10,000	
Securities and Exchange Commission Registration Fee	20,000	
Fees of District of Columbia in connection with increase in authorized		
capital	50 400	

OPINION OF INDEPENDENT PUBLIC ACCOUNTANTS

COMMUNICATIONS SATELLITE CORPORATION:

We have examined the financial statements of Communications Satellite Corporation listed below:

Statement of assets, preliminary survey, research, development, and organization expenses, and liabilities and capital, December 31, 1963.

Statement of cash receipts and disbursements for the period from February 1, 1963 (date of incorporation) to December 31, 1963.

Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying financial statements present fairly the assets, preliminary survey, research, development, and organization expenses, and liabilities and capital of the Corporation at December 31, 1963 and the cash receipts and disbursements of the Corporation for the period from February 1, 1963 to December 31, 1963, in conformity with generally accepted accounting principles consistently applied.

HASKINS & SELLS

Washington, D. C., February 28, 1964

COMMUNICATIONS SATELLITE CORPORATION

STATEMENT OF ASSETS, PRELIMINARY SURVEY, RESEARCH, DEVELOPMENT, AND ORGANIZATION EXPENSES, AND LIABILITIES AND CAPITAL December 31, 1963 and (Unaudited) March 31, 1964

ASSETS, AND PRELIMINARY SURVEY, RESEARCH,

DEVELOPMENT, AND ORGANIZATION EXPE	NSES	March
	December 31, 1963	31, 1964 (Unaudited)
PROPERTY AT COST:	Maria William	PERSONAL PROPERTY.
Furniture, office equipment, and automobiles Leaseholds	\$ 80,405 20,983	\$ 93,775 34,891
TotalLess accumulated depreciation and amortization	101,388 14,192	128,666 20,504
000,002 Property—Net	87,196	108,162
CURRENT ASSETS:	Mach Jl.	December
Cash	246,807 3,500	288,417 1,772
Prepayments—Insurance, rent, etc	6,285	4,285
Total Current Assets	256,592	294,474
OTHER ASSETS ACCOUNTY OF THE ASSETS ACCO	2,000	2,000
PRELIMINARY SURVEY, RESEARCH, DEVELOPMENT, AND ORGANIZATION Ex-	SSEIS .	similard8,468
PENSES (Note 1)	1,012,985	1,444,978
aburaduruia.(adarual.basis)455,635		\$1,849,614
LIABILITIES AND CAPITAL	ounts payable	Add acc
CAPITAL—Common stock—authorized, 100 shares without par value, issued	(Boin	
and outstanding, 14 shares. (Authorized shares increased to 10.000,100		
shares subsequent to March 31, 1964)—See "Description of Common Stock"	\$ 1,400	\$ 1,400
red and withheld(198,214	oll taxes accru	T 22 32
Notes payable to banks (Note 2)	ob sol sonswo	
Accounts payable	1,150,000 157,245	1,650,000 111,840
Accrued interest	25,761	40,543
Other (accrued salaries and payroll taxes accrued and withheld)	24,367	45,831
NING OF PERIOD 246.807	1,357,373	1,848,214
Total Current Liabilities	1,007,070	1,010,21
Total Current Liabilities	1,557,575 0 0/42 TA 207	CASH BALAN

The accompanying Notes to Financial Statements are an integral part of this Statement.

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Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	
Endand and the staying of common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	
Accountants' Fac	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	_5,000
capital	50 400

COMMUNICATIONS SATELLITE CORPORATION

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS

For the Period from February 1, 1963 (Date of Incorporation) to December 31, 1963 and (Unaudited) for the Three Months Ended March 31, 1964

	February 1, 1963 to December 31, 1963	Three months ended March 31, 1964 (unaudited)
Receipts: Bank loans Sales of common stock	\$1,150,000 1,400	\$ 500,000
Maturity of temporary investments (interest income has been deducted from interest expense)	198,754	
Sor sor a deal Total Receipts	1,350,154	500,000
Disbursements:		CURRENT ASSET
Purchases of furniture, office equipment and automobiles—net	80,405	13,462
Leasehold costs	20,983	13,908
Advances and deposits—net (credit)	3,500	(1,728)
Prepayments—Insurance, rent, etc.—net (credit)	6,285	(2,000)
Purchase of temporary investments	198,754	
Other assets	2,000	
Preliminary survey, research, development and organization expenses (Note 1)	1,012,985	431,993
Total Disbursements (accrual basis)	1,324,912	455,635
Add accounts payable and accrued liabilities at beginning of period (settled by cash disbursements or continued as liabilities at end of period) Deduct amounts included above which have not involved cash disbursements and which are represented by the following at the end of the respective periods:		207,373
Accounts payable, accrued interest, accrued salaries, and pay-		Stock"
roll taxes accrued and withheld	(207,373)	(198,214)
Allowance for depreciation and amortization	(14,192)	(6,404)
Total Disbursements (cash basis)	1,103,347	458,390
NET INCREASE IN CASH DURING PERIOD	246,807	41,610
Cash Balance at Beginning of Period		246,807
Cash Balance at End of Period	\$ 246,807	\$ 288,417

The accompanying Notes to Financial Statements are an integral part of this Statement.

COMMUNICATIONS SATELLITE CORPORATION

NOTES TO FINANCIAL STATEMENTS

December 31, 1963 and (Unaudited) March 31, 1964

1. Preliminary Survey, Research, Development, and Organization Expenses

These amounts represent expenditures for organization matters, hearings and negotiations, research and development, and other corporate activities incident to the formation of a program for the creation of an international communications satellite system. The amounts for the three months ended March 31, 1964 include legal and accounting fees and printing costs approximating \$25,000 in connection with the proposed sale of capital stock contemplated by this Prospectus; and such amounts will constitute part of the capital stock expense of the issue. It is anticipated that as or after the system is developed, the expenditures described in this note, as well as additional expenditures of generally similar character, will be transferred to utility plant, amortized against income of future years, or otherwise disposed of as the Federal Communications Commission may approve or direct. A summary of these expenditures for the periods indicated is as follows:

ats for the Corporation which may require modification of A Tatiw county to small See an W. W beterocrosed shing & seems P. corol P. down Mirror See in connection with its program for the development and	February 1, 1963 (Date of Incorporation) to December 31, 1963	Three Months Ended March 31, 1964 (Unaudited)	Total
Organization expenses (legal fees and other expenses prior to incorporation)	\$ 81,692		\$ 81,692
Salaries of officers and employees	459,381	\$ 234,923	694,304
Fees of directors	23,600	5,200	28,800
Legal, accounting, and other professional fees	70,145	38,323	108,468
Travel and related expenses	36,316	27,294	63,610
Office rent and maintenance	33,783	18,921	52,704
Printing, stationery, and office expenses	34,182	25,038	59,220
Employees' relocation expenses and insurance benefit premiums	22,046	9,678	31,724
Technical consultants, data processing costs, and contract services incident to research program	173,457	31,641	205,098
Interest on notes payable (net of \$1,246 interest received on temporary investments)	24,514	14,783	39,297
Taxes and licenses	13,208	9,116	22,324
Depreciation and amortization	14,192	6,404	20,596
Other expenditures	26,469	10,672	37,141
Total	\$1,012,985	\$ 431,993	\$1,444,978

2. Notes Payable to Banks

The notes payable to banks represent borrowings under a commitment of the lending banks to make loans to the Corporation, not exceeding \$5,000,000, as the Corporation may from time to time request. Borrowings under the agreement are subject to specific authorizations of the Federal Communications

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Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue toy	
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	
Accountants' Fac	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	20,000
capital	50 400

NOTES TO FINANCIAL STATEMENTS (Continued)

Commission. The Corporation has been authorized by the Federal Communications Commission to borrow \$1,900,000. Orders of the Commission provide that funds obtained from such borrowings may not be used for operating expenses subsequent to May 30, 1964, without prior authorization of the Commission. Under the loan agreement, as amended and supplemented in February 1964, the commitment of the banks expires on June 30, 1964. The notes also mature on that date, subject to the provision of the agreement that each note is payable prior to its stated maturity date on the tenth day after receipt by the Corporation of proceeds of the sale of shares of its capital stock in connection with the initial offering of such shares.

3. Federal Communications Commission

The Corporation is subject to regulation by the Federal Communications Commission as explained under "Regulation". The Federal Communications Commission has not approved or reviewed the accounting procedures employed by the Corporation to date. The inclusion of the financial statements in this Prospectus should not be regarded as approval by the Federal Communications Commission as to the accuracy of any material therein nor of the accounting procedures used. The Federal Communications Commission may prescribe a system of accounts for the Corporation which may require modification of existing accounting procedures.

4. COMMITMENTS AND GENERAL

The Corporation has certain commitments in connection with its program for the development and establishment of a commercial communications satellite system. For a summary of the program, the range of estimated costs, and significant contract information, see "Program of the Corporation". The Corporation also has entered into short-term leases, with renewal options, for office space. Reference is also made to the matters referred to under "The Venture and Its Risks".

UNDERWRITING

The Underwriters named below, acting through their Representatives named on the cover of this Prospectus, have entered into a Purchase Contract with the Corporation pursuant to which they have severally agreed, subject to the terms and conditions of the Purchase Contract, to purchase from the Corporation the number of shares of Common Stock set forth below opposite their respective names. Under certain circumstances involving default of Underwriters, less than all of such shares of Common Stock may be purchased by the Underwriters. Under certain circumstances the commitments of non-defaulting Underwriters may be increased. Under the provisions of the Purchase Contract the obligation of the Underwriters to purchase the shares of Common Stock specified in the Purchase Contract is subject, among other things, to the receipt by the Corporation from authorized carriers of the purchase price for at least 90% of the shares of Common Stock subscribed for by authorized carriers, after applying the allocation formula set forth under "Carrier Subscription Matters".

		Number of Shares to be
Name of Underwriter	Address of Underwriter	Purchased
Merrill Lynch, Pierce, Fenner & Smith Incorporated	70 Pine Street, New York 5, N.Y.	100,000
Blyth & Co., Inc	14 Wall Street, New York 5, N.Y.	100,000
The First Boston Corporation	20 Exchange Place, New York, N. Y. 10005	100,000
Kidder, Peabody & Co. Incorporated	20 Exchange Place, New York 5, N.Y.	100,000
Kuhn, Loeb & Co. Incorporated	30 Wall Street, New York 5, N. Y.	100,000
Lazard Frères & Co	44 Wall Street, New York 5, N. Y.	100,000
Lehman Brothers	One William Street, New York 4, N. Y.	100,000
Carl M. Loeb, Rhoades & Co	42 Wall Street, New York 5, N.Y.	100,000
Paine, Webber, Jackson & Curtis	25 Broad Street, New York 4, N.Y.	100,000
White, Weld & Co. Incorporated	20 Broad Street, New York 5, N. Y.	100,000
Dean Witter & Co	45 Montgomery Street, San Francisco 6, California	100,000
Eastman Dillon, Union Securities & Co	One Chase Manhattan Plaza, New York 5, N. Y.	50,000
Glore, Forgan & Co	45 Wall Street, New York 5, N. Y.	50,000
Harriman Ripley & Co., Incorporated	60 Broad Street, New York 4, N. Y.	50,000
Hornblower & Weeks	1 Chase Manhattan Plaza, New York 5, N.Y.	50,000
Smith, Barney & Co. Incorporated	20 Broad Street, New York 5, N.Y.	50,000
Stone & Webster Securities Corporation	90 Broad Street, New York 4, N. Y.	50,000
Bache & Co	36 Wall Street, New York 5, N.Y.	29,000
Bear, Stearns & Co	One Wall Street, New York 5, N.Y.	29,000
A. G. Becker & Co. Incorporated	120 South La Salle Street, Chicago 3, Illinois	29,000
Clark, Dodge & Co. Incorporated	61 Wall Street, New York 5, N.Y.	29,000
Dominick & Dominick, Incorporated	14 Wall Street, New York 5, N.Y.	29,000
Drexel & Co	1500 Walnut Street, Philadelphia 1, Pennsylvania	29,000
Hallgarten & Co	44 Wall Street, New York 5, N.Y.	29,000
Hayden, Stone Incorporated	25 Broad Street, New York, N. Y. 10004	29,000
Hemphill, Noyes & Co	8 Hanover Street, New York 4, N. Y.	29,000
E. F. Hutton & Company Inc	One Chase Manhattan Plaza, New York 5, N.Y.	29,000

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Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

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Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	
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Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	20,000
capital connection with increase in authorized	50 400
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Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
W. F. Hutton & Co.	Theries of the second state of the second second second	white Proper
W. E. Hutton & Co	14 Wall Street, New York, N. Y. 10005	29,000
Lee Higginson Corporation	20 Broad Street, New York 5, N. Y.	29,000
F. S. Moseley & Co.	60 Broad Street, New York, N. Y. 10004	29,000
Reynolds & Co	120 Broadway, New York 5, N. Y.	29,000
Shearson, Hammill & Co	14 Wall Street, New York 5, N. Y.	29,000
Wertheim & Co.	1 Chase Manhattan Plaza, New York 5, N. Y.	29,000
Alex. Brown & Sons	135 East Baltimore Street, Baltimore 2, Maryland	25,500
Equitable Securities Corporation	Two Wall Street, New York 5, N. Y.	25,500
Goodbody & Co.	2 Broadway, New York 4, N. Y.	25,500
Johnston, Lemon & Co.	Southern Bldg., Washington 5, D. C.	25,500
Ladenburg, Thalmann & Co	25 Broad Street, New York 4, N. Y.	25,500
R. W. Pressprich & Co.	80 Pine Street, New York 5, N. Y.	25,500
L. F. Rothschild & Co	120 Broadway, New York 5, N. Y.	25,500
Salomon Brothers & Hutzler	Sixty Wall Street, New York, N. Y. 10005	25,500
Shields & Company Incorporated	44 Wall Street, New York 5, N. Y.	25,500
F. S. Smithers & Co	45 Wall Street, New York 5, N. Y. shall be small	25,500
Spencer Trask & Co	60 Broad Street, New York, N. Y. 10004	25,500
Tucker, Anthony & R. L. Day	120 Broadway, New York 5, N. Y.	25,500
G. H. Walker & Co. Incorporated	45 Wall Street, New York 5, N. Y.	25,500
Wood, Struthers & Co., Inc	20 Exchange Place, New York 5, N. Y.	25,500
Allen & Company	30 Broad Street, New York 4, N. Y.	23,500
American Securities Corporation	25 Broad Street, New York 4, N. Y.	
Bacon, Whipple & Co	135 South La Salle Street, Chicago 3, Illinois	23,500
Robert W. Baird & Co., Incorporated	731 North Water Street, Milwaukee 1, Wisconsin	23,500
Baker, Weeks & Co	One Wall Street, New York 5, N. Y.	23,500
William Blair & Company	135 South La Salle Street, Chicago 3, Illinois	23,500
Blair & Co., Granbery, Marache Incorporated		23,500
Blunt Ellis & Simmons	20 Broad Street, New York 5, N. Y.	23,500
J. C. Bradford & Co	111 West Monroe Street, Chicago 3, Illinois	23,500
J. M. Dain & Co., Inc	414 Union Street, Nashville 3, Tennessee	23,500
Dick & Merle-Smith	110 South Sixth Street, Minneapolis 2, Minnesota	23,500
R. S. Dickson & Company, Incorporated	48 Wall Street, New York 5, N. Y.	23,500
F. Eberstadt & Co	30 Broad Street, New York 4, N. Y.	23,500
Estabrook & Co.	65 Broadway, New York 6, N. Y.	23,500
W. C. Langley & Co.	15 State Street, Boston 9, Massachusetts	23,500
McDonald & Company	115 Broadway, New York 6, N. Y.	23,500
New York Securities Co	Union Commerce Bldg., Cleveland 14, Ohio	23,500
The Ohio Company	52 Wall Street, New York 5, N. Y.	23,500
The Ohio Company Piper, Jaffray & Hopwood	51 North High Street, Columbus 15, Ohio	23,500
Schwabacher & Co	115 South Seventh Street, Minneapolis 2, Minnesota	23,500
Schwabacher & Co	100 Montgomery Street, San Francisco 4, California	23,500
William R. Staats & Co. Incorporated	640 South Spring Street, Los Angeles 14, California	23,500
Ball, Burge & Kraus	1414 Union Commerce Bldg., Cleveland 14, Ohio	18,500
J. Barth & Co	404 Montgomery Street, San Francisco, California 94104	10 500
Burnham and Company	60 Broad Street, New York 4, N. Y.	18,500
Coffin & Burr	CA 337 11 C 37 77 4 7	18,500
Courts & Co	11 Marietta Street, N.W., Atlanta 3, Georgia	18,500
Dempsey-Tegeler & Co., Inc.	1000 Locust Street, St. Louis 1, Missouri	18,500
First of Michigan Corporation	2 Wall Street, New York 5, N. Y.	18,500
Folger, Nolan, Fleming & Co. Incorporated	725 15th Street N.W. Westington F.D. C.	18,500
, , , , , , , , , , , , , , , , , , ,	725 15th Street, N.W., Washington 5, D. C.	18,500

Number of Shares Address of Underwritariwashu fo small Purchased	Address of Underwriter inwashall to small	Number of Shares to be Purchased
Fulton, Reid & Co., Inc.	2100 East Ohio Bldg., Cleveland 14, Ohio	18,500
Robert Garrett & Sons	South & Redwood Streets, Baltimore 3, Maryland	18,500
Hayden, Miller & Co	Union Commerce Bldg., Cleveland 14, Ohio	18,500
H. Hentz & Co	72 Wall Street, New York 5, N. Y.	18,500
Hirsch & Co., Incorporated	25 Broad Street, New York 4, N. Y.	18,500
Irving Lundborg & Co	310 Sansome Street, San Francisco 4, California	18,500
McDonnell & Co. Incorporated	120 Broadway, New York 5, N. Y.	18,500
Merrill, Turben & Co., Inc	1612 Union Commerce Bldg., Cleveland 14, Ohio	18,500
Model, Roland & Co	120 Broadway, New York 5, N. Y.	18,500
Moore, Leonard & Lynch	Union Trust Bldg., Pittsburgh 19, Pennsylvania	18,500
Newhard, Cook & Co	400 Olive Street, St. Louis 2, Missouri	18,500
Reinholdt & Gardner	400 Locust Street, St. Louis 2, Missouri	18,500
Riter & Co.	40 Wall Street, New York 5, N. Y.	18,500
The Robinson-Humphrey Company, Inc	2000 Rhodes-Haverty Bldg., Atlanta, Georgia 30303	18,500
Shuman, Agnew & Co	155 Sansome Street, San Francisco 4, California	18,500
Singer, Deane & Scribner	Union Trust Bldg., Pittsburgh 19, Pennsylvania	
	123 South Broad Street, Philadelphia 9, Pennsylvania	18,500
Stroud & Company, Incorporated	Ford Bldg., Detroit 26, Michigan	
		18,500
Arnhold and S. Bleichroeder, Inc	30 Broad Street, New York 4, N. Y.	12,500
Auchincloss, Parker & Redpath	Two Broadway, New York 4, N. Y.	12,500
Baker, Watts & Co	Calvert & Redwood Streets, Baltimore 3, Maryland	12,500
Bateman, Eichler & Bingham Incorporated	453 South Spring Street, Los Angeles 13, California	12,500
Boettcher and Company	828 17th Street, Denver 2, Colorado	12,500
Bosworth, Sullivan & Company, Inc	660-17th Street, Denver 2, Colorado	12,500
Butcher & Sherrerd	1500 Walnut Street, Philadelphia 2, Pennsylvania	12,500
Chapman, Howe & Co	208 South La Salle Street, Chicago 4, Illinois	12,500
Julien Collins & Company	105 South La Salle Street, Chicago 3, Illinois	12,500
Crowell, Weedon & Co	629 South Spring Street, Los Angeles 14, California	12,500
Eppler, Guerin & Turner, Inc	1600 Fidelity Union Tower, Dallas 1, Texas	12,500
Fahnestock & Co	65 Broadway, New York 6, N. Y.	12,500
First California Company Incorporated	300 Montgomery Street, San Francisco, California 94104	12,500
First Southwest Company	Mercantile Bank Bldg., Dallas 1, Texas	12,500
Halle & Stieglitz	52 Wall Street, New York 5, N. Y.	12,500
The Illinois Company Incorporated	231 South La Salle Street, Chicago, Illinois 60604	12,500
The Johnson, Lane, Space, Smith Corporation	101 East Bay Street, Savannah, Georgia	12,500
Laird & Company, Corporation	Wilmington Trust Bldg., Wilmington 99, Delaware	12,500
Laird, Bissell & Meeds	120 Broadway, New York 5, N. Y.	12,500
Legg & Co	22 Light Street, Baltimore 3, Maryland	12,500
Lester, Ryons & Co	623 South Hope Street, Los Angeles 17, California	A STATE OF THE PARTY OF THE PAR
Loewi & Co. Incorporated	225 East Mason Street, Milwaukee 2, Wisconsin	12,500
A. E. Masten & Co.	First National Bank Bldg., Pittsburgh 22,	12,500
	Pennsylvania	12,500
McCormick & Co	135 South La Salle Street, Chicago 3, Illinois	12,500
The Milwaukee Company	207 East Michigan Street, Milwaukee 2, Wisconsin	12,500
Mitchum, Jones & Templeton, Incorporated	510 South Spring Street, Los Angeles 13, California	12,500
Pacific Northwest Company		
Pacific Northwest Company	1000 Second Avenue, Seattle, Washington 98104 1200 Mercantile Dallas Bldg., Dallas 1, Texas	12,500 12,500

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Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

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Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50 400

Name of Underwriter was bould to seemble.	Address of Underwriter woodau to ome Vo	Number of Shares to be Purchased
Rotan, Mosle & Co	1510 Bank of the Southwest Bldg., Houston 2, Texas	12,500
Stein Bros. & Boyce, Inc	One Charles Center, Baltimore 1, Maryland	12,500
Stern Brothers & Co	1009-15 Baltimore Avenue, Kansas City 5, Missouri	12,500
Stifel, Nicolaus & Company, Incorporated	314 North Broadway, St. Louis 2, Missouri	12,500
Stone & Youngberg	1314 Russ Bldg., San Francisco 4, California	12,500
Sutro & Co	460 Montgomery Street, San Francisco 4, California	12,500
Underwood, Neuhaus & Co. Incorporated	Houston Club Bldg., Houston 2, Texas	12,500
Weeden & Co. Incorporated	25 Broad Street, New York 4, N. Y.	12,500
Winslow, Cohu & Stetson Incorporated	26 Broadway, New York 4, N. Y.	12,500
Abbott, Proctor & Paine	911 East Main Street, Richmond 14, Virginia	
Anderson & Strudwick	913 East Main Street, Richmond 12, Virginia	8,000
Brush, Slocumb & Co. Inc.		8,000
	465 California Street, San Francisco 4, California	8,000
Carolina Securities Corporation	Insurance Bldg., Raleigh, North Carolina	8,000
Richard W. Clarke Corporation	535 Fifth Avenue, New York 17, N. Y.	8,000
Common, Dann & Co	502 Marine Trust Bldg., 237 Main Street, Buffalo, N. Y. 14203	8,000
Cooley & Company	100 Pearl Street, Hartford 4, Connecticut	OTO THIS NOTE
Dallas Union Securities Co., Inc	1001 Adolphus Tower, Dallas 2, Texas	8,000
Davis, Skaggs & Co	111 Sutter Street, San Francisco 4, California	8,000
DeHaven & Townsend, Crouter & Bodine	1500 Chestnut Street, Philadelphia 2, Pennsylvania	8,000
Dewar, Robertson & Pancoast	Milam Bldg., San Antonio 5, Texas	8,000
Dittmar & Company, Inc.	201 North St. Mary's Street, San Antonio 6, Texas	8,000
Dreyfus & Co	Two Broadway, New York 4, N. Y.	8,000
Eddleman, Pollok & Fosdick Inc	440 Bank of the Southwest Bldg., Houston 2, Texas	8,000
A. G. Edwards & Sons	409 North Eighth Street, St. Louis 1, Missouri	8,000
Elworthy & Co., Incorporated	111 Sutter Street, San Francisco 4, California	8,000
Emanuel, Deetjen & Co	120 Broadway, New York 5, N.Y.	8,000
Fahey, Clark & Co	1737 Union Commerce Bldg., Cleveland 14, Ohio	8,000 8,000
Faulkner, Dawkins & Sullivan	60 Broad Street, New York 4, N. Y.	8,000
Ferris & Company	611 Fifteenth Street, N. W., Washington 5, D. C.	8,000
Gregory & Sons	40 Wall Street, New York 5, N. Y.	Stal of A. Samuel
Hallowell, Sulzberger, Jenks, Kirkland & Co	Philadelphia National Bank Bldg., Philadelphia 7,	8,000
J. J. B. Hilliard & Son.	Pennsylvania 419 West Jefferson Street, Louisville 2, Kentucky	8,000 8,000
Howard, Weil, Labouisse, Friedrichs and Company	211 Carondelet Street, New Orleans, Louisiana 70130	THE PARTY OF THE P
Janney, Battles & E. W. Clark, Inc.	Central-Penn National Bank Bldg.,	he Johnso
Edward D. Jones & Co	1401 Walnut Street, Philadelphia 2, Pennsylvania	8,000
Jones, Kreeger & Co	101 North Fourth Street, St. Louis 2, Missouri 1625 Eye Street, N. W., Washington 6, D. C.	8,000
Joseph, Mellen & Miller, Inc	1400 East Ohio Bldg., Cleveland 14, Ohio	8,000
Mackall & Coe	738 15th Street, N. W., Washington 5, D. C.	8,000
Manley, Bennett, McDonald & Co.	1100 Buhl Bldg., Detroit, Michigan 48226	8,000
Mead, Miller & Co	Charles and Chase Streets, Baltimore 1, Maryland	8,000
Mitchell, Hutchins & Co., Incorporated.	231 South La Salle Street, Chicago 4, Illinois	8,000
Moroney, Beissner & Co., Inc	Bank of the Southwest Bldg., Houston 2, Texas	8,000
Mullaney, Wells & Company	135 South La Salle Street, Chicago 3, Illinois	8,000
Newburger & Co	1401 Walnut Street, Philadelphia 2, Pennsylvania	8,000
Putnam & Co	6 Central Row, Hartford, Connecticut 06103	8,000
Saunders, Stiver & Co.	One Terminal Tower, Cleveland 13, Ohio	8,000 8,000
Chas. W. Scranton & Co.	209 Church Street, New Haven 7, Connecticut	0,000

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Name of Underwriter	0	Number f Shares to be urchased
I. M. Simon & Co	315 North Fourth Street, St. Louis 2, Missouri	8,000
Stern, Frank, Meyer & Fox	Union Bank Bldg., Los Angeles, California 90014	8,000
J. S. Strauss & Co	155 Montgomery Street, San Francisco 4, California	8,000
C. E. Unterberg, Towbin Co	61 Broadway, New York, N. Y. 10006	8,000
Van Alstyne, Noel & Co	40 Wall Street, New York 5, N.Y.	8,000
Wagenseller & Durst, Inc	626 South Spring Street, Los Angeles 14, California	8,000
Adams & Peck	120 Broadway, New York, N. Y. 10005	6,500
Bioren & Co	1424 Walnut Street, Philadelphia 2, Pennsylvania	6,500
Boenning & Co.	The Alison Bldg., Rittenhouse Square, Philadelphia 3, Pennsylvania	6,500
Burgess & Leith	53 State Street, Boston 9, Massachusetts	6,500
Chace, Whiteside & Winslow, Inc	24 Federal Street, Boston 10, Massachusetts	6,500
Chaplin, McGuiness & Co	Peoples Bank Bldg., Pittsburgh 22, Pennsylvania	6,500
Clayton Securities Corporation	147 Milk Street, Boston 9, Massachusetts	6,500
Cunningham, Schmertz & Co., Inc	First National Bank Bldg., Pittsburgh 22, Pennsylvania	
Davenport & Co	1113 East Main Street, Richmond 19, Virginia	6,500
Shelby Cullom Davis & Co	116 John Street, New York 38, N.Y.	6,500
Elkins, Morris, Stokes & Co	428 Land Title Bldg., Philadelphia 10, Pennsylvania	6,500
Evans & Co. Incorporated	300 Park Avenue, New York 22, N.Y.	6,500
W. D. Gradison & Co	408 Dixie Terminal Bldg., Cincinnati 2, Ohio	6,500
Hickey & Co	135 South La Salle Street, Chicago 3, Illinois	6,500
Hill Richards & Co., Incorporated	621 South Spring Street, Los Angeles 14, California	6,500
Hulme, Applegate & Humphrey, Inc	586 Union Trust Bldg., Pittsburgh 19, Pennsylvania	6,500
Indianapolis Bond and Share Corporation	120 East Market Street, Indianapolis 4, Indiana	6,500
Ingalls & Snyder	100 Broadway, New York 5, N. Y.	6,500
Kalman & Company, Inc	136 Endicott Bldg., St. Paul 1, Minnesota	6,500
Kay, Richards & Company	Union Trust Bldg., Pittsburgh 19, Pennsylvania	6,500
Mason-Hagan, Inc.	1017 East Main Street, Richmond 10, Virginia	6,500
McKelvy & Company	1146 Union Trust Bldg., Pittsburgh 19, Pennsylvania	6,500
Middendorf, Colgate & Co	51 Broad Street, New York 4, N. Y.	6,500
Newburger, Loeb & Co	5 Hanover Square, New York 4, N. Y.	6,500
Pierce, Wulbern, Murphey, Inc.	222 West Adams Street, Jacksonville 1, Florida 45 Wall Street, New York 5, N. Y.	6,500
Wm. E. Pollock & Co., Inc	Alamo National Bldg., San Antonio, Texas	6,500 6,500
Russ & Company, Incorporated	408 Olive Street, St. Louis, Missouri 63102	6,500
Scherck, Richter Company, Inc	123 South Broad Street, Philadelphia 9, Pennsylvania	6,500
Schmidt, Roberts & Parke	P. O. Box 1575, Richmond 13, Virginia	6,500
Scott & Stringfellow	40 Wall Street, New York 5, N. Y.	6,500
Silberberg & Co	509 Olive Street, St. Louis 1, Missouri	6,500
Stix & Co	305 Porter Bldg., Pittsburgh 19, Pennsylvania	6,500
Thomas & Company	10 Post Office Square, Boston, Massachusetts 02105	6,500
Townsend, Dabney & Tyson	60 State Street, Boston 1, Massachusetts	6,500
H. C. Wainwright & Co	1001 East Main Street, Richmond 19, Virginia	6,500
J. C. Wheat & Co	61 Broadway, New York 6, N. Y.	6,500
Yarnall, Biddle & Co	1528 Walnut Street, Philadelphia 2, Pennsylvania	6,500
Abraham & Co	120 Broadway, New York 5, N. Y.	5,000
Almstedt Brothers	425 West Market Street, Louisville 2, Kentucky	5,000
Arthurs, Lestrange & Co	2 Gateway Center, Pittsburgh 22, Pennsylvania	5,000
Barret, Fitch, North & Co. Incorporated	111 West Tenth Street, Kansas City 5, Missouri	5,000
Darret, Fitch, Worth & Co. Heorporated	315 Fourth Avenue, North, Nashville 3, Tennessee	5,000

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Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50 400

		Number of Shares
Name of Underwriter Two beautiful Name of Underwriter	Address of Underwriter property to ome M	to be Purchased
Birr, Wilson & Co., Inc	155 Sansome Street, San Francisco 4, California	5,000
Blewer, Glynn & Co	1536 Railway Exchange Bldg., St. Louis 1, Missouri	5,000
George D. B. Bonbright & Co	100 Powers Bldg., Rochester 14, N. Y.	5,000
Branch, Cabell & Co	814 East Main Street, Richmond 19, Virginia	5,000
P. W. Brooks & Co. Incorporated	120 Broadway, New York, N. Y. 10005	5,000
Caldwell Phillips, Inc	First National Bank Bldg., St. Paul 1, Minnesota	5,000
C. F. Cassell & Co., Inc	114 Third Street, N.E., Charlottesville, Virginia	5,000
Childs Securities Corporation	One Liberty Street, New York 5, N. Y.	5,000
City Securities Corporation	Circle Tower, Indianapolis 4, Indiana	5,000
Clark, Landstreet & Kirkpatrick, Inc	Life & Casualty Tower, Nashville 3, Tennessee	5,000
Collin, Norton & Co	Gardner Bldg., 506 Madison Avenue, Toledo 4, Ohio	5,000
C. C. Collings and Company, Inc.	Fidelity-Philadelphia Trust Bldg., Philadelphia 9, Pennsylvania	5,000
Craigie & Co., Inc	616 E. Main Street, Richmond, Virginia 23215	
Curtiss, House & Co	Union Commerce Bldg., Cleveland 14, Ohio	5,000
Doolittle & Co.	Liberty Bank Bldg., Buffalo 2, N. Y.	5,000
Field, Richards & Co	1107 Central Trust Bank Tower, Cincinnati, Ohio 45202	5,000 5,000
First Nebraska Securities Corporation	1001 O Street, Lincoln 1, Nebraska	CATAL SECRETARIAN SEC.
First Southeastern Company	103 Twelfth Street, Columbus, Georgia	5,000
Freehling & Co	120 South La Salle Street, Chicago 3, Illinois	5,000
Fridley & Frederking	617 Texas National Bank Bldg., Houston 2, Texas	5,000
Funk, Hobbs & Hart, Inc.	1012 National Bank of Commerce Bldg., San Antonio 5, Texas	5,000
Alester G. Furman Co., Inc	South Carolina National Bank Bldg., Greenville, South Carolina	5,000 5,000
Fusz-Schmelzle & Co., Inc	522 Olive Street, St. Louis 1, Missouri	5,000
Greene & Ladd	Third National Bldg., Dayton 2, Ohio	5,000
Hamershlag, Borg & Co	25 Broad Street, New York 4, N. Y.	5,000
Hanrahan & Co., Inc	332 Main Street, Worcester 8, Massachusetts	5,000
Harrison & Co	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000
Hess, Grant & Remington Incorporated	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000
J. H. Hilsman & Co., Inc	Citizens & Southern Bldg., Atlanta 1, Georgia	5,000
Interstate Securities Corporation	Johnston Bldg., Charlotte 2, North Carolina	5,000
Investment Corporation of Norfolk	215 East Plume Street, Norfolk 10, Virginia	5,000
Kenower, MacArthur & Co	Ford Bldg., Detroit 26, Michigan	5,000
The Kentucky Company	320 South Fifth Street, Louisville 2, Kentucky	5,000
Kirkpatrick-Pettis Company	540 Omaha National Bank Bldg., Omaha, Nebraska	5,000
Kohlmeyer & Co	217 Carondelet Street, New Orleans 30, Louisiana	5,000
Lentz, Newton & Co	Alamo National Bldg., San Antonio 5, Texas	5,000
	906 Marine Trust Bldg., Buffalo 3, N. Y.	5,000
W. L. Lyons & Co	235 South Fifth Street, Louisville 2, Kentucky	5,000
	63 Wall Street, New York, N. Y. 10005	5,000
McCarley & Company, Inc	1130 First Western Bldg., Oakland 12, California 35 Page Avenue, P. O. Box 14, Asheville,	5,000
McCourtney-Breckenridge & Company	North Carolina	5,000
McCourtney-Breckenridge & Company	1030 Boatmen's Bank Bldg., St. Louis 2, Missouri	5,000
	110 East First Street, Wichita 2, Kansas	5,000
	330 Hanna Bldg., Cleveland 15, Ohio	5,000
	1517 Locust Street, Philadelphia 2, Pennsylvania 30 Broad Street, New York 4, N. Y.	5,000
	30 Broad Street, New York 4, N. Y.	5,000

			0.	Number f Shares to be
		Name of Underwriter wrobuU lo asoubbA	Address of Underwriter P	urchased
Charle	es A.	Parcells & Co	639 Penobscot Bldg., Detroit 26, Michigan	5,000
		en, Waeckerle, Adams & Purcell, Inc	1012 Baltimore Avenue, Kansas City 5, Missouri	5,000
		& Co	23 West 10th Street, Kansas City 5, Missouri	5,000
		tler & Co	110 Old Street, Fayetteville, North Carolina	5,000
		0	200 Second Street, N.W., Albuquerque, New Mexico	5,000
		er, Hughes & Co., Inc	20 North Meridian Street, Indianapolis 4, Indiana	5,000
			One Wall Street, New York 5, N. Y.	5,000
		e & Co	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000
		d Lukens	909 Union Trust Bldg., Washington 5, D. C.	5,000
		Renshaw	209 South La Salle Street, Chicago 4, Illinois	5,000
			1300 Southwest Tower, Houston, Texas 77002	5,000
		ston & Co., Incorporated	45 Exchange Street, Rochester 14, N. Y.	5,000
		& Co., Inc	Republic National Bank Bldg., Dallas 1, Texas	5,000
		Company Too	1505 Elm Street, Dallas 1, Texas	5,000
	A 133	Bernet & Hickman, Inc	Security Savings Bldg., Cincinnati 2, Ohio	5,000
		& Mayer		
1	,	nery & Company, Inc	1115-1117 Plaza Bldg., Pittsburgh 19, Pennsylvania	5,000
		air Incorporated	829 Jefferson Avenue, Redwood City, California	5,000
		re & Co	509 Olive Street, St. Louis 1, Missouri	5,000
		Campbell, Waterman Co	1740 Washington Bldg., Seattle 1, Washington	5,000
		& Co	120 Broadway, New York, N. Y. 10005	5,000
		e & Leach, Inc	First National Bldg., Birmingham 3, Alabama	5,000
		banks, Meyerson & Co	216 Montgomery Street, San Francisco 4, California	5,000
		ob-Bender Co	3624 Farnam Street, Omaha, Nebraska 68131	5,000
		Company, Incorporated	502 Peoples National Bank Bldg., Lynchburg, Virginia	
plee	e, Year	tman, Mosley Co. Incorporated	1500 Walnut Street, Philadelphia 2, Pennsylvania	5,000
tro	Bros.	& Co	80 Pine Street, New York 5, N. Y.	5,000
		twright & Co	Huntington Bank Bldg., Columbus 15, Ohio	5,000
ube	e, Coll	ins & Co	M. & T. Bldg., Buffalo 2, N. Y.	5,000
hlma	ann &	Co., Inc	141 West Jackson Blvd., Chicago 4, Illinois	5,000
		hisholm & Co., Inc	One Bull Street, Savannah, Georgia	5,000
illis	, Kenr	y & Ayres, Incorporated	205 West Franklin Street, Richmond 20, Virginia	5,000
ood	cock,	Moyer, Fricke & French, Inc	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000
		& Waggoner	First National Bank Bldg., Atlanta 3, Georgia	5,000
		ner & Woods	819 Pine Street, St. Louis 1, Missouri	5,000
arre	en W.	York & Co., Inc	530 Hamilton Street, Allentown, Pennsylvania	5,000
		oration	120 Broadway, New York, N. Y. 10005	5,000
		Smith & Co	30 Broad Street, New York 4, N. Y.	5,000
		, Inc	Starks Bldg., Louisville 2, Kentucky	3,500
		iams Company	Northwestern Bank Bldg., Minneapolis 2, Minnesota	3,500
		er & Co., Incorporated	150 Broadway, New York 38, N. Y.	3,500
	,	bins & Calvert	National Bank of Commerce Bldg., San Antonio 5, Texas	3,500
11111	rartno	r, Downing & Co	Mercantile Trust Bldg., Baltimore 2, Maryland	3,500
			735 North Water Street, Milwaukee 2, Wisconsin	3,500
		heldon & Co op & Co	Northwestern Bank Bldg., Minneapolis 2, Minnesota	3,500
		ompany, Inc	1421 Chestnut Street, Philadelphia,	0,000
			Pennsylvania 19102	3,500
D	Boyn	ton & Co., Inc	111 Broadway, New York 6, N. Y.	3,500
		eridan, Bogan & Co., Inc	2 Penn Center Plaza, Philadelphia 2, Pennsylvania	3,500
		e & Marshall	Turks Head Bldg., Providence 3, Rhode Island	3,500

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Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	20,000
capital	50 400

Name of Underwriter	Address of Underwriter weekn't to small	Number of Shares to be Purchased
Burrows, Smith and Company	174 South Main Street, Salt Lake City, Utah 84101	3,500
Byrd Brothers	11 Broadway, New York 4, N. Y.	3,500
Campbell, McCarty & Company Incorporated	1500 Buhl Bldg., Detroit 26, Michigan	3,500
Carter, Berlind & Weill	60 Broad Street, New York 4, N. Y.	3,500
The Cherokee Securities Company	4106 Hillsboro Road, Nashville 12, Tennessee	3,500
Chiles & Company	Farm Credit Bldg., Omaha 2, Nebraska	3,500
John W. Clarke & Co	135 South LaSalle Street, Chicago 3, Illinois	3,500
G. H. Crawford Co., Inc.	400 Barringer Bldg., Columbia 1, South Carolina	3,500
Dixon Bretscher Noonan Inc	509 First National Bank Bldg., Springfield, Illinois	3,500
Oscar E. Dooly & Co	612 Ingraham Bldg., Miami, Florida 33131	3,500
Draper, Sears & Co. Incorporated	50 Congress Street, Boston 2, Massachusetts	3,500
Eisele & King, Libaire, Stout & Co	50 Broadway, New York, N. Y. 10004	Line CV Comments
Elder & Company	722 Chestnut Street, Chattanooga 2, Tennessee	3,500
Evans, MacCormack & Co., Inc	453 South Spring Street, Los Angeles 13, California	3,500
First Securities Corporation	111 Corcoran Street, Durham, North Carolina	Commission of the second
Gerstley, Sunstein & Co	211 South Broad Street, Philadelphia 7, Pennsylvania	3,500
Goodkind, Neufeld & Company, Inc	711 Fifth Avenue, New York, N. Y. 10022	3,500
Granger & Company	111 D 1 37 37 1 37 77 40004	3,500
Gruss & Co	30 Broadway, New York, N. Y. 10006	3,500
Hardy & Co.	25 Broad Street, New York, N. Y. 10004	3,500
Wm. P. Harper & Son & Co., Inc.	1504 Third Avenue, Seattle, Washington	3,500
Heller & Meyer	520 Main Street Fact Orange Name I	3,500
	520 Main Street, East Orange, New Jersey	3,500
T. C. Henderson & Co., Inc.	Sixth & Grand, Des Moines 9, Iowa	3,500
Henry, Franc & Co	308 North 8th Street, St. Louis 1, Missouri	3,500
	1 Wall Street, New York 5, N. Y.	3,500
Hill & Co.	2020 Carew Tower, Cincinnati 2, Ohio	3,500
June S. Jones Co	509 U. S. Bank Bldg., Portland 4, Oregon	3,500
John H. Kaplan & Co	120 Broadway, New York, N. Y. 10005	3,500
Kaufman Bros. Co.	16 Selden Arcade, Norfolk 10, Virginia	3,500
Kerr & Bell	210 West 7th Street, Los Angeles 14, California	3,500
Kinsley & Adams	6 Norwich Street, Worcester 8, Massachusetts	3,500
Richard E. Kohn & Co	20 Clinton Street, Newark 2, New Jersey	3,500
Kormendi & Co., Inc	11 Broadway, New York 4, N. Y.	3,500
Lombard, Vitalis & Paganucci, Inc	Jefferson Bldg., Greensboro, North Carolina 48 Wall Street, New York, N.Y. 10005	3,500
MacNaughton-Greenawalt & Co		3,500
The Marshall Company	Michigan Trust Bldg., Grand Rapids 2, Michigan Marine Plaza,	3,500
The Warshair Company	111 E. Wisconsin Avenue, Milwaukee 2, Wisconsin	3,500
Mason & Co	2801 Washington Avenue, Newport News, Virginia	3,500
Mason & Lee, Inc	Church at Eighth Street, Lynchburg, Virginia	3,500
McJunkin, Patton & Co	1724 Oliver Bldg., Pittsburgh 22, Pennsylvania	3,500
C. S. McKee & Company, Inc	Union Trust Bldg., Pittsburgh 19, Pennsylvania	3,500
McLean & Company, Inc	772 Commerce Street, Tacoma 2, Washington	3,500
McMaster Hutchinson & Co	105 South La Salle Street, Chicago 3, Illinois	3,500
Mid-Continent Securities Company, Inc	Central Bldg., Wichita 2, Kansas	3,500
Nauman, McFawn & Co	Ford Bldg., Detroit 26, Michigan	3,500
Norris & Hirshberg, Inc	1550 Bank of Georgia Bldg., Atlanta 3, Georgia	3,500
Paul J. Nowland & Co	1201 Bank of Delaware Bldg	0,000
fead Bidg., Providence 3, Rhode Island seemle 3,500	Wilmington, Delaware 19899	3,500

Name of Underwriter		Number of Shares to be Purchased
Nugent & Igoe.	592 Main Street, East Orange, New Jersey	3,500
Pflueger & Baerwald.	Mills Bldg., San Francisco 4, California	3,500
Pyne, Kendall & Hollister	60 Wall Street, New York, N. Y. 10005	3,500
Quail & Co., Inc	Davenport Bank Bldg., Davenport, Iowa	3,500
Rambo, Close & Kerner Incorporated	1518 Locust Street, Philadelphia 2, Pennsylvania	3,500
Rankin & Co	53 Forsyth St. N.W., Atlanta, Georgia 30303	3,500
Rosenthal & Co.	40 Wall Street, New York 5, N. Y.	3,500
Roulston & Company	1010 Euclid Avenue, Cleveland 15, Ohio	3,500
Earl M. Scanlan & Co	Western Federal Bldg., Seventeenth at California.	194
	Denver 2, Colorado	3,500
Scharff & Jones, Inc	140 Carondelet Street, New Orleans 12, Louisiana	3,500
Schweickhardt & Company, Inc	Hibernia Bldg., New Orleans 12, Louisiana	3,500
H. B. Shaine & Co. Inc.	111 Pearl Street, N.W., Grand Rapids 2, Michigan	3,500
Smith, Hague & Company	539 Penobscot Bldg., Detroit 26, Michigan	3,500
Starkweather & Co	115 Broadway, New York 6, N. Y.	3,500
Sterling, Grace & Co	39 Broadway, New York 6, N. Y.	3,500
Taylor and Company	439 North Bedford Drive, Beverly Hills, California	3,500
Taylor, Rogers & Tracy Inc	105 South La Salle Street, Chicago 3, Illinois	3,500
Burton J. Vincent & Co	105 South La Salle Street, Chicago 3, Illinois	3,500
White & Company Incorporated	506 Olive Street, St. Louis, Missouri 63101	3,500
C. T. Williams & Company, Inc	Fidelity Bldg., Baltimore 1, Maryland	3,500
F. J. Winckler Co	1966 Penobscot Bldg., Detroit 26, Michigan	3,500
Woodard-Elwood & Company	1115 First National Bank Bldg., Minneapolis 2, Minnesota	3,500
Wyllie and Thornhill, Inc	204 East Market Street, Charlottesville, Virginia	3,500
F. S. Yantis & Co. Incorporated	135 South La Salle Street, Chicago 3, Illinois	3,500
York & Co.	235 Montgomery Street, San Francisco 4, California	

In the Purchase Contract the Underwriters have agreed to use their best efforts to offer the Common Stock in a manner to encourage the widest distribution of the shares to the American public. The text of the provision of the Purchase Contract setting forth such agreement of the Underwriters is quoted below. In such text, the term "Representatives" refers to the Underwriters named on the cover of this Prospectus, and the term "Selected Dealers" refers to members of the National Association of Securities Dealers, Inc., selected by the Representatives, to whom certain of the shares to be purchased by the Underwriters will be sold by the Underwriters for resale to the public:

"The Underwriters agree that they will use their best efforts to offer the Shares in a manner to encourage the widest distribution to the American public. In this connection, each Underwriter agrees that in filling orders for Shares retained by it for direct sale (i.e. Shares other than those reserved by the Representatives for sales for the account of such Underwriter to Selected Dealers or others), it will first make allotments of not in excess of 50 Shares, and in no event will it make allotments in excess of 100 Shares unless by such limitation of allotments it would be unable to dispose promptly of all such retained Shares. It is understood that no Underwriter shall be deemed to be unable to dispose promptly of its retained Shares and thereby be permitted to make allotments in excess of 100 Shares unless such Underwriter shall have first notified the Representatives and

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Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	
Federal original issue to-	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	
Accountants' Fee	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50 400

afforded them the opportunity to sell for its account to Selected Dealers such of said retained Shares as to which such Underwriter has not made allotments of 100 Shares and less. Nothing herein shall be construed as requiring any Underwriter to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which it believes will cause a concentration of holdings or adversely affect the distribution of the Shares. The Representatives will obtain from each Selected Dealer to whom they make sales for the accounts of Underwriters an agreement substantially to the same effect as this paragraph. Each Underwriter will refrain, and such agreement will require each Selected Dealer to refrain, from selling Shares, with or without any discount from the public offering price, to any dealer in securities unless such dealer has entered into such an agreement with the Representatives and unless such sale is first consented to by the Representatives."

The Common Stock offered by the several Underwriters is offered subject to prior sale and when, as and if issued by the Corporation and accepted by the Underwriters, and subject to the approval of certain legal matters by their counsel, Messrs. Brown, Wood, Fuller, Caldwell & Ivey, and by counsel for the Corporation, Allen E. Throop, Esq., and Messrs. Wilmer, Cutler & Pickering, and the Underwriters reserve the right to withdraw, cancel or modify such offer and to reject orders in whole or in part.

The Representatives of the Underwriters have advised the Corporation that sales to certain dealers may be made at a concession of not in excess of per share.

The Corporation has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

CARRIER SUBSCRIPTION MATTERS

The FCC has reserved the right, by means of a specific reservation in the authorizations issued to carriers, to allocate stock among the authorized carriers in the event of an oversubscription of the stock reserved for sale to such carriers. By letter dated April 30, 1964, however, the FCC has informed the Corporation that it will not make any allocation of stock pursuant to this reservation, provided the Corporation allocates the stock in the manner and to the extent set forth below. The letter also stated that, in view of the FCC's authority under Section 304(f) of the Act to require one authorized carrier to sell shares of the Corporation to another authorized carrier, nothing contained in the allocation formula should be construed to limit or restrict in any way the right of any authorized carrier to apply to the FCC for relief pursuant to the provisions of the aforementioned Section, nor from obtaining relief pursuant to any action of the FCC instituted in accordance therewith.

In the event that the total number of shares subscribed for by all authorized carriers exceeds the number of shares (5,000,000) reserved for offering to such carriers, the reserved shares will be allocated among the subscribing carriers on the following basis (with adjustment of odd amounts, as the Corporation may determine to a multiple of 100 shares):

- 1. If there are two or more subscriptions each for more than 50% of the reserved shares, each such subscription shall be reduced to 50% of the reserved shares.
- 2. If there is a single subscription for more than 50% of the reserved shares, such subscription shall be reduced until it equals 50% of the reserved shares or until the amount of oversubscription is eliminated, whichever occurs first.

- 3. If no subscription is for more than 50% of the reserved shares, or if an oversubscription remains after reduction is made as provided for in paragraph 1 or 2 above, then all subscriptions for more than 5,000 shares (including the remainder of any subscriptions reduced to 50% of the reserved shares, as hereinabove provided) shall be reduced *pro rata*, on the basis of the amount by which each such subscription exceeds 5,000 shares, until the amount of oversubscription is eliminated.
- 4. In no event shall the above formula be applied to any subscription for 5,000 or less shares or to reduce any subscription below 5,000 shares.
- 5. For the purpose of this formula, subscriptions of affiliated authorized carriers shall be treated as one combined subscription. An authorized carrier will be considered affiliated with another authorized carrier if it directly, or indirectly through one or more intermediaries, controls, or is controlled by, such other carrier or is under common control with such other carrier. In determining whether authorized carriers are affiliated, the Corporation will rely upon advice received from the Federal Communications Commission.
- 6. When a reduction is made in a combined subscription consisting of subscriptions of two or more affiliated carriers, the reduction shall be applied *pro rata* among the respective constituent subscriptions of such affiliated carriers, notwithstanding the fact that any such constituent subscription is for 5,000 or less shares or would be reduced below 5,000 shares, but subject to adjustment of odd amounts to a multiple of 100 shares.

The determinations of the Corporation reasonably made in the application of the formula set forth above, including determinations made with respect to the combining of subscriptions of affiliated authorized carriers, the *pro rata* reduction of subscriptions, and the adjustment of subscriptions to multiples of 100 shares, shall be conclusive and binding upon all persons having an interest in the allocation of shares among authorized carriers.

LEGAL OPINIONS

The legality of the shares of Common Stock offered hereby will be passed upon for the Corporation by Allen E. Throop, Esq., Vice President and General Counsel of the Corporation, and Messrs. Wilmer, Cutler & Pickering, 900 17th Street, N.W., Washington, D. C., and for the Underwriters by Messrs. Brown, Wood, Fuller, Caldwell & Ivey, 70 Pine Street, New York, N. Y. In respect of matters of law of the District of Columbia, Mr. Throop and Messrs. Brown, Wood, Fuller, Caldwell & Ivey will rely on said opinion of Messrs. Wilmer, Cutler & Pickering.

EXPERTS

The Statement of Assets, Preliminary Survey, Research, Development, and Organization Expenses, and Liabilities and Capital (December 31, 1963) and the Statement of Cash Receipts and Disbursements for the Period from February 1, 1963 (date of incorporation) to December 31, 1963 included in this Prospectus have been examined by Haskins & Sells, independent public accountants, as stated in their opinion appearing herein, and have been so included in reliance upon such opinion given upon the authority of that firm as experts in accounting and auditing.

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PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	
Federal original ignus tors	85,000
Federal original issue tax	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	45,000
Accountants' Fee	
Carrier 17 1 C	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50.400

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Item 23. Other Expenses of Issuance and Distribution.

Estimated expenses payable by the Registrant in connection with the issue and distribution of shares of Common Stock being registered are as follows:

Deington D. t. et G.	
Printing Registration Statement, Prospectus and other documents	\$ 75,000
Printing and engraving of Common Stock certificates	85,000
Federal original issue tax	
	200,000
Fees of Transfer Agents and Registrars	79,000
Listing fees of stock exchanges	37,000
Legal Fees	
A	45,000
Accountants' Fee	10,000
Securities and Exchange Commission Registration Fee	20,000
Fees of District of Columbia in connection with increase in authorized	
capital	50,400
Miscellaneous, including "Blue Sky" Fees	
Dide Day 1 ccs	48,600
Total	4650000
2002	\$650,000

Item 31. Financial Statements and Exhibits.

(b) Exhibits:

- Exhibit 1-A -Form of Agreement Among Underwriters.
- Exhibit 1-B —Form of Purchase Contract.
- —Form of Selected Dealers Agreement. Exhibit 1-C
- —Form of Distribution Agreement. Exhibit 1-D
- —Copy of amended Articles of Incorporation of the Corporation. Exhibit 3-A
- Exhibit 3-B
- —Copy of By-laws of the Corporation, as amended. —Specimen of certificate for shares of Common Stock of the Corporation Exhibit 4-A
- (Series I shares). (To be filed by amendment.)

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- —Specimen of certificate for shares of Common Stock of the Corporation Exhibit 4-B (Series II shares). (To be filed by amendment.)
- —Opinion of Allen E. Throop, Esq., Vice President and General Counsel of the Corporation, in respect of the legality of the securities registered hereunder. Exhibit 6-A (To be filed by amendment.)
- -Opinion of Messrs. Wilmer, Cutler & Pickering, Washington, D. C., in re-Exhibit 6-B spect of the legality of the securities registered hereunder. (To be filed by amendment.)
- -Reference is made to information given in answer to Item 29 in this Regis-Exhibit 12 tration Statement.
- —Copy of form of the subscription agreement between the Corporation and each Exhibit 13-A incorporator of the Corporation, relating to purchase by such incorporator of one share of Common Stock, without par value, of the Corporation.
- Exhibit 13-B Copy of Agreement dated as of February 19, 1963, among the Corporation, Continental Illinois National Bank and Trust Company of Chicago and other banks named in such Agreement.
- Exhibit 13-B-1 —Copy of Supplemental Agreement dated as of February 21, 1964, among the Corporation, Continental Illinois National Bank and Trust Company of Chicago and other banks named therein.
- Exhibit 13-C —Copy of agreement dated March 24, 1964, between the Corporation and Hughes Aircraft Company, for design and manufacture of communications satellites and communications satellite components.
- Exhibit 14-A —Form of letter to be sent by the Corporation to communications common carriers authorized by the Federal Communications Commission to own shares of stock of the Corporation.
- Exhibit 14-B —Form of subscription for shares of Common Stock by communications common carriers authorized by the Federal Communications Commission to own shares of stock of the Corporation.
- Exhibit 14-C —Form of Application for Transfer of Shares of Common Stock.
- Exhibit 14-C-1 —Form of Application for Transfer of Shares of Common Stock (Nominee Form).
- Exhibit 14-C-2 —Form of Application for Transfer of Shares of Common Stock (Authorized Carrier Form).
- —Copy of opinion dated March 24, 1964, of Messrs. Wilmer, Cutler & Pickering, Washington, D. C., in respect of determinations of the Board of Directors of the Corporation pursuant to Section 5.02(c) of the Articles of Incorporation Exhibit 15 of the Corporation.

Pursuant to the requirements of the Securities Act of 1933, the registrant, Communications Satellite Corporation, has duly caused this amendment to its Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Washington, District of Columbia, on the 27th day of May, 1964.

COMMUNICATIONS SATELLITE CORPORATION

By Leo D. Welch

(Leo D. Welch, Chairman and
Chief Executive Officer)

May 27, 1964

Pursuant to the requirements of the Securities Act of 1933, this amendment to the Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
LEO D. WELCH (Leo D. Welch)	Chairman and Chief Executive Officer (principal executive officer) and Director	May 27, 1964
JOSEPH V. CHARYCK (Joseph V. Charyk)	President and Director	May 27, 1964
Lewis C. Meyer (Lewis C. Meyer)	Treasurer and Finance Coordinator (principal financial officer)	May 27, 1964
FREDERIC M. MEAD (Frederic M. Mead)	_Comptroller (principal accounting officer)	May 27, 1964
John T. Connor; George J. Feldman; Beardsley Graham; Sam Harris; Edgar F. Kaiser; David M. Kennedy; George L. Killion; Byrne Litschgi; Leonard H. Marks; Bruce G. Sundlun; Sidney J. Weinberg; Leonard Woodcock.	Directors	

Original powers of attorney authorizing Leo D. Welch, Joseph V. Charyk and Allen E. Throop, and each of them, to sign this amendment to the Registration Statement on behalf of the Corporation and the above-named directors and officers, and certified copies of a resolution of the Board of Directors of the Corporation authorizing said persons to sign as attorney, have been filed with the Securities and Exchange Commission.

ALLEN E. THROOP

(Allen E. Throop, Attorney-in-Fact)

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SECURITIES AND EXCHANGE COMMISSION

WASHINGTON 25, D. C.

AMENDMENT NO. 2

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

COMMUNICATIONS SATELLITE CORPORATION

(Exact name of registrant as specified in charter)

3029 Klingle Road, N.W.

Washington 8, D.C.

(Address of principal executive offices)

Consisting of

Amended Prospectus; Amended Exhibits 1-A, 1-B and 1-C; and Exhibits 4-A, 4-B, 6-A, 6-B and 15

This Registration Statement shall hereafter become effective in accordance with the provisions of Section 8(a) of the Securities Act of 1933.

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Pursuant to Rule 404(c) Showing the Location in the Prospectus of the Answers to the Items of Part I of Form S-1

	Item Number and Caption	Heading or Page in Prospectus
1.	Distribution Spread	Cover Page
2.	Plan of Distribution	Offering of Common Stock; Underwriting; Carrier Subscription Matters
3.	Use of Proceeds to Registrant	Application of Proceeds
4.	Sales Otherwise than for Cash	*
5.	Capital Structure	Capitalization
6.	Summary of Earnings	*
7.	Organization of Registrant	The Corporation
8.	Parents of Registrant	*
9.	Description of Business	The Corporation; The Venture and Its Risks; Satellite Communica- tions; Program of the Corpora- tion; International Arrangements for System; International Tele- communications; Competition; Regulation
10.	Description of Property	Program of the Corporation
11.	Organization within 5 years	The Corporation; Management
12.	Pending Legal Proceedings	*
13.	Capital Stock Being Registered	Description of Common Stock
14.	Long-Term Debt Being Registered	*
15.	Other Securities Being Registered	*
16.	Directors and Executive Officers	Management
17.	Remuneration of Directors and Officers	Management
18.	Options to Purchase Securities	*
19.	Principal Holders of Securities	*
	Interest of Management and Others in Certain Transactions	Management
21.	Financial Statements	38-42

^{*} Item inapplicable or answer thereto in negative and omitted from Prospectus.

10,000,000 Shares

Communications Satellite Corporation

Common Stock (without par value)

The Corporation is not an agency or establishment of the United States Government.

In conformity with the Communications Satellite Act of 1962, 50% of the shares of Common Stock to which this Prospectus relates were reserved for subscription by communications common carriers authorized by the Federal Communications Commission to own stock of the Corporation. As of the close of business on June 1, 1964, there were in effect subscriptions of authorized carriers, revocable until accepted by the Corporation, for all the reserved shares. The Underwriters are purchasing from the Corporation for sale to the public the 5,000,000 unrecovered shares. writers are purchasing from the Corporation for sale to the public the 5,000,000 unreserved shares. See "Offering of Common Stock".

There is at present no market for the Common Stock of the Corporation. The New York, Midwest and Pacific Coast Stock Exchanges have approved the listing of the Common Stock on such Exchanges, subject to certain conditions. See "Description of Common Stock".

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION NOR HAS THE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

space aggress of the system (comprising the manife	Offering Price	Underwriting Discount	Proceeds to Corporation*
Per Share: Public (5,000,000 shares) Authorized Carriers (5,000,000 shares)	\$20 \$20	\$.80 None	\$19.20 \$20
Total:	\$200,000,000	\$4,000,000	\$196,000,000

^{*} Before deducting expenses payable by the Corporation estimated at \$650,000.

Merrill Lynch, Pierce, Fenner & Smith Incorporated

Blyth & Co., Inc.

The First Boston Corporation

Kidder, Peabody & Co.

Kuhn, Loeb & Co.

Incorporated

Lazard Frères & Co. Lehman Brothers

Carl M. Loeb, Rhoades & Co.

Paine, Webber, Jackson & Curtis

White, Weld & Co.

Incorporated

Dean Witter & Co.

June 2, 1964.

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No person is authorized to give any information or to make any representations not contained in this Prospectus, and any information or representation not contained herein must not be relied upon as having been authorized by the Corporation or by any Underwriter. This Prospectus does not constitute an offer of Common Stock by any person in any State or other jurisdiction to any person to whom it is unlawful to make such offer in such State or other jurisdiction, or an offer by the Corporation or any Underwriter to sell Common Stock to any person ineligible under the Communications Satellite Act of 1962 or the Articles of Incorporation of the Corporation to own shares of Common Stock of the Corporation.

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IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMMON STOCK AT A LEVEL ABOVE THAT WHICH MIGHT OTHER-WISE PREVAIL IN THE OPEN MARKET. SUCH TRANSACTIONS MAY BE EFFECTED ON THE NEW YORK, MIDWEST OR PACIFIC COAST STOCK EXCHANGES OR IN THE OVER-THE-COUNTER MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THE CORPORATION

Communications Satellite Corporation (the Corporation) was incorporated under District of Columbia law on February 1, 1963, as authorized by the Communications Satellite Act of 1962 (the Act). The Act states that it is the policy of the United States to establish, in cooperation with other countries, as expeditiously as practicable, a commercial communications satellite system, as part of an improved global communications network, and that United States participation in the system shall be in the form of a private corporation, subject to appropriate Government regulation. The Corporation has been created in pursuance of such national policy, but the Corporation is not an agency or establishment of the United States Government. The United States Government has not guaranteed funds invested in the stock of the Corporation, the payment of dividends on shares of such stock, or the profitability of the venture in which the Corporation proposes to engage.

In accordance with the Act, the Corporation plans to establish and operate a global commercial communications satellite system in cooperation with telecommunications entities in other countries, certain of which are agencies of foreign governments. Such a system would use satellites placed in orbit around the earth to relay telecommunications between terminal stations in the United States and in other countries. Terminal stations in the United States would be connected with communications systems owned and operated by common carriers that provide telephone and other telecommunications service to the public. Terminal stations in other countries would be connected with communications systems that provide such service there.

It is expected that (i) telecommunications entities in other countries will provide and operate terminal stations in such countries (without which there cannot be a satellite system for international telecommunications), and (ii) such entities will share with the Corporation the costs of establishing the space segment of the system (comprising the satellites and the command and control facilities on earth), which would be jointly owned by the Corporation and such entities in proportion to their respective investments. It is contemplated that equitable allocations of the communications capacity of the space segment would be made to such joint owners and others. The Corporation would utilize its allocation to furnish satellite channels for hire to United States communications common carriers and other authorized users. It is expected that the charges made to United States carriers for use of such channels would be a principal source of the Corporation's revenue. Arrangements with telecommunications entities in other countries have not yet been made. The Corporation intends to proceed with its program for the establishment of the system while such arrangements are being negotiated. See "International Arrangements for System".

The Act embodies a comprehensive plan for the conduct of the business and affairs of the Corporation. It includes provisions governing the Corporation with respect to matters that, in the case of other communications common carriers in the United States, are not ordinarily subject to Government supervision or control. The Act defines the powers of the Corporation and the relationships of the Corporation to the President of the United States and various agencies of the United States Government which have responsibilities in carrying out the purposes of the Act. Under the provisions of the Act, the President of the United States has approved the Corporation's Articles of Incorporation, and he is directed by the Act, among other things, to exercise authority over the relationships of the Corporation with foreign governments and entities. The Act directs the Federal Communications Commission (the FCC) to exercise authority over certain aspects of the affairs of the Corporation, including the rates charged by it. See "Regulation".

Provisions of the Act also govern the ownership of shares of Common Stock of the Corporation and the composition and manner of selection of its Board of Directors. Among other things, such provisions contemplate that up to half the total number of shares of Common Stock of the Corporation is to be owned by United States communications common carriers, and direct that, effective upon completion of the first meeting of shareholders, the Board of Directors shall consist of six directors elected by those shareholders which are communications common carriers, six directors elected by other shareholders and three directors appointed by the President of the United States with the advice and consent of the Senate. See "Management" and "Description of Common Stock—Voting Rights". In the Act, Congress expressly has reserved the right to repeal, alter or amend the Act at any time.

THE VENTURE AND ITS RISKS

The Corporation proposes to engage solely in operations based on recent developments in space and communications technology. Careful consideration should be given to the matters referred to in the following summary, as well as to the information set forth elsewhere in this Prospectus.

- (1) Experimental communications satellites have been placed in orbit and operated in programs conducted by the United States Government and private United States firms (other than the Corporation); but the establishment of a communications satellite system, capable of providing commercially useful service, has never before been attempted.
- (2) Satellite systems of several different types are believed to be practicable for commercial purposes. To provide further information relevant to the selection of a type of system, the Corporation plans to conduct experiments and limited operations by means of a satellite to be launched by mid-1965. The program of the Corporation contemplates that the type of system to be established will not be determined before the latter part of 1965. It is anticipated that the system selected will be ready to provide service between certain areas beginning in 1966, but that the system will not be in full operation before the latter part of 1967. The dates referred to in this paragraph are approximations only, and every reference in this Prospectus to an anticipated date of a particular step in the program of the Corporation is subject to that qualification and to the qualification that unforeseen developments may either delay or prevent the carrying out of the program.
- (3) It is anticipated that the Corporation will not have significant operating revenue until the system is in full operation. In view of the risks of the venture, the Corporation may not realize significant operating revenue for a period after full system operations commence, and the Corporation may operate at a loss for several years after commencement of full system operations. In view of such risks, the period during which operations are conducted at a loss may be even more extended. No dividends will be paid on the Common Stock for an indeterminate period.
- (4) A communications satellite system of any type requires rockets or other launch vehicles that will place the satellites in the intended orbit, and the costs of launch vehicles will represent a major element in the costs of establishing a communications satellite system. It is contemplated that satellites for the system will be launched by vehicles developed in United States defense and space programs. The reliability of such vehicles is being further improved, but the risk of launch vehicle failure is an important risk inherent in an attempt to establish a satellite system of any type.

Consequences of launch vehicle failure will include loss of the vehicle and of the satellite or satellites carried by the vehicle, and, if the failed vehicle causes injuries or damage, may also include liability therefor.

- (5) A communications satellite system of any type requires satellites which will remain operable for a considerable period. On the basis of information derived from experimental communications satellite programs, it is believed that satellite operating lifetimes of the duration necessary for a commercial system can be achieved, but the risk of early failure of satellites in orbit also is an important risk inherent in an attempt to establish a satellite system of any type. Failure of satellites in orbit may necessitate the launching of replacement satellites (involving additional launch vehicle costs) and may also cause interruption or suspension of service, with consequent loss of revenue.
- (6) Certain techniques and devices, not yet proved in actual operations, are regarded as important to the commercial feasibility of certain types of satellite systems, or as important to highly efficient operations of any type of system. These include the launching of several communications satellites by a single launch vehicle (of importance to the commercial feasibility of a system consisting of a large number of satellites); techniques or devices to enable more than two terminal stations to communicate simultaneously via a single satellite without significant reduction in the satellite's communication capacity; and devices to control the attitude of satellites in orbit so that signals emitted by the satellite are directed toward the earth only.
- (7) The demand for international telecommunications services (particularly telephone service) has increased continuously since the end of World War II, and, if the demand continues to increase, additional facilities of some kind will be required within the next few years to assure adequate telecommunications service between North America and Western Europe (commercially the most important route at present) and over certain other routes. The program of the Corporation to establish, in cooperation with other telecommunications entities, a commercial communications satellite system is based on the belief that the demand for international telecommunications services will continue to grow and on the expectation that the satellite system, in competition with facilities operated by others, will serve an important and increasing volume of international telecommunications traffic. It is expected that, in the early years of system operations, revenues from the use of satellite channels for telephone service will constitute by far the most important element in total revenues from system operations, and that revenues from television transmissions will not be significant in terms of such total revenues.
- (8) The satellite system will compete with submarine telephone cable systems between North America and Western Europe and on certain other routes, and with high-frequency radio facilities generally. Such cable systems and radio facilities are owned by certain of the United States carriers and telecommunications entities in other countries which are prospective users of the satellite system. American Telephone and Telegraph Company (AT&T) is the principal United States owner of submarine telephone cable systems. The submarine cable systems with which the satellite system will compete may include cable systems of greatly increased efficiency now under development by AT&T and others. AT&T has stated an intention, subject to certain conditions, to lease satellite system channels of commercial quality, and other United States carriers have indicated an interest in so doing; but the Corporation has not obtained firm commitments therefor. The competitive position of the Corporation will depend on its ability to develop and operate a satellite system that will provide

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- (9) The venture depends on the cooperation of telecommunications entities in other countries. Although many of such entities have indicated interest in the venture, the Corporation has not obtained the commitments of any such entities to provide the foreign terminal stations essential to the operations of a satellite system, or to join with the Corporation in the ownership (and payment of the costs) of the space segment of the system, or to use the system.
- (10) The negotiation and carrying out of international arrangements for the system may be impeded or prevented by international political developments that are not directly related to the system. Moreover, the system may not be designed to operate in spite of intentional interference (e.g., jamming) and, if the operations of the system are purposely interfered with by a foreign government, elimination of the interference would depend on action by the United States Government (or other interested governments).
- (11) Other countries may have or may acquire the ability to establish and operate a satellite system which would compete with the system the Corporation proposes to establish. Governments of certain foreign countries from time to time have announced that communications satellite development activities are being pursued or considered in such countries; but the Corporation does not know of any plan for the establishment by any other country of a communications satellite system which would compete with the system contemplated by the program of the Corporation. Under provisions of law presently in effect, any such competing system could not provide telecommunications service between the United States and overseas points without authorization by the FCC.
- (12) Under the provisions of the Act, the activities in which the Corporation has authority to engage are, in general, those related or incidental to the development, ownership and operation of a commercial communications satellite system as defined in the Act. In the event that future technological developments provide a basis for new types of communications systems which do not use earth satellites and satellite terminal stations on the earth's surface, the Corporation might be unable to take advantage of such developments without appropriate legislation. Such legislation might not necessarily be required by other enterprises.
- (13) The Corporation has public responsibilities under the Act, as well as responsibilities to its shareholders. Among other things, in the interests of national policy, the Corporation may be required to provide certain communications services to particular foreign points in circumstances in which it would be contrary to the business judgment of the Corporation to do so.
- (14) The Corporation does not presently hold any patent rights. The manufacture and operation of the equipment and facilities required for a commercial communications satellite system may involve the use of inventions which are or may be subject to patent rights held by others. However, it is believed that access to such patent rights, or to satisfactory alternatives, should be obtainable on reasonable terms. It is expected that although equipment and facilities for the system will generally be procured on a competitive basis, some items may be available only from a single source of supply because of know-how, production capacity or other unique qualifications possessed by such source. It is believed that access to such single sources of supply, or to satisfactory alternatives, should also be obtainable on reasonable terms.

OFFERING OF COMMON STOCK

Offering to Authorized Carriers

In conformity with the Act and the Corporation's Articles of Incorporation, 50% of the 10,000,000 shares of Common Stock to which this Prospectus relates were reserved until the close of business on May 26, 1964, for subscription by communications common carriers authorized by the FCC to own stock of the Corporation (authorized carriers). As of that time, 163 authorized carriers had submitted subscriptions, revocable until accepted by the Corporation, for an aggregate of 6,354,250 shares of Common Stock. There are set forth below, as of the close of business on June 1, 1964, (a) the name of each authorized carrier whose subscription relates to 5% or more of the 5,000,000 reserved shares and the number of shares to which the subscriptions of each such carrier relates, and (b) the aggregate number of shares to which the subscriptions of authorized carriers (other than those named) relate. The number of shares shown opposite American Telephone and Telegraph Company is the number of shares subscribed for by it, reduced by the application of the allocation formula set forth under "Carrier Subscription Matters".

Name	Number of Shares	
American Telephone and Telegraph Company International Telephone and Telegraph Corporation General Telephone & Electronics Corporation RCA Communications, Inc. Other Authorized Carriers	1,050,000 shares 350,000 shares	
Total	5.000.000 shares	

The subscriptions referred to above are subject to revocation (in full but not in part) at any time prior to the acceptance thereof by the Corporation after the effectiveness of the Registration Statement covering the shares of Common Stock to which this Prospectus relates (the Registration Statement).

Upon (i) the issuance and sale to authorized carriers of the number of shares of Common Stock to which their respective subscriptions relate (adjusted, in the case of AT&T, as set forth above), and (ii) the issuance and sale to the Underwriters of 5,000,000 shares of Common Stock pursuant to the Purchase Contract referred to below, AT&T will own shares constituting approximately 29%, and International Telephone and Telegraph Corporation (ITT) will own shares constituting 10.5%, of the total number of shares of Common Stock then issued and outstanding, and no other person will own of record or, to the knowledge of the Corporation, beneficially but not of record, shares constituting more than 10% of the total number of shares then issued and outstanding. The Corporation may enter into transactions with AT&T and/or ITT or companies controlled by them, respectively. See "Experimental Operational Satellites" and "System Development".

The obligations of authorized carriers to purchase shares subscribed for by them are subject to certain conditions, including the conditions that (a) the Registration Statement shall have become and shall remain effective, and (b) the sum of the aggregate purchase price for shares covered by accepted subscriptions of authorized carriers and the net proceeds (after underwriting discount but before expenses) received by the Corporation for shares purchased by the Underwriters under the Purchase Contract referred to below shall amount to not less than \$190,000,000. The subscription of each authorized carrier which has subscribed for shares includes the agreement of such carrier that, unless compelled by the FCC in accordance with the provisions of the Act to transfer shares to another carrier, it will not, during a period of 60 days after the delivery to it of the shares of Common Stock purchased by it pursuant to the offering made by this Prospectus, sell or otherwise dispose of such shares otherwise

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than to an authorized carrier affiliated with it which is a party to a similar agreement with respect to the sale or other disposition of such shares during such 60-day period.

On May 28, 1964, the FCC issued a statement, the text of which appears under "Carrier Subscription Matters", advising authorized carriers that authorizations to own shares of Common Stock of the Corporation granted by FCC presuppose that shares acquired by authorized carriers will be acquired for investment purposes and not for speculative purposes.

Offering to Public

The Underwriters have agreed to purchase from the Corporation for sale to the public the 5,000,000 unreserved shares. In the Purchase Contract between the Underwriters and the Corporation, the Underwriters have agreed to use their best efforts to offer the Common Stock in a manner to encourage the widest distribution of the shares to the American public. In addition to offering a portion of the shares directly to the public, the Underwriters will offer shares to over 800 dealers for resale to the public.

Underwriters and dealers will not be required to accept or fill all orders received. In the Purchase Contract the Underwriters have agreed, except under certain circumstances, in making sales to persons other than dealers, to limit the number of shares allotted to any purchaser and to require each dealer to enter into an agreement to the same effect covering the shares sold by such dealer. The text of the provision of the Purchase Contract stating such agreement of the Underwriters is set forth under "Underwriting".

At the request of the Corporation, an arrangement has been made whereby up to 25 shares of Common Stock will be allotted at the public offering price to any employee of the Corporation who may enter an order with Merrill Lynch, Pierce, Fenner & Smith Incorporated. The maximum number of shares purchasable under this arrangement is approximately 2,000 shares.

The decisions of authorized carriers to purchase shares may be based on business considerations not applicable to purchasers other than carriers.

CAPITALIZATION

The following table sets forth the capitalization of the Corporation as of June 1, 1964 and as adjusted to give effect to the sale of 5,000,000 shares of Common Stock to authorized carriers, the sale of 5,000,000 such shares to the Underwriters and the application of a portion of the proceeds of such sales to the payment of bank loans of the Corporation, as described under "Application of Proceeds":

Title of Class	Authorized	Outstanding	Adjusted
Bank loans due June 30, 1964		\$1,850,000	None
Common Stock, without par value*	10,000,100 shs.	14 shs.	10,000,014 shs.

^{*} The shares of Common Stock are issuable in two Series, designated Series I and Series II. As more fully set forth under "Description of Common Stock", and subject to the provisions of the Act and the Articles of Incorporation of the Corporation referred to therein, Series I shares are issuable to the public and Series II shares are issuable to communications common carriers authorized by the FCC to own stock of the Corporation.

APPLICATION OF PROCEEDS

The net proceeds from the sale of the 10,000,000 shares of Common Stock are estimated at approximately \$195,350,000, after deducting estimated expenses. Approximately \$1,903,000 of such net proceeds will be applied to the payment of bank loans of the Corporation. The balance of such net proceeds (\$193,447,000) will be applied to pay the costs and expenses to be incurred by the Corporation in carrying out its program over the next few years for the development and establishment of a commercial communications satellite system, and for related purposes. See "Program of the Corporation". It is contemplated

that funds not at the time required for such purposes will be invested in obligations of the United States Government or in other interest-bearing obligations or deposits.

As indicated under "Program of the Corporation", the range of the costs which it is estimated will be incurred in carrying out the program of the Corporation is from \$190,000,000 to \$230,000,000. It is believed that the net proceeds from the sale of Common Stock, together with interest income and possible revenues from the operations of the experimental operational satellite proposed to be launched in 1965, will provide an amount sufficient to pay substantially all of the program costs which will be required to be paid by the Corporation. However, in view of the risks associated with the program and the possibility of changes in the program (including such changes as might result from modification of the program so as to satisfy certain requirements of the National Communications System), the actual costs may considerably exceed present estimates. See "National Communications System Program". The Corporation has not made any arrangements to provide such additional funds as may be required.

It is expected that telecommunications entities in other countries may become joint owners with the Corporation of the space segment (comprising the satellites and the command and control facilities) of the communications satellite system and may provide part of the capital necessary to pay the costs of establishing the space segment. The Corporation has not obtained the commitment of any such entity to bear any part of such costs. Other than as indicated above, the Corporation at present has no plans for the use of any of the net proceeds of this financing which, because of the sharing of costs by the telecommunications entities in other countries, or for any other reasons, may not be required by it to defray the costs of the program.

SATELLITE COMMUNICATIONS

Nature of Satellite Communications

A communications satellite system would consist of satellites placed in orbit around the earth for the purpose of relaying telecommunications between terminal stations at different places on the earth's surface. Telecommunications which would be so relayed would include telephone messages, television signals, and "record traffic" of various types (message and other telegraph traffic, teleprinter exchange traffic (telex), and facsimile, photogram and data transmissions). Terminal stations would be operationally connected with telephone systems and other telecommunications facilities. Telecommunications would be transmitted (i) from the place of origin, through telephone lines or other facilities, to a terminal station, (ii) from the terminal station to a satellite in orbit, (iii) from the satellite to another terminal station, and (iv) from the receiving terminal station, through telephone lines or other facilities, to the place of destination.

Communication by satellite between two terminal stations is possible only when a satellite is above the horizon (is "visible") at both terminal stations. If the satellite's orbit carries it below the horizon of one of the terminal stations, communication between the stations will not be possible until the satellite again becomes visible to both stations or another satellite becomes visible to both stations. In such a case, to enable continuous communication between two terminal stations, a number of satellites would be necessary, so that before the last satellite visible to both terminal stations moves below the horizon of one of the stations, at least one other satellite will have become visible to both stations.

The number of satellites necessary to enable continuous communication between a pair of terminal stations depends primarily on the altitude and inclination of the orbits from the plane of the Equator and on whether the spacings between the satellites are controlled. Fewer satellites would be necessary at any

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altitude than would be necessary in an orbit of the same inclination at a lower altitude. The spacings between satellites at the same altitude will not be uniform unless such spacings are established, after the satellites are in orbit, by use of "position control" equipment included in the satellites. A system of satellites the spacings between which are controlled during orbit (a controlled system) need include fewer satellites than a system of satellites at the same altitude which are not subject to such control (a random system). Altitudes within the range of from 5,000 to 10,000 miles are generally proposed for a system (controlled or random) which is to consist of a number of satellites that in turn disappear below the horizon and in turn become visible again. Satellites in orbit at such altitudes (medium altitudes) could be used for communication between terminal stations over transoceanic distances.

The orbital period of a satellite and the length of the time that a satellite would be above the horizon of a particular terminal station increase as the altitude of the orbit increases. In particular, if the velocity of a satellite in orbit above the Equator at an altitude of 22,300 miles is effectively controlled, the orbital period of such a satellite would be 24 hours—an orbital period synchronized with the rotation of the earth. A satellite in such an orbit (synchronous orbit) would be visible to terminal stations within an area including approximately one third of the earth's surface and would be visible to terminal stations within that area during its entire orbital period of 24 hours. To an observer at such a terminal station, the satellite would appear to remain stationary in the sky. A satellite in such a synchronous orbit could be used at any time for communication between terminal stations within that area located up to 10,000 miles apart. The orbit of a satellite at an altitude of 22,300 miles, which deviates slightly from the plane of the Equator, is also referred to in this Prospectus as a synchronous orbit. The usefulness for communications of a satellite in such an orbit would be substantially the same as that of a satellite in a true "stationary" orbit, exactly above the Equator. A true "stationary" orbit (or an orbit of such slight deviation) has not yet been achieved.

The quality of telephone communication by means of a satellite in synchronous orbit would be reduced by reason of the length of the time (approximately three-tenths of a second) required for transmission of the signal to the satellite and back to earth (a delay which tends to interfere with the normal rhythms of conversation), and by the inter-acting effects of echo suppressors of existing types which must be used. There is not yet sufficient experience to indicate clearly whether or not telephone service by means of satellites in synchronous orbit will be of a quality that is generally acceptable to the public.

The principal components of any satellite which relays signals between terminal stations are (i) a receiver and related antenna, for the reception of signals from terminal stations, (ii) a transmitter and related antenna, to amplify and return signals to terminal stations, and (iii) a system to provide electrical energy for the satellite's receiver and transmitter. The principal components of a terminal station for any satellite system are, in addition to a source of electric power, a transmitter, a receiver, and at least one antenna. The orbital configuration of a satellite system greatly influences the nature of additional equipment which satellites and terminal stations must include. Placing and maintaining a satellite in synchronous orbit require that the satellite itself have position control equipment, to help achieve the synchronous orbit in the first instance and to overcome the effects of drift from such orbit. Satellites in a controlled medium altitude system also must have position control equipment, to establish the desired spacings between the satellites. Satellites in a random system need not include such equipment. To conduct the same operations, a terminal station for a medium altitude system must include twice the number of antennas required in a terminal station for a synchronous satellite system.

Command and control facilities (including computers and other equipment for tracking, guidance and control of satellites) also are necessary to satellite system operations.

Launching of Satellites

Rockets or other launch vehicles capable of placing objects of substantial weight in orbit are essential to a communications satellite system. Such vehicles have been developed in the United States in recent years in connection with United States Government space and defense programs. The reliability of such vehicles has been improved in the course of such programs, and agencies of the Government and others engaged therein are carrying out activities intended to increase launch vehicle reliability to a further degree; but the risk that one or more launch vehicles will fail to place satellites in a planned orbit may continue to be a significant factor throughout the period during which the Corporation proposes to create a commercial satellite system.

Costs of launch vehicles, and related vehicle launching expenses, are a major part of the aggregate cost of creating any satellite system. A medium altitude system may not be commercially feasible unless several satellites can be placed in the intended orbit by a single launch vehicle. In experiments conducted by agencies of the United States Government, as many as five objects have been placed in orbit by a single launch vehicle. Such objects were not communications satellites, and the orbits achieved were orbits at substantially lower altitudes than those contemplated for the satellites of a medium altitude system. The techniques necessary for a "multiple launch" of communications satellites would be the same as those successfully employed in such experiments; but no attempt has thus far been made in the United States to place more than one communications satellite in orbit by use of a single launch vehicle.

Satellite Lifetime

Satellites in orbit are subject to being damaged by radiation, by collision with natural objects and by other events in space. Damage resulting from any of such causes, or a failure of satellite components for other reasons, may interrupt or terminate the operation of the satellite. Certain of the experimental satellites launched in the United States experienced damage or failure of components within relatively short times after being placed in orbit. Three of the experimental satellites have operated for periods of nine months or longer (the longest such period being approximately 16 months). Certain of the experimental satellites launched in the United States are still in operation. See "Experimental Communications Satellites".

Failure of a satellite in orbit may impair or prevent communication service between the terminal stations to which the satellite is visible. In the case of a medium altitude system, the failure of a satellite is likely to result in interruptions of service during periods of predictable occurrence and length, corresponding to the periods during which the inoperative satellite is the only satellite visible to the terminal stations. Such periods of interruption will be longer if the system is a controlled system than if the system is a random system. If communication between two terminal stations is provided by a single synchronous satellite and there is not a "standby" satellite in orbit, failure of the satellite will prevent communication at any time until the satellite is replaced. Costs of replacing a satellite that has failed in orbit include the costs of the replacement satellite, the costs of a launch vehicle and related vehicle launching expenses. For a commercial system, the impairment or suspension of service resulting from satellite failure may also result in loss of substantial revenue until service can be restored by the successful launching of the replacement satellite.

Experimental Communications Satellites

Experimental communications satellites have been developed and placed in orbit in programs conducted by agencies of the United States Government and by private American companies other than the

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Experimental Communications Satellites (United States)

Name(a)	Launch Date	Altitude of Initial Orbit (statute miles)	Operating Lifetime of Telecommunications System	Telecommunications Transmissions
Score	December 18, 1958	115 to 914	13 days (design life)	Voice and telegraph, including delayed signal repetition and rebroadcast of recorded message.
Courier I-A	August 18, 1960	Failed to orbit (launch vehicle exploded)		
Courier I-B	October 4, 1960	586 to 767	17 days	Voice, telegraph and telephoto, including voice transmission to Puerto Rico.
Telstar I	July 10, 1962	593 to 3,503	199 days(b)	Television, voice, telegraph, data and telephoto, including trans- oceanic transmissions.
Relay I	December 13, 1962	819 to 4,612	484 days(c)(d)	Television, voice, telegraph, data and telephoto, including transmissions between the U. S. and Western Europe and South America, and between the U. S. and Japan.
Syncom I	February 13, 1963	21,268 to 22,974	Communication lost at injection into orbit.	des at lesses — of core said
Telstar II	May 7, 1963	604 to 6,713	359 days(d)(e)	Similar to Telstar I.
Syncom II	July 26, 1963	22,240 to 22,247 (orbit very nearly circular and synchro- nous)	305 days(d)	Voice, telegraph, data and telephoto, including transmissions between the U. S., Western Europe and Africa.
Relay II	January 21, 1964	1,325 to 4,600	127 days(d)	Similar to Relay I.

(a) Of the satellites referred to in the table, (i) Telstar I and Telstar II were designed and constructed by American Telephone and Telegraph Company, (ii) Relay I and Relay II were designed and constructed by Radio Corporation of America (RCA) under contract with the National Aeronautics and Space Administration (NASA), (iii) Syncom I and Syncom II were designed and constructed by Hughes Aircraft Company under contract with NASA, (iv) communications equipment for Score was constructed by RCA for the Department of Defense, and (v) Courier IA and IB were constructed by Philo Corporation for the Department of Defense.

(b) Exclusive of a 27-day interruption (attributed to damage caused by radiation) in the operating lifetime stated. Termination of lifetime is attributed to damage so caused.

(c) Exclusive of (i) a 20-day period, immediately following launch, during which malfunction in satellite components prevented telecommunications transmission, and (ii) a 26-day period in April and May, 1964, during which the telecommunications system was inoperable.

(d) Computed to May 26, 1964, at which time the telecommunications system of the satellite was still operable.

(e) Exclusive of a 27-day interval during which the telecommunications system was inoperable for unknown reasons.

The experimental satellites Telstar I and II and Relay I and II have been used successfully for transmission of the principal kinds of telecommunications which a commercial system would serve over distances comparable to those which commercial service would require. The experimental satellite Syncom II has also been used successfully for the transmission over such distances of the principal kinds of telecommunications which commercial service would require, except that television signals transmitted through Syncom II have not been of commercial quality. In addition, the experimental satellite programs have provided much information relevant to the design of satellites for a commercial system.

The improvements in experimental satellites which are essential for the satellites of a commercial system are primarily those related to the achievement of reliability of components through careful selection and intensive testing. In addition, certain anticipated developments in components or techniques generally are regarded as important to communications satellite operations of highest efficiency, viz., (i) development of techniques which will enable a satellite to communicate simultaneously with more than two terminal stations without material reduction in the satellite's overall communication capacity, and (ii) development of devices which can be used to control the attitude of satellites for extended periods of time, so that signals emitted by the satellite are directed toward the earth only.

The terminal station facilities principally used in connection with the operation of the experimental satellites referred to in the table have been, in respect of facilities in the United States, experimental terminal stations constructed by communications common carriers or facilities of the United States Government, and, in respect of facilities outside the United States, experimental terminal stations constructed by foreign telecommunications entities, including such facilities in the United Kingdom, France, Italy, Brazil and Japan. Telecommunications entities in other foreign countries (including Canada and the Federal Republic of Germany) are engaged in the construction of terminal station facilities in such countries.

PROGRAM OF THE CORPORATION

Activities to Date

The Corporation has been engaged in various activities leading to the creation of a commercial communications satellite system. It has established its offices in leased premises in Washington, D. C. Technical and economic studies are being carried out by the staff of the Corporation and by firms under contract with the Corporation, including studies of factors affecting the design of a satellite system, studies with respect to potential telecommunications traffic which such a system might serve, and studies relating to the minimum specifications and characteristics of an initial communications satellite system. Expenses incurred in connection with these activities have been financed by bank borrowings.

Summary of Program and Estimated Costs

The Board of Directors of the Corporation has approved a program for the development and establishment of a commercial communications satellite system. The principal elements of the Corporation's program, and the estimated costs of each element in the program, are summarized below. The cost estimates shown are approximations only, and, in view of various factors referred to below, the actual costs of the program as a whole, or of particular elements in the program, may considerably exceed such estimates. The estimates do not reflect such additional costs as would be involved if the program were modified to satisfy certain requirements of the National Communications System. See "National Communications System Program". The cost estimates in the summary do not include any amount covering the expenses to be incurred in maintaining an established system.

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Experimental Operational Satellites Conduct of certain communications tests and limited operations be means of an experimental operational satellite proposed to be place in synchronous orbit above the Atlantic Ocean in mid-1965	d
System Development	
Preparation of satellite engineering designs and development of prototype satellites of various types, preparatory to a decision, propose to be made in the latter part of 1965, as to whether the commercia satellite system will be a medium altitude system or a synchronous system	d al as
Manufacture and placing in orbit of satellites constituting a commer cial communications satellite system, to provide limited service estimated to begin in 1966 and to be in full operation in the latter part of 1967.	r- ne er
Construction in the United States by mid-1966 of a command an control center for the satellite system	d . \$ 9,000,000 – \$ 10,000,000
Proposed Terminal Stations	
Construction by the Corporation of satellite terminal stations require in the United States*	d . \$ 17,000,000 – \$ 20,000,000

* Contingent on matters referred to under "Proposed Terminal Stations".

RESEARCH AND DEVELOPMENT AND ADMINISTRATION

The Corporation has entered into an agreement for the design and manufacture of the experimental operational satellites, and has received proposals for the preparation of the satellite engineering designs, referred to in the foregoing summary. Except with respect to the equipment and services to which such agreement and proposals relate, the cost estimates in the foregoing summary are not based upon bids to provide equipment or services. Such estimates are based on information furnished to the Corporation by the United States Government and United States firms which have engaged in satellite experiments and in other phases of space programs. The Corporation expects to invite at the appropriate time competitive bids or proposals for the equipment and services required by its program, and does not presently plan to manufacture itself any of such equipment. The actual costs of the program summarized above may vary considerably from estimated costs, depending upon the characteristics of the system, unforeseen factors affecting adversely launching costs or costs of components, and technological developments or other factors. In view of the risks of the venture, the taking of any particular step in the program may be delayed for extended periods beyond the approximate date for such step referred to in the summary above.

Additional research and development and administrative activities .. \$ 20,000,000 - \$ 25,000,000

Total \$190,000,000 - \$230,000,000

The program of the Corporation summarized above may be changed in material respects by reason of unforeseen developments. Whether or not any such development occurs, the program is also subject to change by the Board of Directors of the Corporation that will succeed the present Board. See "Management". Changes in the program may also be made by reason of modification of the program to satisfy certain requirements of the National Communications System or by reason of the nature

or terms of the international arrangements to be negotiated for the system. See "National Communications System Program" and "International Arrangements for System". The carrying out of any program for the establishment of a commercial communications satellite system is subject, among other things, to the continued effectiveness of the provisions of the Act which authorize the Corporation to carry out such a program, and to the authority of the agencies of the United States Government referred to under "Regulation".

Experimental Operational Satellites

The Corporation plans to conduct communications tests and to provide certain commercial communications services by means of a satellite to be placed in synchronous orbit over the Atlantic Ocean in mid-1965. The principal objectives of the program for such a satellite are to obtain information relevant to the selection and design of a commercial system (including information about public attitudes toward the time delays and echo suppression effects involved in telephone conversation via satellite in synchronous orbit) and also to provide experience in the conduct of operations. The particular satellite to be used in the program will be designed to provide up to 240 two-way telephone grade circuits between appropriately equipped terminal stations in North America and Western Europe. Such circuits could be used for telephone conversations, or for record traffic, or for the transmission of television signals. The capacity provided by one two-way telephone grade circuit is sufficient for the simultaneous transmission of 22 or more telegraph messages, depending on the terminal equipment used. The construction, launching and operation of the satellite are subject to the approval of the FCC. The Corporation has obtained such approval for the construction of the satellite, but has not yet made application for the other necessary approvals.

The Corporation has entered into an agreement with Hughes Aircraft Company, Culver City, California (Hughes Aircraft), for the design, manufacture, assembly and testing of two such satellites, for the manufacture of components for a third such satellite and for the performance of certain related services. The agreement provides for delivery of the first satellite in April, 1965, and for delivery of the second satellite later that year. Under the provisions of the agreement, the aggregate amount payable by the Corporation to Hughes Aircraft depends on whether the satellites are successfully implaced in orbit and, if successfully implaced, on the length of the period during which either of the two satellites is operable in accordance with certain operating standards specified in the agreement. Under such provisions, if neither satellite is successfully implaced in orbit, the aggregate amount payable by the Corporation to Hughes Aircraft would be \$7,885,000. If both satellites are successfully implaced, the minimum aggregate amount payable by the Corporation, whether or not either satellite is operable for any period, is \$6,335,000, and the maximum aggregate amount payable by the Corporation, which would be payable if each of the two satellites is operable for a period of 18 months or longer, would be \$10,835,000. The agreement also provides for additional payments by the Corporation to Hughes Aircraft in the event of the delivery of the first satellite in advance of the scheduled delivery date.

The Corporation expects to enter into an agreement with the National Aeronautics and Space Administration (NASA), an agency of the United States Government, for the furnishing to the Corporation by NASA of launch vehicles and launching services for two such satellites. The Act provides that NASA shall furnish launching services to the Corporation on a reimbursable basis. The Corporation has held preliminary discussions with NASA with respect to the furnishing by NASA of such launching services, but the terms of an agreement between the Corporation and NASA have not been determined.

It is expected that the vehicle to be used in the launching of each such satellite would be a Thor Delta rocket vehicle with three augmenting rockets attached. A total of 24 launchings of the Thor Delta rocket vehicle (without such augmenting rockets) has been attempted to date in connection with national

space programs. Of such launching attempts, 22 were successful, including the launchings of the experimental satellites Syncom I and Syncom II. The launchings of Syncom I and Syncom II are the only launchings of the Thor Delta rocket vehicle to date for the purpose of placing an object into synchronous orbit. The Thor Delta rocket vehicle with such augmenting rockets has not been launched to date in national space programs.

The program of the Corporation contemplates that, in the event the first launch attempt fails or the first satellite is inoperable, an attempt will be made to launch the second satellite into synchronous orbit over the Atlantic Ocean. If the first launch is successful, it will then be determined whether to launch the second satellite into orbit over the Atlantic Ocean (to provide additional or stand-by capacity) or to launch it into orbit over the Pacific Ocean, or to hold it in reserve.

The Corporation is discussing with AT&T the terms of arrangements for the modification of AT&T's experimental terminal station facilities at Andover, Maine, and for the use of such facilities in the conduct of tests and operation of such satellites. Such arrangements and use will be subject to the approval of the FCC. It is expected that experimental terminal station facilities now existing or to be constructed in other countries will be used in the conduct of such tests and operations, but arrangements therefor have not yet been made. The Corporation proposes to offer to United States communication common carriers and other authorized users, for hire, channels of communication by means of the satellite in synchronous orbit above the Atlantic Ocean, between such terminal station in the United States and such terminal stations in Western Europe. AT&T has advised the FCC that it intends to seek FCC authorization to lease 100 circuits in the experimental operational satellite as soon as such circuits are commercially available; but the Corporation has not obtained the commitment of AT&T (or of any other carrier or entity) to lease any such circuits.

System Development

In December, 1963, the Corporation invited 15 United States firms to submit proposals for the preparation of engineering designs of satellites for a commercial system. In response to such invitation, proposals were submitted by (i) AT&T and Radio Corporation of America (RCA), jointly, (ii) Hughes Aircraft, (iii) Philco Corporation, and (iv) Space Technology Laboratories, Inc. (STL) in association with International Telephone and Telegraph Corporation (ITT). The AT&T-RCA proposal and the Philco Corporation proposal are each for the design of satellites for a medium altitude random system. The STL-ITT proposal is for the design of satellites for a medium altitude controlled system. The Hughes Aircraft proposal is for the design of satellites for a synchronous satellite system. The Corporation is negotiating with, and expects to enter into agreements with, AT&T-RCA and STL-ITT for the preparation of engineering designs on the basis of the proposals submitted by them, subject to arriving at mutually satisfactory terms of the proposed agreements and subject to compliance with regulations prescribed by the FCC, which require notification to and review by the FCC of such proposed agreements before they may be entered into. Each such agreement would provide for the completion of the design within a period of six months from the effective date of the agreement. In addition, the Corporation expects to enter into an agreement with Hughes Aircraft for the conduct of studies of synchronous satellite development which could improve the satellites now under development by Hughes Aircraft, as described under "Experimental Operational Satellites", for possible subsequent synchronous satellite use.

The program of the Corporation for the development of a global commercial satellite system contemplates that (a) in the latter part of 1964, after evaluation of the engineering designs referred to above, the Corporation will enter into an agreement or agreements for the development of prototype satellites for systems of one or more types; and (b) in the latter part of 1965, it will be determined whether the commercial system will be a medium altitude random system, a medium altitude controlled system

or a synchronous system. It is expected that the choice of a system type will be made after evaluation of the results of the operation of the synchronous satellite to be launched in 1965, and in the light of other information then available. The construction and technical characteristics of any operational system are subject to the prior approval of the FCC. See "Regulation".

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The satellites of the system selected would be designed to provide at least 270 two-way telephone grade circuits initially, which could be used for the simultaneous transmission between two terminal stations of up to that number of telephone conversations or for the transmission of other forms of telecommunications. If development of efficient attitude stabilizing devices is completed in time and such devices are incorporated in the satellites, the design capacity of the satellites may be increased to up to 1200 such circuits.

There is set forth below, with respect to each of the alternative projected systems, information as to the characteristics of the system and the contemplated development schedule for such a system, should it be selected as the commercial system.

Medium Altitude System. A commercial medium altitude system would consist of satellites in orbit at an altitude of approximately 6,000 miles. Such a system might be either (i) a random system of approximately 18 satellites at that altitude, or (ii) a controlled system of a lesser number of satellites at that altitude, with desired spacings between the satellites being achieved through the use of position control equipment included in each satellite. It is expected that such a medium altitude system, when in full operation, would provide channels of communication on a substantially continuous basis between appropriate pairs of suitably equipped terminal stations located in various parts of the world.

Plans for such a system (if selected) contemplate that the first satellites would be launched in mid-1966, and that launchings necessary to complete the system would be carried out within a period of approximately a year from the date of such launchings. It also is contemplated that more than one satellite would be placed in orbit by each launch vehicle. The program of the Corporation for the replacement of satellites of a medium altitude system assumes that the satellites will have operating lifetimes of not less than three years. To date, none of the experimental communications satellites launched in the United States has had an operating lifetime in excess of 16 months, and the "multiple launching" technique has not yet been attempted with communications satellites. See "Satellite Communications". A series of failures in "multiple launching" attempts, or a general failure of satellites to achieve planned operating lifetimes, would have a serious adverse effect on the commercial feasibility of such a system.

Synchronous System. A commercial synchronous system would consist of at least three satellites in synchronous orbit at an altitude of approximately 22,300 miles. Such satellites would be stationed at appropriate points so as to be able to provide channels of communication on a continuous basis between appropriate pairs of suitably equipped terminal stations located in various parts of the world.

Plans for such a system (if selected) contemplate that, in mid-1966, two satellites will be placed in synchronous orbit above the Atlantic Ocean and one satellite will be placed in such an orbit above the Pacific Ocean. A second Pacific Ocean satellite or an Indian Ocean satellite, or both, might be launched in the following year. It is expected that satellites would be launched singly. The program of the Corporation for the replacement of satellites of a synchronous system assumes that the satellites will have operating lifetimes of not less than one year. The satellites of such a synchronous system would be in addition to those referred to under "Experimental Operational Satellites".

Combined Systems. It is envisioned that the initial global system to be established will not combine the use of satellites in synchronous orbit and random orbit. However, since the program of the Corporation involves placing an experimental operational synchronous satellite in orbit in 1965, it is possible that for a time use could be made of two different types of satellites. It is also possible that a com-

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mercial communications satellite system could ultimately consist of a combination of satellites of different types.

Command and Control Facilities. The Corporation plans to arrange for the design, construction and equipping of a command and control center for the system, to be located in the continental United States. The center would include computers, and would include or be linked to equipment for the tracking, guidance, control and command of the satellites constituting the system. It is expected that the construction and equipping of such center will be completed by mid-1966, to provide for the type of system theretofore selected.

Launching Services. The Corporation expects to enter into agreements with NASA providing for the purchase from NASA of the launching and associated services necessary to establish and maintain the system. The Corporation has held preliminary discussions with NASA with respect to the launching schedule contemplated by the program of the Corporation, the types of launch vehicles proposed to be used, and related matters, but the terms and provisions of such agreements have not been negotiated.

The Corporation expects that launch vehicles of types developed (or under development) in connection with the national space programs will be used in the launchings of satellites of the commercial communications satellite system. Launch vehicles of several types (the cost of which ranges from approximately \$3 million to \$10 million per vehicle) are believed to be suitable for such use. The Corporation has not yet determined the type of vehicle which would be used to launch the satellites of a medium altitude system or the satellites of a synchronous system. It is expected that such determination will be made at the time it is decided whether the system is to be a synchronous system, or a medium altitude random system or a medium altitude controlled system.

Proposed Terminal Stations

The program of the Corporation contemplates that (i) if the commercial communications satellite system is a medium altitude system, there would initially be three terminal stations in the continental United States (northeast, northwest and southeast quarters) and a terminal station in the State of Hawaii, and (ii) if the commercial system is a synchronous system, there would initially be two terminal stations in the continental United States (eastern half and western half) and a terminal station in the State of Hawaii. Under the provisions of the Act, a license to own and operate any of such terminal stations may be granted by the FCC only to the Corporation or to one or more communications common carriers, or to the Corporation and one or more such carriers jointly. The number and location of terminal stations in the United States actually licensed by the FCC may differ from the number and location of the stations contemplated by the program of the Corporation. As of the date of this Prospectus, neither the Corporation nor any carrier has filed with the FCC an application for such a license. AT&T and ITT each have constructed and own experimental terminal station facilities in the United States. Pursuant to authorizations by the FCC under the Communications Act of 1934, such stations have engaged in various telecommunications experiments.

AT&T and certain other carriers engaged in international telecommunications have stated, expressly or in substance, an intention to apply to the FCC at the appropriate time for authorization to own and operate, or to participate in the ownership and operation of, one or more United States terminal stations. The Corporation intends to apply to the FCC at the appropriate time for authorization to own and operate each terminal station in the United States (including the State of Hawaii) or to carry out arrangements with carriers which would give the Corporation operating control over United States terminal stations to be owned by such carriers. The Corporation has not negotiated any such arrangement with AT&T

or any other carrier. It is possible that the ownership and operation of terminal stations in the United States will be the subject of contested proceedings before the FCC among the Corporation and one or more communications common carriers.

The construction and operation of suitably equipped terminal stations in foreign countries are essential to the operations of the commercial communications satellite system. It is presently expected that terminal stations in foreign countries will be constructed, owned and operated by telecommunications entities or authorities other than the Corporation.

In the event that the proposed program referred to under "National Communications System Program" is undertaken, terminal station facilities required for the use of the Government in connection with such program would be owned by the United States Government. See "National Communications System Program".

National Communications System Program

By Executive Order of the President there was established in August, 1963 the National Communications System, which is responsible for the administration of all communications facilities serving the Government of the United States, including the Department of State, the Department of Defense, the General Services Administration, the Federal Aviation Agency, and all other governmental departments and agencies. Under this Executive Order, the Secretary of Defense is the Executive Agent for the President.

For some time there have been discussions, which are continuing, between the office of the Secretary of Defense and the Corporation with a view to ascertaining whether a feasible program can be developed under which the National Communications System would be provided with satellite communications capability adapted to its needs, consistently with the development and establishment of a commercial communications satellite system.

As stated above under "System Development", the program of the Corporation contemplates active research and development on both synchronous and medium altitude communications satellite systems, with the ultimate decision to be made in 1965 as to whether the commercial system will be a medium altitude random system, a medium altitude controlled system, or a synchronous system. The office of the Secretary of Defense has advised the Corporation that, in order to minimize the risks of "jamming", and for other reasons, a medium altitude random system is needed. Accordingly, the discussions which have been had with the office of the Secretary of Defense have sought, on the one hand, to explore the possibilities of satisfying the requirements of the National Communications System if such a medium altitude system is selected, and on the other hand to spell out arrangements whereby the products of work done on a medium altitude random system could be utilized for the benefit of the Government on terms satisfactory to the Corporation and the Government in the event that another type of system is selected for the commercial satellite system.

If agreement should be reached with the Government under which, in the event of selection of a medium altitude random system as the commercial system, the National Communications System would be provided with capability to satisfy certain of its requirements, the range of estimated costs for the manufacture and placing in orbit of satellites constituting the system would be substantially greater than the \$75,000,000-\$90,000,000 range of such estimated costs in the case of a purely commercial system, as shown under "Summary of Program and Estimated Costs", and the time required for the design and the complete establishment of the system would probably be somewhat increased. In addition, launchings of replacement satellites would be required more frequently in the case of a system which provided service both to the Government and to other customers than in the case of a purely commercial system; and, accordingly, the expense of maintaining a system which served both the Government and other customers would be greater than the expense of maintaining a purely commercial system of the same

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capability. However, the parties are continuing to explore in their discussions whether, as the result of a program for such a "combined" system, (i) the portion of the total "combined" system cost properly allocable to the establishment and maintenance of system facilities (other than facilities to meet the Government's special requirement) would be less than the cost of a purely commercial system, and (ii) the portion of such total "combined" system cost properly allocable to the establishment and maintenance of the facilities to meet the Government's special requirements would be less than the cost of a separate system established by the Government to meet such requirements only. It is contemplated that if agreement were reached with the Government under which the National Communications System were provided with a portion of the capability of a medium altitude random system, charges would be made to the Government which would be such as to provide a resonable return on the portion of the total cost of the "combined" system properly allocable to such capability. Such charges may be subject to regulation by the FCC. It is not contemplated that the Government would contribute to the payment of the cost of establishing and maintaining such a "combined" system otherwise than through such charges.

Many technical and administrative problems would be involved in carrying out a program such as that outlined above, and many aspects of it are subject to the approval of the FCC, as well as other participants. Furthermore, the nature of such international arrangements as are made with the telecommunications entities in other countries, discussed below under "International Arrangements for System", may affect the feasibility of any such program or the manner in which it would be carried out. Although the Corporation believes that, if the proposed program could be carried out, it would offer advantages to both the Corporation and the Government, there is substantial question whether the problems inherent in the program can be resolved and as to the extent to which modifications in the program would affect the costs thereof or the time or manner in which it would be carried out.

Research and Development

The Corporation proposes to engage in communications satellite research and development activities as a part of the program for the establishment and operation of a commercial system. Certain of such research and development activities will be related to matters affecting the design of satellites which would be launched to establish the commercial satellite system. Other such activities will be directed toward matters affecting the design of satellites which would be launched after the system is in being, either as replacements for inoperative satellites of the system or for the purpose of increasing the capability of the system.

INTERNATIONAL ARRANGEMENTS FOR SYSTEM

In accordance with the policies of the United States Government, which favor the development of a single global system, telecommunications entities in other countries have been and will be given the opportunity of participating with the Corporation in the establishment of the space segment (comprising the satellites and the command and control facilities) of the commercial communications satellite system. Officers of the Corporation and representatives of the United States Government have met with representatives of other governments and other telecommunications entities for the purpose of discussing international arrangements for such participation. In these discussions, the Corporation and the United States Government have proposed that the telecommunications entities in other countries might share with the Corporation the costs of establishing the space segment, which would be jointly owned by the Corporation and such entities in proportion to their respective investments. According to this proposal, each participant's share of the total investment in the space segment would be based upon its share of world telecommunications traffic which is suitable for transmission by a communications satellite system and upon the participant's anticipated use of the system. On this basis, the Corporation's share would exceed the shares of all other participants combined.

Under the proposal a committee representing the joint owners would be established, to which would be delegated the responsibility and authority for certain major decisions relating to the design, establishment and operation of the space segment. Thus, in the event that the proposed arrangements become effective, such decisions would not be made by the Corporation alone, but would require the concurrence of some of the other participants. However, the other participants would not have the power to make such decisions without the concurrence of the Corporation.

The proposal contemplates that the Corporation would act as manager on behalf of the joint owners in the designing, establishing and operating of the space segment and would be compensated for such services. It also contemplates that each of the investing participants would be allocated an equitable portion of the space segment capacity and that the Corporation would utilize its allocation to furnish satellite channels for hire to the United States communications common carriers and other authorized users. It is expected that the charges made to United States carriers for use of such channels would be a principal source of the Corporation's revenue.

The Corporation and the United States Government have proposed that appropriate interim arrangements covering the establishment and operation of the proposed system in its early stages be negotiated as soon as possible among prospective participants who are prepared to make immediate commitments for substantial investments of capital in the space segment, with provision for new investors to become participants at a later date. Certain of these arrangements would be among governments and other arrangements would be among the participating communications entities. Preliminary discussions are taking place in London with representatives of the governments and telecommunications entities of a number of countries, including Western European nations, Canada, Japan and Australia with respect to the proposed interim arrangements. It is expected that such discussions will be followed by negotiations with the governments and telecommunications entities of the above-mentioned countries during the middle and latter part of June. The outcome of such discussions and negotiations, and the terms of the interim arrangements which may result from them, cannot be predicted. In order to insure the development of a communications satellite system as promptly as possible, the Corporation intends to proceed with its program while discussions and negotiations with other governments and other telecommunications entities are pending, and it is prepared if necessary to finance the entire cost of establishing the system (exclusive of the costs of foreign terminal stations). Early in 1963 the United States Government suggested to the Government of the U.S.S.R. that it might be useful to have discussions relative to the establishment of a single global commercial communications satellite system. Recently that Government indicated that it would be prepared to hold such discussions, and the United States Government responded with the suggestion that a meeting for that purpose, in which the Corporation would participate, be held in June of this year.

The international allocation of frequency bands for space radio-communication services is a prerequisite to the conduct of the operations of a commercial communications satellite system. Important
steps in this area were taken at the Extraordinary Administrative Radio Conference on Space Communications, held in Geneva, Switzerland, in October and early November, 1963. The Conference, which
was held under the auspices of the International Telecommunication Union (ITU), a specialized agency
of the United Nations, allocated for communications satellite services (a) two 50 megacycle bands of
frequency space, on an exclusive basis, and (b) 2500 to 2700 megacycles of frequency space, on a shared
basis with existing radio services. A number of ITU members (including certain countries in Western
Europe) have stated that, in their countries, certain existing radio services would continue to use either
or both of the two 50 megacycle bands allocated by the Conference to communications satellite services

on an exclusive basis. The Corporation believes that the frequency allocations so made by the Conference, which are subject to ratification by ITU members, make satisfactory provision for the requirements of the communications satellite system contemplated by the program of the Corporation.

INTERNATIONAL TELECOMMUNICATIONS

Facilities for International Telecommunications

Telecommunications service between the United States and overseas points is provided by United States communications common carriers (U. S. carriers), in most instances in collaboration with telecommunications entities in foreign countries. The U. S. carriers are subject to regulation by the FCC under the Communications Act of 1934, and other provisions of law, with respect to the construction and operation of facilities for such service and the rates charged therefor. The collaborating telecommunications entities in foreign countries are either government-owned or privately owned, but subject to regulation or control by the governments of such countries. International service between points outside the United States is provided by agencies of foreign governments, by other foreign telecommunications entities and by U. S. carriers.

International telecommunications service is provided primarily by means of submarine telephone cables, high-frequency radio facilities and submarine telegraph cables, and, in respect of service between contiguous countries, also by terrestrial (overland) facilities.

Submarine Telephone Cables. Submarine telephone cables carry all forms of record traffic, as well as telephone traffic. Existing telephone cables, and those planned to be in service by December 31, 1965, are not designed to transmit high-quality television signals. The first oceanic telephone cable (Florida-Cuba) began service in 1950 and the first trans-Atlantic telephone cable was placed in operation in 1956. Other important submarine telephone cable systems have been placed in operation at various times since 1956. Further advances in cable and related technology have greatly increased the initial capacity of telephone cables most recently placed in service. In addition, significant increases have been made in the capacity of earlier telephone cables, primarily by the installation of additional cable terminal equipment ("TASI equipment"), which automatically utilizes capacity resulting from intervals in one conversation for the transmission of another conversation. AT&T and others are carrying out programs to place additional telephone cable systems in operation at various future dates.

The following table sets forth information with respect to the principal submarine telephone cable systems in operation at December 31, 1960, and December 31, 1963, or scheduled to be in operation at December 31, 1965, other than those within Europe or between Europe and North Africa:

	Number of Two-way Telephone Grade Circuits in Service at December 31		
Cable System(a)	1960(b)	1963(b)	1965 (Est.) (b)
NORTH ATLANTIC U.S. or Canada—U.K. or France Primarily for U.S. traffic Other systems	170	298 104(d)	426(c) 104(d)
Western Hemisphere(e) U.S.—Alaska U.S.—Puerto Rico U.S.—Bermuda	36 48	48 85 80	48 85 80

	at December 31		
Cable System(a)	1960(b)	1963(b)	1965 (Est.) (b)
U.S.—Jamaica		128	128
Jamaica—Canal Zone		128	128
Canal Zone—Colombia		_	80
U.S.—Virgin Islands	_	_	128
Virgin Islands—Venezuela	-139	_	80
Pacific Area			
U.S.—Hawaii	48	85	213
Canada—Hawaii	blow add	80	80
Hawaii—Guam—Japan	is no and otally	anii-i-ot t	128
Guam—Philippines	_		128
Hawaii—New Zealand	The Sylvings	80	80
Australia—New Zealand	, out an idae	80	80
Australia—Malaysia—Hong Kong	a medicina	litie s - was d	80
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Number of Two-way Telephone

(a) As used in the table, U.S. refers to points within the 48 contiguous States of the United States and U.K. refers to the United Kingdom.

(b) Numbers of circuits in service at December 31, 1960 and December 31, 1963 include circuits provided by TASI equipment installed at said dates. Estimates of circuits to be in service at December 31, 1965, are based on assumptions that (i) systems planned for completion by that date will be so completed and will then provide planned capacity, and (ii) systems in operation at December 31, 1963, will be in operation at December 31, 1965, and will then provide the same capacity as provided at December 31, 1963. The design capacity of cable systems planned to be constructed before December 31, 1965, and the capacity of certain of the cable systems in service at December 31, 1963 (including certain of the North Atlantic systems) could be increased substantially for traffic of certain types (including message telephone service) by the installation of TASI equipment. The FCC, which heretofore has not required that its authorization be obtained for installation of TASI equipment, recently has stated that such authorization should be required of U.S. carriers for future installation of such equipment.

(c) Includes the initial planned capacity (128 two-way telephone grade circuits) of a cable between New Jersey and France, the construction of which by mid-1965 the FCC, on March 17, 1964, determined to be required by the public interest, convenience and necessity. Such determination was made in proceedings upon applications of AT&T for authority to construct such a cable over that route, and of Mackay Radio and Telegraph Company (Mackay), an affiliate of ITT, for authority to construct a trans-Atlantic cable over a different route. AT&T's application estimated that its share of the costs of the cable proposed by it (in which AT&T would have an ownership interest of approximately 65%) would be \$34,347,000. The FCC's determination provided that the new cable should be authorized in the name of all the United States overseas telecommunication entities (both record and telephone) which desire to participate in such ownership. Pursuant to such determination, upon applications by the entities hereinafter referred to, the FCC on May 6, 1964, authorized AT&T, Mackay, Press Wireless, Inc., RCA Communications, Inc. and Western Union International, Inc. to construct and operate such cable.

(d) Includes the capacity (24 two-way telephone grade circuits) provided by cable systems extending from Canada to Iceland and from Iceland to the United Kingdom, used exclusively by the international airlines of North Atlantic countries to provide communication services necessary for the conduct of their operations.

(e) In addition to the Western Hemisphere cable systems shown above, the Corporation is advised that ITT and AT&T propose, subject to the obtaining of various requisite governmental approvals, jointly to construct and operate a cable, with a design capacity of 160 two-way telephone grade circuits, from the Canal Zone down the west coast of South America to Chile, which it is contemplated would be completed by the end of 1965. See "Competition".

Of the cable systems included in the foregoing table, AT&T owns, or has ownership interests in (or, in respect of systems to be constructed before December 31, 1965, is expected to own or have ownership interests in), (i) all the North Atlantic cable systems reflected in the numbers of circuits shown opposite "Primarily for U. S. Traffic", (ii) each of the cable systems referred to under the

heading "Western Hemisphere", (iii) the U. S.-Hawaii cable systems, and (iv) the Hawaii-Guam-Japan and the Guam-Philippines cable systems. Hawaiian Telephone Company also has ownership interests in the U. S.-Hawaii cable systems and the Hawaii-Guam-Japan cable system. Affiliates of ITT have ownership interests in the U. S.-Puerto Rico, the U. S.-Virgin Islands, the U. S.-Jamaica and the Jamaica-Canal Zone cable systems.

AT&T and others are engaged in the development of improved submarine telephone cables. See "Competition".

High-Frequency Radio Facilities. High-frequency radio (HFR) facilities serve telephone and record traffic on routes served by telephone cables and, in addition, provide the only telephone and record service to the many areas of the world which do not have cable connections. Communication by HFR circuits is subject to fading, distortion and blackout because of disturbances in the ionosphere.

HFR facilities began extensive service for international record traffic shortly before World War I, and for international telephone traffic in 1927. All international telephone traffic (except that carried by overland facilities) was carried on HFR circuits until the introduction of submarine telephone cables in 1956. Submarine telephone cables now carry a far greater part of international telephone traffic than is carried by HFR facilities between places having both telephone cable and HFR service. On routes which have submarine telephone cable service, HFR facilities are operated primarily on a standby basis.

In addition, communications circuits for all forms of telecommunication are provided by tropospheric scatter radio systems and ionospheric scatter radio systems. Tropospheric scatter systems are used for communication over relatively short distances (i.e., 300 miles or less). Ionospheric scatter systems are also used for communication over longer routes. The capacity of scatter systems in comparison with the capacity of submarine telephone cables is not significant.

Submarine Telegraph Cables. Service provided by submarine telegraph cables is limited to message telegraph and other telegraph transmissions. The capacity of such cables in comparison with the capacity of submarine telephone cables is not significant. Beginning in 1960, U. S. carriers which operate submarine telegraph cables have leased circuits in submarine telephone cables for transmission of telegraph and other forms of record traffic, and since that time an increasing proportion of the record traffic between the United States and overseas points has been transmitted through such leased circuits. With the approval of the FCC, certain U. S. carriers recently have abandoned submarine telegraph cables (including trans-Atlantic telegraph cables) theretofore operated by them.

Traffic and Revenues

Telephone traffic and record traffic between the United States and overseas places constitute an important part of all telephone and record traffic between different continents or areas of the world. It is estimated that, in 1963, overseas telephone messages originating or terminating in the continental United States represented approximately 70% of the total number of intercontinental telephone messages, and that approximately one-half the revenues from overseas telephone messages originating or terminating in the United States were received by U. S. carriers.

Telephone and record traffic between the United States and overseas places has increased continuously since the end of World War II. In respect of record traffic, the most rapid growth has been in forms of service other than message telegraph service, principally teleprinter exchanges service (telex) and leased circuit services. The following table sets forth information, for each of the years indicated, with respect to telephone traffic between the continental United States and places outside

the continental United States (except Canada and Mexico). The table shows, in respect of such routes, the total number of chargeable telephone calls transmitted by the principal U. S. telephone carriers, and the gross revenues of the U. S. telephone carriers from such calls:

	No. of Chargeable Calls (Thousands)	Gross Revenues from Chargeable Calls (Thousands of \$)*
1947	517	\$ 5,833
1950	745	8,198
1955	1,194	13,001
1956	1,394	15,802
1957	2,178	22,679
1958	2,427	27,841
1959	2,736	33,110
1960	3,301	42,322
1961	3,945	50,906
1962	4,461	61,387
1963 (est.)	4,825	69,410

*Exclusive of any revenues (approximately \$12,700,000 in 1962) derived by U. S. telephone carriers from leases of circuits, principally to U. S. telegraph carriers and to agencies of the United States Government. Information in the table (except estimates for 1963) is from statistical publications of the FCC for the years indicated.

The revenues of the U. S. carriers shown in the table reflect (1) charges for the domestic segment of the telephone calls (including terminal handling), as well as charges for the overseas segment of the calls, and (2) rates established for a "retail" communications service, rendered directly to the public. In contrast, any revenue which the Corporation would receive from leases of satellite system channels would relate only to the overseas segment of the service, and would reflect rates to be established for a "wholesale" service rendered to the carriers and not directly to the public. Accordingly, any revenues of the Corporation under leases of satellite system channels to U. S. carriers would be less than the revenues which the U. S. carriers would receive from their customers for providing overseas telephone service through such satellite system channels. The revenues shown in the table include revenues of U. S. carriers from calls over certain routes (e.g., between the U. S. and places in the Caribbean) which would not necessarily be served by satellite system channels in the early years of a commercial satellite system.

Of the gross revenues of the U. S. telephone carriers from overseas chargeable calls in 1962, as shown in the foregoing table, \$22,668,000 (37%) relate to chargeable calls classified as "Trans-Atlantic and Bermuda", \$21,927,000 (36%) relate to chargeable calls classified as "Central America, South America and Caribbean" and \$16,792,000 (27%) relate to chargeable calls classified as "Trans-Pacific".

The aggregate amount paid by U. S. telegraph carriers for the rental of circuits in submarine telephone cables from U. S. telephone carriers and others is estimated at approximately \$4,662,000 for 1963. The gross revenues of the U. S. telegraph carriers from record traffic service between the United States and overseas places are a much larger amount, reflecting not only such leased circuit costs but charges in respect of the HFR or telegraph cable facilities operated by them for traffic not transmitted through such leased circuits, charges attributable to transmission services in the United States from points of origin to gateways for overseas transmission, and charges in respect of non-transmission services.

The demand for telecommunications service between Western Europe and North America, and on certain other overseas routes, exceeded the capacity of available facilities during peak demand hours in 1063

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The rate of growth in the demand for international telecommunications service is influenced by many factors, including population growth, the extent of international trade and travel, the extent of improvements in domestic telecommunications systems and rates for international telecommunications service. Estimates with respect to the demand for international telecommunications service at various times through 1980 have been published in recent years by U. S. carriers, by representatives of such carriers and by international bodies and other persons. Such estimates, which are not necessarily based on the same information with respect to relevant matters or on the same assumptions with respect to factors which may affect the demand for international telecommunications service, differ substantially from each other in certain respects. All such estimates of which the officers of the Corporation have knowledge, however, reflect the view that, during the periods to which such estimates, respectively, relate, there will be a continuous growth in the demand for telephone and record traffic service between the continental United States or North America and other areas of the world, and that the demand for telephone and record traffic service between the continental United States and Western Europe will exceed the capacity of telephone cables now in existence or now scheduled for construction through 1965 within a period of not more than a year thereafter. Estimates of future demand for international telecommunications service necessarily are based on assumptions and predictions with respect to factors which may affect the growth of such demand, and the accuracy of such estimates may depend upon the substantial correctness of the assumptions and predictions on which the estimates are based.

Although the need for a commercial communications satellite system derives primarily from the anticipated growth in demand for international telecommunications services and the relationship of such demand to the capacity of present and proposed submarine telephone cables, it is possible that, once such a system has been established, it may be used to provide service between intracontinental points separated by long distances. The Corporation is unable to predict the extent of such intracontinental use of the proposed system.

Submarine cable systems (and/or other telecommunications facilities), in addition to those now planned, may be constructed and placed in operation at or before the time the commercial communications satellite system is established, to meet the anticipated increase in demand for international telecommunications service. See "Competition".

COMPETITION

The U. S. carriers and telecommunications entities in other countries to which satellite system channels will be offered own and operate the submarine telephone cable systems and HFR facilities with which the satellite system will compete. In respect of telephone and record traffic between the continental United States and overseas points, the facilities of the satellite system will compete principally with those of AT&T and the U. S. telegraph carriers.

The amount of the revenues from the operations of the satellite system will depend in the first instance on the ability of the system to provide communication channels of commercial quality. The amount of such revenues will also be affected by the extent of the growth of international telecommunications traffic and the extent of the construction of submarine telephone cable systems or other telecommunications facilities. The competitive position of the Corporation will depend on its ability to develop and operate a satellite system which compares favorably, in cost and efficiency, with service provided by cable systems or other telecommunications facilities.

AT&T and others are engaged in the development of improved submarine telephone cables. The cables under development by AT&T include cables in which transistors would be used for the first time in certain submerged components of the cable. A 3,000-mile cable in which transistors are so utilized would have a design capacity of up to 720 two-way telephone grade circuits and could provide service, between the places connected by such cables, for all the forms of telecommunications traffic which the satellite system might serve. None of the trans-oceanic cables shown in the table under "International Telecommunications—Facilities for International Telecommunications" as scheduled to be in operation by December 31, 1965, will be a transistorized cable. The design capacity of the trans-Atlantic telephone cable recently authorized by the FCC to be constructed in 1965 is 128 two-way telephone grade circuits.

Under the Communications Act of 1934, and other provisions of law, the construction and operation of a submarine telephone cable between the United States and an overseas point may not be undertaken unless the FCC has determined that the present or future public convenience and necessity require or will require the construction and operation of the cable.

In December, 1963, AT&T advised the Corporation, among other things, to the effect that (a) AT&T sees a place and a need for both satellite and cable communications, in order to provide for anticipated increases in the volume of trans-oceanic communications and to provide diversity in means of communication, (b) if satellite system circuits of satisfactory quality and costs reasonably related to the costs of providing communication circuits by alternative means are available in late 1966 or early 1967 on North Atlantic routes, AT&T would prefer, in order to provide diversity of facilities in meeting additional needs, to use satellite circuits instead of placing additional cables in service on such routes, subject to the giving to AT&T during 1964 of assurances that suitable satellite circuits would be available in 1966 or early 1967, the obtaining of the agreement of the interested European telecommunications entities (which AT&T would take all reasonable steps to help obtain), and the obtaining of necessary authorizations from the FCC, and (c) it appears to AT&T that such preference for satellite circuits would continue until North Atlantic routes were served by approximately equal numbers of cable system voice circuits and satellite system voice circuits. Regardless of the type of system selected, the present program for system development contemplates the emplacement by early 1967 of at least a number of satellites providing North Atlantic circuits satisfactory in quality and having costs bearing a reasonable relationship to alternative methods, which would be sufficient to provide an average grade of service (percentage of total number of customer calls for which circuits are available immediately) equivalent to that obtained by means of North Atlantic cable circuits at the present time. See "System Development".

The Corporation is informed that ITT (subsidiaries of which operate telecommunications systems in various South and Central American countries) and AT&T have recently transmitted letters to the Department of State stating that they desire to construct by the end of 1965, and participate in the ownership and operation of, a submarine telephone cable which would extend from the Canal Zone down the west coast of South America to Chile. This cable, which would have a design capacity of 160 two-way telephone grade circuits, would constitute a continuation of a submarine telephone cable recently put in operation between the United States and the Canal Zone via Jamaica. The Corporation is informed that this cable may subsequently be connected with facilities, to be constructed, which would provide a continuation of similar telecommunications service across the Andes to Argentina and, by submarine cable, along the east coast of South America, to Brazil. In their letters to the Department of State, ITT and AT&T expressed the view that both cable and satellite facilities are needed. In its letter ITT also stated that it had initiated discussions with the governments of various South American countries looking toward the granting of franchises for both cable facilities and satellite terminal stations. The Corporation is

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unable to state the extent to which the cable program described above, if the requisite approvals of governmental authorities in the United States and other countries are obtained and the cable system is constructed, might adversely affect the establishment of or the revenues from satellite communications services between the United States and South American countries or between South American countries.

In respect of telecommunications traffic between places outside the United States, the facilities of the satellite system will compete principally with facilities of foreign telecommunications entities, which may include facilities not now scheduled to be constructed.

REGULATION

The Corporation is subject to regulation by the FCC under the provisions of the Act and, as a communications common carrier, under certain provisions of the Communications Act of 1934. The matters as to which the FCC has regulatory authority include, among other things, (a) the procurement by the Corporation of equipment and services required for the establishment and operation of the satellite system and terminal stations, (b) the use by communications common carriers of the facilities of the satellite system and terminal stations, including the charges to be made therefor, (c) the making of additions with respect to the facilities of the satellite system or terminal stations, including authority to insure that no substantial additions are made by the Corporation or carriers with respect to facilities of the satellite system or terminal stations unless such additions are required by the public interest, convenience, and necessity, and authority to require the establishment of service to particular foreign points upon advice of the Secretary of State of the United States that such service should be established in the national interest, (d) the technical characteristics of the satellite system and terminal stations, including the technical compatibility and operational interconnection of the system and terminal stations with each other and with existing communications facilities, (e) accounting systems, and (f) the issuance of securities (other than the issuance of the shares of Common Stock to which this Prospectus relates) and the borrowing of funds. Under the provisions of such Act or Acts, in respect of rates charged by the Corporation for service to communications common carriers and other authorized users, the FCC may limit the Corporation to a reasonable rate of return, and the FCC is also directed by the Act to engage in such rate-making procedures as will insure that any economies made possible by a communications satellite system are appropriately reflected in rates for public communications services. The Act also provides that the FCC shall authorize the construction and operation of each satellite terminal station by the Corporation or one or more communications common carriers authorized to provide services by means of communications satellites, or by the Corporation and one or more such carriers jointly, without preference to either the Corporation or such carriers, as will best serve the public interest, convenience and necessity.

Under the provisions of the Act, the Corporation is required to meet certain responsibilities to representatives or agencies of the United States Government other than the FCC. The Act provides that (a) the President of the United States shall exercise such supervision over the relationships of the Corporation with foreign governments, foreign entities and international bodies as may be appropriate to assure that such relationships are consistent with the national interest and foreign policy of the United States, and that the President shall exercise various other powers relating to the establishment and operation of a commercial communications satellite system; (b) the Corporation shall notify the Department of State whenever it enters into business negotiations with a foreign or international entity relating to the Corporation's facilities, operations or services, shall receive the advice of that Department with respect to relevant foreign policy considerations and, throughout

such negotiations, shall keep the Department informed with respect to such considerations; (c) NASA shall, among other things, consult with the Corporation with respect to the technical characteristics of the satellite system; cooperate, to the extent deemed appropriate by it, in the Corporation's research and development program; and provide, on a reimbursable basis, satellite launching and associated services deemed necessary by NASA in connection with the research and development program of the Corporation or required for the establishment, operation and maintenance of the communications satellite system; (d) the Corporation shall transmit to the President of the United States and to the United States Congress, detailed reports of its operations, activities and accomplishments under the Act; and (e) the Attorney General of the United States may institute appropriate court proceedings to prevent or terminate actions by the Corporation which are inconsistent with the policies and purposes declared in the Act or which involve or threaten a refusal or failure by the Corporation to comply with the provisions of the Act.

Under the provisions of the NASA Authorization Act for the 1964 fiscal year, the Corporation is required to reimburse NASA for any scientific or technological services furnished at the request of the Corporation for its exclusive benefit.

Communication via the satellite system with a telecommunications entity in any other country may also be subject to regulation or control by the government of such country.

MANAGEMENT

Directors

In accordance with the provisions of the Act, the present Board of Directors of the Corporation consists of persons appointed by the President of the United States, with the advice and consent of the United States Senate, as incorporators of the Corporation. The name and principal occupation of each such person are as follows:

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	Name	Principal Occupation
	Joseph V. Charyk	President of the Corporation, Washington, D. C.
	John T. Connor	President, Merck & Co., Rahway, New Jersey
	George J. Feldman	Vice President and Counsel, Mastan Co., New York, N. Y.
	Beardsley Graham	President, Spindletop Research, Inc., Lexington, Kentucky
	Sam Harris	Attorney, New York, N. Y.
	Edgar F. Kaiser	President, Kaiser Industries Corporation, Oakland, California*
	David M. Kennedy	Chairman, Continental Illinois National Bank and Trust Company of Chicago, Chicago, Illinois*
	George Killion	President, American President Lines, San Francisco, California
	Byrne Litschgi	Attorney, Tampa, Florida
	Leonard H. Marks	Attorney, Washington, D. C.
	Bruce G. Sundlun	Attorney, Washington, D. C.
	Sidney J. Weinberg	Partner, Goldman, Sachs & Co., New York, N. Y.
	Leo D. Welch	Chairman and Chief Executive Officer of the Corporation, Washington, D. C.*
	Leonard Woodcock	Vice President, UAW-CIO, Detroit, Michigan

* Continental Illinois National Bank and Trust Company of Chicago, of which Mr. Kennedy is a director and Chairman of the Board, Bank of America National Trust and Savings Association, of which Mr. Kaiser is a director, and First National City Bank, of which Mr. Welch is a director, are among the banks which are parties to the Corporation's bank credit agreement. See "Notes to Financial Statements".

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The present Board of Directors will serve until the first annual meeting of shareholders following completion of the offering made by this Prospectus. It is expected that such shareholders meeting will be held on or about September 1, 1964. As provided in the Act and the Articles of Incorporation of the Corporation, the Board of Directors thereafter will consist of 15 individuals, of whom (a) three will be appointed by the President of the United States, by and with the advice and consent of the Senate, for terms of three years (except that the first three directors so appointed will continue in office for terms of one, two and three years, respectively), (b) six will be elected annually by those holders of Common Stock which are communications common carriers (holders of Series II shares), and (c) six will be elected annually by holders of Common Stock who are not communications common carriers or persons having specified relationships to any such carrier (holders of Series I shares). See "Description of Common Stock—Voting Rights", below. The Articles of Incorporation provide that each director, regardless of the method of his appointment or election, shall have the same fiduciary duty to the Corporation and its shareholders.

Under the provisions of the By-laws of the Corporation presently in effect, no vote may be counted for the election of any person as a director unless (a) such person was proposed for nomination to be a candidate by written notice signed by a shareholder of the appropriate Series and mailed to the Secretary of the Corporation not less than 10 nor more than 50 days before the date of the meeting, (b) such person has filed with the Secretary of the Corporation a statement of his interests in any communications common carrier, and (c) a statement of the interests of such person in any communications common carrier shall have been included in each written solicitation of proxies in favor of his election, made by such person or by his proposer.

It is the intention of the present Board of Directors, as holders of Series I shares, to nominate six candidates for election as directors by holders of Series I shares (public shareholders) at the first annual meeting of shareholders, and to solicit proxies for the election of such candidates. Such candidates may include members of the present Board of Directors. The identity of such candidates has not been determined.

Officers and Staff Division Heads

The names of the executive officers and heads of the principal staff divisions of the Corporation are as follows:

Name	Office or Position
Leo D. Welch	Chairman and Chief Executive Officer*
Joseph V. Charyk	President*
Allen E. Throop	Vice President and General Counsel*
Siegfried H. Reiger	Vice President (Technical)*
Lewis C. Meyer**	Treasurer*
Frederic M. Mead	Comptroller*
David J. Melamed	Secretary*
John A. Johnson	Director of International Arrangements
Sidney Metzger	Manager, Engineering Division
Matthew Gordon	Director of Information

^{*}Executive officer elected by the Board of Directors.

** Mr. Meyer is also Finance Coordinator of the Corporation.

Mr. Welch has served as Chairman and Chief Executive Officer of the Corporation since March 31, 1963. From 1944 to that date, he served in various capacities with Standard Oil Company (New Jersey), including service as a vice president (September 6, 1956 to April 2, 1958), executive vice president and member of the executive committee (April 3, 1958 to April 30, 1960) and chairman of the board and vice chairman of the executive committee (May 1, 1960 to March 31, 1963).

Dr. Charyk has served as President of the Corporation since February 28, 1963. From January 1959 to that date, he served in various civilian capacities with the United States Department of the Air Force, including service as Chief Scientist of the Air Force (January, 1959 to June, 1959), Assistant Secretary of the Air Force for Research and Development (June, 1959 to January, 1960), and Under Secretary of the Air Force (January, 1960 to February, 1963). Before such service with the Department of the Air Force, Dr. Charyk was General Manager of the Space Technology Division of Aeronutronic Systems, Inc. (a subsidiary of the Ford Motor Company) and was a director of the Aerophysics and Chemistry Laboratory of Lockheed Aircraft Corporation.

Mr. Throop has served as Vice President and General Counsel of the Corporation since May 31, 1963. From 1945 to that date he was a member of the law firm of Messrs. Shearman & Sterling, New York, N. Y.

Mr. Reiger was elected Vice President (Technical) of the Corporation, effective May 15, 1964. From June 3, 1963 to that date he served as the Corporation's Manager for Systems Analysis. From January, 1959 to June 3, 1963, he served as a Senior Staff Member of The Rand Corporation, Santa Monica, California.

Mr. Meyer has served as Finance Coordinator of the Corporation since June 2, 1963, and as Treasurer and Finance Coordinator since April 10, 1964. From July, 1958 until his employment by the Corporation, he served in various civilian capacities with the United States Department of the Air Force, including service as Chief, Missile and Space Systems Division, Office of the Comptroller of the Air Force (July, 1958 to August 1962), and as Deputy for Financial Analysis, Office of the Assistant Secretary of the Air Force (Financial Management) (August, 1962 to June 2, 1963).

Mr. Mead was elected Comptroller of the Corporation, effective May 1, 1964. From March 1, 1958 to April 30, 1964, he served in various capacities with Mallinckrodt Chemical Works, St. Louis, Missouri, including service as Controller (April 4, 1961 to April 30, 1964).

Mr. Melamed served as Assistant Counsel to the Chairman of the Incorporators of the Corporation from November 6, 1962 to January 31, 1963, as Assistant Secretary of the Corporation from February 1, 1963 to September 15, 1963, and has served as Secretary of the Corporation since that time. From August 11, 1956 to November 5, 1962, he was an associate with the law firm of Messrs. Cravath, Swaine & Moore, New York, N. Y.

Mr. Johnson has served as Director of International Arrangements since December 9, 1963. From October, 1958 to that date, he served as General Counsel of the National Aeronautics and Space Administration.

Mr. Metzger has served as Manager, Engineering Division, since June 6, 1963. From 1954 to that date, he served in various capacities with Radio Corporation of America (RCA), including service as Manager, Communications Engineering, of the Astro-Electronics Division of RCA and Manager of RCA's New York Communications System Laboratory.

Mr. Gordon has served as Director of Information, including public relations and government relations, since May 20, 1963. From March, 1946, to September, 1961 Mr. Gordon was in charge of press services at the United Nations. From the latter date until May 20, 1963, he was in private business, primarily as a consultant to technological companies.

Remuneration

The following table sets forth the aggregate direct remuneration for services in all capacities estimated to be payable by the Corporation in 1964 (a) to each director, and each of the three highest-paid officers, of the Corporation whose aggregate direct remuneration in such year is estimated will exceed \$30,000, and (b) to all directors and officers of the Corporation as a group:

Name of Individual or Identity of Group	Capacities In Which Remuneration Was Received	Aggregate Direct Remuneration*
Leo D. Welch	Chairman and Chief Executive Officer	\$125,000
Joseph V. Charyk	President	80,000
Allen E. Throop	Vice President and General Counsel	50,000
All directors and officers as a group (including those named above)		404,000

*It is estimated that the following additional amounts will be payable by the Corporation in 1964 as life insurance premiums in respect of the officers named under policies other than the Corporation's contributory group insurance policy: Mr. Welch, \$4,481; Dr. Charyk, \$714; Mr. Throop, \$1,183.

The Corporation does not have an employment contract with any of its officers or employees, or any plan or arrangement for the payment of retirement benefits to any of its directors, officers or employees.

Personne

At June 1, 1964 the Corporation employed 79 persons, of whom 43 were administrative or professional employees. None of the employees of the Corporation is represented by a collective bargaining agent. It is expected that increases in the number of employees of the Corporation will be required in the carrying out of the program to establish a commercial communications satellite system, and also in the operation of the system, including command and control facilities and such of the terminal stations in the United States as may be operated by the Corporation.

DESCRIPTION OF COMMON STOCK

For a full description of the Common Stock of the Corporation, reference is made to the Communications Satellite Act of 1962, and to the Articles of Incorporation, as amended, of the Corporation, a copy of which is filed as an Exhibit to the Registration Statement. The statements herein summarizing certain provisions of said Articles and the Act are qualified by such reference.

The New York Stock Exchange, the Midwest Stock Exchange and the Pacific Coast Stock Exchange each has approved the listing on such Exchange of the shares of Common Stock to which this Prospectus relates, subject to official notice of issuance, the furnishing of evidence of satisfactory distribution of the shares and the furnishing of certain other documents. The date for the commencement of trading of such shares on these Exchanges has not been determined, and is subject, among other things, to the prior registration of such shares under the Securities Exchange Act of 1934.

The transfer agents for the Common Stock are Continental Illinois National Bank and Trust Company of Chicago, Chicago, Ill.; Manufacturers Hanover Trust Company, New York, N. Y.; and Wells Fargo Bank, San Francisco, Calif.

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The registrars for the Common Stock are The First National Bank of Chicago, Chicago, Ill.; The Chase Manhattan Bank, New York, N. Y.; and Bank of America National Trust and Savings Association, San Francisco, Calif.

By amendment of the Articles of Incorporation effective May 6, 1964, the authorized capital of the Corporation was increased from 100 shares of Common Stock, without par value, to 10,000,100 such shares.

Series I and Series II Shares

Shares of Common Stock are issuable in two series designated respectively Series I and Series II. Except as stated below under "Restrictions on Ownership and Transfer of Shares" and "Voting Rights", the rights of a holder of a Series I share, as such, and the rights of a holder of a Series II share, as such, are the same.

Shares issued or transferred to persons other than authorized carriers are Series I shares. Shares issued or transferred to authorized carriers are Series II shares. Authorized carriers are those communications common carriers, as defined below, which have been authorized by the FCC to own shares of stock of the Corporation. Shares of either Series may not be issued or transferred to a communications common carrier which is not an authorized carrier or to persons having certain relationships with a communications common carrier. See "Restrictions on Ownership and Transfer of Shares".

Under the provisions of the Act and the Articles of Incorporation, in any offering by the Corporation of Common Stock, 50% of the shares to be offered must be reserved for offering and offered for purchase by authorized carriers. Shares reserved and offered to authorized carriers but not purchased by them may be offered to other persons.

Dividend Rights

Holders of Common Stock are entitled to receive such dividends, in cash, in property or in shares of stock of the Corporation, as may be declared by the Board of Directors. Holders of Common Stock, as such, have equal dividend rights, irrespective of the Series of shares of Common Stock held by them.

Liquidation

Upon any liquidation, dissolution or winding up of the Corporation, holders of shares of Common Stock, irrespective of the Series of such shares held by them, are entitled to receive, pro rata, the assets of the Corporation available for distribution.

Restrictions on Ownership and Transfer of Shares

Subject to the limitations referred to below, holders of Series I shares or of Series II shares may at any time sell or otherwise dispose of such shares to any person to whom shares of either Series may be issued and, upon surrender of the share certificate for transfer, the transferee will receive a certificate, representing the same number of shares as the surrendered certificate, for shares of the Series appropriate to him.

- (i) Except for an authorized carrier, shares of Common Stock may not be owned or held, directly or indirectly, by any communications common carrier, or by a subsidiary or affiliated company of any communications common carrier, or by a trustee, director or officer of any of the foregoing. For these purposes, the term "communications common carrier" has the meaning of the term "common carrier" as used in the Communications Act of 1934, and also includes any person or entity which owns or controls, directly or indirectly, or is under direct or indirect common control with, any such carrier, but does not include the Corporation. Reference is made to the definition, in the By-laws of the Corporation, of the terms "subsidiary" and "affiliated company" of a "communications common carrier". See "Voting Rights".
- (ii) The aggregate number of shares of Common Stock owned or held, directly or indirectly, by authorized carriers may not at any time exceed 50% of the total number of shares of Common Stock issued and outstanding.
- (iii) Not more than an aggregate of 20% of the number of shares of Common Stock owned or held by persons other than authorized carriers may be owned or held by persons of the classes described in paragraphs (1) through (5) of Section 310(a) of the Communications Act of 1934. The classes as described consist of aliens, foreign governments, representatives of aliens or foreign governments, and corporations organized under the laws of foreign governments (hereinafter collectively called Alien Persons); corporations of which any officer or director is an alien or of which more than 20% of the capital stock is owned of record or voted by Alien Persons; and a corporation which is directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens or of which more than 25% of the capital stock is owned of record or voted by Alien Persons.
- (iv) As provided in the Act, the number of shares of Common Stock owned or held by any person (other than an authorized carrier) or syndicate or affiliated group of such persons may not at any time exceed 10% of the total number of shares of Common Stock at the time outstanding, or, as provided in the Articles of Incorporation, such lesser percentage thereof as the Board of Directors may from time to time determine for the purpose of encouraging the widest distribution of shares of Common Stock to the American public. Notice of any such determination by the Board of Directors must be mailed to each record holder of Common Stock not less than ten days prior to the effective date of such determination. The ownership of shares acquired before the effective date of any such determination is not affected thereby. Pursuant to such provisions of the Articles of Incorporation, the Board of Directors has fixed 1% as the maximum percentage of the outstanding shares of Common Stock which may be owned or held by any shareholder (other than an authorized carrier) or syndicate or affiliated group of such shareholders. The FCC has advised the Corporation that it has determined that any action by the Corporation fixing such a maximum percentage of less than 10% is subject to review by the FCC to ascertain its reasonableness in the light of the purposes and objectives of the Act. The Corporation has been advised by its special counsel, Messrs. Wilmer, Cutler & Pickering, Washington, D. C., that, in the opinion of such firm, the FCC does not have authority to review and set aside such action of the Board of Directors, and that any such action of the Board may be determined to be invalid under the Act only by the courts.
- (v) No authorized carrier or affiliated group of such carriers may sell or transfer to persons other than authorized carriers shares of Common Stock totalling, in any consecutive 12-month

period, more than 2% of the greatest number of Series II shares issued and outstanding at any time during such period, except pursuant to a general public offering or in conformity with regulations adopted by the Board of Directors to encourage the widest distribution of shares of Common Stock to the American public.

(vi) The FCC is authorized, upon application by any authorized carrier and after notice and hearing, to require any other authorized carrier which owns shares of Common Stock to transfer to the applicant, for a fair and reasonable consideration, such number of shares as the FCC determines will advance the public interest and the purposes of the Act.

Voting Rights

Holders of Common Stock have exclusive voting rights. Except as otherwise stated in the following three paragraphs, each share of Common Stock, irrespective of Series, is entitled to one vote on each matter submitted to a vote at a meeting of shareholders.

Holders of Series I shares of Common Stock are entitled to elect six directors. In voting for directors, each holder of Series I shares has the right to vote the number of shares held by him for six candidates, or to cumulate such shares and give one candidate as many votes as the number of his shares multiplied by six shall equal, or to distribute such votes on the same principle among any number of candidates not exceeding six. No Series I share may be voted for the election of directors if such vote is subject to the direction or control of a person ineligible to own or hold Series I shares. See "Restrictions on Ownership and Transfer of Shares", above.

Holders of Series II shares of Common Stock are entitled to elect six directors. In voting for directors, each holder of Series II shares has the right to cumulate such shares and give one candidate as many votes as the number of shares held by him multiplied by six shall equal, or to distribute such votes on the same principle among any number of candidates not exceeding three. Under the Act and the Articles of Incorporation no holder of Series II shares and no trustee for such a holder may vote. either directly or indirectly, through the votes of subsidiary or affiliated companies, nominees or any persons subject to his direction or control, for more than three candidates. The By-laws of the Corporation provide that, in the event that any holder of Series II shares or a trustee for such holder casts votes, either directly or indirectly, through subsidiary or affiliated companies, nominees, or persons subject to his direction or control, for more than three candidates, only the votes so cast for those three of such candidates who receive the highest number of the votes so cast shall be counted, and the votes so cast for any other such candidates shall not be counted. The By-laws also provide that an association, joint-stock company, trust, corporation or other entity shall be deemed to be a subsidiary of a communications common carrier, as defined above, if more than 50% of its shares entitled under normal circumstances to elect a majority of its board of directors or trustees are owned or controlled directly or indirectly by such carrier, and that any such entity shall be deemed to be an affiliated company of a communications common carrier if it is otherwise directly or indirectly subject to the control of, or is under direct or indirect common control with, such carrier.

No share of Common Stock, irrespective of Series, may be voted on any matter at a meeting of shareholders if, at the time of such meeting, the share is owned or held in violation of the Act or any regulation promulgated thereunder or in violation of the Articles of Incorporation or any regulation or determination made by the Board of Directors thereunder; and the Corporation may, in accordance with

The By-laws of the Corporation provide that, at any meeting of shareholders for the election of directors (a) a majority of the shares of Series I Common Stock entitled to vote thereat constitutes a quorum for the election of directors by holders of shares of such Series, and (b) a majority of shares of Series II Common Stock entitled to vote thereat constitutes a quorum for the election of directors by the holders of shares of such Series, provided that, with respect to each Series, if such quorum shall not have been attained within 30 days from the date of the meeting as originally called, one-third of the shares of such Series entitled to vote thereat constitutes a quorum for the purpose of election of directors by holders of shares of such Series. Except where a greater proportion is required by law, one-third of the total number of shares (Series I and Series II) entitled to vote thereat constitutes a quorum for the transaction of any business other than the election of directors.

It is the intention of the present Board of Directors, in the event that, upon completion of the distribution of the shares offered by this Prospectus, the aggregate number of shares of Common Stock held by authorized carriers constitutes substantially less than 50% of the total number of shares of Common Stock then outstanding, to submit to the Congress a request in substance to the effect that the Act be amended to provide that, as nearly as may be, the number of directors to be elected by shareholders which are authorized carriers (holders of Series II shares), and the number of directors to be elected by other shareholders (holders of Series I shares), shall be in proportion to the respective aggregate numbers of shares of Common Stock held by the holders of shares of each such Series.

Transfer Procedures

The Board of Directors is authorized to establish procedures with respect to the transfer of shares of Common Stock to enforce the limitations referred to under "Restrictions on Ownership and Transfer", above. Procedures established by the Board of Directors require that, in connection with each transfer of shares on the books of the Corporation, the transferee complete an application for transfer of the shares. Such application calls for information about the transferee's citizenship status, relationship with communications common carriers and other matters related to the limitations on ownership and transfer of shares of Common Stock. Such an application for transfer must also be completed by each person who purchases shares from any of the Underwriters.

Neither the Act nor the Articles of Incorporation define the respective rights, as between themselves, of the seller and purchaser of shares where, because of the restrictions on the ownership and transfer of shares, the purchaser is not entitled to have the shares transferred to him on the books of the Corporation. The respective rights of the seller and purchaser in such a case would be determined under the laws or other rules applicable to such sale. The Articles of Incorporation provide, however, that nothing in the provisions thereof limiting the ownership and transfer of shares shall be deemed to affect the right of the purchaser in such a case to transfer his interest in the shares to any person who, under the provisions of the Act and the Articles, lawfully may acquire such interest.

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No conversion rights, preemptive rights, redemption rights or sinking fund provisions are applicable to the Common Stock. Shares of Common Stock offered hereby will be fully-paid and non-assessable.

Under the provisions of the Act, shares of Common Stock owned by an authorized carrier are not eligible to be included in the rate base of such carrier.

The Corporation will furnish to its shareholders annually a report containing certified financial statements.

Under the provisions of the Act, the Corporation is authorized to issue, in addition to shares of Common Stock without par value, non-voting securities, bonds, debentures, and other certificates of indebtedness as it may determine. The Articles of Incorporation at present provide for the issuance only of Common Stock without par value having the voting rights described above. The issuance of any securities other than the shares offered by this Prospectus, and the borrowing of moneys or assumption of any obligation in respect of securities of others, are subject to authorization by the FCC.

We have examined the financial statements of Communications Satellite Corporation listed below:

Statement of assets, preliminary survey, research, development, and organization expenses, and liabilities and capital, December 31, 1963.

Statement of cash receipts and disbursements for the period from February 1, 1963 (date of incorporation) to December 31, 1963.

Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying financial statements present fairly the assets, preliminary survey, research, development, and organization expenses, and liabilities and capital of the Corporation at December 31, 1963 and the cash receipts and disbursements of the Corporation for the period from February 1, 1963 to December 31, 1963, in conformity with generally accepted accounting principles consistently applied.

HASKINS & SELLS

Washington, D. C., February 28, 1964

COMMUNICATIONS SATELLITE CORPORATION

STATEMENT OF ASSETS, PRELIMINARY SURVEY, RESEARCH, DEVELOPMENT, AND ORGANIZATION EXPENSES, AND LIABILITIES AND CAPITAL December 31, 1963 and (Unaudited) March 31, 1964

ASSETS, AND PRELIMINARY SURVEY, RESEARCH, DEVELOPMENT, AND ORGANIZATION EXPENSES

DEVELOPMENT, AND ORGANIZATION EXPEN	NSES	36 1
d og 1977 by common conditionary the modific agencia. I be senerally be the fixer of the fixer o	December 31, 1963	March 31, 1964 (Unaudited)
Property at Cost: Furniture, office equipment, and automobiles Leaseholds	\$ 80,405 20,983	\$ 93,775 34,891
Total Less accumulated depreciation and amortization	101,388 14,192	128,666 20,504
Property—Net	87,196	108,162
Current Assets: Cash Advances and deposits Prepayments—Insurance, rent, etc.	246,807 3,500 6,285	288,417 1,772 4,285
Total Current Assets	256,592	294,474
Other Assets	2,000	2,000
Preliminary Survey, Research, Development, and Organization Expenses (Note 1)	1,012,985	1,444,978
Total	\$1,358,773	\$1,849,614
LIABILITIES AND CAPITAL		
Capital—Common stock—authorized, 100 shares without par value, issued and outstanding, 14 shares. (Authorized shares increased to 10,000,100 shares subsequent to March 31, 1964)—See "Description of Common Stock"	\$ 1,400	\$ 1,400
Current Liabilities: Notes payable to banks (Note 2) Accounts payable Accrued interest Other (accrued salaries and payroll taxes accrued and withheld)	1,150,000 157,245 25,761 24,367	1,650,000 111,840 40,543 45,831
Total Current Liabilities	1,357,373	1,848,214
Commitments (Note 4) Total	\$1,358,773	\$1,849,614

The accompanying Notes to Financial Statements are an integral part of this Statement.

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS

For the Period from February 1, 1963 (Date of Incorporation) to December 31, 1963 and (Unaudited) for the Three Months Ended March 31, 1964

	February 1, 1963 to December 31, 1963	Three months ended March 31, 1964 (unaudited)
Receipts: Bank loans	\$1,150,000 1,400	\$ 500,000
Sales of common stock Maturity of temporary investments (interest income has been deducted from interest expense)	198,754	
Total Receipts	1,350,154	500,000
DISBURSEMENTS: Purchases of furniture, office equipment and automobiles—net Leasehold costs	80,405 20,983 3,500 6,285 198,754 2,000	13,462 13,908 (1,728) (2,000)
Preliminary survey, research, development and organization expenses (Note 1)	1,012,985	431,993
Total Disbursements (accrual basis)	1,324,912	455,635
Add accounts payable and accrued liabilities at beginning of period (settled by cash disbursements or continued as liabilities at end of period)		207,373
Accounts payable, accrued interest, accrued salaries, and payroll taxes accrued and withheld	(207,373) (14,192)	(198,214) (6,404)
Total Disbursements (cash basis)	1,103,347	458,390
NET INCREASE IN CASH DURING PERIOD	246,807	41,610
Cash Balance at Beginning of Period		246,807
Cash Balance at End of Period	\$ 246,807	\$ 288,417
	Trees, Mariel	

The accompanying Notes to Financial Statements are an integral part of this Statement.

COMMUNICATIONS SATELLITE CORPORATION

NOTES TO FINANCIAL STATEMENTS

December 31, 1963 and (Unaudited) March 31, 1964

1. Preliminary Survey, Research, Development, and Organization Expenses

These amounts represent expenditures for organization matters, hearings and negotiations, research and development, and other corporate activities incident to the formation of a program for the creation of an international communications satellite system. The amounts for the three months ended March 31, 1964 include legal and accounting fees and printing costs approximating \$25,000 in connection with the proposed sale of capital stock contemplated by this Prospectus; and such amounts will constitute part of the capital stock expense of the issue. It is anticipated that as or after the system is developed, the expenditures described in this note, as well as additional expenditures of generally similar character, will be transferred to utility plant, amortized against income of future years, or otherwise disposed of as the Federal Communications Commission may approve or direct. A summary of these expenditures for the periods indicated is as follows:

February 1,

	February 1, 1963 (Date of Incorporation) to December 31, 1963	Three Months Ended March 31, 1964 (Unaudited)	Total
Organization expenses (legal fees and other expenses prior to incorporation)	\$ 81,692		\$ 81,692
Salaries of officers and employees	459,381	\$ 234,923	694,304
Fees of directors	23,600	5,200	28,800
Legal, accounting, and other professional fees	70,145	38,323	108,468
Travel and related expenses	36,316	27,294	63,610
Office rent and maintenance	33,783	18,921	52,704
Printing, stationery, and office expenses	34,182	25,038	59,220
Employees' relocation expenses and insurance benefit premiums	22,046	9,678	31,724
Technical consultants, data processing costs, and contract services incident to research program	173,457	31,641	205,098
Interest on notes payable (net of \$1,246 interest received on temporary investments)	24,514	14,783	39,297
Taxes and licenses	13,208	9,116	22,324
Depreciation and amortization	14,192	6,404	20,596
Other expenditures	26,469	10,672	37,141
Total	\$1,012,985	\$ 431,993	\$1,444,978

2. Notes Payable to Banks

The notes payable to banks represent borrowings under a commitment of the lending banks to make loans to the Corporation, not exceeding \$5,000,000, as the Corporation may from time to time request. Borrowings under the agreement are subject to specific authorizations of the Federal Communications

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3. Federal Communications Commission

The Corporation is subject to regulation by the Federal Communications Commission as explained under "Regulation". The Federal Communications Commission has not approved or reviewed the accounting procedures employed by the Corporation to date. The inclusion of the financial statements in this Prospectus should not be regarded as approval by the Federal Communications Commission as to the accuracy of any material therein nor of the accounting procedures used. The Federal Communications Commission may prescribe a system of accounts for the Corporation which may require modification of existing accounting procedures.

4. COMMITMENTS AND GENERAL

The Corporation has certain commitments in connection with its program for the development and establishment of a commercial communications satellite system. For a summary of the program, the range of estimated costs, and significant contract information, see "Program of the Corporation". The Corporation also has entered into short-term leases, with renewal options, for office space. Reference is also made to the matters referred to under "The Venture and Its Risks".

UNDERWRITING

The Underwriters named below, acting through their Representatives named on the cover of this Prospectus, have entered into a Purchase Contract with the Corporation pursuant to which they have severally agreed, subject to the terms and conditions of the Purchase Contract, to purchase from the Corporation the number of shares of Common Stock set forth below opposite their respective names. Under certain circumstances involving default of Underwriters, less than all of such shares of Common Stock may be purchased by the Underwriters. Under certain circumstances the commitments of non-defaulting Underwriters may be increased. Under the provisions of the Purchase Contract the obligation of the Underwriters to purchase the shares of Common Stock specified in the Purchase Contract is subject, among other things, to the receipt by the Corporation from authorized carriers of the purchase price for at least 90% of the shares of Common Stock subscribed for by authorized carriers, after applying the allocation formula set forth under "Carrier Subscription Matters".

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
Merrill Lynch, Pierce, Fenner & Smith Incorporated	70 Pine Street, New York 5, N.Y.	100,000
Blyth & Co., Inc	14 Wall Street, New York 5, N.Y.	100,000
The First Boston Corporation	20 Exchange Place, New York, N. Y. 10005	100,000
Kidder, Peabody & Co. Incorporated	20 Exchange Place, New York 5, N.Y.	100,000
Kuhn, Loeb & Co. Incorporated	30 Wall Street, New York 5, N. Y.	100,000
Lazard Frères & Co	44 Wall Street, New York 5, N. Y.	100,000
Lehman Brothers	One William Street, New York 4, N.Y.	100,000
Carl M. Loeb, Rhoades & Co	42 Wall Street, New York 5, N.Y.	100,000
Paine, Webber, Jackson & Curtis	25 Broad Street, New York 4, N.Y.	100,000
White, Weld & Co. Incorporated	20 Broad Street, New York 5, N. Y.	100,000
Dean Witter & Co	45 Montgomery Street, San Francisco 6, California	100,000
Eastman Dillon, Union Securities & Co	One Chase Manhattan Plaza, New York 5, N.Y.	50,000
Glore, Forgan & Co	45 Wall Street, New York 5, N. Y.	50,000
Harriman Ripley & Co., Incorporated	60 Broad Street, New York 4, N.Y.	50,000
Hornblower & Weeks	1 Chase Manhattan Plaza, New York 5, N.Y.	50,000
Smith, Barney & Co. Incorporated	20 Broad Street, New York 5, N.Y.	50,000
Stone & Webster Securities Corporation	90 Broad Street, New York 4, N.Y.	50,000
Bache & Co	36 Wall Street, New York 5, N.Y.	29,000
Bear, Stearns & Co	One Wall Street, New York 5, N.Y.	29,000
A. G. Becker & Co. Incorporated	120 South La Salle Street, Chicago 3, Illinois	29,000
Clark, Dodge & Co. Incorporated	61 Wall Street, New York 5, N.Y.	29,000
Dominick & Dominick, Incorporated	14 Wall Street, New York 5, N.Y.	29,000
Drexel & Co	1500 Walnut Street, Philadelphia 1, Pennsylvania	29,000
Hallgarten & Co	44 Wall Street, New York 5, N.Y.	29,000
Hayden, Stone Incorporated	25 Broad Street, New York, N.Y. 10004	29,000
Hemphill, Noyes & Co	8 Hanover Street, New York 4, N. Y.	29,000
E. F. Hutton & Company Inc	One Chase Manhattan Plaza, New York 5, N.Y.	29,000

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
W. E. Hutton & Co	14 Wall Street, New York, N. Y. 10005	29,000
Lee Higginson Corporation	20 Broad Street, New York 5, N. Y.	29,000
F. S. Moseley & Co	60 Broad Street, New York, N. Y. 10004	29,000
Reynolds & Co	120 Broadway, New York 5, N. Y.	29,000
Shearson, Hammill & Co.	14 Wall Street, New York 5, N. Y.	29,000
Wertheim & Co.	1 Chase Manhattan Plaza, New York 5, N. Y.	29,000
Alex. Brown & Sons	135 East Baltimore Street, Baltimore 2, Maryland	25,500
	Two Wall Street, New York 5, N. Y.	25,500
Equitable Securities Corporation	2 Broadway, New York 4, N. Y.	25,500
Goodbody & Co	Southern Bldg., Washington 5, D. C.	25,500
	25 Broad Street, New York 4, N. Y.	25,500
Ladenburg, Thalmann & Co	80 Pine Street, New York 5, N. Y.	25,500
R. W. Pressprich & Co	120 Broadway, New York 5, N. Y.	25,500
L. F. Rothschild & Co	Sixty Wall Street, New York, N. Y. 10005	25,500
Salomon Brothers & Hutzler	44 Wall Street, New York 5, N. Y.	25,500
Shields & Company Incorporated	45 Wall Street, New York 5, N. Y.	25,500
F. S. Smithers & Co	60 Broad Street, New York, N. Y. 10004	25,500
Spencer Trask & Co		25,500
Tucker, Anthony & R. L. Day	120 Broadway, New York 5, N. Y. 45 Wall Street, New York 5, N. Y.	25,500
G. H. Walker & Co. Incorporated	20 Exchange Place, New York 5, N. Y.	25,500
Wood, Struthers & Co., Inc		23,500
Allen & Company	30 Broad Street, New York 4, N. Y.	23,500
American Securities Corporation	25 Broad Street, New York 4, N. Y.	23,500
Bacon, Whipple & Co.	135 South La Salle Street, Chicago 3, Illinois	23,500
Robert W. Baird & Co., Incorporated	731 North Water Street, Milwaukee 1, Wisconsin	23,500
Baker, Weeks & Co	One Wall Street, New York 5, N. Y.	23,500
William Blair & Company	135 South La Salle Street, Chicago 3, Illinois	23,500
Blair & Co., Granbery, Marache Incorporated	20 Broad Street, New York 5, N. Y.	23,500
Blunt Ellis & Simmons	111 West Monroe Street, Chicago 3, Illinois	23,500
J. C. Bradford & Co	414 Union Street, Nashville 3, Tennessee	
J. M. Dain & Co., Inc	110 South Sixth Street, Minneapolis 2, Minnesota	23,500
Dick & Merle-Smith	48 Wall Street, New York 5, N. Y.	23,500
R. S. Dickson & Company, Incorporated	30 Broad Street, New York 4, N. Y.	23,500
F. Eberstadt & Co	65 Broadway, New York 6, N. Y.	23,500
Estabrook & Co	15 State Street, Boston 9, Massachusetts	23,500
W. C. Langley & Co	115 Broadway, New York 6, N. Y.	23,500
McDonald & Company	Union Commerce Bldg., Cleveland 14, Ohio	23,500
New York Securities Co	52 Wall Street, New York 5, N. Y.	23,500
The Ohio Company	51 North High Street, Columbus 15, Ohio	23,500
Piper, Jaffray & Hopwood	115 South Seventh Street, Minneapolis 2, Minnesot	
Schwabacher & Co	100 Montgomery Street, San Francisco 4, California	
William R. Staats & Co. Incorporated	640 South Spring Street, Los Angeles 14, California	
Ball, Burge & Kraus	1414 Union Commerce Bldg., Cleveland 14, Ohio	18,500
J. Barth & Co	404 Montgomery Street, San Francisco, California 94104	18,500
D 1 C		18,500
Burnham and Company	60 Broad Street, New York 4, N. Y. 64 Wall Street, New York 5, N. Y.	18,500
Coffin & Burr	11 Marietta Street, N.W., Atlanta 3, Georgia	18,500
Courts & Co	1000 Locust Street, St. Louis 1, Missouri	18,500
Dempsey-Tegeler & Co., Inc	2 Wall Street, New York 5, N. Y.	18,500
First of Michigan Corporation	725 15th Street, N.W., Washington 5, D. C.	18,500

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
Fulton, Reid & Co., Inc	2100 East Ohio Bldg., Cleveland 14, Ohio	18,500
Robert Garrett & Sons	South & Redwood Streets, Baltimore 3, Maryland	18,500
Hayden, Miller & Co	Union Commerce Bldg., Cleveland 14, Ohio	18,500
H. Hentz & Co	72 Wall Street, New York 5, N. Y.	18,500
Hirsch & Co., Incorporated	25 Broad Street, New York 4, N. Y.	18,500
Irving Lundborg & Co	310 Sansome Street, San Francisco 4, California	18,500
McDonnell & Co. Incorporated	120 Broadway, New York 5, N. Y.	
Merrill, Turben & Co., Inc	1612 Union Commerce Bldg., Cleveland 14, Ohio	18,500
Model, Roland & Co	120 Broadway, New York 5, N. Y.	18,500
Moore, Leonard & Lynch		18,500
Newhard, Cook & Co	Union Trust Bldg., Pittsburgh 19, Pennsylvania	18,500
Poinholdt & Cardner	400 Olive Street, St. Louis 2, Missouri	18,500
Reinholdt & Gardner	400 Locust Street, St. Louis 2, Missouri	18,500
Riter & Co	40 Wall Street, New York 5, N. Y.	18,500
The Robinson-Humphrey Company, Inc	2000 Rhodes-Haverty Bldg., Atlanta, Georgia 30303	18,500
Shuman, Agnew & Co	155 Sansome Street, San Francisco 4, California	18,500
Singer, Deane & Scribner	Union Trust Bldg., Pittsburgh 19, Pennsylvania	18,500
Stroud & Company, Incorporated	123 South Broad Street, Philadelphia 9, Pennsylvania	a 18,500
Watling, Lerchen & Co	Ford Bldg., Detroit 26, Michigan	18,500
Arnhold and S. Bleichroeder, Inc	30 Broad Street, New York 4, N. Y.	12,500
Auchincloss, Parker & Redpath	Two Broadway, New York 4, N. Y.	12,500
Baker, Watts & Co	Calvert & Redwood Streets, Baltimore 3, Maryland	12,500
Bateman, Eichler & Bingham Incorporated	453 South Spring Street, Los Angeles 13, California	12,500
Boettcher and Company	828 17th Street, Denver 2, Colorado	12,500
Bosworth, Sullivan & Company, Inc	660-17th Street, Denver 2, Colorado	12,500
Butcher & Sherrerd	1500 Walnut Street, Philadelphia 2, Pennsylvania	12,500
Chapman, Howe & Co	208 South La Salle Street, Chicago 4, Illinois	12,500
Julien Collins & Company	105 South La Salle Street, Chicago 3, Illinois	12,500
Crowell, Weedon & Co	629 South Spring Street, Los Angeles 14, California	12,500
Eppler, Guerin & Turner, Inc	1600 Fidelity Union Tower, Dallas 1, Texas	12,500
Fahnestock & Co	65 Broadway, New York 6, N. Y.	12,500
First California Company Incorporated	300 Montgomery Street, San Francisco,	12,500
	California 94104	12,500
First Southwest Company	Mercantile Bank Bldg., Dallas 1, Texas	12,500
Halle & Stieglitz	52 Wall Street, New York 5, N. Y.	12,500
The Illinois Company Incorporated	231 South La Salle Street, Chicago, Illinois 60604	12,500
The Johnson, Lane, Space, Smith Corporation	101 East Bay Street, Savannah, Georgia	12,500
Laird & Company, Corporation	Wilmington Trust Bldg., Wilmington 99, Delaware	12,500
Laird, Bissell & Meeds	120 Broadway, New York 5, N. Y.	12,500
Legg & Co.	22 Light Street, Baltimore 3, Maryland	12,500
Lester, Ryons & Co	623 South Hope Street, Los Angeles 17, California	10 400
Loewi & Co. Incorporated.	225 East Mason Street, Milwaukee 2, Wisconsin	12,500
A. E. Masten & Co.		12,500
A. E. Wastell & Co	First National Bank Bldg., Pittsburgh 22, Pennsylvania	12,500
McCormick & Co	135 South La Salle Street, Chicago 3, Illinois	
The Milwaukee Company	207 East Michigan Street, Milwaukee 2, Wisconsin	12,500
Mitchum, Jones & Templeton, Incorporated		12,500
Mittenum, Jones & Templeton, Incorporated	510 South Spring Street, Los Angeles 13, California	12,500
Pacific Northwest Company	1000 Second Avenue, Seattle, Washington 98104	
Rauscher, Pierce & Co., Inc.	1200 Mercantile Dallas Bldg., Dallas 1, Texas	12,500
Wm. C. Roney & Co	2 Buhl Bldg., Detroit 26, Michigan	12,500
C. Roncy & Co	2 Duni Diug., Denoit 20, Michigan	12,500

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		Number f Shares	sudma M stopili Can		Number f Shares
Name of Underwriter		to be urchased	Name of Underwriter	Address of Underwriter P	to be urchased
	1510 Bank of the Southwest Bldg., Houston 2,	20,000	I. M. Simon & Co	315 North Fourth Street, St. Louis 2, Missouri	8,000
Rotan, Mosle & Co	Texas	12,500	Stern, Frank, Meyer & Fox	Union Bank Bldg., Los Angeles, California 90014	8,000
Stein Bros. & Boyce, Inc	One Charles Center, Baltimore 1, Maryland	12,500	J. S. Strauss & Co	155 Montgomery Street, San Francisco 4, California	8,000
Stern Brothers & Co	1009-15 Baltimore Avenue, Kansas City 5, Missouri	12,500	C. E. Unterberg, Towbin Co	61 Broadway, New York, N. Y. 10006	8,000
Stifel, Nicolaus & Company, Incorporated	314 North Broadway, St. Louis 2, Missouri	12,500	Van Alstyne, Noel & Co	40 Wall Street, New York 5, N.Y.	8,000
Stone & Youngberg	1314 Russ Bldg., San Francisco 4, California	12,500	Wagenseller & Durst, Inc	626 South Spring Street, Los Angeles 14, California	8,000
Sutro & Co	460 Montgomery Street, San Francisco 4, California	12,500	Adams & Peck	120 Broadway, New York, N. Y. 10005 1424 Walnut Street, Philadelphia 2, Pennsylvania	6,500 6,500
Underwood, Neuhaus & Co. Incorporated	Houston Club Bldg., Houston 2, Texas	12,500	Bioren & Co Boenning & Co.	The Alison Bldg., Rittenhouse Square,	0,300
Weeden & Co. Incorporated	25 Broad Street, New York 4, N. Y.	12,500	Boeining & Co	Philadelphia 3, Pennsylvania	6,500
Winslow, Cohu & Stetson Incorporated	26 Broadway, New York 4, N. Y.	12,500 8,000	Burgess & Leith	53 State Street, Boston 9, Massachusetts	6,500
Abbott, Proctor & Paine	911 East Main Street, Richmond 14, Virginia	8,000	Chace, Whiteside & Winslow, Inc	24 Federal Street, Boston 10, Massachusetts	6,500
Anderson & Strudwick	913 East Main Street, Richmond 12, Virginia	8,000	Chaplin, McGuiness & Co	Peoples Bank Bldg., Pittsburgh 22, Pennsylvania	6,500
Brush, Slocumb & Co. Inc	465 California Street, San Francisco 4, California	8,000	Clayton Securities Corporation	147 Milk Street, Boston 9, Massachusetts	6,500
Carolina Securities Corporation	Insurance Bldg., Raleigh, North Carolina	8,000	Cunningham, Schmertz & Co., Inc	First National Bank Bldg., Pittsburgh 22, Pennsylvania	a 6,500
Richard W. Clarke Corporation	535 Fifth Avenue, New York 17, N. Y.	0,000	Davenport & Co	1113 East Main Street, Richmond 19, Virginia	6,500
Common, Dann & Co	502 Marine Trust Bldg., 237 Main Street, Buffalo, N. Y. 14203	8,000	Shelby Cullom Davis & Co	116 John Street, New York 38, N.Y.	6,500
the second bridge of bridge belief the second broads the	100 Pearl Street, Hartford 4, Connecticut	8,000	Elkins, Morris, Stokes & Co	428 Land Title Bldg., Philadelphia 10, Pennsylvania	6,500
Cooley & Company	1001 Adolphus Tower, Dallas 2, Texas	8,000	Evans & Co. Incorporated	300 Park Avenue, New York 22, N.Y.	6,500
Dallas Union Securities Co., Inc	111 Sutter Street, San Francisco 4, California	8,000	W. D. Gradison & Co	408 Dixie Terminal Bldg., Cincinnati 2, Ohio	6,500
Davis, Skaggs & Co	1500 Chestnut Street, Philadelphia 2, Pennsylvania	8,000	Hickey & Co	135 South La Salle Street, Chicago 3, Illinois	6,500
DeHaven & Townsend, Crouter & Bodine	Milam Bldg., San Antonio 5, Texas	8,000	Hill Richards & Co., Incorporated	621 South Spring Street, Los Angeles 14, California	6,500
Dewar, Robertson & Pancoast	201 North St. Mary's Street, San Antonio 6, Texas	8,000	Hulme, Applegate & Humphrey, Inc	586 Union Trust Bldg., Pittsburgh 19, Pennsylvania	6,500
Dittmar & Company, Inc	Two Broadway, New York 4, N. Y.	8,000	Indianapolis Bond and Share Corporation	120 East Market Street, Indianapolis 4, Indiana	6,500
Dreyfus & Co	440 Bank of the Southwest Bldg., Houston 2, Texas	8,000	Ingalls & Snyder	100 Broadway, New York 5, N.Y.	6,500
Eddleman, Pollok & Fosdick Inc	409 North Eighth Street, St. Louis 1, Missouri	8,000	Kalman & Company, Inc	136 Endicott Bldg., St. Paul 1, Minnesota	6,500
Elworthy & Co., Incorporated	111 Sutter Street, San Francisco 4, California	8,000	Kay, Richards & Company	Union Trust Bldg., Pittsburgh 19, Pennsylvania	6,500
Emanuel, Deetjen & Co	120 Broadway, New York 5, N.Y.	8,000	Mason-Hagan, Inc.	1017 East Main Street, Richmond 10, Virginia	6,500
Fahey, Clark & Co	1737 Union Commerce Bldg., Cleveland 14, Ohio	8,000	McKelvy & Company	1146 Union Trust Bldg., Pittsburgh 19, Pennsylvania	6,500
Faulkner, Dawkins & Sullivan	60 Broad Street, New York 4, N.Y.	8,000	Middendorf, Colgate & Co	51 Broad Street, New York 4, N. Y.	6,500
Ferris & Company	611 Fifteenth Street, N. W., Washington 5, D. C.	8,000	Newburger, Loeb & Co	5 Hanover Square, New York 4, N. Y.	6,500
Gregory & Sons	40 Wall Street, New York 5, N.Y.	8,000	Pierce, Wulbern, Murphey, Inc.	222 West Adams Street, Jacksonville 1, Florida	6,500
Hallowell, Sulzberger, Jenks, Kirkland & Co	Philadelphia National Bank Bldg., Philadelphia 7,	0.000	Wm. E. Pollock & Co., Inc	45 Wall Street, New York 5, N. Y.	6,500
Transveri, Suizberger, Jennes, Transverie	Pennsylvania	8,000	Russ & Company, Incorporated	Alamo National Bldg., San Antonio, Texas	6,500
J. J. B. Hilliard & Son	419 West Jefferson Street, Louisville 2, Kentucky	8,000	Scherck, Richter Company, Inc	408 Olive Street, St. Louis, Missouri 63102	6,500
Howard, Weil, Labouisse, Friedrichs and Company	211 Carondelet Street, New Orleans, Louisiana 70130	8,000	Schmidt, Roberts & Parke	123 South Broad Street, Philadelphia 9, Pennsylvania	6,500
Janney, Battles & E. W. Clark, Inc	Central-Penn National Bank Bldg.,	8,000	Scott & Stringfellow	P. O. Box 1575, Richmond 13, Virginia	6,500
THE RESERVE AND PROPERTY AND THE SECOND PROPERTY AND FACE OF STATES	1401 Walnut Street, Philadelphia 2, Pennsylvania	8,000	Silberberg & Co	40 Wall Street, New York 5, N. Y.	6,500
Edward D. Jones & Co	101 North Fourth Street, St. Louis 2, Missouri 1625 Eye Street, N. W., Washington 6, D. C.	8,000	Stix & Co	509 Olive Street, St. Louis 1, Missouri	6,500
Jones, Kreeger & Co	1025 Eye Street, N. W., Washington O, D. C.	8,000	Thomas & Company	305 Porter Bldg., Pittsburgh 19, Pennsylvania	6,500
Joseph, Mellen & Miller, Inc	1400 East Ohio Bldg., Cleveland 14, Ohio 738 15th Street, N. W., Washington 5, D. C.	8,000	Townsend, Dabney & Tyson	10 Post Office Square, Boston, Massachusetts 02105	6,500
Mackall & Coe	1100 Buhl Bldg., Detroit, Michigan 48226	8,000	H. C. Wainwright & Co	60 State Street, Boston 1, Massachusetts	6,500
Manley, Bennett, McDonald & Co	Charles and Chase Streets, Baltimore 1, Maryland	8,000	J. C. Wheat & Co	1001 East Main Street, Richmond 19, Virginia	6,500
Mead, Miller & Co	231 South La Salle Street, Chicago 4, Illinois	8,000	Arthur Wiesenberger & Co	61 Broadway, New York 6, N. Y.	6,500
Mitchell, Hutchins & Co., Incorporated	Bank of the Southwest Bldg., Houston 2, Texas	8,000	Yarnall, Biddle & Co	1528 Walnut Street, Philadelphia 2, Pennsylvania	6,500
Moroney, Beissner & Co., Inc		8,000	Abraham & Co	120 Broadway, New York 5, N. Y.	5,000
Mullaney, Wells & Company	1401 Walnut Street, Philadelphia 2, Pennsylvania	8,000	Almstedt Brothers	425 West Market Street, Louisville 2, Kentucky	5,000
Newburger & Co	6 Central Row, Hartford, Connecticut 06103	8,000	Arthurs, Lestrange & Co	2 Gateway Center, Pittsburgh 22, Pennsylvania	5,000
Putnam & Co	One Terminal Tower, Cleveland 13, Ohio	8,000	Barret, Fitch, North & Co. Incorporated	111 West Tenth Street, Kansas City 5, Missouri	5,000
Saunders, Stiver & Co	209 Church Street, New Haven 7, Connecticut	8,000	Jack M. Bass & Company	315 Fourth Avenue, North, Nashville 3, Tennessee	5,000
Unas. W. Scranton & Co	20, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0				

IZOEX 1

4.

		Number of Shares			Number of Shares
Name of Underwriter	Address of Underwriter	to be Purchased	Name of Underwriter	Address of Underwriter	to be Purchased
Birr, Wilson & Co., Inc	155 Sansome Street, San Francisco 4, California	5,000	Charles A. Parcells & Co	639 Penobscot Bldg., Detroit 26, Michigan	5,000
	1536 Railway Exchange Bldg., St. Louis 1, Missouri	5,000	Parker, Eisen, Waeckerle, Adams & Purcell, Inc	1012 Baltimore Avenue, Kansas City 5, Missouri	5,000
	100 Powers Bldg., Rochester 14, N. Y.	5,000	H. O. Peet & Co	23 West 10th Street, Kansas City 5, Missouri	5,000
	814 East Main Street, Richmond 19, Virginia	5,000	Powell, Kistler & Co	110 Old Street, Fayetteville, North Carolina	5,000
	20 Broadway, New York, N. Y. 10005	5,000	Quinn & Co.	200 Second Street, N.W., Albuquerque, New Mexico	
Caldwell Phillips, Inc	First National Bank Bldg., St. Paul 1, Minnesota	5,000	Raffensperger, Hughes & Co., Inc	20 North Meridian Street, Indianapolis 4, Indiana	5,000
	14 Third Street, N.E., Charlottesville, Virginia	5,000	Rand & Co.	One Wall Street, New York 5, N. Y.	5,000
	One Liberty Street, New York 5, N. Y.	5,000	F. P. Ristine & Co.	123 South Broad Street, Philadelphia 9, Pennsylvania	
	Circle Tower, Indianapolis 4, Indiana	5,000	Robinson and Lukens	909 Union Trust Bldg., Washington 5, D. C.	5,000
	Life & Casualty Tower, Nashville 3, Tennessee	5,000	Rodman & Renshaw	209 South La Salle Street, Chicago 4, Illinois	5,000
	Gardner Bldg., 506 Madison Avenue, Toledo 4, Ohio	and the Contract of the Contra	Rowles, Winston & Co., Incorporated	1300 Southwest Tower, Houston, Texas 77002	5,000
Collin, 1, citon & collins	Fidelity-Philadelphia Trust Bldg.,	W. Janes D	Sage, Rutty & Co., Inc	45 Exchange Street, Rochester 14, N. Y.	5,000
	Philadelphia 9, Pennsylvania	5,000	Sanders & Company	Republic National Bank Bldg., Dallas 1, Texas	5,000
Craigie & Co., Inc	516 E. Main Street, Richmond, Virginia 23215	5,000	Schneider, Bernet & Hickman, Inc	1505 Elm Street, Dallas 1, Texas	5,000
	Union Commerce Bldg., Cleveland 14, Ohio	5,000	Seasongood & Mayer	Security Savings Bldg., Cincinnati 2, Ohio	5,000
	Liberty Bank Bldg., Buffalo 2, N. Y.	5,000	Simpson, Emery & Company, Inc	1115-1117 Plaza Bldg., Pittsburgh 19, Pennsylvania	5,000
Field, Richards & Co 1	1107 Central Trust Bank Tower, Cincinnati,	Dagger C	Sisson & Nair Incorporated	829 Jefferson Avenue, Redwood City, California	5,000
	Ohio 45202	5,000	Smith, Moore & Co	509 Olive Street, St. Louis 1, Missouri	5,000
	1001 O Street, Lincoln 1, Nebraska	5,000	Southwick, Campbell, Waterman Co	1740 Washington Bldg., Seattle 1, Washington	5,000
I II DE DOMENTONDO	103 Twelfth Street, Columbus, Georgia	5,000	Stern, Lauer & Co	120 Broadway, New York, N. Y. 10005	5,000
Freehling & Co 1	120 South La Salle Street, Chicago 3, Illinois	5,000	Sterne, Agee & Leach, Inc	First National Bldg., Birmingham 3, Alabama	5,000
Fridley & Frederking 6	617 Texas National Bank Bldg., Houston 2, Texas	5,000	Stewart, Eubanks, Meyerson & Co	216 Montgomery Street, San Francisco 4, California	5,000
Funk, Hobbs & Hart, Inc 1	1012 National Bank of Commerce Bldg.,	A	Storz-Wachob-Bender Co.	3624 Farnam Street, Omaha, Nebraska 68131	5,000
East Market Street Indicaspolis 4. Indiana	San Antonio 5, Texas	5,000	Strader and Company, Incorporated	502 Peoples National Bank Bldg., Lynchburg, Virgini	4
Alester G. Furman Co., Inc S	South Carolina National Bank Bldg., Greenville, South Carolina	5,000	Suplee, Yeatman, Mosley Co. Incorporated	1500 Walnut Street, Philadelphia 2, Pennsylvania	5,000
- ON The state of	522 Olive Street, St. Louis 1, Missouri	5,000 5,000	Sutro Bros. & Co	80 Pine Street, New York 5, N. Y.	5,000
1 432 00111101110 00	Third National Bldg., Dayton 2, Ohio		Sweney Cartwright & Co	Huntington Bank Bldg., Columbus 15, Ohio	5,000
Circuit & Edda	25 Broad Street, New York 4, N. Y.	5,000	Trubee, Collins & Co	M. & T. Bldg., Buffalo 2, N. Y.	5,000
Hamici Smag, Doig & Control	332 Main Street, Worcester 8, Massachusetts			141 West Jackson Blvd., Chicago 4, Illinois	5,000
Tidili dilai di ori,	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000 a 5,000	Uhlmann & Co., Inc.	One Bull Street, Savannah, Georgia	5,000
	123 South Broad Street, Philadelphia 9, Pennsylvania		Varnedoe, Chisholm & Co., Inc	205 West Franklin Street, Richmond 20, Virginia	5,000
	Citizens & Southern Bldg., Atlanta 1, Georgia	5,000	Willis, Kenny & Ayres, Incorporated Woodcock, Moyer, Fricke & French, Inc	123 South Broad Street, Philadelphia 9, Pennsylvania	
	Johnston Bldg., Charlotte 2, North Carolina	5,000		First National Bank Bldg., Atlanta 3, Georgia	5,000
	215 East Plume Street, Norfolk 10, Virginia	5,000	Wyatt, Neal & Waggoner	819 Pine Street, St. Louis 1, Missouri	5,000
	Ford Bldg., Detroit 26, Michigan	5,000	Warren W. York & Co., Inc.	530 Hamilton Street, Allentown, Pennsylvania	5,000
	320 South Fifth Street, Louisville 2, Kentucky	5,000	Zilkha Corporation	120 Broadway, New York, N. Y. 10005	5,000
	540 Omaha National Bank Bldg., Omaha, Nebraska	5,000	Zuckerman, Smith & Co	30 Broad Street, New York 4, N. Y.	5,000
	217 Carondelet Street, New Orleans 30, Louisiana	5,000	Alden & Co., Inc.	Starks Bldg., Louisville 2, Kentucky	3,500
	Alamo National Bldg., San Antonio 5, Texas	5,000		Northwestern Bank Bldg., Minneapolis 2, Minnesota	3,500
S. D. Lunt & Co	906 Marine Trust Bldg., Buffalo 3, N. Y.	5,000	Allison-Williams Company	150 Broadway, New York 38, N. Y.	3,500
	235 South Fifth Street, Louisville 2, Kentucky	5,000	Austin, Dobbins & Calvert	National Bank of Commerce Bldg.,	5,500
	63 Wall Street, New York, N. Y. 10005	5,000	Austin, Dobbins & Carvert	San Antonio 5, Texas	3,500
Mason Brothers	1130 First Western Bldg., Oakland 12, California	5,000	Baumgartner, Downing & Co	Mercantile Trust Bldg., Baltimore 2, Maryland	3,500
111000011	35 Page Avenue, P. O. Box 14, Asheville,	0,300	Bingham, Sheldon & Co	735 North Water Street, Milwaukee 2, Wisconsin	3,500
incoming a company, and	North Carolina	5,000	M. H. Bishop & Co	Northwestern Bank Bldg., Minneapolis 2, Minnesota	3,500
McCourtney-Breckenridge & Company 1	1030 Boatmen's Bank Bldg., St. Louis 2, Missouri	5,000	Blaine & Company, Inc	1421 Chestnut Street, Philadelphia,	
	110 East First Street, Wichita 2, Kansas	5,000	,	Pennsylvania 19102	3,500
	330 Hanna Bldg., Cleveland 15, Ohio	5,000	E. D. Boynton & Co., Inc	111 Broadway, New York 6, N. Y.	3,500
W. H. Newbold's Son & Co 1	1517 Locust Street, Philadelphia 2, Pennsylvania	5,000	Brooke, Sheridan, Bogan & Co., Inc	2 Penn Center Plaza, Philadelphia 2, Pennsylvania	3,500
	30 Broad Street, New York 4, N. Y.	5,000	Brown, Lisle & Marshall	Turks Head Bldg., Providence 3, Rhode Island	3,500

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
Burrows, Smith and Company	174 South Main Street, Salt Lake City, Utah 84101	3,500
Byrd Brothers	11 Broadway, New York 4, N. Y.	3,500
Campbell, McCarty & Company Incorporated	1500 Buhl Bldg., Detroit 26, Michigan	3,500
Carter, Berlind & Weill	60 Broad Street, New York 4, N. Y.	3,500
The Cherokee Securities Company	4106 Hillsboro Road, Nashville 12, Tennessee	3,500
Chiles & Company	Farm Credit Bldg., Omaha 2, Nebraska	3,500
John W. Clarke & Co	135 South LaSalle Street, Chicago 3, Illinois	3,500
G. H. Crawford Co., Inc	400 Barringer Bldg., Columbia 1, South Carolina	3,500
Dixon Bretscher Noonan Inc	509 First National Bank Bldg., Springfield, Illinois	3,500
Oscar E. Dooly & Co	612 Ingraham Bldg., Miami, Florida 33131	3,500
Draper, Sears & Co. Incorporated	50 Congress Street, Boston 2, Massachusetts	3,500
Eisele & King, Libaire, Stout & Co	50 Broadway, New York, N. Y. 10004	3,500
Elder & Company	722 Chestnut Street, Chattanooga 2, Tennessee	3,500
Evans, MacCormack & Co., Inc	453 South Spring Street, Los Angeles 13, California	3,500
First Securities Corporation	111 Corcoran Street, Durham, North Carolina 211 South Broad Street, Philadelphia 7,	3,500
Gerstley, Sunstein & Co	Pennsylvania	3,500
Goodkind, Neufeld & Company, Inc	711 Fifth Avenue, New York, N. Y. 10022	3,500
Granger & Company	111 Broadway, New York, N. Y. 10006	3,500
Gruss & Co	30 Broad Street, New York, N. Y. 10004	3,500
Hardy & Co	25 Broad Street, New York, N. Y. 10004	3,500
Wm. P. Harper & Son & Co., Inc	1504 Third Avenue, Seattle, Washington	3,500
Heller & Meyer	520 Main Street, East Orange, New Jersey	3,500
T. C. Henderson & Co., Inc.	Sixth & Grand, Des Moines 9, Iowa	3,500
Henry, Franc & Co	308 North 8th Street, St. Louis 1, Missouri	3,500
Hettleman & Co	1 Wall Street, New York 5, N.Y.	3,500
Hill & Co	2020 Carew Tower, Cincinnati 2, Ohio	3,500
June S. Jones Co	509 U.S. Bank Bldg., Portland 4, Oregon	3,500
John H. Kaplan & Co	120 Broadway, New York, N.Y. 10005	3,500
Kaufman Bros. Co	16 Selden Arcade, Norfolk 10, Virginia	3,500
Kerr & Bell	210 West 7th Street, Los Angeles 14, California	3,500
Kinsley & Adams	6 Norwich Street, Worcester 8, Massachusetts	3,500
Richard E. Kohn & Co	20 Clinton Street, Newark 2, New Jersey	3,500
Kormendi & Co., Inc	11 Broadway, New York 4, N.Y.	3,500
McDaniel Lewis & Co	Jefferson Bldg., Greensboro, North Carolina	3,500
Lombard, Vitalis & Paganucci, Inc	48 Wall Street, New York, N.Y. 10005	3,500
MacNaughton-Greenawalt & Co	Michigan Trust Bldg., Grand Rapids 2, Michigan Marine Plaza,	3,500
The Marshall Company	111 E. Wisconsin Avenue, Milwaukee 2, Wisconsi	n 3,500
Mason & Co	2801 Washington Avenue, Newport News, Virginia	3,500
Mason & Lee, Inc	Church at Eighth Street, Lynchburg, Virginia	3,500
McJunkin, Patton & Co	1724 Oliver Bldg., Pittsburgh 22, Pennsylvania	3,500
C. S. McKee & Company, Inc	Union Trust Bldg., Pittsburgh 19, Pennsylvania	3,500
McLean & Company, Inc	772 Commerce Street, Tacoma 2, Washington	3,500
McMaster Hutchinson & Co	105 South La Salle Street, Chicago 3, Illinois	3,500
Mid-Continent Securities Company, Inc	Central Bldg., Wichita 2, Kansas	3,500
Nauman, McFawn & Co	Ford Bldg., Detroit 26, Michigan	3,500
Norris & Hirshberg, Inc	1550 Bank of Georgia Bldg., Atlanta 3, Georgia	3,500
Paul J. Nowland & Co	1201 Bank of Delaware Bldg., Wilmington, Delaware 19899	3,500
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	Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
ı	Nugent & Igoe	592 Main Street, East Orange, New Jersey	3,500
1	Pflueger & Baerwald	Mills Bldg., San Francisco 4, California	3,500
1	Pyne, Kendall & Hollister	60 Wall Street, New York, N.Y. 10005	3,500
ı	Quail & Co., Inc	Davenport Bank Bldg., Davenport, Iowa	3,500
1	Rambo, Close & Kerner Incorporated	1518 Locust Street, Philadelphia 2, Pennsylvania	3,500
ı	Rankin & Co	53 Forsyth St. N.W., Atlanta, Georgia 30303	3,500
ı	Rosenthal & Co	40 Wall Street, New York 5, N. Y.	3,500
1	Roulston & Company	1010 Euclid Avenue, Cleveland 15, Ohio	3,500
١	Earl M. Scanlan & Co	Western Federal Bldg., Seventeenth at California, Denver 2, Colorado	3,500
1	Scharff & Jones, Inc	140 Carondelet Street, New Orleans 12, Louisiana	3,500
1	Schweickhardt & Company, Inc	Hibernia Bldg., New Orleans 12, Louisiana	3,500
1	H. B. Shaine & Co. Inc	111 Pearl Street, N.W., Grand Rapids 2, Michigan	3,500
1	Smith, Hague & Company	539 Penobscot Bldg., Detroit 26, Michigan	3,500
ı	Starkweather & Co	115 Broadway, New York 6, N. Y.	3,500
١	Sterling, Grace & Co	39 Broadway, New York 6, N. Y.	3,500
ı	Taylor and Company	439 North Bedford Drive, Beverly Hills, California	3,500
1	Taylor, Rogers & Tracy Inc	105 South La Salle Street, Chicago 3, Illinois	3,500
ı	Burton J. Vincent & Co	105 South La Salle Street, Chicago 3, Illinois	3,500
ı	White & Company Incorporated	506 Olive Street, St. Louis, Missouri 63101	3,500
1	C. T. Williams & Company, Inc	Fidelity Bldg., Baltimore 1, Maryland	3,500
1	F. J. Winckler Co	1966 Penobscot Bldg., Detroit 26, Michigan	3,500
	Woodard-Elwood & Company	1115 First National Bank Bldg., Minneapolis 2, Minnesota	3,500
1	Wyllie and Thornhill, Inc	204 East Market Street, Charlottesville, Virginia	3,500
1	F. S. Yantis & Co. Incorporated	135 South La Salle Street, Chicago 3, Illinois	3,500
	York & Co	235 Montgomery Street, San Francisco 4, California	
			5,000,000

In the Purchase Contract the Underwriters have agreed to use their best efforts to offer the Common Stock in a manner to encourage the widest distribution of the shares to the American public. The text of the provision of the Purchase Contract setting forth such agreement of the Underwriters is quoted below. In such text, the term "Representatives" refers to the Underwriters named on the cover of this Prospectus, and the term "Selected Dealers" refers to members of the National Association of Securities Dealers, Inc., selected by the Representatives, to whom certain of the shares to be purchased by the Underwriters will be sold by the Underwriters for resale to the public:

"The Underwriters agree that they will use their best efforts to offer the Shares in a manner to encourage the widest distribution to the American public. In this connection, each Underwriter agrees that in filling orders for Shares retained by it for direct sale (i.e. Shares other than those reserved by the Representatives for sales for the account of such Underwriter to Selected Dealers or others), it will first make allotments of not in excess of 50 Shares, and in no event will it make allotments in excess of 100 Shares unless by such limitation of allotments it would be unable to dispose promptly of all such retained Shares. It is understood that no Underwriter shall be deemed to be unable to dispose promptly of its retained Shares and thereby be permitted to make allotments in excess of 100 Shares unless such Underwriter shall have first notified the Representatives and

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afforded them the opportunity to sell for its account to Selected Dealers such of said retained Shares as to which such Underwriter has not made allotments of 100 Shares and less. Nothing herein shall be construed as requiring any Underwriter to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which it believes will cause a concentration of holdings or adversely affect the distribution of the Shares. The Representatives will obtain from each Selected Dealer to whom they make sales for the accounts of Underwriters an agreement substantially to the same effect as this paragraph. Each Underwriter will refrain, and such agreement will require each Selected Dealer to refrain, from selling Shares, with or without any discount from the public offering price, to any dealer in securities unless such dealer has entered into such an agreement with the Representatives and unless such sale is first consented to by the Representatives."

The Common Stock offered by the several Underwriters is offered subject to prior sale and when, as and if issued by the Corporation and accepted by the Underwriters, and subject to the approval of certain legal matters by their counsel, Messrs. Brown, Wood, Fuller, Caldwell & Ivey, and by counsel for the Corporation, Allen E. Throop, Esq., and Messrs. Wilmer, Cutler & Pickering, and the Underwriters reserve the right to withdraw, cancel or modify such offer and to reject orders in whole or in part.

The Representatives of the Underwriters have advised the Corporation that sales to certain dealers may be made at a concession of not in excess of 50¢ per share.

The Corporation has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

CARRIER SUBSCRIPTION MATTERS

The FCC has reserved the right, by means of a specific reservation in the authorizations issued to carriers, to allocate stock among the authorized carriers in the event of an oversubscription of the stock reserved for sale to such carriers. By letter dated April 30, 1964, however, the FCC has informed the Corporation that it will not make any allocation of stock pursuant to this reservation, provided the Corporation allocates the stock in the manner and to the extent set forth below. The letter also stated that, in view of the FCC's authority under Section 304(f) of the Act to require one authorized carrier to sell shares of the Corporation to another authorized carrier, nothing contained in the allocation formula should be construed to limit or restrict in any way the right of any authorized carrier to apply to the FCC for relief pursuant to the provisions of the aforementioned Section, nor from obtaining relief pursuant to any action of the FCC instituted in accordance therewith.

In the event that the total number of shares subscribed for by all authorized carriers exceeds the number of shares (5,000,000) reserved for offering to such carriers, the reserved shares will be allocated among the subscribing carriers on the following basis (with adjustment of odd amounts, as the Corporation may determine to a multiple of 100 shares):

- 1. If there are two or more subscriptions each for more than 50% of the reserved shares, each subscription shall be reduced to 50% of the reserved shares.
- 2. If there is a single subscription for more than 50% of the reserved shares, such subscription shall be reduced until it equals 50% of the reserved shares or until the amount of oversubscription is eliminated, whichever occurs first.

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- 3. If no subscription is for more than 50% of the reserved shares, or if an oversubscription remains after reduction is made as provided for in paragraph 1 or 2 above, then all subscriptions for more than 5,000 shares (including the remainder of any subscriptions reduced to 50% of the reserved shares, as hereinabove provided) shall be reduced *pro rata*, on the basis of the amount by which each such subscription exceeds 5,000 shares, until the amount of oversubscription is eliminated.
- 4. In no event shall the above formula be applied to any subscription for 5,000 or less shares or to reduce any subscription below 5,000 shares.
- 5. For the purpose of this formula, subscriptions of affiliated authorized carriers shall be treated as one combined subscription. An authorized carrier will be considered affiliated with another authorized carrier if it directly, or indirectly through one or more intermediaries, controls, or is controlled by, such other carrier or is under common control with such other carrier. In determining whether authorized carriers are affiliated, the Corporation will rely upon advice received from the Federal Communications Commission.
- 6. When a reduction is made in a combined subscription consisting of subscriptions of two or more affiliated carriers, the reduction shall be applied *pro rata* among the respective constituent subscriptions of such affiliated carriers, notwithstanding the fact that any such constituent subscription is for 5,000 or less shares or would be reduced below 5,000 shares, but subject to adjustment of odd amounts to a multiple of 100 shares.

The determinations of the Corporation reasonably made in the application of the formula set forth above, including determinations made with respect to the combining of subscriptions of affiliated authorized carriers, the *pro rata* reduction of subscriptions, and the adjustment of subscriptions to multiples of 100 shares, shall be conclusive and binding upon all persons having an interest in the allocation of shares among authorized carriers.

On May 28, 1964, the FCC issued a statement, the text of which is set forth below:

"The Commission has recently been informed that certain communications common carriers, who have been authorized by the Commission to acquire shares of stock of the Communications Satellite Corporation, may intend to use their authorizations in a manner which is incompatible and inconsistent with the purposes and objectives of the Communications Satellite Act of 1962.

"Specifically, inquiry has been made whether carriers may purchase stock with their own funds or with borrowed funds for the purpose of reselling it after the sixty (60) day holding period required by the terms of the Corporation's offering to the Common Carriers. Such action would not only be contrary to the purposes for which the authorizations were originally given but also would give carriers an unfair advantage over members of the general public in the acquisition of stock. Each common carrier authorization was granted upon a finding by the Commission that ownership of stock by that particular carrier "... will be consistent with the public interest, convenience, and necessity." This statutory finding clearly presupposes the acquisition of stock by a carrier for legitimate investment purposes and not for speculation.

"The carriers have been accorded a privileged position in the acquisition of Corporation stock. The allocation formula (approved by the Commission on April 29, 1964), provides that, in the

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event of an oversubscription of stock among such carriers, each carrier have the opportunity to subscribe for 5,000 shares or \$100,000 of stock. If any carrier should take advantage of this privilege to buy shares with the intent to sell them at the earliest possible time, it would be acting clearly in a manner which is both incompatible and inconsistent with the purposes and objectives of the Act.

"Furthermore, to the extent that any authorized carrier may make an agreement express or implied with another entity giving such entity an interest in or voice with respect to the disposition of the stock or a share in any profits of a resale, such carrier would violate the provisions in our authorizations requiring the disclosure of all real parties in interest.

"Nothing, of course, requires the carriers to hold such stock indefinitely. But authorized carriers should conduct themselves in such fashion as to demonstrate that they did not acquire the stock for speculative purposes. Any hasty disposition of the stock would raise serious questions as to the purposes for which the purchase was made.

"The Commission is therefore considering whether appropriate action should be taken to deal with this matter, including the desirability of revising its rules concerning authorized carrier stock during the next 60-day period. The purpose of this Notice is to inform all interested persons so that they are made aware at this time of the Commission's construction of its present rules and the possibility of further appropriate action in this respect."

LEGAL OPINIONS

The legality of the shares of Common Stock offered hereby will be passed upon for the Corporation by Allen E. Throop, Esq., Vice President and General Counsel of the Corporation, and Messrs. Wilmer, Cutler & Pickering, 900 17th Street, N.W., Washington, D. C., and for the Underwriters by Messrs. Brown, Wood, Fuller, Caldwell & Ivey, 70 Pine Street, New York, N. Y. In respect of matters of law of the District of Columbia, Mr. Throop and Messrs. Brown, Wood, Fuller, Caldwell & Ivey will rely on said opinion of Messrs. Wilmer, Cutler & Pickering.

EXPERTS

The Statement of Assets, Preliminary Survey, Research, Development, and Organization Expenses, and Liabilities and Capital (December 31, 1963) and the Statement of Cash Receipts and Disbursements for the Period from February 1, 1963 (date of incorporation) to December 31, 1963 included in this Prospectus have been examined by Haskins & Sells, independent public accountants, as stated in their opinion appearing herein, and have been so included in reliance upon such opinion given upon the authority of that firm as experts in accounting and auditing.

PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 31. Financial Statements and Exhibits.

(b) Exhibits:

Ex	chibit 1-A	-Form	of	Agreement	Among	Underwriters.

Exhibit 1-B —Form of Purchase Contract.

Exhibit 1-C —Form of Selected Dealers Agreement.

Exhibit 4-A —Specimen of certificate for shares of Common Stock of the Corporation (Series I shares).

Exhibit 4-B — Specimen of certificate for shares of Common Stock of the Corporation (Series II shares).

Exhibit 6-A — Opinion of Allen E. Throop, Esq., Vice President and General Counsel of the Corporation, in respect of the legality of the securities registered hereunder.

Exhibit 6-B —Opinion of Messrs. Wilmer, Cutler & Pickering, Washington, D. C., in respect of the legality of the securities registered hereunder.

Exhibit 15

—Copy of opinion dated March 24, 1964, of Messrs. Wilmer, Cutler & Pickering, Washington, D. C., in respect of determinations of the Board of Directors of the Corporation pursuant to Section 5.02(c) of the Articles of Incorporation of the Corporation.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant, Communications Satellite Corporation, has duly caused this amendment to its Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Washington, District of Columbia, on the 2nd day of June, 1964.

COMMUNICATIONS SATELLITE CORPORATION

By Leo D. Welch

(Leo D. Welch, Chairman and
Chief Executive Officer)

Pursuant to the requirements of the Securities Act of 1933, this amendment to the Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	<u>Title</u>	Date
LEO D. WELCH (Leo D. Welch)	Chairman and Chief Executive Officer (principal executive officer) and Director	June 2, 1964
Joseph V. Charyk (Joseph V. Charyk)	_President and Director	June 2, 1964
Lewis C. Meyer (Lewis C. Meyer)	Treasurer and Finance Coordinator (principal financial officer)	June 2, 1964
FREDERIC M. MEAD (Frederic M. Mead)	Comptroller (principal accounting officer)	June 2, 1964
John T. Connor; George J. Feldman; Beardsley Graham; Sam Harris; Edgar F. Kaiser; David M. Kennedy; George L. Killion; Byrne Litschgi; Leonard H. Marks; Bruce G. Sundlun; Sidney J. Weinberg; Leonard Woodcock.	Directors	
By Allen E. Throop		June 2, 1964

Original powers of attorney authorizing Leo D. Welch, Joseph V. Charyk and Allen E. Throop, and each of them, to sign this amendment to the Registration Statement on behalf of the Corporation and the above-named directors and officers, and certified copies of a resolution of the Board of Directors of the Corporation authorizing said persons to sign as attorney, have been filed with the Securities and Exchange Commission.

(Allen E. Throop, Attorney-in-Fact)

EXHIBITS 1-A, 1-B, and 1-C

COMMUNICATIONS SATELLITE CORPORATION (A District of Columbia Corporation)

Common Stock (Without Par Value)

AGREEMENT AMONG UNDERWRITERS

June , 1964

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.
As Representatives of the Several Underwriters

c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated

70 Pine Street New York 5, N. Y.

Dear Sirs:

We confirm our agreement with respect to the purchase, severally, from Communications Satellite Corporation (the "Corporation") of an aggregate of shares of Common Stock, without par value, of the Corporation (the "Shares"), by you and the other Underwriters referred to in a proposed Purchase Contract (the "Purchase Contract"), a copy of which is attached hereto as Exhibit A, and the carrying, sale and distribution of the Shares. We will purchase from the Corporation, severally, the number of Shares set forth opposite our name in Schedule A to the Purchase Contract. It is understood that changes may be made in those who are to be Underwriters and in the number of Shares to be purchased by them, but that the number of Shares to be purchased by us as set forth in Schedule A to the Purchase Contract will not be changed without our consent except as provided for herein or in the Purchase Contract.

We confirm that our ratio of aggregate indebtedness to net capital is such that we may, in accordance with and pursuant to Rule 15c3-1, promulgated by the Securities and Exchange Commission (the "Commission") under the Securities Exchange Act of 1934, agree to purchase the number of Shares set forth opposite our name in Schedule A to the Purchase Contract (together with any increase provided for herein or in the Purchase Contract). We also confirm that we are engaged in the business of distributing securities and will participate in good faith in the ordinary course of such business in the distribution of the Shares.

Section 1. Authority of the Representatives. We authorize you, as our Representatives, to execute on our behalf the Purchase Contract and an "Underwriters' Application for Issuance of Shares" substantially in the form of Schedule B to the Purchase Contract (by the terms of which Application we hereby agree to be bound), and to take such action as may be necessary or advisable to carry

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out the Purchase Contract, this Agreement and the purchase, carrying, sale and distribution of the Shares, including authority to agree to any waiver or modification of the terms and provisions of the Purchase Contract (either before or after its execution) which in your judgment is not material.

Section 2. Sale to Public, Public Offering Price, and Purchase Price. It is expected that the sale to the public of the Shares will commence as soon after the Registration Statement has become effective as you may deem advisable, and on the terms set forth in the Prospectus. We will not sell any Shares until they are released by you for that purpose.

The initial public advertisement will appear on such date and will include the names of such of the Underwriters as you may determine.

The purchase price to be paid by the Underwriters for the Shares is set forth in Section 3 of the Purchase Contract. The initial public offering price of the Shares shall be \$20 per Share. After offering at the initial public offering price, the public offering price and the concession therefrom may be varied by you by reason of market conditions.

Section 3. Offering to Selected Dealers and Others. We authorize you, for our account, to reserve and offer for sale and to sell to dealers selected by you (the "Selected Dealers"), who shall be members of the National Association of Securities Dealers, Inc., among whom any of the Underwriters may be included, such number of Shares to be purchased by us as you shall determine. Such offering may be made under a Selected Dealers Agreement substantially in the form attached hereto as Exhibit B (the "Selected Dealers Agreement") or otherwise. The price to Selected Dealers shall be the public offering price less a concession of not in excess of \$\phi\$ per Share. We also authorize you, for our account, to reserve and offer for sale and to sell to others than Selected Dealers at the public offering price, Shares to be purchased by us. Such reservations for sales to others than Selected Dealers shall be as nearly as practicable in proportion to our underwriting obligation, unless you agree to a smaller proportion at our request. At or before the time of the public offering you will advise us of the number of Shares to be purchased by us which has not been reserved for sale as provided in this Section.

Sales to Selected Dealers and others shall be made as nearly as practicable in the ratio which the number of Shares reserved for our account bears to the aggregate number of Shares reserved for the accounts of all Underwriters, as calculated from day to day. It is understood that you may deliver to any of the Underwriters from time to time on or after the date of closing as determined in the Purchase Contract, (i) for carrying purposes, or (ii) for sale by such Underwriter, any of the Shares then reserved for offering and sale to, but not purchased and paid for by, Selected Dealers or others as above provided, but to the extent that Shares are so delivered for sale by such Underwriter, the number of Shares then reserved for the account of such Underwriter shall be correspondingly reduced. Shares delivered for carrying purposes only must be redelivered to you upon your demand.

We will repurchase any Shares sold by us, except through you, which shall be contracted for or purchased by you in the open market or otherwise during the life of this Agreement, on demand at a price equal to the cost of such purchase plus tax on redelivery and commission, if any. In lieu of delivering such Shares you may, in your discretion, sell the same for our account at such prices and upon such terms and to such persons, including any of the other Underwriters, as you may determine, charging the amount of any loss and expense or crediting the amount of any profit, less any expense, resulting from such sale, to our account, or charge our account with an amount not in excess of the concession to Selected Dealers.

Each Underwriter agrees that if any such offering is made pursuant to the Selected Dealers Agreement it will be governed by the terms and provisions thereof.

Section 4. Distribution Agreement. We agree to use our best efforts to offer the Shares retained by us for direct sale in a manner to encourage the widest distribution to the American public. In this connection, we agree that in filling orders for Shares retained by us for direct sale, we will first make allotments of not in excess of 50 Shares, and in no event will we make allotments in excess of 100 Shares unless by such limitation of allotments we would be unable to dispose promptly of all such

retained Shares. We understand that we shall not be deemed to be unable to dispose promptly of our retained Shares and thereby be permitted to make allotments in excess of 100 Shares, unless we shall have first notified you and afforded you the opportunity to sell to Selected Dealers as provided in Section 3 hereof such of said retained Shares as to which we have not made allotments of 100 Shares and less. Nothing herein shall be construed as requiring us to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which we believe will cause a concentration of holdings or adversely affect the distribution of the Shares. We will not sell any Shares to any dealer in securities unless such dealer has entered into an agreement with you substantially to the same effect as this Section and unless you first consent to such sale. Upon your request, we will furnish you, from time to time, with complete data as to our distribution of Shares.

Section 5. Payment and Delivery. Payment for the Shares to be purchased by each Underwriter is to be made by the delivery of its check to Merrill Lynch, Pierce, Fenner & Smith Incorporated at its office, 70 Pine Street, New York 5, New York, not later than 9:00 A.M., New York City Time, on the date of closing as determined in the Purchase Contract or such other date as you may advise. Payment shall be made by certified or official bank check in New York Clearing House funds to the order of Merrill Lynch, Pierce, Fenner & Smith Incorporated, and each Underwriter authorizes you for its account to make payment of the purchase price of the Shares against delivery to you of the Shares which it has agreed to purchase. Delivery of the Shares retained by us for direct sale will be made by you as soon as practicable.

Upon receiving payment for Shares reserved for Selected Dealers and others as provided in Section 3 hereof or sold for our account to Selected Dealers as provided in Section 4 hereof, you are to remit an amount equal to the purchase price paid by us for such Shares and credit or charge our account with the difference between the price at which such Shares were sold and our purchase price.

Section 6. Authority of the Representatives to Borrow. You are hereby authorized to advance your own funds for our account, charging current interest rates, or to arrange loans for the account of one or more of the Underwriters, severally and not jointly, to execute and deliver any notes or other instruments in connection therewith and to pledge all or any part of the Shares which such Underwriter or Underwriters shall have become obligated to purchase under any of the terms of this Agreement or of the Purchase Contract, as security therefor, as you may deem necessary or advisable to carry out the purchase and distribution of the Shares. Any lender is hereby authorized to accept your instructions as to the disposition of the proceeds of any such loans. Each Underwriter will be reimbursed or credited with the proceeds of loans made for its account.

Section 7. Trading Among Underwriters and Selected Dealers. You may purchase Shares from or sell Shares to any of the Selected Dealers or any of the Underwriters at the public offering price less a concession no greater than the concession allowed to Selected Dealers. The Underwriters and the Selected Dealers may, with your consent, purchase Shares from and sell Shares to each other at the public offering price less the concession allowed to Selected Dealers.

Section 8. Stabilization. In order to facilitate the distribution of the Shares, you may, for the account of each Underwriter, during the life of this Agreement, make purchases and sales of Common Stock of the Corporation, in the open market or otherwise for long or short account, at such prices, in such amounts and in such manner as you may determine, and, in arranging for sales to Selected Dealers or others, may over-allot for the account of such Underwriter, and either before or after the termination of this Agreement you may cover any short position incurred pursuant to this Section; provided that at the close of business on any day the net commitment of each Underwriter, either for long or short account, resulting from such purchases or sales (including over-allotments) shall not exceed 10% of the aggregate number of Shares which such Underwriter has agreed to purchase pursuant to the Purchase Contract, except that such percentage may be increased with the approval of a majority in interest of the Underwriters (including yourselves). Such purchases and sales (including over-allotments) shall be made for the accounts of the Underwriters as nearly as practicable in proportion to their

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respective underwriting obligations. Each Underwriter agrees to take up at cost on demand any Common Stock so purchased for its account and to deliver on demand any Common Stock so sold or over-allotted for its account, and to pay to you on demand the amount of any losses or expenses incurred for its account pursuant to this Section. In the event of default by one or more Underwriters in respect of their obligations under this Section, each non-defaulting Underwriter shall assume its proportionate share of the obligations of such defaulting Underwriter without relieving such defaulting Underwriter of its liability hereunder.

Each Underwriter agrees that during the life of this Agreement or such shorter period as you may determine it will not bid for or purchase for any account in which it has a beneficial interest any Common Stock of the Corporation, or attempt to induce any person to purchase any Common Stock of the Corporation; provided, however, that the foregoing shall not prohibit (i) offers to sell or the solicitation of offers to buy Shares to be acquired by an Underwriter pursuant to the Purchase Contract; (ii) brokerage transactions not involving solicitation of customers' orders; and (iii) transactions with your written consent or otherwise permitted under this Agreement.

Each Underwriter agrees that at any time or times prior to the termination of this Agreement it will, upon your request, report to you the number of Shares purchased by it and not reserved for offering to Selected Dealers and others, as herein provided, which then remains unsold and will, upon your request, at such time or times, deliver to you for its account or sell to you for the account of one or more of the Underwriters, such number of unsold Shares as you may designate at the public offering price less an amount to be determined by you not in excess of the concession allowed to Selected Dealers.

Each Underwriter authorizes you to file with the Commission any and all reports required by Rule 17a-2 of the Commission to be filed in connection with any purchases or sales made by you for its account pursuant to the authorization contained in this Section.

Section 9. Allocation of Expenses. The accounts of the Underwriters shall be charged with all transfer taxes on sales and other transfers for their respective accounts, and, in proportion to their respective underwriting obligations, with all expenses incurred by you or with your approval in connection with the Purchase Contract and this Agreement and the purchase, carrying, sale and distribution of the Shares. Your determination of the amount of such expenses and the allocation thereof as among the Underwriters shall be final and conclusive.

Funds of the Underwriters at any time in your hands may be held in your general funds without accountability for interest. You may in your discretion at any time make partial distribution of credit balances of the Underwriters and may at any time call on the Underwriters to pay their respective debit balances.

Section 10. Blue Sky Qualifications. Upon application, you will inform any of the Underwriters as to the States in which it is believed that the Shares are qualified for sale under, or are exempt from the requirements of, the respective securities laws of such States, but you, individually or as Representatives, assume no obligation or responsibility as to the right of any Underwriter to sell Shares in any jurisdiction.

We authorize you to cause to be sent by registered mail to the Pennsylvania Securities Commission a copy of the Prospectus and a list of dealers to whom you expect initially to offer Shares on behalf of the Underwriters and you agree to cause to be filed with the Department of State in New York a Further State Notice with respect to the Shares, if necessary.

Section 11. Membership in National Association of Securities Dealers, Inc. We understand that each of you is, and we hereby confirm that we are, a member in good standing of the National Association of Securities Dealers, Inc.

Section 12. Termination of Agreement. This Agreement shall terminate at the close of business on the 45th day after the effective date of the Registration Statement, unless earlier terminated. You may terminate this Agreement or any provision thereof at any time by written or telegraphic notice to us. As soon as practicable after any such termination the net credit or debit balance in the account of each Underwriter shall be paid to or collected from each Underwriter, provided that you may in your discretion reserve from distribution an aggregate of not exceeding \$10,000, to cover possible additional expenses chargeable to the respective Underwriters, but no statement by you of the amount of credit or debit balance or payment or reserve shall constitute any representation by you as to the existence or non-existence of any other charges, liabilities or expenses, for which the Underwriters shall continue liable. Notwithstanding any settlement on the termination of this Agreement, each Underwriter agrees to pay its proportion (determined on the basis provided in Section 9 hereof) of the amount of any liability or expense incurred by any Underwriter, based on the claim that the Underwriters constitute an association, unincorporated business or other separate entity.

Section 13. Default by Underwriters. Default by one or more Underwriters in respect of their several obligations pursuant hereto or to the Purchase Contract shall not release any other Underwriter from its obligations or in any way affect the liability of any defaulting Underwriter to the other Underwriters for damages resulting from such default. If one or more Underwriters default under the Purchase Contract, you are authorized, but shall not be obligated, to arrange for the purchase by other persons, including non-defaulting Underwriters, of the Shares not taken up by such defaulting Underwriters.

Section 14. Position of Representatives. Except as in this Agreement otherwise specifically provided, you shall have full authority to take such action as you may deem necessary or advisable in respect of all matters pertaining to the Purchase Contract, this Agreement and the purchase, carrying, sale and distribution of the Shares, but you shall be under no liability to us, except for your own want of good faith, for obligations assumed by you in this Agreement and for any liabilities arising under the Securities Act of 1933. Your authority hereunder and under the Purchase Contract may be exercised by Merrill Lynch, Pierce, Fenner & Smith Incorporated. No obligations not expressly assumed by you in this Agreement shall be implied hereby or inferred herefrom. Authority with respect to matters to be determined by you or by you and the Corporation pursuant to the terms of the Purchase Contract shall survive the termination of this Agreement.

Nothing herein contained shall constitute the Underwriters an association, or partners, with you, or with each other, or, except as otherwise provided in this Agreement, render any Underwriter liable for the obligations of any other Underwriter and the rights, obligations and liabilities of each of the Underwriters are several in accordance with their respective obligations and not joint.

Section 15. *Indemnification*. We will indemnify and hold harmless each other Underwriter and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act of 1933 to the extent that, and upon the terms upon which, each Underwriter agrees to indemnify and hold harmless the Corporation as set forth in the Purchase Contract. Such indemnity agreement shall survive the termination of this Agreement.

Section 16. Notices. Any notice from you to the undersigned shall be deemed to have been duly given if mailed, telephoned or telegraphed to us at our address appearing in the Prospectus.

Section 17. Execution of this Agreement. This Agreement is being executed by us and delivered to you in duplicate. Upon your receipt of identical agreements from each of the other Underwriters, please confirm this Agreement and return one copy to us.

Very truly yours,

(Official Signature)

Confirmed as of the date first above written.

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.

as Representatives of the Several Underwriters

By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By(Vice President)

EXHIBIT A

COMMUNICATIONS SATELLITE CORPORATION (A District of Columbia Corporation)

Common Stock
(Without Par Value)

PURCHASE CONTRACT

June , 1964

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

Blyth & Co., Inc.

The First Boston Corporation

Kidder, Peabody & Co. Incorporated

Kuhn, Loeb & Co. Incorporated

Lazard Frères & Co.

Lehman Brothers

Carl M. Loeb, Rhoades & Co.

Paine, Webber, Jackson & Curtis

White, Weld & Co. Incorporated

Dean Witter & Co.

As Representatives of the Several Underwriters

c/o Merrill Lynch, Pierce, Fenner & Smith
Incorporated

70 Pine Street New York 5, N. Y.

Dear Sirs:

Communications Satellite Corporation, a District of Columbia corporation (the "Corporation"), confirms its agreement with each of the underwriters named in Schedule A annexed hereto, including yourselves (the "Underwriters", which term, when the context permits, also includes any underwriter substituted as hereinafter provided in Section 12), for whom you are acting as Representatives for the purposes of this Contract.

Section 1. Financing of the Corporation. The Corporation proposes to issue and sell, in accordance with the Communications Satellite Act of 1962 (the "Satellite Act"), an aggregate of 10,000,000 shares of its Common Stock, without par value ("Common Stock"). The Corporation has offered 50% of such shares of Common Stock to communications common carriers authorized by the Federal Communications Commission to own stock of the Corporation (the "Authorized Carriers") at the Offering Price set forth on the cover page of the Prospectus hereinafter mentioned. The Corporation has received from certain Authorized Carriers subscriptions to purchase shares of Common Stock, subject to the conditions and the allocation formula referred to under "Offering of Common Stock" in said Prospectus, which subscriptions, after application of said allocation formula to the extent required, aggregate shares. The Corporation desires to obtain commitments for the purchase from it of the remaining shares of Common Stock (said shares being hereinafter called the "Shares").

(a) The Corporation has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 and an amendment thereto and related preliminary prospectuses for the registration under the Securities Act of 1933, as amended (the "Act"), of the 10,000,000 shares of Common Stock. The Corporation has prepared and will promptly file with the Commission a further amendment to said registration statement and an amended prospectus, and will not, at any time before the registration statement becomes effective, file any other amendment to the registration statement or any other amended prospectus which shall be reasonably disapproved by Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, on legal grounds, or by the Representatives on any other grounds. The registration statement as amended and the amended prospectus on file with the Commission at the time the registration statement becomes effective are hereinafter called the "Registration Statement" and the "Prospectus", respectively. The Corporation will not, at any time after the Registration Statement becomes effective, file any amendment to the Registration Statement or any amendment or supplement to the Prospectus which shall be reasonably disapproved by Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, on legal grounds, or by the Representatives on any other grounds.

(b) At the time the Registration Statement becomes effective the Registration Statement and the Prospectus will comply with the provisions of the Act and the rules and regulations of the Commission thereunder (the "Regulations"), and at the time the Registration Statement becomes effective the Registration Statement will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and at the time the Registration Statement becomes effective and at the Closing Time referred to in Section 3 the Prospectus will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that none of the representations and warranties in this subsection shall apply to statements in or omissions from the Registration Statement or Prospectus made in reliance upon and in conformity with information furnished to the Corporation in writing by any Underwriter through the Representatives expressly for use in the Registration Statement or Prospectus.

(c) The financial statements included in the Registration Statement and Prospectus present fairly the assets, preliminary survey, research, development, and organization expenses, and liabilities and capital of the Corporation at the dates indicated and the cash receipts and disbursements of the Corporation for the periods specified, in conformity with generally accepted accounting principles consistently applied, and the accountants who certified the financial statements are with respect to the Corporation independent public accountants as required by the Act and the Regulations.

(d) Since March 31, 1964: (i) there has not been any material adverse change in the condition of the Corporation, financial or otherwise, or in the affairs or business prospects of the Corporation except as set forth in the Registration Statement; (ii) the Corporation has not entered into any material transactions other than those necessary to or in connection with the establishment of its proposed business referred to in the Registration Statement and Prospectus; and (iii) the Corporation has not incurred any material contingent obligation not set forth or referred to in the Registration Statement and Prospectus.

Any certificate signed by any officer of the Corporation and delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Corporation to each Underwriter as to the statements made therein.

Section 3. Purchase by, and Sale and Delivery to, Underwriters—Closing Time. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Corporation agrees to sell to each Underwriter, and each Underwriter, severally and not jointly,

agrees to purchase from the Corporation, at the price of \$20 per Share, less an underwriting allowance or discount of \$ per Share in consideration of the Underwriter's agreement to make a public offering of Shares as provided in Section 4, the number of Shares set forth in Schedule A opposite the name of such Underwriter.

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Payment of the purchase price for, and delivery of certificates for, the Shares to be purchased by the Underwriters shall be made at the office of Manufacturers Hanover Trust Company, 40 Wall Street, New York 15, N. Y., or at such other place as shall be agreed upon by the Representatives and the Corporation at the following time (the "Closing Time"): 10:00 A.M., New York City Time, on the seventh full business day (unless postponed in accordance with the provisions of Section 12) after the day on which the Registration Statement becomes effective, or such other time after such effective date as shall be agreed upon by the Representatives and the Corporation. Such payment shall be made to the Corporation by certified or official bank check or checks, in New York Clearing House funds, payable to or upon the order of the Corporation by or on behalf of the respective Underwriters, against delivery to Merrill Lynch, Pierce, Fenner & Smith Incorporated for the respective accounts of the Underwriters of certificates for the Shares to be purchased by the Underwriters. The obligation of the Corporation to deliver certificates for the Shares to be purchased by the Underwriters is conditioned upon its receipt of an "Underwriters' Application for Issuance of Shares" in substantially the form of Schedule B annexed hereto, signed by the Representatives on behalf of the Underwriters. Certificates for the respective numbers of Shares to be purchased by the Underwriters shall be in such denominations and registered in such names as Merrill Lynch, Pierce, Fenner & Smith Incorporated may request in writing at least two business days before Closing Time. It is understood that each Underwriter has authorized Merrill Lynch, Pierce, Fenner & Smith Incorporated, for the account of such Underwriter, to make payment of the purchase price for, and to accept delivery of, its Shares and to receipt therefor. Any of you, individually and not as Representative, may (but shall not be obligated to) make payment for any Shares agreed to be purchased by any Underwriter whose check shall not have been received by Closing Time, for the account of such Underwriter, but any such payment shall not relieve such Underwriter from any obligations hereunder. The Corporation will permit Merrill Lynch, Pierce, Fenner & Smith Incorporated, on or before the first business day prior to Closing Time, to examine and package for delivery the certificates for the Shares to be purchased by the Underwriters.

Section 4. Public Offering. It is understood that subject to the terms and conditions herein set forth the Underwriters propose to make a public offering of the Shares as soon as practicable after the Registration Statement becomes effective at an initial public offering price of \$20 per Share.

The Underwriters agree that they will use their best efforts to offer the Shares in a manner to encourage the widest distribution to the American public. In this connection, each Underwriter agrees that in filling orders for Shares retained by it for direct sale (i.e. Shares other than those reserved by the Representatives for sales for the account of such Underwriter to Selected Dealers or others), it will first make allotments of not in excess of 50 Shares, and in no event will it make allotments in excess of 100 Shares unless by such limitation of allotments it would be unable to dispose promptly of all such retained Shares. It is understood that no Underwriter shall be deemed to be unable to dispose promptly of its retained Shares and thereby be permitted to make allotments in excess of 100 Shares unless such Underwriter shall have first notified the Representatives and afforded them the opportunity to sell for its account to Selected Dealers such of said retained Shares as to which such Underwriter has not made allotments of 100 Shares and less. Nothing herein shall be construed as requiring any Underwriter to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which it believes will cause a concentration of holdings or adversely affect the distribution of the Shares. The Representatives will obtain from each Selected Dealer to whom they make sales for the accounts of Underwriters an agreement substantially to the same effect as this paragraph. Each Underwriter will refrain, and such agreement will require each Selected Dealer to refrain, from selling Shares, with or without any discount from the public offering price, to any dealer in securities unless such dealer has entered into such an agreement with the Representatives and unless such sale is first consented to by the Representatives.

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- (a) The Corporation will notify the Representatives immediately and confirm the notice in writing (i) when the Registration Statement and any amendment thereto shall have become effective, (ii) of the receipt of any comments from the Commission, and (iii) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of the initiation of any proceedings for that purpose. The Corporation will make every reasonable effort to prevent the issuance by the Commission of any stop order and, if any such stop order shall at any time be issued, to obtain the lifting thereof at the earliest possible moment.
- (b) The Corporation will deliver to the Representatives, as soon as available, twelve signed copies of the registration statement as originally filed and of each amendment thereto and twelve sets of exhibits thereto, and will also deliver to the Representatives, a copy of the registration statement as originally filed and of each amendment thereto (without exhibits) for each of the Underwriters.
- (c) The Corporation will deliver to each Underwriter from time to time, before the registration statement becomes effective, such number of copies of the preliminary prospectus as originally filed and any amended preliminary prospectus, and as soon as the Registration Statement becomes effective and thereafter from time to time during the period when the Prospectus is required to be delivered under the Act, such number of copies of the Prospectus (as amended or supplemented) as the Representatives may reasonably request for the purposes contemplated by the Act or the Regulations.
- (d) During the period when the Prospectus is required to be delivered under the Act, the Corporation will comply so far as it is able, and at its own expense, with all requirements imposed upon it by the Act, as now and hereafter amended, and by the Regulations, as from time to time in force, so far as necessary to permit the continuance of sales of or dealing in the Common Stock during such period in accordance with the provisions hereof and the Prospectus.
- (e) If any event relating to or affecting the Corporation shall occur as a result of which it is necessary, in the opinion of counsel for the Underwriters, to amend or supplement the Prospectus in order to make the Prospectus not misleading in the light of the circumstances existing at the time it is delivered to a purchaser, the Corporation will forthwith prepare and furnish to the Underwriters, without expense to them, a reasonable number of copies of an amendment or amendments or a supplement or supplements to the Prospectus (in form and substance satisfactory to counsel for the Underwriters) which will amend or supplement the Prospectus so that as amended or supplemented it will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus is delivered to a purchaser, not misleading. For the purposes of this subsection the Corporation will furnish such information with respect to itself as the Representatives may from time to time reasonably request.
- (f) The Corporation will endeavor in good faith, in cooperation with the Underwriters, to qualify the Common Stock for offering and sale under the applicable securities laws of such States as the Representatives may designate; provided, however, that the Corporation shall not be obligated to file any general consent to service or to qualify as a foreign corporation in any State in which it is not so qualified. The Underwriters will cooperate with the Corporation in obtaining such qualification of the Common Stock. In each State where the Common Stock shall be qualified as above provided the Corporation will make and file such statements and reports in each year as are or may be reasonably required by the laws thereof.
- (g) The Corporation will make generally available to its security holders as soon as practicable, but not later than 90 days after the close of the period covered thereby, an earnings statement (in form complying with the provisions of Section 11(a) of the Act, which need not be certified by independent public accountants unless required by the Act or Regulations) covering a period of at least twelve months commencing not later than the first day of the second month following the month in which the Registration Statement becomes effective.

- (h) The Corporation will for a period of five years from the effective date of the Registration Statement furnish direct to each of the Underwriters as soon as the same shall be sent to stockholders copies of any annual or interim reports of the Corporation to its stockholders or to the President of the United States or the United States Congress, and it will also furnish each of the Representatives with the following:
 - (i) as soon as practicable after the end of each fiscal year, one copy of the annual independent accountants' report, including therein the accountants' certificate, and financial statements of the Corporation, together with such accountants' comments and notations with respect thereto in such detail as the Corporation may customarily receive from such accountants;
 - (ii) as soon as practicable after the end of each quarterly period, one copy of the financial statements of the Corporation, in reasonable detail, none of which statements need be audited but shall be prepared in conformity with generally accepted accounting principles and certified as correct by the Treasurer or the principal accounting officer of the Corporation;
 - (iii) copies of any report, application or document which the Corporation shall file with the Commission or any securities exchange; and
 - (iv) as soon as the same shall be sent to stockholders, each communication which shall be sent to the stockholders as a class.

Section 6. Payment of Expenses. The Corporation will pay all expenses incident to the performance of its obligations under this Contract, including (i) the printing and filing of the Registration Statement and Prospectus and the printing of this Contract and the Underwriters' Questionnaire, (ii) the authorization, issuance and delivery of the Shares, including the printing and filing of charter amendments, printing and engraving of stock certificates, all original issue taxes payable upon the issuance and sale of the Shares to the Underwriters, and transfer agents' and registrars' fees, (iii) the qualification of the Common Stock under State securities laws in accordance with the provisions of subsection (f) of Section 5, including the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification, (iv) the printing and delivery to the Underwriters in quantities as hereinbefore stated of copies of the registration statement and all amendments thereto, of the preliminary prospectus and amended preliminary prospectus, of the Registration Statement and any amendments thereto, and of the Prospectus and any amendments or supplements thereto and (v) the cost of printing and delivery to the Underwriters of copies of the Blue Sky Survey.

If this Contract is cancelled or terminated by the Representatives in accordance with the provisions of Section 7 or Section 11(b)(i), or is cancelled by the Corporation or prevented by the Corporation from becoming effective in accordance with the provisions of Section 8 or Section 11(a), the Corporation shall reimburse the Underwriters severally for their out-of-pocket expenses, including the reasonable fees and disbursements of counsel for the Underwriters.

- Section 7. Conditions of Underwriters' Obligations. The several obligations of the Underwriters hereunder are subject to the accuracy of and compliance with the representations and warranties of the Corporation, to the performance by the Corporation of its obligations hereunder, and to the following further conditions:
 - (a) The Registration Statement shall have become effective not later than 5:30 P.M., New York City Time, on June , 1964, or, with the consent of the Representatives, at a later time and date, not later, however, than 5:30 P.M., New York City Time, on June , 1964, or such later time and date as may be approved by a majority in interest of the Underwriters; and at Closing Time no stop order suspending the effectiveness of the Registration Statement shall have been issued under the Act or proceedings therefor initiated or threatened by the Commission.
 - (b) At Closing Time the Representatives shall have received:
 - (1) The favorable opinion of Messrs. Wilmer, Cutler & Pickering, counsel for the Corporation, in form and substance satisfactory to counsel for the Underwriters, to the effect that

- (i) the Corporation has been duly created, organized and established in accordance with the provisions of the Satellite Act and has been duly incorporated and is validly existing as a corporation in good standing under the laws of the District of Columbia;
- (ii) the Corporation has the corporate power to carry on the business and to own the property which it proposes to carry on and own as described in the Registration Statement and Prospectus;
- (iii) the authorized capital stock of the Corporation consists of 10,000,100 shares of Common Stock, without par value, and is in accordance with the provisions of the Satellite Act;
- (iv) the offering of shares of Common Stock to Authorized Carriers as set forth in Section 1, the issuance and sale of shares of Common Stock to Authorized Carriers that have subscribed therefor, and the issuance and sale of the Shares to the Underwriters pursuant to this Contract are in accordance with the Satellite Act and the Articles of Incorporation of the Corporation;
- (v) the shares of Common Stock to be sold by the Corporation to Authorized Carriers that have subscribed therefor have been duly authorized for issuance and sale to such Authorized Carriers, and when issued and delivered to such Authorized Carriers against payment of the consideration referred to in Section 1, will be validly issued, fully paid and nonassessable; and the Shares to be sold by the Corporation to the Underwriters pursuant to the provisions of this Contract have been duly authorized for issuance and sale to the Underwriters and, when issued and delivered to the Underwriters pursuant to the provisions of this Contract against payment of the consideration therefor specified herein, the Shares will be validly issued, fully paid and nonassessable;
- (vi) the execution and delivery of this Contract have been duly authorized by all necessary action on the part of the Corporation, and this Contract constitutes the valid and binding agreement of the Corporation;
- (vii) the Registration Statement is effective under the Act, and to the best of their knowledge no proceedings for a stop order have been instituted or are pending or threatened under Section 8 (d) of the Act;
- (viii) at the time the Registration Statement became effective, the Registration Statement and the Prospectus (other than the financial statements contained therein, as to which no opinion need be rendered) complied as to form in all material respects with the requirements of the Act and the Regulations, and nothing has come to their attention that would lead them to believe that the Registration Statement at the time it became effective contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading or that the Prospectus at the time the Registration Statement became effective or at Closing Time contained an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;
- (ix) the terms and provisions of the Common Stock conform to the description thereof contained in the Registration Statement and Prospectus, and the forms of certificates used to evidence the Common Stock are in due and proper form;
- (x) to the best of their knowledge and information, there are no contracts or documents of a character required to be described in the Registration Statement or Prospectus or to be filed as exhibits to the Registration Statement other than those described therein or filed as exhibits thereto and the description thereof is correct;
- (xi) to the best of their knowledge and information, there are no legal proceedings, pending or threatened, of a character required to be disclosed in the Registration Statement and Prospectus;

- (xii) the information in the Prospectus under the captions "Regulation" and "Description of Common Stock", to the extent that it constitutes matters of law or legal conclusions, has been reviewed by them and is correct; and
- (xiii) no consent, approval, authorization or order of any regulatory authority, other than the Commission or authorities administering State securities laws, is legally required for the issuance and sale of the Common Stock to the Authorized Carriers as set forth in Section 1 or for the issuance and sale of the Shares to the Underwriters as herein contemplated.
- (2) The favorable opinion of Allen E. Throop, Esq., General Counsel of the Corporation, in form and substance satisfactory to counsel for the Underwriters, with respect to the matters set forth in subsection (b)(1) of this Section.
- (3) The favorable opinion of Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, with respect to the matters set forth in (i) and (iii) to (ix), inclusive, of subsection (b) (1) of this Section.

With respect to matters of the law of the District of Columbia, Allen E. Throop, Esq. and Messrs. Brown, Wood, Fuller, Caldwell & Ivey may rely upon the opinion of Messrs. Wilmer, Cutler & Pickering.

- (4) A letter from Haskins & Sells, in form and substance satisfactory to the Representatives, confirming that with respect to the Corporation they are independent public accountants as required by the Act and the Regulations and stating in effect that (i) in their opinion the financial statements examined by them and included in the Registration Statement and Prospectus comply as to form in all material respects with the applicable accounting requirements of the Act and the Regulations, and (ii) a reading of the unaudited financial statements appearing in the Registration Statement and Prospectus, a reading of the latest available interim financial statements of the Corporation, a reading of the Minutes of the meetings of the Board of Directors of the Corporation since December 31, 1963, inquiries of certain responsible officials of the Corporation, and correspondence with the principal Registrar and the principal Transfer Agent of the Corporation's capital stock (which procedures and inquiries are intended to assist the Underwriters in their investigation of the information contained in the Registration Statement, do not constitute an examination made in accordance with generally accepted auditing standards, and would not necessarily reveal adverse changes in the financial position or inconsistencies in the application of generally accepted accounting principles) did not cause them to believe, nor did anything else cause them to believe: (a) that the unaudited financial statements included in the Registration Statement and Prospectus do not comply as to form in all material respects with the applicable accounting requirements of the Act and the Regulations, were not prepared in accordance with accounting principles and practices consistent in all material respects with those followed in the preparation of the financial statements examined by them (included in the Registration Statement and Prospectus) or would require any material adjustments for a fair presentation of the financial information purported to be shown, or (b) that during the period from April 1, 1964 to a date specified in such letter which is not more than five days prior to Closing Time, there was any change in the capital stock of the Corporation, any incurrence of a long-term debt of the Corporation (in this connection, the notes payable to banks, that mature not later than June 30, 1964, are not considered to be long-term debt), or any material adverse change in the financial position of the Corporation from that set forth in the latest financial statements included in the Registration Statement and Prospectus, except in all instances as set forth in or contemplated by the Registration Statement (the term "financial position" being used in its conventional accounting sense and thus relating to the financial statements of the business as a whole).
- (c) At Closing Time (i) there shall not have been from the respective dates as of which information is given in the Registration Statement and Prospectus any material adverse change

- (d) At Closing Time, the Corporation shall have received from Authorized Carriers the purchase price for at least 90% of the shares of Common Stock covered by subscriptions of Authorized Carriers as stated in Section 1.
- (e) At Closing Time counsel for the Underwriters shall have been furnished with such documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the sale of the Common Stock, including the Shares, as herein contemplated and related proceedings, or in order to evidence the accuracy or completeness of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Corporation in connection with the sale of the Common Stock, including the Shares, as herein contemplated shall be satisfactory to the Representatives as to matters of substance and to counsel for the Underwriters as to legal matters.

If any of the conditions specified in this Section shall not have been fulfilled when and as required by this Contract to be fulfilled, this Contract and all obligations of the Underwriters hereunder may be cancelled by the Representatives by notifying the Corporation of such cancellation in writing or by telegram at any time at or prior to Closing Time and any such cancellation shall be without liability of any party to any other party except as otherwise provided in this Contract.

Section 8. Condition of Corporation's Obligations. The obligations of the Corporation hereunder are subject to the condition that at Closing Time it shall have received from Authorized Carriers the purchase price for at least 90% of the shares of Common Stock covered by subscriptions of Authorized Carriers as stated in Section 1. If this condition shall not have been fulfilled when and as required by this Contract to be fulfilled, this Contract and all obligations of the Corporation hereunder may be cancelled by the Corporation by notifying the Representatives of such cancellation in writing or by telegram at or prior to Closing Time and any such cancellation shall be without liability of any party to any other party except as otherwise provided in this Contract.

SECTION 9. Indemnification.

- (a) The Corporation agrees to indemnify and hold harmless each Underwriter and each person, if any, who controls any Underwriter within the meaning of Section 15 of the Act, as follows:
 - (i) against any and all loss, liability, claim, damage and expense whatsoever arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration

Statement (or any amendment thereto) or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, unless such statement or omission or such alleged statement or omission was made in reliance upon and in conformity with written information furnished to the Corporation by any Underwriter through the Representatives expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto);

- (ii) against any and all loss, liability, claim, damage and expense whatsoever to the extent of the aggregate amount paid in settlement of any litigation, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission or any such alleged untrue statement or omission, if such settlement is effected with the written consent of the Corporation; and
- (iii) against any and all expense whatsoever reasonably incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above.

In no case shall the Corporation be liable under this indemnity agreement with respect to any claim made against any Underwriter or any such controlling person unless the Corporation shall be notified in writing of the nature of the claim within a reasonable time after the assertion thereof, but failure so to notify the Corporation shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. The Corporation shall be entitled to participate at its own expense in the defense, or, if the Corporation so elects, within a reasonable time after receipt of such notice, to assume the defense of any suit brought to enforce any such claim, but if the Corporation so elects to assume the defense, such defense shall be conducted by counsel chosen by it and approved by the Underwriter or Underwriters or controlling person or persons, defendant or defendants in any suit so brought, which approval shall not be unreasonably withheld. In the event that the Corporation elects to assume the defense of any such suit and retain such counsel, the Underwriter or Underwriters or controlling person or persons, defendant or defendants in the suit, shall bear the fees and expenses of any counsel retained by them for services thereafter performed and expenses of such counsel thereafter incurred. The Corporation agrees to notify you within a reasonable time of the assertion of any claim against it, any of its officers or directors or any person who controls the Corporation within the meaning of Section 15 of the Act, in connection with the sale of the Common Stock, including the Shares.

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(b) Each Underwriter severally agrees that it will indemnify and hold harmless the Corporation, its directors and each of its officers who signed the Registration Statement and each person, if any, who controls the Corporation within the meaning of Section 15 of the Act to the same extent as the indemnity contained in subsection (a) of this Section, but only with respect to statements or omissions made in the Registration Statement (or any amendment thereto) or any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with written information furnished to the Corporation by such Underwriter through the Representatives expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto). In case any action shall be brought against the Corporation or any person so indemnified based on the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto) and in respect of which indemnity may be sought against any Underwriter, such Underwriter shall have the rights and duties given to the Corporation, and the Corporation and each person so indemnified shall have the rights and duties given to the Underwriters, by the provisions of subsection (a) of this Section.

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Section 10. Representations, Warranties and Agreements to Survive Delivery. All representations, warranties and agreements contained in this Contract and/or contained in certificates of officers of the Corporation submitted pursuant hereto, shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of any Underwriter or any controlling person of any Underwriter or by or on behalf of the Corporation and shall survive delivery of the Shares to the Underwriters.

Section 11. Effective Date of this Contract and Termination Thereof.

(a) This Contract shall become effective (i) at 11:30 A. M., New York City Time, on the first business day following the day the Registration Statement becomes effective, or (ii) at the time of the initial public offering by the Underwriters, after the Registration Statement becomes effective, of any of the Shares, whichever shall first occur. The time of the initial public offering shall mean the time of the release by you, for publication, of the first newspaper advertisement, which is subsequently published, relating to the Shares, or the time at which the Shares are first generally offered by the Underwriters to dealers by letter or telegram, whichever shall first occur. The Representatives or the Corporation may prevent this Contract from becoming effective by giving the notice indicated below in this Section prior to the time this Contract would otherwise have become effective as herein provided, but only in the event that, by reason of revocations of subscriptions of Authorized Carriers before such subscriptions are accepted, the Corporation is unable to accept subscriptions for shares of Common Stock covered by subscriptions of Authorized Carriers as set forth in Section 1. The Corporation shall give immediate notice to the Representatives as soon as any such inability has occurred. If the Representatives or the Corporation prevent this Contract from becoming effective pursuant to this subsection, it shall be without liability of any party to any other party, except as otherwise provided in this Contract.

(b) The Representatives shall have the right to terminate this Contract by giving the notice indicated below in this Section at any time at or prior to Closing Time (i) if there shall have been, since the respective dates as of which information is given in the Registration Statement and Prospectus, any material adverse change in the condition of the Corporation, financial or otherwise, or in the affairs or business prospects of the Corporation, or (ii) if a war involving the United States or other national calamity shall have occurred, or (iii) if trading on the New York Stock Exchange shall be suspended or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities on the New York Stock Exchange shall have been required by that Exchange or by order of the Commission or any other governmental authority having jurisdiction, or (iv) if a banking moratorium shall have been declared by either Federal or New York authorities. If you shall terminate this Contract, such termination shall be without liability of any party to any other party except as otherwise provided in this Contract.

If the Representatives elect to prevent this Contract from becoming effective or to terminate this Contract as provided in this Section, the Corporation and each other Underwriter shall be notified promptly by the Representatives, by telephone or telegram, confirmed by letter. If the Corporation elects to prevent this Contract from becoming effective as provided in this Section, the Representatives shall be notified promptly by the Corporation by telephone or telegram, confirmed by letter.

Section 12. Substitution of Underwriters or Increase in Underwriters' Commitments. If one or more of the Underwriters shall fail at Closing Time to purchase the Shares which it or they have agreed to purchase hereunder (the "Unpurchased Shares"), then the Representatives shall have the right within 24 hours after Closing Time to procure one or more of the non-defaulting Underwriters, or any others, to purchase Unpurchased Shares in such amounts as may be agreed upon and upon the terms herein set forth; if, however, during such 24 hours the Representatives shall not have completed such arrangements for the purchase of all Unpurchased Shares, then the Corporation shall have the right, by written notice to the Representatives within the next 24 hours, either to terminate this Contract or to require the non-defaulting Underwriters to purchase the Shares which they have severally agreed to purchase hereunder and, in addition, to purchase Unpurchased Shares in proportion to their respective commitments hereunder up to a number thereof equal to 10% of the respective number of Shares which such non-defaulting Underwriters otherwise agreed to purchase hereunder.

The termination of this Contract by the Corporation pursuant to this Section shall be without liability on the part of the Corporation or any of said non-defaulting Underwriters. Nothing herein shall relieve any Underwriter so defaulting from liability, if any, for such default.

In the event of a default by any one or more Underwriters as set forth in this Section, Closing Time shall be postponed for 24 hours, and either the Representatives or the Corporation shall have the right to postpone Closing Time for an additional period of not exceeding 7 days, in order that any required changes in the Registration Statement and Prospectus or in any other documents or arrangements may be effected.

Section 13. Modification and Waiver. The Representatives and the Corporation expressly reserve the right, in their sole discretion and when mutually agreed upon, to make any modification herein or to waive any of the provisions hereof, and any such action when taken in accordance herewith shall be binding upon the other Underwriters.

Section 14. *Notices*. Except as herein otherwise provided, all communications hereunder shall be in writing and, if sent to the Underwriters, shall be mailed, delivered or telegraphed and confirmed to the Representatives c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., attention of Mr. J. H. Sedlmayr, or, if sent to the Corporation, shall be mailed, delivered or telegraphed and confirmed to the Corporation, at 3029 Klingle Road, N.W., Washington 8, D. C., attention of the Chairman and Chief Executive Officer. All communications hereunder from the Representatives shall be signed by Merrill Lynch, Pierce, Fenner & Smith Incorporated, acting on behalf of the Representatives.

Section 15. Parties. This Contract shall inure to the benefit of and be binding upon the Underwriters and the Corporation and their respective successors. Nothing expressed or mentioned in this Contract is intended or shall be construed to give any person, firm or corporation, other than the parties hereto and their respective successors and the controlling persons, directors and officers referred to in Section 8, any legal or equitable right, remedy or claim under or in respect of this Contract or any provision herein contained; this Contract and all conditions and provisions hereof being intended to be and being for the sole and exclusive benefit of the parties hereto and their respective successors and said controlling persons, directors and officers and for the benefit of no other person, firm or corporation. No purchaser of any Shares from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

This Contract shall be construed in accordance with the law of the State of New York.

If the foregoing is in accordance with your understanding of our agreement, kindly sign and return to us a counterpart hereof, whereupon this instrument along with all counterparts will become a binding contract between the Corporation and the Underwriters in accordance with its terms.

Very trul	y yours,
	COMMUNICATIONS SATELLITE CORPORATION
	By
Confirmed and Accepted, as of the date first above written.	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
By (Vice President)	

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BLYTH & Co., Inc.
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Carl M. Loeb, Rhoades & Co.
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Paine, Webber, Jackson & Curtis
Ву
(A General Partner)
White, Weld & Co. Incorporated
Ву
(Vice President)
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(A General Partner)
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For themselves and as the Representatives of the other
Underwriters named in Schedule A annexed hereto.

SCHEDULE A

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
Merrill Lynch, Pierce, Fenner & Smith Incorporated	70 Pine Street, New York 5, N. Y.	
Blyth & Co., Inc.	14 Wall Street, New York 5, N. Y.	
The First Boston Corporation	20 Exchange Place, New York 5, N. Y.	
Kidder, Peabody & Co. Incorporated	20 Exchange Place, New York 5, N. Y.	
Kuhn, Loeb & Co. Incorporated	30 Wall Street, New York 5, N. Y.	
Lazard Frères & Co.	44 Wall Street, New York 5, N. Y.	
Lehman Brothers	One William Street, New York 4, N. Y.	
Carl M. Loeb, Rhoades & Co.	42 Wall Street, New York 5, N. Y.	
Paine, Webber, Jackson & Curtis	25 Broad Street, New York 4, N. Y.	
White, Weld & Co. Incorporated	20 Broad Street, New York 5, N. Y.	
Dean Witter & Co.	45 Montgomery Street, San Francisco 6, California	

[It is contemplated that there will be approximately 350 additional Underwriters]

Total

Underwriters' Application for Issuance of Shares of Common Stock in Connection with Initial Offering

The undersigned, as Representatives of the several Underwriters named in Schedule A to the Purchase Contract between said Underwriters and Communications Satellite Corporation, a District of Columbia corporation (the "Corporation"), hereby make application for the issuance to each such Underwriter of the number of Shares of Common Stock, without par value ("Common Stock"), of the Corporation which such Underwriter in the Purchase Contract has severally agreed to purchase from the Corporation. Each Underwriter is engaged in the business of distributing securities and is participating in good faith in the ordinary course of such business in the distribution of Common Stock of the Corporation.

Each Underwriter agrees as follows, in respect of the Shares of Common Stock to be purchased by it pursuant to the Purchase Contract (the "Shares"):

- (a) If any of the Shares are to be held by such Underwriter as nominee of, or subject to the direction and control of, another person (the "Owner"), such Underwriter will obtain from each such Owner a statement of the following information: (i) whether the Owner is an "Alien Person"*; (ii) whether the Owner is a "Communications Common Carrier" or a subsidiary or affiliated company of a "Communications Common Carrier" or a trustee, officer or director of any of the foregoing; (iii) whether the Owner, or any syndicate or affiliated group of shareholders of the Corporation of which the Owner is a member, owns or holds more than 100,000 Shares of Common Stock.
- (b) To the extent that the information furnished to such Underwriter shows that Shares are owned by "Alien Persons"*, such Underwriter will take such action as may be appropriate to assure that such Shares are represented by a Foreign Shares Certificate or Foreign Shares Certificates.
- (c) Such Underwriter will furnish to Continental Illinois National Bank and Trust Company of Chicago, 231 South LaSalle Street, Chicago, Illinois, principal Transfer Agent for Common Stock, within 60 days after the date of the issuance of the Shares, a report, dated as of the 45th day after the issuance of the Shares, setting forth the following information: (i) whether such Underwriter is a securities broker or dealer having its principal place of business in the United States and registered in accordance with Section 15 of the Securities Exchange Act of 1934; (ii) whether such Underwriter is an "Alien Person"*; (iii) whether such Underwriter is a "Communications Common Carrier"* or a subsidiary or affiliated company of a "Communications Common Carrier" or a trustee, director or officer of any of the foregoing; (iv) whether such Underwriter, or any syndicate or affiliated group of shareholders of the Corporation of which such Underwriter is a member, will own or hold more than 100,000 Shares of Common Stock; (v) on the basis of information furnished to such Underwriter by the Owners, the total number of Shares held for Owners who are "Alien Persons"; (vi) on the basis of information furnished to such Underwriter by the Owners, whether any of the Owners is a "Communications Common Carrier" or a subsidiary or affiliated company of a "Communications Common Carrier", or a trustee, officer or director of any of the foregoing; (vii) on the basis of information furnished to such Underwriter by the Owners, whether any of the Owners, or any syndicate or affiliated group of shareholders of which the Owner is a member, owns or holds more than 100,000 Shares of Common Stock.

Compliance by each Underwriter with its agreement hereunder shall be the responsibility of such Underwriter and not the responsibility of the Representatives as such.

Dated: June , 1964

MERRILL LYNCH, PIERCE, FENNER & SMITH Incorporated BLYTH & Co., INC. THE FIRST BOSTON CORPORATION KIDDER, PEABODY & Co. INCORPORATED Kuhn, Loeb & Co. Incorporated LAZARD FRÈRES & CO. LEHMAN BROTHERS CARL M. LOEB, RHOADES & CO. PAINE, WEBBER, JACKSON & CURTIS White, Weld & Co. Incorporated Dean Witter & Co. 30

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By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By (Vice President)

*DEFINITION OF CERTAIN TERMS USED IN APPLICATION

"ALIEN PERSON" means

(1) any alien or the representative of any alien; (2) any foreign government or the representative thereof;

(2) any foreign government or the representative thereof;
(3) any corporation organized under the laws of any foreign government;
(4) any corporation of which any officer or director is an alien or of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country; or
(5) any corporation directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens, or of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any other corporation organized under the laws of a foreign country. tion organized under the laws of a foreign country.

"COMMUNICATIONS COMMON CARRIER" means

(1) any person (other than the Corporation) engaged as a common carrier for hire, in interestate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy, including a person so engaged through physical connection, or connection by radio, or by wire and radio, with the facilities of another carrier; or (2) any person which owns or controls, directly or indirectly, or is under direct or indirect common control with,

A person engaged in radio broadcasting is not, insofar as so engaged, deemed to be a "communications common

"PERSON" means an individual, partnership, association, joint-stock company, trust, corporation or other entity.

^{*} See reverse side for definitions

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COMMUNICATIONS SATELLITE CORPORATION (A District of Columbia Corporation)

Common Stock (Without Par Value)

SELECTED DEALERS AGREEMENT

June , 19

Gentlemen:

We and the other Underwriters named in the enclosed Prospectus have severally agreed to purchase from Communications Satellite Corporation (the "Corporation"), an aggregate of Shares of Common Stock, without par value, of the Corporation (the "Shares"). The Shares and certain of the terms on which they are being purchased and offered are more fully described in the enclosed Prospectus.

On behalf of the Underwriters, we are severally offering to certain dealers ("Selected Dealers") who are members of the National Association of Securities Dealers, Inc., among whom any of the Underwriters may be included, subject to prior sale and when, as and if delivered to and accepted by the Underwriters and subject to the approval of legal matters by their counsel and subject to the other terms and conditions hereof, a part of the Shares at the public offering price per Share less a concession of \$\phi\$ per Share. The public offering price of the Shares is to be \$20 per Share.

Orders for the Shares will be strictly subject to confirmation and we reserve the right in our uncontrolled discretion to reject any order in whole or in part, to accept or reject orders in the order of their receipt or otherwise, and to allot. Neither you nor any other person is authorized by the Corporation or the Underwriters to give any information or make any representations other than those contained in the Prospectus in connection with the sale of any of the Shares. No dealer is authorized to act as agent for the Underwriters when offering the Shares to the public or otherwise.

Upon release by us, you may offer the Shares at the public offering price, subject to the terms and conditions hereof. The Underwriters and the Selected Dealers may, with our consent, purchase Shares from and sell Shares to each other at the public offering price less the concession to Selected Dealers.

You agree to use your best efforts to offer the Shares purchased by you in a manner to encourage the widest distribution to the American public. In this connection, you agree that in filling orders for Shares to be purchased by you pursuant to this offering, you will first make allotments of not in excess of 50 Shares, and in no event will you make allotments in excess of 100 Shares unless by such limitation of allotments you would be unable to dispose promptly of all such Shares. Before making any allotments in excess of 100 Shares you will notify us, and if we request, you will sell to us for the accounts

Payment for Shares purchased by you is to be made by certified or official bank check at the office of Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., at the public offering price less the above concession, on such date as we may advise, in New York Clearing House funds to the order of Merrill Lynch, Pierce, Fenner & Smith Incorporated, against delivery of the Shares to be purchased by you.

This Agreement shall terminate at the close of business on the 45th day after the effective date of the Registration Statement, unless earlier terminated. We may terminate this Agreement at any time by written or telegraphic notice.

In the event that prior to the termination of this Agreement we purchase, or contract to purchase, for the accounts of the Underwriters, in the open market or otherwise, any Shares delivered to you, you agree to repay to us for the accounts of the Underwriters the amount of the above concession to Selected Dealers plus brokerage commissions and transfer taxes paid in connection with such purchase or contract to purchase.

You agree that at any time or times prior to the termination of this Agreement you will, upon our request, report to us the number of Shares purchased by you under this Agreement which then remains unsold by you and will, upon our request, at any such time or times, sell to us for the account of one or more of the Underwriters such number of such unsold Shares as we may designate, at the public offering price less an amount to be determined by us not in excess of the concession allowed you.

We shall have full authority to take such action as we may deem advisable in respect of all matters pertaining to the offering. We shall be under no liability to you except for lack of good faith and for obligations expressly assumed by us in this Agreement. Nothing contained in this paragraph is intended to operate as, and the provisions of this paragraph shall not in any way whatsover constitute, a waiver by you of compliance with any provision of the Securities Act of 1933, as amended, or of the rules and regulations of the Securities and Exchange Commission issued thereunder.

Upon application to us, we will inform you as to the States in which we believe the Shares have been qualified for sale under, or are exempt from the requirements of, the respective securities laws of such States, but we assume no obligation or responsibility as to your right to sell Shares in any jurisdiction.

We will cause to be sent by registered mail to the Pennsylvania Securities Commission a copy of the Prospectus and a list of the Selected Dealers to whom this Agreement is initially being sent. We will also cause to be filed with the Department of State in New York a Further State Notice with respect to the Shares, if necessary.

Additional copies of the Prospectus will be supplied in reasonable quantities upon request.

Any notice from us to you shall be deemed to have been duly given if mailed or telegraphed to you at the address to which this Agreement is mailed.

Please confirm your agreement hereto and indicate the number of Shares ordered by you by telegraphing your acceptance and order and by signing and returning at once to us, c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., the enclosed duplicate of this

letter. Upon receipt thereof this letter and such signed duplicate copy will evidence the agreement between us.

Very truly yours,

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

Blyth & Co., Inc.

The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.

By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By (Vice President)

Acting on behalf of themselves and the other several Underwriters.

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ACCEPTANCE AND ORDER

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine Werber, Jackson & Curtis

Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.

As Representatives of the Several Underwriters c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated

70 Pine Street New York 5, N. Y.

Dear Sirs:

We hereby enter our order for shares of Common Stock, without par value, of Communications Satellite Corporation, a District of Columbia corporation, under the terms and conditions of the foregoing Agreement.

We hereby confirm our agreement to all the terms and conditions stated in the foregoing Agreement. We acknowledge receipt of the Prospectus relating to the above Shares and we further state that in entering this order we have relied upon said Prospectus and no other statements whatsoever, written or oral. We confirm that we are members in good standing of the National Association of Securities Dealers, Inc.

Dated, June , 1964.

By(Authorized Representative)

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| 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 8 | 8 | 8 | 9 | 39 | 40 | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 28

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EXHIBITS 1-A, 1-B, and 1-C

COMMUNICATIONS SATELLITE CORPORATION (A District of Columbia Corporation)

Common Stock (Without Par Value)

AGREEMENT AMONG UNDERWRITERS

June , 1964

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

Blyth & Co., Inc.

The First Boston Corporation

Kidder, Peabody & Co. Incorporated

Kuhn, Loeb & Co. Incorporated

Lazard Frères & Co.

Lehman Brothers

Carl M. Loeb, Rhoades & Co.

Paine, Webber, Jackson & Curtis

White, Weld & Co. Incorporated

Dean Witter & Co.

As Representatives of the Several Underwriters

c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated

70 Pine Street New York 5, N. Y.

Dear Sirs:

We confirm our agreement with respect to the purchase, severally, from Communications Satellite Corporation (the "Corporation") of an aggregate of 5,000,000 shares of Common Stock, without par value, of the Corporation (the "Shares"), by you and the other Underwriters referred to in a proposed Purchase Contract (the "Purchase Contract"), a copy of which is attached hereto as Exhibit A, and the carrying, sale and distribution of the Shares. We will purchase from the Corporation, severally, the number of Shares set forth opposite our name in Schedule A to the Purchase Contract. It is understood that changes may be made in those who are to be Underwriters and in the number of Shares to be purchased by them, but that the number of Shares to be purchased by us as set forth in Schedule A to the Purchase Contract will not be changed without our consent except as provided for herein or in the Purchase Contract.

We confirm that our ratio of aggregate indebtedness to net capital is such that we may, in accordance with and pursuant to Rule 15c3-1, promulgated by the Securities and Exchange Commission (the "Commission") under the Securities Exchange Act of 1934, agree to purchase the number of Shares set forth opposite our name in Schedule A to the Purchase Contract (together with any increase provided for herein or in the Purchase Contract). We also confirm that we are engaged in the business of distributing securities and will participate in good faith in the ordinary course of such business in the distribution of the Shares.

Section 1. Authority of the Representatives. We authorize you, as our Representatives, to execute on our behalf the Purchase Contract and an "Underwriters' Application for Issuance of Shares" substantially in the form of Schedule B to the Purchase Contract (by the terms of which Application we hereby agree to be bound), and to take such action as may be necessary or advisable to carry

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out the Purchase Contract, this Agreement and the purchase, carrying, sale and distribution of the Shares, including authority to agree to any waiver or modification of the terms and provisions of the Purchase Contract (either before or after its execution) which in your judgment is not material.

Section 2. Sale to Public, Public Offering Price, and Purchase Price. It is expected that the sale to the public of the Shares will commence as soon after the Registration Statement has become effective as you may deem advisable, and on the terms set forth in the Prospectus. We will not sell any Shares until they are released by you for that purpose.

The initial public advertisement will appear on such date and will include the names of such of the Underwriters as you may determine.

The purchase price to be paid by the Underwriters for the Shares is set forth in Section 3 of the Purchase Contract. The initial public offering price of the Shares shall be \$20 per Share. After offering at the initial public offering price, the public offering price and the concession therefrom may be varied by you by reason of market conditions.

Section 3. Offering to Selected Dealers and Others. We authorize you, for our account, to reserve and offer for sale and to sell to dealers selected by you (the "Selected Dealers"), who shall be members of the National Association of Securities Dealers, Inc., among whom any of the Underwriters may be included, such number of Shares to be purchased by us as you shall determine. Such offering may be made under a Selected Dealers Agreement substantially in the form attached hereto as Exhibit B (the "Selected Dealers Agreement") or otherwise. The price to Selected Dealers shall be the public offering price less a concession of not in excess of \$\phi\$ per Share. We also authorize you, offering price, Shares to be purchased by us. Such reservations for sales to others than Selected Dealers shall be as nearly as practicable in proportion to our underwriting obligation, unless you agree to a smaller proportion at our request. At or before the time of the public offering you will advise us of the number of Shares to be purchased by us which has not been reserved for sale as provided in this Section.

Sales to Selected Dealers and others shall be made as nearly as practicable in the ratio which the number of Shares reserved for our account bears to the aggregate number of Shares reserved for the accounts of all Underwriters, as calculated from day to day. It is understood that you may deliver to any of the Underwriters from time to time on or after the date of closing as determined in the Purchase Contract, (i) for carrying purposes, or (ii) for sale by such Underwriter, any of the Shares then reserved for offering and sale to, but not purchased and paid for by, Selected Dealers or others as above provided, but to the extent that Shares are so delivered for sale by such Underwriter, the number of Shares then reserved for the account of such Underwriter shall be correspondingly reduced. Shares delivered for carrying purposes only must be redelivered to you upon your demand.

We will repurchase any Shares sold by us, except through you, which shall be contracted for or purchased by you in the open market or otherwise during the life of this Agreement, on demand at a price equal to the cost of such purchase plus tax on redelivery and commission, if any. In lieu of delivering such Shares you may, in your discretion, sell the same for our account at such prices and upon such terms and to such persons, including any of the other Underwriters, as you may determine, charging the amount of any loss and expense or crediting the amount of any profit, less any expense, resulting from such sale, to our account, or charge our account with an amount not in excess of the concession to Selected Dealers.

Each Underwriter agrees that if any such offering is made pursuant to the Selected Dealers Agreement it will be governed by the terms and provisions thereof.

Section 4. Distribution Agreement. We agree to use our best efforts to offer the Shares retained by us for direct sale in a manner to encourage the widest distribution to the American public. In this connection, we agree that in filling orders for Shares retained by us for direct sale, we will first make allotments of not in excess of 50 Shares, and in no event will we make allotments in excess of 100 Shares unless by such limitation of allotments we would be unable to dispose promptly of all such

retained Shares. We understand that we shall not be deemed to be unable to dispose promptly of our retained Shares and thereby be permitted to make allotments in excess of 100 Shares, unless we shall have first notified you and afforded you the opportunity to sell to Selected Dealers as provided in Section 3 hereof such of said retained Shares as to which we have not made allotments of 100 Shares and less. Nothing herein shall be construed as requiring us to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which we believe will cause a concentration of holdings or adversely affect the distribution of the Shares. We will not sell any Shares to any dealer in securities unless such dealer has entered into an agreement with you substantially to the same effect as this Section and unless you first consent to such sale. Upon your request, we will furnish you, from time to time, with complete data as to our distribution of Shares.

Section 5. Payment and Delivery. Payment for the Shares to be purchased by each Underwriter is to be made by the delivery of its check to Merrill Lynch, Pierce, Fenner & Smith Incorporated at its office, 70 Pine Street, New York 5, New York, not later than 9:00 A.M., New York City Time, on the date of closing as determined in the Purchase Contract or such other date as you may advise. Payment shall be made by certified or official bank check in New York Clearing House funds to the order of Merrill Lynch, Pierce, Fenner & Smith Incorporated, and each Underwriter authorizes you for its account to make payment of the purchase price of the Shares against delivery to you of the Shares which it has agreed to purchase. Delivery of the Shares retained by us for direct sale will be made by you as soon as practicable.

Upon receiving payment for Shares reserved for Selected Dealers and others as provided in Section 3 hereof or sold for our account to Selected Dealers as provided in Section 4 hereof, you are to remit an amount equal to the purchase price paid by us for such Shares and credit or charge our account with the difference between the price at which such Shares were sold and our purchase price.

Section 6. Authority of the Representatives to Borrow. You are hereby authorized to advance your own funds for our account, charging current interest rates, or to arrange loans for the account of one or more of the Underwriters, severally and not jointly, to execute and deliver any notes or other instruments in connection therewith and to pledge all or any part of the Shares which such Underwriter or Underwriters shall have become obligated to purchase under any of the terms of this Agreement or of the Purchase Contract, as security therefor, as you may deem necessary or advisable to carry out the purchase and distribution of the Shares. Any lender is hereby authorized to accept your instructions as to the disposition of the proceeds of any such loans. Each Underwriter will be reimbursed or credited with the proceeds of loans made for its account.

Section 7. Trading Among Underwriters and Selected Dealers. You may purchase Shares from or sell Shares to any of the Selected Dealers or any of the Underwriters at the public offering price less a concession no greater than the concession allowed to Selected Dealers. The Underwriters and the Selected Dealers may, with your consent, purchase Shares from and sell Shares to each other at the public offering price less the concession allowed to Selected Dealers.

Section 8. Stabilization. In order to facilitate the distribution of the Shares, you may, for the account of each Underwriter, during the life of this Agreement, make purchases and sales of Common Stock of the Corporation, in the open market or otherwise for long or short account, at such prices, in such amounts and in such manner as you may determine, and, in arranging for sales to Selected Dealers or others, may over-allot for the account of such Underwriter, and either before or after the termination of this Agreement you may cover any short position incurred pursuant to this Section; provided that at the close of business on any day the net commitment of each Underwriter, either for long or short account, resulting from such purchases or sales (including over-allotments) shall not exceed 10% of the aggregate number of Shares which such Underwriter has agreed to purchase pursuant to the Purchase Contract, except that such percentage may be increased with the approval of a majority in interest of the Underwriters (including yourselves). Such purchases and sales (including over-allotments) shall be made for the accounts of the Underwriters as nearly as practicable in proportion to their

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respective underwriting obligations. Each Underwriter agrees to take up at cost on demand any Common Stock so purchased for its account and to deliver on demand any Common Stock so sold or over-allotted for its account, and to pay to you on demand the amount of any losses or expenses incurred for its account pursuant to this Section. In the event of default by one or more Underwriters in respect of their obligations under this Section, each non-defaulting Underwriter shall assume its proportionate share of the obligations of such defaulting Underwriter without relieving such defaulting Underwriter of its liability hereunder.

Each Underwriter agrees that during the life of this Agreement or such shorter period as you may determine it will not bid for or purchase for any account in which it has a beneficial interest any Common Stock of the Corporation, or attempt to induce any person to purchase any Common Stock of the Corporation; provided, however, that the foregoing shall not prohibit (i) offers to sell or the solicitation of offers to buy Shares to be acquired by an Underwriter pursuant to the Purchase Contract; (ii) brokerage transactions not involving solicitation of customers' orders; and (iii) transactions with your written consent or otherwise permitted under this Agreement.

Each Underwriter agrees that at any time or times prior to the termination of this Agreement it will, upon your request, report to you the number of Shares purchased by it and not reserved for offering to Selected Dealers and others, as herein provided, which then remains unsold and will, upon your request, at such time or times, deliver to you for its account or sell to you for the account of one or more of the Underwriters, such number of unsold Shares as you may designate at the public offering price less an amount to be determined by you not in excess of the concession allowed to Selected Dealers.

Each Underwriter authorizes you to file with the Commission any and all reports required by Rule 17a-2 of the Commission to be filed in connection with any purchases or sales made by you for its account pursuant to the authorization contained in this Section.

Section 9. Allocation of Expenses. The accounts of the Underwriters shall be charged with all transfer taxes on sales and other transfers for their respective accounts, and, in proportion to their respective underwriting obligations, with all expenses incurred by you or with your approval in connection with the Purchase Contract and this Agreement and the purchase, carrying, sale and distribution of the Shares. Your determination of the amount of such expenses and the allocation thereof as among the Underwriters shall be final and conclusive.

Funds of the Underwriters at any time in your hands may be held in your general funds without accountability for interest. You may in your discretion at any time make partial distribution of credit balances of the Underwriters and may at any time call on the Underwriters to pay their respective debit balances.

Section 10. Blue Sky Qualifications. Upon application, you will inform any of the Underwriters as to the States in which it is believed that the Shares are qualified for sale under, or are exempt from the requirements of, the respective securities laws of such States, but you, individually or as Representatives, assume no obligation or responsibility as to the right of any Underwriter to sell Shares in any jurisdiction.

We authorize you to cause to be sent by registered mail to the Pennsylvania Securities Commission a copy of the Prospectus and a list of dealers to whom you expect initially to offer Shares on behalf of the Underwriters and you agree to cause to be filed with the Department of State in New York a Further State Notice with respect to the Shares, if necessary.

Section 11. Membership in National Association of Securities Dealers, Inc. We understand that each of you is, and we hereby confirm that we are, a member in good standing of the National Association of Securities Dealers, Inc.

Section 12. Termination of Agreement. This Agreement shall terminate at the close of business on the 45th day after the effective date of the Registration Statement, unless earlier terminated. You may terminate this Agreement or any provision thereof at any time by written or telegraphic notice to us. As soon as practicable after any such termination the net credit or debit balance in the account of each Underwriter shall be paid to or collected from each Underwriter, provided that you may in your discretion reserve from distribution an aggregate of not exceeding \$10,000, to cover possible additional expenses chargeable to the respective Underwriters, but no statement by you of the amount of credit or debit balance or payment or reserve shall constitute any representation by you as to the existence or non-existence of any other charges, liabilities or expenses, for which the Underwriters shall continue liable. Notwithstanding any settlement on the termination of this Agreement, each Underwriter agrees to pay its proportion (determined on the basis provided in Section 9 hereof) of the amount of any liability or expense incurred by any Underwriter, based on the claim that the Underwriters constitute an association, unincorporated business or other separate entity.

Section 13. Default by Underwriters. Default by one or more Underwriters in respect of their several obligations pursuant hereto or to the Purchase Contract shall not release any other Underwriter from its obligations or in any way affect the liability of any defaulting Underwriter to the other Underwriters for damages resulting from such default. If one or more Underwriters default under the Purchase Contract, you are authorized, but shall not be obligated, to arrange for the purchase by other persons, including non-defaulting Underwriters, of the Shares not taken up by such defaulting Underwriters.

Section 14. Position of Representatives. Except as in this Agreement otherwise specifically provided, you shall have full authority to take such action as you may deem necessary or advisable in respect of all matters pertaining to the Purchase Contract, this Agreement and the purchase, carrying, sale and distribution of the Shares, but you shall be under no liability to us, except for your own want of good faith, for obligations assumed by you in this Agreement and for any liabilities arising under the Securities Act of 1933. Your authority hereunder and under the Purchase Contract may be exercised by Merrill Lynch, Pierce, Fenner & Smith Incorporated. No obligations not expressly assumed by you in this Agreement shall be implied hereby or inferred herefrom. Authority with respect to matters to be determined by you or by you and the Corporation pursuant to the terms of the Purchase Contract shall survive the termination of this Agreement.

Nothing herein contained shall constitute the Underwriters an association, or partners, with you, or with each other, or, except as otherwise provided in this Agreement, render any Underwriter liable for the obligations of any other Underwriter and the rights, obligations and liabilities of each of the Underwriters are several in accordance with their respective obligations and not joint.

Section 15. *Indemnification*. We will indemnify and hold harmless each other Underwriter and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act of 1933 to the extent that, and upon the terms upon which, each Underwriter agrees to indemnify and hold harmless the Corporation as set forth in the Purchase Contract. Such indemnity agreement shall survive the termination of this Agreement.

Section 16. Notices. Any notice from you to the undersigned shall be deemed to have been duly given if mailed, telephoned or telegraphed to us at our address appearing in the Prospectus.

Section 17. Execution of this Agreement. This Agreement is being executed by us and delivered to you in duplicate. Upon your receipt of identical agreements from each of the other Underwriters, please confirm this Agreement and return one copy to us.

ery truly	yours,	
	(Official Signature)	

Confirmed as of the date first above written.

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.
as Representatives of the Several Underwriters

By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By(Vice President)

EXHIBIT A

COMMUNICATIONS SATELLITE CORPORATION (A District of Columbia Corporation)

Common Stock
(Without Par Value)

PURCHASE CONTRACT

June , 1964

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

Blyth & Co., Inc.

The First Boston Corporation

Kidder, Peabody & Co. Incorporated

Kuhn, Loeb & Co. Incorporated

Lazard Frères & Co.

Lehman Brothers

Carl M. Loeb, Rhoades & Co.

Paine, Webber, Jackson & Curtis

White, Weld & Co. Incorporated

Dean Witter & Co.

As Representatives of the Several Underwriters

c/o Merrill Lynch, Pierce, Fenner & Smith

Incorporated

70 Pine Street New York 5, N. Y.

Dear Sirs:

Communications Satellite Corporation, a District of Columbia corporation (the "Corporation"), confirms its agreement with each of the underwriters named in Schedule A annexed hereto, including yourselves (the "Underwriters", which term, when the context permits, also includes any underwriter substituted as hereinafter provided in Section 12), for whom you are acting as Representatives for the purposes of this Contract.

Section 1. Financing of the Corporation. The Corporation proposes to issue and sell, in accordance with the Communications Satellite Act of 1962 (the "Satellite Act"), an aggregate of 10,000,000 shares of its Common Stock, without par value ("Common Stock"). The Corporation has offered 50% of such shares of Common Stock to communications common carriers authorized by the Federal Communications Commission to own stock of the Corporation (the "Authorized Carriers") at the Offering Price set forth on the cover page of the Prospectus hereinafter mentioned. The Corporation has received from certain Authorized Carriers subscriptions to purchase shares of Common Stock, subject to the conditions and the allocation formula referred to under "Offering of Common Stock" in said Prospectus, which subscriptions, after application of said allocation formula to the extent required, aggregate 5,000,000 shares. The Corporation desires to obtain commitments for the purchase from it of the remaining 5,000,000 shares of Common Stock (said 5,000,000 shares being hereinafter called the "Shares").

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Section 2. Representations and Warranties of the Corporation. The Corporation represents and warrants to each Underwriter that:

(a) The Corporation has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 and an amendment thereto and related preliminary prospectuses for the registration under the Securities Act of 1933, as amended (the "Act"), of the 10,000,000 shares of Common Stock. The Corporation has prepared and will promptly file with the Commission a further amendment to said registration statement and an amended prospectus, and will not, at any time before the registration statement becomes effective, file any other amendment to the registration statement or any other amended prospectus which shall be reasonably disapproved by Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, on legal grounds, or by the Representatives on any other grounds. The registration statement as amended and the amended prospectus on file with the Commission at the time the registration statement becomes effective are hereinafter called the "Registration Statement" and the "Prospectus", respectively. The Corporation will not, at any time after the Registration Statement becomes effective, file any amendment to the Registration Statement or any amendment or supplement to the Prospectus which shall be reasonably disapproved by Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, on legal grounds, or by the Representatives on any other grounds.

(b) At the time the Registration Statement becomes effective the Registration Statement and the Prospectus will comply with the provisions of the Act and the rules and regulations of the Commission thereunder (the "Regulations"), and at the time the Registration Statement becomes effective the Registration Statement will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and at the time the Registration Statement becomes effective and at the Closing Time referred to in Section 3 the Prospectus will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that none of the representations and warranties in this subsection shall apply to statements in or omissions from the Registration Statement or Prospectus made in reliance upon and in conformity with information furnished to the Corporation in writing by any Underwriter through the Representatives expressly for use in the Registration Statement or Prospectus.

(c) The financial statements included in the Registration Statement and Prospectus present fairly the assets, preliminary survey, research, development, and organization expenses, and liabilities and capital of the Corporation at the dates indicated and the cash receipts and disbursements of the Corporation for the periods specified, in conformity with generally accepted accounting principles consistently applied, and the accountants who certified the financial statements are with respect to the Corporation independent public accountants as required by the Act and the Regulations.

(d) Since March 31, 1964: (i) there has not been any material adverse change in the condition of the Corporation, financial or otherwise, or in the affairs or business prospects of the Corporation except as set forth in the Registration Statement; (ii) the Corporation has not entered into any material transactions other than those necessary to or in connection with the establishment of its proposed business referred to in the Registration Statement and Prospectus; and (iii) the Corporation has not incurred any material contingent obligation not set forth or referred to in the Registration Statement and Prospectus.

Any certificate signed by any officer of the Corporation and delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Corporation to each Underwriter as to the statements made therein.

Section 3. Purchase by, and Sale and Delivery to, Underwriters—Closing Time. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Corporation agrees to sell to each Underwriter, and each Underwriter, severally and not jointly,

agrees to purchase from the Corporation, at the price of \$20 per Share, less an underwriting allowance or discount of \$ per Share in consideration of the Underwriter's agreement to make a public offering of Shares as provided in Section 4, the number of Shares set forth in Schedule A opposite the name of such Underwriter.

Payment of the purchase price for, and delivery of certificates for, the Shares to be purchased by the Underwriters shall be made at the office of Manufacturers Hanover Trust Company, 40 Wall Street, New York 15, N. Y., or at such other place as shall be agreed upon by the Representatives and the Corporation at the following time (the "Closing Time"): 10:00 A.M., New York City Time, on the seventh full business day (unless postponed in accordance with the provisions of Section 12) after the day on which the Registration Statement becomes effective, or such other time after such effective date as shall be agreed upon by the Representatives and the Corporation. Such payment shall be made to the Corporation by certified or official bank check or checks, in New York Clearing House funds, payable to or upon the order of the Corporation by or on behalf of the respective Underwriters, against delivery to Merrill Lynch, Pierce, Fenner & Smith Incorporated for the respective accounts of the Underwriters of certificates for the Shares to be purchased by the Underwriters. The obligation of the Corporation to deliver certificates for the Shares to be purchased by the Underwriters is conditioned upon its receipt of an "Underwriters' Application for Issuance of Shares" in substantially the form of Schedule B annexed hereto, signed by the Representatives on behalf of the Underwriters. Certificates for the respective numbers of Shares to be purchased by the Underwriters shall be in such denominations and registered in such names as Merrill Lynch, Pierce, Fenner & Smith Incorporated may request in writing at least two business days before Closing Time. It is understood that each Underwriter has authorized Merrill Lynch, Pierce, Fenner & Smith Incorporated, for the account of such Underwriter, to make payment of the purchase price for, and to accept delivery of, its Shares and to receipt therefor. Any of you, individually and not as Representative, may (but shall not be obligated to) make payment for any Shares agreed to be purchased by any Underwriter whose check shall not have been received by Closing Time, for the account of such Underwriter, but any such payment shall not relieve such Underwriter from any obligations hereunder. The Corporation will permit Merrill Lynch, Pierce, Fenner & Smith Incorporated, on or before the first business day prior to Closing Time, to examine and package for delivery the certificates for the Shares to be purchased by the Underwriters.

Section 4. *Public Offering*. It is understood that subject to the terms and conditions herein set forth the Underwriters propose to make a public offering of the Shares as soon as practicable after the Registration Statement becomes effective at an initial public offering price of \$20 per Share.

The Underwriters agree that they will use their best efforts to offer the Shares in a manner to encourage the widest distribution to the American public. In this connection, each Underwriter agrees that in filling orders for Shares retained by it for direct sale (i.e. Shares other than those reserved by the Representatives for sales for the account of such Underwriter to Selected Dealers or others), it will first make allotments of not in excess of 50 Shares, and in no event will it make allotments in excess of 100 Shares unless by such limitation of allotments it would be unable to dispose promptly of all such retained Shares. It is understood that no Underwriter shall be deemed to be unable to dispose promptly of its retained Shares and thereby be permitted to make allotments in excess of 100 Shares unless such Underwriter shall have first notified the Representatives and afforded them the opportunity to sell for its account to Selected Dealers such of said retained Shares as to which such Underwriter has not made allotments of 100 Shares and less. Nothing herein shall be construed as requiring any Underwriter to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which it believes will cause a concentration of holdings or adversely affect the distribution of the Shares. The Representatives will obtain from each Selected Dealer to whom they make sales for the accounts of Underwriters an agreement substantially to the same effect as this paragraph. Each Underwriter will refrain, and such agreement will require each Selected Dealer to refrain, from selling Shares, with or without any discount from the public offering price, to any dealer in securities unless such dealer has entered into such an agreement with the Representatives and unless such sale is first consented to by the Representatives.

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- (a) The Corporation will notify the Representatives immediately and confirm the notice in writing (i) when the Registration Statement and any amendment thereto shall have become effective, (ii) of the receipt of any comments from the Commission, and (iii) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of the initiation of any proceedings for that purpose. The Corporation will make every reasonable effort to prevent the issuance by the Commission of any stop order and, if any such stop order shall at any time be issued, to obtain the lifting thereof at the earliest possible moment.
- (b) The Corporation will deliver to the Representatives, as soon as available, twelve signed copies of the registration statement as originally filed and of each amendment thereto and twelve sets of exhibits thereto, and will also deliver to the Representatives, a copy of the registration statement as originally filed and of each amendment thereto (without exhibits) for each of the Underwriters.
- (c) The Corporation will deliver to each Underwriter from time to time, before the registration statement becomes effective, such number of copies of the preliminary prospectus as originally filed and any amended preliminary prospectus, and as soon as the Registration Statement becomes effective and thereafter from time to time during the period when the Prospectus is required to be delivered under the Act, such number of copies of the Prospectus (as amended or supplemented) as the Representatives may reasonably request for the purposes contemplated by the Act or the Regulations.
- (d) During the period when the Prospectus is required to be delivered under the Act, the Corporation will comply so far as it is able, and at its own expense, with all requirements imposed upon it by the Act, as now and hereafter amended, and by the Regulations, as from time to time in force, so far as necessary to permit the continuance of sales of or dealing in the Common Stock during such period in accordance with the provisions hereof and the Prospectus.
- (e) If any event relating to or affecting the Corporation shall occur as a result of which it is necessary, in the opinion of counsel for the Underwriters, to amend or supplement the Prospectus in order to make the Prospectus not misleading in the light of the circumstances existing at the time it is delivered to a purchaser, the Corporation will forthwith prepare and furnish to the Underwriters, without expense to them, a reasonable number of copies of an amendment or amendments or a supplement or supplements to the Prospectus (in form and substance satisfactory to counsel for the Underwriters) which will amend or supplement the Prospectus so that as amended or supplemented it will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus is delivered to a purchaser, not misleading. For the purposes of this subsection the Corporation will furnish such information with respect to itself as the Representatives may from time to time reasonably request.
- (f) The Corporation will endeavor in good faith, in cooperation with the Underwriters, to qualify the Common Stock for offering and sale under the applicable securities laws of such States as the Representatives may designate; provided, however, that the Corporation shall not be obligated to file any general consent to service or to qualify as a foreign corporation in any State in which it is not so qualified. The Underwriters will cooperate with the Corporation in obtaining such qualification of the Common Stock. In each State where the Common Stock shall be qualified as above provided the Corporation will make and file such statements and reports in each year as are or may be reasonably required by the laws thereof.
- (g) The Corporation will make generally available to its security holders as soon as practicable, but not later than 90 days after the close of the period covered thereby, an earnings statement (in form complying with the provisions of Section 11(a) of the Act, which need not be certified by independent public accountants unless required by the Act or Regulations) covering a period of at least twelve months commencing not later than the first day of the second month following the month in which the Registration Statement becomes effective.

- (h) The Corporation will for a period of five years from the effective date of the Registration Statement furnish direct to each of the Underwriters as soon as the same shall be sent to stockholders copies of any annual or interim reports of the Corporation to its stockholders or to the President of the United States or the United States Congress, and it will also furnish each of the Representatives with the following:
 - (i) as soon as practicable after the end of each fiscal year, one copy of the annual independent accountants' report, including therein the accountants' certificate, and financial statements of the Corporation, together with such accountants' comments and notations with respect thereto in such detail as the Corporation may customarily receive from such accountants;
 - (ii) as soon as practicable after the end of each quarterly period, one copy of the financial statements of the Corporation, in reasonable detail, none of which statements need be audited but shall be prepared in conformity with generally accepted accounting principles and certified as correct by the Treasurer or the principal accounting officer of the Corporation;
 - (iii) copies of any report, application or document which the Corporation shall file with the Commission or any securities exchange; and
 - (iv) as soon as the same shall be sent to stockholders, each communication which shall be sent to the stockholders as a class.

Section 6. Payment of Expenses. The Corporation will pay all expenses incident to the performance of its obligations under this Contract, including (i) the printing and filing of the Registration Statement and Prospectus and the printing of this Contract and the Underwriters' Questionnaire, (ii) the authorization, issuance and delivery of the Shares, including the printing and filing of charter amendments, printing and engraving of stock certificates, all original issue taxes payable upon the issuance and sale of the Shares to the Underwriters, and transfer agents' and registrars' fees, (iii) the qualification of the Common Stock under State securities laws in accordance with the provisions of subsection (f) of Section 5, including the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification, (iv) the printing and delivery to the Underwriters in quantities as hereinbefore stated of copies of the registration statement and all amendments thereto, of the preliminary prospectus and amended preliminary prospectus, of the Registration Statement and any amendments thereto, and of the Prospectus and any amendments or supplements thereto and (v) the cost of printing and delivery to the Underwriters of copies of the Blue Sky Survey.

If this Contract is cancelled or terminated by the Representatives in accordance with the provisions of Section 7 or Section 11(b)(i), or is cancelled by the Corporation or prevented by the Corporation from becoming effective in accordance with the provisions of Section 8 or Section 11(a), the Corporation shall reimburse the Underwriters severally for their out-of-pocket expenses, including the reasonable fees and disbursements of counsel for the Underwriters.

- Section 7. Conditions of Underwriters' Obligations. The several obligations of the Underwriters hereunder are subject to the accuracy of and compliance with the representations and warranties of the Corporation, to the performance by the Corporation of its obligations hereunder, and to the following further conditions:
 - (a) The Registration Statement shall have become effective not later than 5:30 P.M., New York City Time, on June 2, 1964, or, with the consent of the Representatives, at a later time and date, not later, however, than 5:30 P.M., New York City Time, on June 4, 1964, or such later time and date as may be approved by a majority in interest of the Underwriters; and at Closing Time no stop order suspending the effectiveness of the Registration Statement shall have been issued under the Act or proceedings therefor initiated or threatened by the Commission.
 - (b) At Closing Time the Representatives shall have received:
 - (1) The favorable opinion of Messrs. Wilmer, Cutler & Pickering, counsel for the Corporation, in form and substance satisfactory to counsel for the Underwriters, to the effect that

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- (i) the Corporation has been duly created, organized and established in accordance with the provisions of the Satellite Act and has been duly incorporated and is validly existing as a corporation in good standing under the laws of the District of Columbia;
- (ii) the Corporation has the corporate power to carry on the business and to own the property which it proposes to carry on and own as described in the Registration Statement and Prospectus;
- (iii) the authorized capital stock of the Corporation consists of 10,000,100 shares of Common Stock, without par value, and is in accordance with the provisions of the Satellite Act;
- (iv) the offering of shares of Common Stock to Authorized Carriers as set forth in Section 1, the issuance and sale of shares of Common Stock to Authorized Carriers that have subscribed therefor, and the issuance and sale of the Shares to the Underwriters pursuant to this Contract are in accordance with the Satellite Act and the Articles of Incorporation of the Corporation;
- (v) the shares of Common Stock to be sold by the Corporation to Authorized Carriers that have subscribed therefor have been duly authorized for issuance and sale to such Authorized Carriers, and when issued and delivered to such Authorized Carriers against payment of the consideration referred to in Section 1, will be validly issued, fully paid and nonassessable; and the Shares to be sold by the Corporation to the Underwriters pursuant to the provisions of this Contract have been duly authorized for issuance and sale to the Underwriters and, when issued and delivered to the Underwriters pursuant to the provisions of this Contract against payment of the consideration therefor specified herein, the Shares will be validly issued, fully paid and nonassessable;
- (vi) the execution and delivery of this Contract have been duly authorized by all necessary action on the part of the Corporation, and this Contract constitutes the valid and binding agreement of the Corporation;
- (vii) the Registration Statement is effective under the Act, and to the best of their knowledge no proceedings for a stop order have been instituted or are pending or threatened under Section 8 (d) of the Act;
- (viii) at the time the Registration Statement became effective, the Registration Statement and the Prospectus (other than the financial statements contained therein, as to which no opinion need be rendered) complied as to form in all material respects with the requirements of the Act and the Regulations, and nothing has come to their attention that would lead them to believe that the Registration Statement at the time it became effective contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading or that the Prospectus at the time the Registration Statement became effective or at Closing Time contained an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;
- (ix) the terms and provisions of the Common Stock conform to the description thereof contained in the Registration Statement and Prospectus, and the forms of certificates used to evidence the Common Stock are in due and proper form;
- (x) to the best of their knowledge and information, there are no contracts or documents of a character required to be described in the Registration Statement or Prospectus or to be filed as exhibits to the Registration Statement other than those described therein or filed as exhibits thereto and the description thereof is correct;
- (xi) to the best of their knowledge and information, there are no legal proceedings, pending or threatened, of a character required to be disclosed in the Registration Statement and Prospectus;

- (xii) the information in the Prospectus under the captions "Regulation" and "Description of Common Stock", to the extent that it constitutes matters of law or legal conclusions, has been reviewed by them and is correct; and
- (xiii) no consent, approval, authorization or order of any regulatory authority, other than the Commission or authorities administering State securities laws, is legally required for the issuance and sale of the Common Stock to the Authorized Carriers as set forth in Section 1 or for the issuance and sale of the Shares to the Underwriters as herein contemplated.
- (2) The favorable opinion of Allen E. Throop, Esq., General Counsel of the Corporation, in form and substance satisfactory to counsel for the Underwriters, with respect to the matters set forth in subsection (b)(1) of this Section.
- (3) The favorable opinion of Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, with respect to the matters set forth in (i) and (iii) to (ix), inclusive, of subsection (b)(1) of this Section.

With respect to matters of the law of the District of Columbia, Allen E. Throop, Esq. and Messrs. Brown, Wood, Fuller, Caldwell & Ivey may rely upon the opinion of Messrs. Wilmer, Cutler & Pickering.

- (4) A letter from Haskins & Sells, in form and substance satisfactory to the Representatives, confirming that with respect to the Corporation they are independent public accountants as required by the Act and the Regulations and stating in effect that (i) in their opinion the financial statements examined by them and included in the Registration Statement and Prospectus comply as to form in all material respects with the applicable accounting requirements of the Act and the Regulations, and (ii) a reading of the unaudited financial statements appearing in the Registration Statement and Prospectus, a reading of the latest available interim financial statements of the Corporation, a reading of the Minutes of the meetings of the Board of Directors of the Corporation since December 31, 1963, inquiries of certain responsible officials of the Corporation, and correspondence with the principal Registrar and the principal Transfer Agent of the Corporation's capital stock (which procedures and inquiries are intended to assist the Underwriters in their investigation of the information contained in the Registration Statement, do not constitute an examination made in accordance with generally accepted auditing standards, and would not necessarily reveal adverse changes in the financial position or inconsistencies in the application of generally accepted accounting principles) did not cause them to believe, nor did anything else cause them to believe: (a) that the unaudited financial statements included in the Registration Statement and Prospectus do not comply as to form in all material respects with the applicable accounting requirements of the Act and the Regulations, were not prepared in accordance with accounting principles and practices consistent in all material respects with those followed in the preparation of the financial statements examined by them (included in the Registration Statement and Prospectus) or would require any material adjustments for a fair presentation of the financial information purported to be shown, or (b) that during the period from April 1, 1964 to a date specified in such letter which is not more than five days prior to Closing Time, there was any change in the capital stock of the Corporation, any incurrence of a long-term debt of the Corporation (in this connection, the notes payable to banks, that mature not later than June 30, 1964, are not considered to be long-term debt), or any material adverse change in the financial position of the Corporation from that set forth in the latest financial statements included in the Registration Statement and Prospectus, except in all instances as set forth in or contemplated by the Registration Statement (the term "financial position" being used in its conventional accounting sense and thus relating to the financial statements of the business as a whole).
- (c) At Closing Time (i) there shall not have been from the respective dates as of which information is given in the Registration Statement and Prospectus any material adverse change

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in the condition of the Corporation, financial or otherwise, or in the affairs or business prospects of the Corporation; (ii) the Corporation shall not have entered into any material transactions other than those necessary to or in connection with the establishment of its proposed business referred to in the Registration Statement and Prospectus; (iii) the Corporation shall not have any material contingent obligation not set forth or referred to in the Registration Statement and Prospectus; (iv) no action, suit or proceeding, at law or in equity, shall be pending or to the knowledge of the Corporation threatened against the Corporation, and no proceeding shall be pending or to the knowledge of the Corporation threatened against the Corporation before or by any Federal, State or local commission, board or other administrative agency, wherein an unfavorable decision, ruling or finding would materially adversely affect the condition, financial or otherwise, or the affairs or business prospects of the Corporation other than as set forth in the Registration Statement and Prospectus; (v) none of the assets of the Corporation shall be pledged or otherwise mortgaged except as may be set forth in the Registration Statement and Prospectus; (vi) no stop order shall have been issued under the Act and no proceedings therefor shall have been initiated or shall be pending or threatened by the Commission; (vii) all contracts required to be filed as exhibits to the Registration Statement shall have been so filed, and there shall be no material misstatement or omission in the descriptions of contracts contained in the Registration Statement or Prospectus; and (viii) no default shall exist in the due performance and observance of any term, covenant or condition of any contract filed as an exhibit to the Registration Statement. Compliance with the provisions of this subsection shall be evidenced by a certificate of the Chairman and Chief Executive Officer or the President of the Corporation delivered to you at Closing Time.

- (d) At Closing Time, the Corporation shall have received from Authorized Carriers the purchase price for at least 90% of the 5,000,000 shares of Common Stock covered by subscriptions of Authorized Carriers as stated in Section 1.
- (e) At Closing Time counsel for the Underwriters shall have been furnished with such documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the sale of the Common Stock, including the Shares, as herein contemplated and related proceedings, or in order to evidence the accuracy or completeness of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Corporation in connection with the sale of the Common Stock, including the Shares, as herein contemplated shall be satisfactory to the Representatives as to matters of substance and to counsel for the Underwriters as to legal matters.

If any of the conditions specified in this Section shall not have been fulfilled when and as required by this Contract to be fulfilled, this Contract and all obligations of the Underwriters hereunder may be cancelled by the Representatives by notifying the Corporation of such cancellation in writing or by telegram at any time at or prior to Closing Time and any such cancellation shall be without liability of any party to any other party except as otherwise provided in this Contract.

Section 8. Condition of Corporation's Obligations. The obligations of the Corporation hereunder are subject to the condition that at Closing Time it shall have received from Authorized Carriers the purchase price for at least 90% of the 5,000,000 shares of Common Stock covered by subscriptions of Authorized Carriers as stated in Section 1. If this condition shall not have been fulfilled when and as required by this Contract to be fulfilled, this Contract and all obligations of the Corporation hereunder may be cancelled by the Corporation by notifying the Representatives of such cancellation in writing or by telegram at or prior to Closing Time and any such cancellation shall be without liability of any party to any other party except as otherwise provided in this Contract.

SECTION 9. Indemnification.

- (a) The Corporation agrees to indemnify and hold harmless each Underwriter and each person, if any, who controls any Underwriter within the meaning of Section 15 of the Act, as follows:
 - (i) against any and all loss, liability, claim, damage and expense whatsoever arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration

Statement (or any amendment thereto) or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, unless such statement or omission or such alleged statement or omission was made in reliance upon and in conformity with written information furnished to the Corporation by any Underwriter through the Representatives expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto);

- (ii) against any and all loss, liability, claim, damage and expense whatsoever to the extent of the aggregate amount paid in settlement of any litigation, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission or any such alleged untrue statement or omission, if such settlement is effected with the written consent of the Corporation; and
- (iii) against any and all expense whatsoever reasonably incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above.

In no case shall the Corporation be liable under this indemnity agreement with respect to any claim made against any Underwriter or any such controlling person unless the Corporation shall be notified in writing of the nature of the claim within a reasonable time after the assertion thereof, but failure so to notify the Corporation shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. The Corporation shall be entitled to participate at its own expense in the defense, or, if the Corporation so elects, within a reasonable time after receipt of such notice, to assume the defense of any suit brought to enforce any such claim, but if the Corporation so elects to assume the defense, such defense shall be conducted by counsel chosen by it and approved by the Underwriter or Underwriters or controlling person or persons, defendant or defendants in any suit so brought, which approval shall not be unreasonably withheld. In the event that the Corporation elects to assume the defense of any such suit and retain such counsel, the Underwriter or Underwriters or controlling person or persons, defendant or defendants in the suit, shall bear the fees and expenses of any counsel retained by them for services thereafter performed and expenses of such counsel thereafter incurred. The Corporation agrees to notify you within a reasonable time of the assertion of any claim against it, any of its officers or directors or any person who controls the Corporation within the meaning of Section 15 of the Act, in connection with the sale of the Common Stock, including the Shares.

(b) Each Underwriter severally agrees that it will indemnify and hold harmless the Corporation, its directors and each of its officers who signed the Registration Statement and each person, if any, who controls the Corporation within the meaning of Section 15 of the Act to the same extent as the indemnity contained in subsection (a) of this Section, but only with respect to statements or omissions made in the Registration Statement (or any amendment thereto) or any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with written information furnished to the Corporation by such Underwriter through the Representatives expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto). In case any action shall be brought against the Corporation or any person so indemnified based on the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto) and in respect of which indemnity may be sought against any Underwriter, such Underwriter shall have the rights and duties given to the Corporation, and the Corporation and each person so indemnified shall have the rights and duties given to the Underwriters, by the provisions of subsection (a) of this Section.

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Section 10. Representations, Warranties and Agreements to Survive Delivery. All representations, warranties and agreements contained in this Contract and/or contained in certificates of officers of the Corporation submitted pursuant hereto, shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of any Underwriter or any controlling person of any Underwriter or by or on behalf of the Corporation and shall survive delivery of the Shares to the Underwriters.

Section 11. Effective Date of this Contract and Termination Thereof.

(a) This Contract shall become effective (i) at 11:30 A. M., New York City Time, on the first business day following the day the Registration Statement becomes effective, or (ii) at the time of the initial public offering by the Underwriters, after the Registration Statement becomes effective, of any of the Shares, whichever shall first occur. The time of the initial public offering shall mean the time of the release by you, for publication, of the first newspaper advertisement, which is subsequently published, relating to the Shares, or the time at which the Shares are first generally offered by the Underwriters to dealers by letter or telegram, whichever shall first occur. The Representatives or the Corporation may prevent this Contract from becoming effective by giving the notice indicated below in this Section prior to the time this Contract would otherwise have become effective as herein provided, but only in the event that, by reason of revocations of subscriptions of Authorized Carriers before such subscriptions are accepted, the Corporation is unable to accept subscriptions for at least 90% of the 5,000,000 shares of Common Stock covered by subscriptions of Authorized Carriers as set forth in Section 1. The Corporation shall give immediate notice to the Representatives as soon as any such inability has occurred. If the Representatives or the Corporation prevent this Contract from becoming effective pursuant to this subsection, it shall be without liability of any party to any other party, except as otherwise provided in this Contract.

(b) The Representatives shall have the right to terminate this Contract by giving the notice indicated below in this Section at any time at or prior to Closing Time (i) if there shall have been, since the respective dates as of which information is given in the Registration Statement and Prospectus, any material adverse change in the condition of the Corporation, financial or otherwise, or in the affairs or business prospects of the Corporation, or (ii) if a war involving the United States or other national calamity shall have occurred, or (iii) if trading on the New York Stock Exchange shall be suspended or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities on the New York Stock Exchange shall have been required by that Exchange or by order of the Commission or any other governmental authority having jurisdiction, or (iv) if a banking moratorium shall have been declared by either Federal or New York authorities. If the Representatives shall terminate this Contract, such termination shall be without liability of any party to any other party except as otherwise provided in this Contract.

If the Representatives elect to prevent this Contract from becoming effective or to terminate this Contract as provided in this Section, the Corporation and each other Underwriter shall be notified promptly by the Representatives, by telephone or telegram, confirmed by letter. If the Corporation elects to prevent this Contract from becoming effective as provided in this Section, the Representatives shall be notified promptly by the Corporation by telephone or telegram, confirmed by letter.

Section 12. Substitution of Underwriters or Increase in Underwriters' Commitments. If one or more of the Underwriters shall fail at Closing Time to purchase the Shares which it or they have agreed to purchase hereunder (the "Unpurchased Shares"), then the Representatives shall have the right within 24 hours after Closing Time to procure one or more of the non-defaulting Underwriters, or any others, to purchase Unpurchased Shares in such amounts as may be agreed upon and upon the terms herein set forth; if, however, during such 24 hours the Representatives shall not have completed such arrangements for the purchase of all Unpurchased Shares, then the Corporation shall have the right, by written notice to the Representatives within the next 24 hours, either to terminate this Contract or to require the non-defaulting Underwriters to purchase the Shares which they have severally agreed to purchase hereunder and, in addition, to purchase Unpurchased Shares in proportion to their respective commitments hereunder up to a number thereof equal to 10% of the respective number of Shares which such non-defaulting Underwriters otherwise agreed to purchase hereunder.

The termination of this Contract by the Corporation pursuant to this Section shall be without liability on the part of the Corporation or any of said non-defaulting Underwriters. Nothing herein shall relieve any Underwriter so defaulting from liability, if any, for such default.

In the event of a default by any one or more Underwriters as set forth in this Section, Closing Time shall be postponed for 24 hours, and either the Representatives or the Corporation shall have the right to postpone Closing Time for an additional period of not exceeding 7 days, in order that any required changes in the Registration Statement and Prospectus or in any other documents or arrangements may be effected.

Section 13. *Modification and Waiver*. The Representatives and the Corporation expressly reserve the right, in their sole discretion and when mutually agreed upon, to make any modification herein or to waive any of the provisions hereof, and any such action when taken in accordance herewith shall be binding upon the other Underwriters.

Section 14. Notices. Except as herein otherwise provided, all communications hereunder shall be in writing and, if sent to the Underwriters, shall be mailed, delivered or telegraphed and confirmed to the Representatives c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., attention of Mr. J. H. Sedlmayr, or, if sent to the Corporation, shall be mailed, delivered or telegraphed and confirmed to the Corporation, at 3029 Klingle Road, N.W., Washington 8, D. C., attention of the Chairman and Chief Executive Officer. All communications hereunder from the Representatives shall be signed by Merrill Lynch, Pierce, Fenner & Smith Incorporated, acting on behalf of the Representatives.

Section 15. Parties. This Contract shall inure to the benefit of and be binding upon the Underwriters and the Corporation and their respective successors. Nothing expressed or mentioned in this Contract is intended or shall be construed to give any person, firm or corporation, other than the parties hereto and their respective successors and the controlling persons, directors and officers referred to in Section 9, any legal or equitable right, remedy or claim under or in respect of this Contract or any provision herein contained; this Contract and all conditions and provisions hereof being intended to be and being for the sole and exclusive benefit of the parties hereto and their respective successors and said controlling persons, directors and officers and for the benefit of no other person, firm or corporation. No purchaser of any Shares from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

This Contract shall be construed in accordance with the law of the State of New York.

If the foregoing is in accordance with your understanding of our agreement, kindly sign and return to us a counterpart hereof, whereupon this instrument along with all counterparts will become a binding contract between the Corporation and the Underwriters in accordance with its terms.

Very	truly yours,
	COMMUNICATIONS SATELLITE CORPORATION
	By(Chairman and Chief Executive Officer)
Confirmed and Accepted, as of the date first above written.	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
By(Vice President)	For dismerives and as the Representatives of the other. Underwriters named in Schedule A amexed here;o.

SCHEDULE A

	SCHEDULE A	
		Number of Shares to b
Name of Underwriter	Address of Underwriter	Purchased
Merrill Lynch, Pierce, Fenner & Smith		
Incorporated	70 Pine Street, New York 5, N. Y.	100,000
Blyth & Co., Inc.	14 Wall Street, New York 5, N. Y.	100,000
The First Boston Corporation	20 Exchange Place, New York, N. Y. 10005	100,000
Kidder, Peabody & Co. Incorporated	20 Exchange Place, New York 5, N. Y.	100,000
Kuhn, Loeb & Co. Incorporated	30 Wall Street, New York 5, N. Y.	100,000
Lazard Frères & Co.	44 Wall Street, New York 5, N. Y.	100,000
	One William Street, New York 4, N. Y.	100,000
Lehman Brothers	42 Wall Street, New York 5, N. Y.	100,000
Carl M. Loeb, Rhoades & Co.	25 Broad Street, New York 4, N. Y.	100,000
Paine, Webber, Jackson & Curtis	20 Broad Street, New York 5, N. Y.	100,000
White, Weld & Co. Incorporated	45 Montgomery Street,	
Dean Witter & Co.	San Francisco 6, California	100,000
Dill II : Compiles & Co	One Chase Manhattan Plaza,	all high
Eastman Dillon, Union Securities & Co.	New York 5, N. Y.	50,000
C1	45 Wall Street, New York 5, N. Y.	50,000
Glore, Forgan & Co.	60 Broad Street, New York 4, N. Y.	50,000
Harriman Ripley & Co., Incorporated	1 Chase Manhattan Plaza,	910 36 369
Hornblower & Weeks	New York 5, N. Y.	50,000
C. Incomposated	20 Broad Street, New York 5, N. Y.	50,000
Smith, Barney & Co. Incorporated	90 Broad Street, New York 4, N. Y.	50,000
Stone & Webster Securities Corporation	36 Wall Street, New York 5, N. Y.	29,000
Bache & Co.	One Wall Street, New York 5, N. Y.	29,000
Bear, Stearns & Co.	120 South La Salle Street,	about we
A. G. Becker & Co. Incorporated	Chicago 3, Illinois	29,000
au 1 D 1 0 C I amandad	61 Wall Street, New York 5, N. Y.	29,00
Clark, Dodge & Co. Incorporated	14 Wall Street, New York 5, N. Y.	29,00
Dominick & Dominick, Incorporated	1500 Walnut Street,	arlanging
Drexel & Co.	Philadelphia 1, Pennsylvania	29,00
	44 Wall Street, New York 5, N. Y.	29,00
Hallgarten & Co.	25 Broad Street, New York, N. Y. 10004	29,00
Hayden, Stone Incorporated	8 Hanover Street, New York 4, N. Y.	29,00
Hemphill, Noyes & Co.		
E. F. Hutton & Company Inc.	One Chase Manhattan Plaza, New York 5, N. Y.	29,00
California 94104 - 12 500 2	14 Wall Street, New York, N. Y. 10005	29,00
W. E. Hutton & Co.	20 Broad Street, New York 5, N. Y.	29,00
Lee Higginson Corporation	60 Broad Street, New York, N. Y. 10004	29,00
F. S. Moseley & Co.		29,00
Reynolds & Co.	120 Broadway, New York 5, N. Y.	29,00
Shearson, Hammill & Co.	14 Wall Street, New York 5, N. Y.	29,00
Wertheim & Co.	1 Chase Manhattan Plaza,	29,00
	New York 5, N. Y.	20,00
Alex. Brown & Sons	135 East Baltimore Street, Baltimore 2, Maryland	25,50
Toomet Co. Spelveril	Two Wall Street, New York 5, N. Y.	25,50
Equitable Securities Corporation	2 Broadway, New York 4, N. Y.	25,50
Goodbody & Co.	Couthorn Dida Washington 5 D. C	25,50
Johnston, Lemon & Co.	Southern Bldg., Washington 5, D. C.	25,50
Ladenburg, Thalmann & Co.	25 Broad Street, New York 4, N. Y.	25,50
R. W. Pressprich & Co.	80 Pine Street, New York 5, N. Y.	
L. F. Rothschild & Co.	120 Broadway, New York 5, N. Y.	25,50
Salomon Brothers & Hutzler	Sixty Wall Street, New York, N. Y. 1000	25,50

Underwriters named in Schedule A annexed hereto.

| 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 36 | 37 | 8 | 38 | 9 | 39 | 40 | 41 | 11 | 42 | 12 | 13 | 13 | 14 | 14 | 15 | 16

Shields & Company Incorporated F. S. Smithers & Co. Spencer Trask & Co. Tucker, Anthony & R. L. Day G. H. Walker & Co. Incorporated Wood, Struthers & Co., Inc. Allen & Company American Securities Corporation Bacon, Whipple & Co. Robert W. Baird & Co., Incorporated Blunt Ellis & Simmons J. C. Bradford & Co. J. M. Dain & Co., Inc. Dick & Merle-Smith R. S. Dickson & Company, Incorporated Esterstadt & Co. W. C. Langley & Co. W. C. Langley & Co. McDonald & Company New York Son, Y. Spencer Trask & Co. 44 Wall Street, New York 5, N. Y. 25,5 60 Broad Street, New York 5, N. Y. 25,5 61 Broadway, New York 5, N. Y. 25,5 62 Broad Street, New York 4, N. Y. 23,5 63 Broad Street, New York 4, N. Y. 23,5 62 Broad Street, New York 5, N. Y. 23,5 62 Broad Street, New York 5, N. Y. 23,5 62 Broad Street, New York 5, N. Y. 23,5 63 Broad Street, New York 5, N. Y. 23,5 64 Wall Street, New York 5, N. Y. 25,5 65 Broadway, New York 5, N. Y. 26,5 66 Broad Street, New York 5, N. Y. 27,5 67 Broadway, New York 5, N. Y. 28,5 60 Broad Street, New York 5, N. Y. 29,5 60 Broad Street, New York 5, N. Y. 21,5 60 Broad Street, New York 5, N. Y. 21,5 60 Broad Street, New York 5, N. Y. 23,5 61 Broad Street, New York 5, N. Y. 23,5 62 Broad Street, New York 5, N. Y. 23,5 62 Broad Street, New York 5, N. Y. 23,5 62 Broad Street, New York 5, N. Y. 23,5 62 Broad Street, New York 5, N. Y. 23,5 62 Broad Street, New York 5, N. Y. 23,5 63 Broad Street, New York 5, N. Y. 23,5 64 Wall Street, New York 5, N. Y. 23,5 65 Broadway, New York 6, N. Y. 23,5 60 Broad Street, New York 5, N. Y. 23,5 61 Broadway, New York 6, N. Y. 61 Broadway, New York 6, N. Y. 62 Broadway, New York 6, N. Y. 63 Broadway, New York 6, N. Y. 64 Broadway, New York 6, N. Y. 65 Broadway, New York 6, N. Y. 67 Broadway, New York 6, N. Y. 68 Broadway, New York 6, N. Y. 69 Broadway, New York 6, N. Y. 69 Broadway, New York 6, N. Y. 60 Broad Street, New York 5, N. Y. 60 Broad Street, New York 5, N. Y. 61 Broadway, New York 6, N. Y. 61 Broadway, New York 6, N. Y. 61 Broadway, New York 6, N. Y. 62 Broadway	ber of es to be
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F. Eberstadt & Co. Estabrook & Co. W. C. Langley & Co. McDonald & Company New York Securities Co. The Ohio Company Piper, Jaffray & Hopwood S. Langley & Hopwood 65 Broadway, New York 6, N. Y. 23,50 15 State Street, Boston 9, Massachusetts 23,50 Union Commerce Bldg., Cleveland 14, Ohio 23,50 52 Wall Street, New York 5, N. Y. 23,50 51 North High Street, Columbus 15, Ohio 115 South Seventh Street, Minneapolis 2, Minnesota 23,50	500
Estabrook & Co. W. C. Langley & Co. McDonald & Company New York Securities Co. The Ohio Company Piper, Jaffray & Hopwood S. Langley & Hopwood S. Langley & Co. 15 State Street, Boston 9, Massachusetts 23,50 Union Commerce Bldg., Cleveland 14, Ohio 23,50 State Street, Boston 9, Massachusetts 23,50 Union Commerce Bldg., Cleveland 14, Ohio 23,50 State Street, Boston 9, Massachusetts 23,50 State Street, Boston 9,	500
W. C. Langley & Co. McDonald & Company New York Securities Co. The Ohio Company Piper, Jaffray & Hopwood McDonald & Company New York Securities Co. The Ohio Company Piper, Jaffray & Hopwood Solve Jaffray & Hopwood McDonald & Company Union Commerce Bldg., Cleveland 14, Ohio 23,50 52 Wall Street, New York 5, N. Y. 23,50 51 North High Street, Columbus 15, Ohio 115 South Seventh Street, Minneapolis 2, Minnesota 23,50	500
McDonald & Company New York Securities Co. The Ohio Company Piper, Jaffray & Hopwood Solve Jaffray & Hopwood McDonald & Company Union Commerce Bldg., Cleveland 14, Ohio 23,50 23,50 23,50 23,50 23,50 23,50 23,50 23,50 23,50 23,50 23,50	500
New York Securities Co. The Ohio Company Piper, Jaffray & Hopwood Standard Company Piper, Jaffray & Hopwood Standard Company Piper, Jaffray & Hopwood 115 South Seventh Street, Minneapolis 2, Minnesota 23,50 23,50 23,50	500
The Ohio Company Piper, Jaffray & Hopwood S. L. L. L. 2. G. The Ohio Company 51 North High Street, Columbus 15, Ohio 115 South Seventh Street, Minneapolis 2, Minnesota 23,50	500
Piper, Jaffray & Hopwood 115 South Seventh Street, Minneapolis 2, Minnesota 23,50	500
Minneapolis 2, Minnesota 23.50	500
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Son Francis A C 199	
William R. Staats & Co. Incorporated 640 South Spring Street,	000
Los Appeller 14 C 1's	.00
Ball, Burge & Kraus Los Angeles 14, California 23,500	000
(leveland 14 Ohio	000
J. Barth & Co. 404 Montgomery Street,	00
San Francisco, California 94104	000
Burnham and Company 60 Broad Street New York 4 N V	
64 Wall Street, New York 5 N V 19 Too	
Courts & Co. 11 Marietta Street N W Atlanta 3 Garria 19 500	
1000 Locust Street St Louis 1 Miscouri 10 For	
2 Wall Street, New York 5 N V 19 500	
rolger, Nolan, Fleming & Co. Incorporated 725 15th Street N. W. Washington 5 D. C. 19 500	
2100 East Ohio Bldg Claveland 14 Ohio 10 Food	
South & Redwood Streets,	
Baltimore 3, Maryland 18.500	00
Union Commerce Bldg., Cleveland 14, Ohio 18.500	
72 Wall Street, New York 5, N. Y. 18.500	
25 Broad Street, New York 4, N. Y. 18.500	
Trying Lundborg & Co. 310 Sansome Street,	
McDonnell & Co. Incorporated San Francisco 4, California 18,500 120 Broadway New York 5 N V	00
120 Broadway, New York 5, N. Y. 18,500)0

Name of Underwriter	St	Tumber of nares to be urchased
Manual Tumbon & Co. Inc.	1612 Union Commerce Bldg.,	
Merrill, Turben & Co., Inc.	Cleveland 14, Ohio	18,500
Model, Roland & Co.	120 Broadway, New York 5, N. Y.	18,500
Moore, Leonard & Lynch	Union Trust Bldg.,	
Wioore, Econard & Bynon	Pittsburgh 19, Pennsylvania	18,500
Newhard, Cook & Co.	400 Olive Street, St. Louis 2, Missouri	18,500
Reinholdt & Gardner	400 Locust Street, St. Louis 2, Missouri	18,500
Riter & Co.	40 Wall Street, New York 5, N. Y.	18,500
The Robinson-Humphrey Company, Inc.	2000 Rhodes-Haverty Bldg.,	10 500
ghiel les wignoc are to state	Atlanta, Georgia 30303	18,500
Shuman, Agnew & Co.	155 Sansome Street, San Francisco 4, California	18,500
Singer, Deane & Scribner	Union Trust Bldg.,	10 500
Singer, Deane & Southern	Pittsburgh 19, Pennsylvania	18,500
Stroud & Company, Incorporated	123 South Broad Street,	18,500
Dogasta and American State of the State of t	Philadelphia 9, Pennsylvania	
Watling, Lerchen & Co.	Ford Bldg., Detroit 26, Michigan	18,500
Arnhold and S. Bleichroeder, Inc.	30 Broad Street, New York 4, N. Y.	12,500 12,500
Auchincloss, Parker & Redpath	Two Broadway, New York 4, N. Y.	12,500
Baker, Watts & Co.	Calvert & Redwood Streets,	12,500
A STATE OF THE PARTY OF THE PAR	Baltimore 3, Maryland	12,000
Bateman, Eichler & Bingham Incorporated	453 South Spring Street, Los Angeles 13, California	12,500
	828 17th Street, Denver 2, Colorado	12,500
Boettcher and Company	660—17th Street, Denver 2, Colorado	12,500
Bosworth, Sullivan & Company, Inc.	1500 Walnut Street,	
Butcher & Sherrerd	Philadelphia 2, Pennsylvania	12,500
Chapman, Howe & Co.	208 South La Salle Street,	
Chapman, 110wc & Co.	Chicago 4, Illinois	12,500
Julien Collins & Company	105 South La Salle Street,	12 500
Julion Commo de Campa	Chicago 3, Illinois	12,500
Crowell, Weedon & Co.	629 South Spring Street,	12,500
	Los Angeles 14, California	12,500
Eppler, Guerin & Turner, Inc.	1600 Fidelity Union Tower, Dallas 1, Texas	12,500
Fahnestock & Co.	65 Broadway, New York 6, N. Y.	12,500
First California Company Incorporated	300 Montgomery Street, San Francisco, California 94104	12,500
Separate services	Mercantile Bank Bldg., Dallas 1, Texas	12,500
First Southwest Company	52 Wall Street, New York 5, N. Y.	12,500
Halle & Stieglitz	231 South La Salle Street,	oi grewe
The Illinois Company Incorporated	Chicago, Illinois 60604	12,500
TI I I and Space Smith Corporation	101 East Bay Street, Savannah, Georgia	12,500
The Johnson, Lane, Space, Smith Corporation	Wilmington Trust Bldg.,	
Laird & Company, Corporation	Wilmington 99, Delaware	12,500
Laird, Bissell & Meeds	120 Broadway, New York 5, N. Y.	12,500
	22 Light Street, Baltimore 3, Maryland	12,500
Legg & Co. Lester, Ryons & Co.	623 South Hope Street, Los Angeles 17, California	12,500
I O Co Incompand	225 East Mason Street,	
Loewi & Co. Incorporated	Milwaukee 2, Wisconsin	12,500
union Commerce Helg.	First National Bank Bldg.,	10 70
A E Magton & Co		
A. E. Masten & Co.	Pittsburgh 22, Pennsylvania 135 South La Salle Street, Chicago 3, Illinoi	12,500 s 12,500

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Rauscher, Pierce & Co., Inc. Rauscher, Pierce & Co., Inc. Wm. C. Roney & Co. Rotan, Mosle & Co. Stein Bros. & Boyce, Inc. Stifel, Nicolaus & Company, Incorporated Stone & Youngberg Sutro & Co. Underwood, Neuhaus & Co. Incorporated Weeden & Co. Incorporated Weeden & Co. Incorporated Winslow, Cohu & Stetson Incorporated Abbott, Proctor & Paine Anderson & Strudwick Brush, Slocumb & Co. Inc. Carolina Securities Corporation Richard W. Clarke Corporation Romon, Dann & Co. Cooley & Company Dewar, Robertson & Pancoast Dewar, Robertson & Pancoast Dittmar & Company, Inc. Dreyfus & Co. Eddleman, Pollok & Fosdick Inc. Panilbner, Pawkins & Sullivan 1000 Second Avenue, Seattle, Washington 98104 12,200 Reatligh Dallas In Bidg, Dallas I, Texas Dallas II, Texas Dallas I, Texas Dallas II, Tex	Name of Underwriter	Address of Underwriter	Number of Shares to b Purchased
Antenium, Jones & Templeton, Incorporated Pacific Northwest Company Rauscher, Pierce & Co., Inc. Wm. C. Roney & Co. Rotan, Mosle & Co. Stein Bros. & Boyce, Inc. Stifel, Nicolaus & Company, Incorporated Stone & Youngberg Stince & Youngberg Sutro & Co. Underwood, Neuhaus & Co. Incorporated Weeden & Co. Incorporated Abbott, Proctor & Paine Anderson & Strudwick Brush, Slocumb & Co. Inc. Carolina Securities Corporation Richard W. Clarke Corporation Common, Dann & Co. Cooley & Company Dallas Union Securities Co., Inc. Davis, Skaggs & Co. DeHaven & Townsend, Crouter & Bodine Dewar, Robertson & Pancoast Dittmar & Company, Inc. Dewar, Robertson & Pancoast Dittmar & Company, Inc. Dewar, Robertson & Pancoast Dittmar & Company, Inc. Elworthy & Co., Incorporated Milam Bldg,, San Antonio 5, Texas Sum Francisco 4, California Street, San Francisco 5, California Street, San Francisco 4, California Street, San Francisco 6, California Suturna ce Bldg., Sundandary, New York 4, N. Y. Sundandary, New York 5, N. Y. Sundandary,	The Milwaukee Company	207 East Michigan Street,	o'r Andan
Rauscher, Pierce & Co., Inc. Wm. C. Roney & Co. Rotan, Mosle & Co. Stein Bros. & Boyce, Inc. Stein Bros. & Bouthwest Bldg., Ilouston Clu Bldg., Houston Clu Bldg., Flouston Clu	Mitchum, Jones & Templeton, Incorporated	510 South Spring Street.	12,500
Rausener, Pierce & Co., Inc. Wm. C. Roney & Co. Rotan, Mosle & Co. Stein Bros. & Boyce, Inc. Stern Brothers & Co. Stifel, Nicolaus & Company, Incorporated Stone & Youngberg Sutro & Co. Underwood, Neuhaus & Co. Incorporated Weeden & Co. Incorporated Weeden & Co. Incorporated Winslow, Cohu & Stetson Incorporated Abbott, Proctor & Paine Anderson & Strudwick Brush, Slocumb & Co. Inc. Carolina Securities Corporation Richard W. Clarke Corporation Richard W. Clarke Corporation Common, Dann & Co. Caroly & Company Dallas I Union Securities Co., Inc. Dewar, Robertson & Pancoast Dittmar & Company, Inc. Dewar, Robertson & Pancoast Dittmar & Company, Inc. Dewar, Robertson & Pancoast Dittmar & Company, Inc. Emanuel, Deetjen & Co. Fanilkner Dawkins & Sullivan 1200 Mercantile Dallas Bldg, Dallas I Pexas 12,500 12	Pacific Northwest Company	1000 Second Avenue,	12,500
Wm. C. Roney & Co. Rotan, Mosle & Co. Rotan, Mosle & Co. Stein Bros. & Boyce, Inc. Stern Brothers & Co. Stifel, Nicolaus & Company, Incorporated Stone & Youngberg Sutro & Co. Underwood, Neuhaus & Co. Incorporated Wesden & Co. Incorporated Winslow, Cohu & Stetson Incorporated Winslow, Cohu & Stetson Incorporated Abbott, Proctor & Paine Anderson & Strudwick Brush, Slocumb & Co. Inc. Carolina Securities Corporation Richard W. Clarke Corporation Richard W. Clarke Corporation Common, Dann & Co. Cooley & Company Dallas Union Securities Co., Inc. Davis, Skaggs & Co. DeHaven & Townsend, Crouter & Bodine Dewar, Robertson & Pancoast Dittmar & Company, Inc. Dreyfus & Co. Eddleman, Pollok & Fosdick Inc. A. G. Edwards & Sons Elworthy & Co., Incorporated Emanuel, Deetjen & Co. Fanilyner Dawkins & Sullivan Wishow, Cohu & Stetson Incorporated Anderson & Strudwick Strudwick Brush, Slocumb & Co. Inc. Carolina Securities Corporation Richard W. Clarke Corporation Rich	Rauscher, Pierce & Co., Inc.	1200 Mercantile Dallas Bldg	12,500
Rotan, Mosle & Co. Stein Bros. & Boyce, Inc. Stern Brothers & Co. Stifel, Nicolaus & Company, Incorporated Stone & Youngberg Sutro & Co. Underwood, Neuhaus & Co. Incorporated Weeden & Co. Incorporated Winslow, Cohu & Stetson Incorporated Abbott, Proctor & Paine Anderson & Strudwick Brush, Slocumb & Co. Inc. Carolina Securities Corporation Richard W. Clarke Co. Dewar, Robertson & Pancoast Dittinus & Company Richard W. V. V. V. V. V. V. V. V. V. V	Wm C Ropey & Co		12,500
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Stein Bros. & Boyce, Inc. Stern Brothers & Co. Stifiel, Nicolaus & Company, Incorporated Stone & Youngberg Sutro & Co. Underwood, Neuhaus & Co. Incorporated Weeden & Co. Incorporated Weeden & Co. Incorporated Winslow, Cohu & Stetson Incorporated Abbott, Proctor & Paine Anderson & Strudwick Brush, Slocumb & Co. Inc. Carolina Securities Corporation Richard W. Clarke Corporation Richard W. Clarke Corporation Common, Dann & Co. Cooley & Company Dallas Union Securities Co., Inc. Davis, Skaggs & Co. DeHaven & Townsend, Crouter & Bodine Dewar, Robertson & Pancoast Dittmar & Company, Inc. Dreyfus & Co. Dreyfus & Co. Eddleman, Pollok & Fosdick Inc. Elemanuel, Dectjen & Co. Fabicy, Clarke & Co. Emanuel, Dectjen & Co. Failigner Dawkins & Sullivan One Charles Center, Baltimore 1, Maryland 1009-15 Baltimore Avenue, Kansas City 5, Missouri 314 North Broadway, 12,500 144, North Broadway, 12,500 145, Maissouri 114, North Broadway, 12,500 144, North Broadway, 12,500 145, And Souri 145, North Broadway, 12,500 1	itotan, wosie & Co.	1510 Bank of the Southwest Bldg.,	
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Stifel, Nicolaus & Company, Incorporated Stone & Youngberg Sutro & Co. Underwood, Neuhaus & Co. Incorporated Weeden & Co. Incorporated Weeden & Co. Incorporated Webster & Co. Underwood, Neuhaus & Co. Incorporated Weeden & Co. Incorporated Webster & Co. Incorporated Workloop & Co. Incorporated Abbott, Proctor & Paine Anderson & Strudwick Brush, Slocumb & Co. Inc. Carolina Securities Corporation Richard W. Clarke Corporation Richard W. Clarke Corporation Common, Dann & Co. Cooley & Company Dallas Union Securities Co., Inc. Delyis, Skaggs & Co. DeHaven & Townsend, Crouter & Bodine Dewar, Robertson & Pancoast Dittmar & Company, Inc. Dreyfus & Co. Eddleman, Pollok & Fosdick Inc. Elworthy & Co., Incorporated Emanuel, Deetjen & Co. Faley, Clark & Co. Falikner Dawkins & Sullivan Stutro & Co. Indendary, St. Louis 1, Missouri 111 Sutter Street, San Francisco 4, California 12,500 102,501 1314 Russ Bldg., San Francisco 4, California 12,500 12,500 12,500 1314 Russ Bldg., San Francisco 4, California 12,500 12,500 1314 Russ Bldg., San Francisco 4, California 12,500 12,500 1314 Russ Bldg., San Francisco 4, California 12,500 12,500 1314 Russ Bldg., San Francisco 4, California 12,500 12,50		One Charles Center, Baltimore 1, Maryland	12,500
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Shares to be	Shar	es to be
Name of Underwriter		chased
Ferris & Company	611 Fifteenth Street, N. W.	8,000
Cassama & Sono		8,000
Gregory & Sons Hallowell, Sulzberger, Jenks, Kirkland & Co.	Philadelphia National Bank Bldg.,	
Tranowen, Suizberger, Jenns, Trimana & So.	Philadelphia 7, Pennsylvania	8,000
J. J. B. Hilliard & Son	419 West Jefferson Street,	0.000
and the second s		8,000
Howard, Weil, Labouisse, Friedrichs and	211 Carondelet Street, New Orleans, Louisiana 70130	8,000
Company	Central-Penn National Bank Bldg.,	0,000
Janney, Battles & E. W. Clark, Inc.	1401 Walnut Street,	
	Philadelphia 2, Pennsylvania	8,000
Edward D. Jones & Co.	101 North Fourth Street, St. Louis 2, Missouri	8,000
Jones, Kreeger & Co.		8,000
Joseph, Mellen & Miller, Inc.		8,000
Mackall & Coe	, , , , , , , , , , , , , , , , , , , ,	8,000
Manley, Bennett, McDonald & Co.	1100 Buhl Bldg., Detroit, Michigan 48226	8,000
Mead, Miller & Co.	Charles and Chase Streets, Baltimore 1, Maryland	8,000
Asia 1 11 II a line of Co. Incorporated	231 South La Salle Street, Chicago 4, Illinois	8,000
Mitchell, Hutchins & Co., Incorporated	Bank of the Southwest Bldg.,	
Moroney, Beissner & Co., Inc.	Houston 2, Texas	8,000
Mullaney, Wells & Company	135 South La Salle Street, Chicago 3, Illinois	8,000
Newburger & Co.	1401 Walnut Street,	0.000
to the second se	Philadelphia 2, Pennsylvania	8,000
Putnam & Co.	6 Central Row, Hartford, Connecticut 06103	8,000
Saunders, Stiver & Co.	One Terminal Tower, Cleveland 13, Ohio	8,000
Chas. W. Scranton & Co.	209 Church Street, New Haven 7, Connecticut	8,000
I. M. Simon & Co.	315 North Fourth Street, St. Louis 2, Missouri	8,000
Chara Erest Meyer & Fox	Union Bank Bldg.,	A COOK
Stern, Frank, Meyer & Fox	Los Angeles, California 90014	8,000
J. S. Strauss & Co.	155 Montgomery Street,	0.000
	San Francisco 4, California	8,000
C. E. Unterberg, Towbin Co.	61 Broadway, New York, N. Y. 10006	8,000
Van Alstyne, Noel & Co.	40 Wall Street, New York 5, N. Y.	8,000
Wagenseller & Durst, Inc.	626 South Spring Street, Los Angeles 14, California	8,000
A 1 0 D-1-	120 Broadway, New York, N. Y. 10005	6,500
Adams & Peck	1424 Walnut Street,	
Bioren & Co.	Philadelphia 2, Pennsylvania	6,500
Boenning & Co.	The Alison Bldg., Rittenhouse Square,	C 500
	Philadelphia 3, Pennsylvania	6,500
Burgess & Leith	53 State Street, Boston 9, Massachusetts	6,500 6,500
Chace, Whiteside & Winslow, Inc.	24 Federal Street, Boston 10, Massachusetts	0,500
Chaplin, McGuiness & Co.	Peoples Bank Bldg., Pittsburgh 22, Pennsylvania	6,500
Cl. Counities Corporation	147 Milk Street, Boston 9, Massachusetts	6,500
Clayton Securities Corporation Cunningham, Schmertz & Co., Inc.	First National Bank Bldg.,	
Cullilligham, Schillertz & Co., The.	Pittsburgh 22, Pennsylvania	6,500
Davenport & Co.	1113 East Main Street, Richmond 19, Virginia	
Shelby Cullom Davis & Co.	116 John Street, New York 38, N.Y.	6,500
Elkins, Morris, Stokes & Co.	428 Land Title Bldg.,	6,500
	Philadelphia 10, Pennsylvania	0,500

Hickey & Co. Hill Richards & Co., Incorporated Hulme, Applegate & Humphrey, Inc. Indianapolis Bond and Share Corporation Ingalls & Snyder Kalman & Company, Inc. Kay, Richards & Company Mason-Hagan, Inc. Middendorf, Colgate & Co. Newburger, Loeb & Co. Pierce, Wulbern, Murphey, Inc. Wm. E. Pollock & Co., Inc. Russ & Company, Incorporated Scherck, Richter Company, Inc. Schmidt, Roberts & Parke Scott & Stringfellow Silberberg & Co. Stix & Co. Thomas & Company Townsend, Dabney & Tyson H. C. Wainwright & Co. Arthur Wiesenberger & Co. Almstedt Brothers Arthurs, Lestrange & Co. Hill Richards & Co., Inc, Hill Richards & Co. Hill Richards & Co., Inc, Hill Richards & Co. Hill Richards & Co., Inc, Human And Share Corporation Silberberg & Co. Stringfellow Silberberg & Co. Almstedt Brothers Arthurs, Lestrange & Co. Hill Richards & Co., Inc, Human Agency Inc. Silberberg & Co. Almstedt Brothers Arthurs, Lestrange & Co. Hill Richards & Co., Inc, Human Agency Inc. Silberberg & Co. Almstedt Brothers Arthurs, Lestrange & Co. Almstedt Brothers Arthurs Lestrange & Co. Hill Richards & Co., Inc, Indiana 120 Broadway, New York 5, N. Y. As Balosteret, Chicago 3, Illinois 252 Suth La Salle Street, Claificanpal 586 Union Trust Bldg., Pittsburgh 19, Pennsylvania 100 Broadway, New York 5, N. Y. Ala Endicott Bldg., St. Paul 1, Minnesota Union Trust Bldg., Pittsburgh 19, Pennsylvania 1017 East Main Street, Rew York 4, N. Y. Alamo National Bldg., San Antonio, Texas 408 Olive Street, St. Louis, Missouri 63102 Class of the Wall Street, New York 5, N. Y. Alamo National Bldg., San Antonio, Texas 408 Olive Street, St. Louis, Missouri 63102 Class of the Wall Street, New York 5, N. Y. Alamo National Bldg., Pennsylvania 60 Ostate Street, Sc. Louis, Missouri 63102 Class of the Wall Street, Philadelphia 2, Pennsylvania 61 Post Office Square, New York 5, N. Y. Alamo National Bldg., San Antonio, Texas 408 Olive Street, St. Louis, Missouri 63102 Class of the Wall Street, New York 5, N. Y. Alamo National Bldg., Pittsburgh 19, Pennsylvania 61 Post Offic	6,500 6,500
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Vousse Cit F Mr.	
Jack M. Bass & Company Kansas City 5, Missouri 315 Fourth Avenue North	,000
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San Francisco 4, California 5, Blewer, Glynn & Co. 1536 Railway Exchange Bldg	,000
Ct I will 1 M.	000
George D. B. Bombright & Co. 100 December 111 D. 1	,000
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Dishmand 10 VV.	000

Name of Underwriter	Sha	imber of ares to be irchased
P. W. Brooks & Co. Incorporated	120 Broadway, New York, N. Y. 10005 First National Bank Bldg.,	5,000
Caldwell Phillips, Inc.	St. Paul 1, Minnesota	5,000
C. F. Cassell & Co., Inc.	114 Third Street, N.E., Charlottesville, Virginia	5,000
Childs Securities Corporation	One Liberty Street, New York 5, N. Y.	5,000 5,000
City Securities Corporation	Circle Tower, Indianapolis 4, Indiana Life & Casualty Tower,	3,000
Clark, Landstreet & Kirkpatrick, Inc.	Nashville 3, Tennessee	5,000
Collin, Norton & Co.	Gardner Bldg., 506 Madison Avenue, Toledo 4, Ohio	5,000
C. C. Collings and Company, Inc.	Fidelity-Philadelphia Trust Bldg., Philadelphia 9, Pennsylvania	5,000
Craigie & Co., Inc.	616 E. Main Street, Richmond, Virginia 23215	5,000
Curtiss, House & Co.	Union Commerce Bldg., Cleveland 14, Ohio	5,000
Doolittle & Co.	Liberty Bank Bldg., Buffalo 2, N. Y.	5,000
Field, Richards & Co.	1107 Central Trust Bank Tower, Cincinnati, Ohio 45202	5,000
First Nebraska Securities Corporation	1001 O Street, Lincoln 1, Nebraska	5,000
First Southeastern Company	103 Twelfth Street, Columbus, Georgia	5,000
Freehling & Co.	120 South La Salle Street,	# 000
hand nathrold	Chicago 3, Illinois	5,000
Fridley & Frederking	617 Texas National Bank Bldg., Houston 2, Texas	5,000
Funk, Hobbs & Hart, Inc.	1012 National Bank of Commerce Bldg., San Antonio 5, Texas	5,000
Alester G. Furman Co., Inc.	South Carolina National Bank Bldg., Greenville, South Carolina	5,000
Fusz-Schmelzle & Co., Inc.	522 Olive Street, St. Louis 1, Missouri	5,000
Greene & Ladd	Third National Bldg., Dayton 2, Ohio	5,000
Hamershlag, Borg & Co.	25 Broad Street, New York 4, N. Y.	5,000
Hanrahan & Co., Inc.	332 Main Street, Worcester 8, Massachusetts	5,000
Harrison & Co.	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000
Hess, Grant & Remington Incorporated	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000
J. H. Hilsman & Co., Inc.	Citizens & Southern Bldg., Atlanta 1, Georgia	5,000
Interstate Securities Corporation	Johnston Bldg., Charlotte 2, North Carolina	5,000
Investment Corporation of Norfolk	215 East Plume Street, Norfolk 10, Virginia	5,000
Kenower, MacArthur & Co.	Ford Bldg., Detroit 26, Michigan	5,000
The Kentucky Company	320 South Fifth Street, Louisville 2, Kentucky	5,000
Kirkpatrick-Pettis Company	540 Omaha National Bank Bldg., Omaha, Nebraska	5,000
Kohlmeyer & Co.	217 Carondelet Street, New Orleans 30, Louisiana	5,000
Lentz, Newton & Co. S. D. Lunt & Co.	Alamo National Bldg., San Antonio 5, Texas 906 Marine Trust Bldg., Buffalo 3, N. Y.	5,000 5,000

Name of Underwriter	Address of Underwriter	Number of Shares to b Purchased
W. L. Lyons & Co.	235 South Fifth Street,	A-C 231
tronal Bank Bidge	Louisville 2, Kentucky	5,000
D. B. Marron & Co., Incorporated	63 Wall Street, New York, N. Y. 10005	5,000
Mason Brothers	1130 First Western Bldg.,	3,000
McCorlos & Comm	Oakland 12, California	5,000
McCarley & Company, Inc.	35 Page Avenue, P. O. Box 14,	2,000
McCourtney-Breckenridge & Company	Asheville, North Carolina	5,000
The court they - brecken rage & Company	1030 Boatmen's Bank Bldg.,	
Milburn, Cochran & Company, Inc.	St. Louis 2, Missouri	5,000
Murch & Co., Inc.	110 East First Street, Wichita 2, Kansas	5,000
W. H. Newbold's Son & Co.	330 Hanna Bldg., Cleveland 15, Ohio	5,000
ohia 9, Pennsylvanua 5,000	1517 Locust Street, Philadelphia 2, Pennsylvania	LIOU D
Orvis Brothers & Co.	30 Broad Street Novy World A N. XV	5,000
Charles A. Parcells & Co.	30 Broad Street, New York 4, N. Y.	5,000
Parker, Eisen, Waeckerle, Adams & Purcell,	639 Penobscot Bldg., Detroit 26, Michigan	5,000
Inc.	1012 Baltimore Avenue,	6,5110
Bank fildg. Buttato & N. & dout ambilitier	Kansas City 5, Missouri	5,000
H. O. Peet & Co.	23 West 10th Street.	3,000
Dame11 17:-/1. 0 C	Kansas City 5, Missouri	5,000
Powell, Kistler & Co.	110 Old Street, Fayetteville, North Carolina	5,000
Quinn & Co.	200 Second Street, N.W.	
Raffensperger, Hughes & Co., Inc.	Albuquerque, New Mexico	5,000
realiensperger, frughes & Co., file.	20 North Meridian Street,	
Rand & Co.	Indianapolis 4, Indiana	5,000
F. P. Ristine & Co.	One Wall Street, New York 5, N. Y. 123 South Broad Street,	5,000
	Philadelphia 9, Pennsylvania	F 000
Robinson and Lukens	909 Union Trust Bldg., Washington 5, D. C.	5,000
Rodman & Renshaw	209 South La Salle Street,	5,000
	Chicago 4, Illinois	5,000
Rowles, Winston & Co., Incorporated	1300 Southwest Tower, Houston, Texas 77002	2 5,000
Sage, Rutty & Co., Inc.	45 Exchange Street, Rochester 14, N. Y.	5,000
Sanders & Company	Republic National Bank Bldg.,	3,000
C1 11 D TILL	Dallas I, Texas	5,000
Schneider, Bernet & Hickman, Inc.	1505 Elm Street, Dallas 1, Texas	5,000
Seasongood & Mayer	Security Savings Bldg., Cincinnati 2. Ohio	5,000
Simpson, Emery & Company, Inc.	1115-111/ Plaza Bldg	0,000
Sisson & Nair Incorporated	Pittsburgh 19, Pennsylvania	5,000
Sisson & Ivan incorporated	829 Jefferson Avenue,	
Smith, Moore & Co.	Redwood City, California	5,000
Southwick, Campbell, Waterman Co.	509 Olive Street, St. Louis 1, Missouri 1740 Washington Bldg.,	5,000
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Stern, Lauer & Co.	120 Broadway, New York, N. Y. 10005	5,000
Sterne, Agee & Leach, Inc.	First National Bldg.,	5,000
outh Entité Stroet	Birmingham 3, Alabama	5,000
Stewart, Eubanks, Meyerson & Co.	216 Montgomery Street.	3,000
Character II D. 1 C	San Francisco 4, California	5,000
Storz-Wachob-Bender Co.	3624 Farnam Street, Omaha, Nebraska 68131	5,000
Strader and Company, Incorporated	502 Peoples National Bank Bldg.	Kohlm
Suplee, Yeatman, Mosley Co. Incorporated	Lynchburg, Virginia	5,000
~ aprox, reatman, wrostey Co. Hicorporated	1500 Walnut Street,	Leniz
	Philadelphia 2, Pennsylvania	5,000

Name of Underwriter		Number of Shares to be Purchased
Sutro Bros. & Co.	80 Pine Street, New York 5, N. Y.	5,000
Sweney Cartwright & Co.	Huntington Bank Bldg., Columbus 15, Ohio	
Trubee, Collins & Co.	M. & T. Bldg., Buffalo 2, N. Y.	5,000
Uhlmann & Co., Inc.	141 West Jackson Blvd., Chicago 4, Illinois	5,000
Varnedoe, Chisholm & Co., Inc.	One Bull Street, Savannah, Georgia	5,000
Willis, Kenny & Ayres, Incorporated	205 West Franklin Street, Richmond 20, Virginia	5,000
Woodcock, Moyer, Fricke & French, Inc.	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000
Wyatt, Neal & Waggoner	First National Bank Bldg., Atlanta 3, Georgia	5,000
Yates, Heitner & Woods	819 Pine Street, St. Louis 1, Missouri	5,000
Warren W. York & Co., Inc.	530 Hamilton Street,	
	Allentown, Pennsylvania	5,000
Zilkha Corporation	120 Broadway, New York, N. Y. 10005	5,000
Zuckerman, Smith & Co.	30 Broad Street, New York 4, N. Y.	5,000
Alden & Co., Inc.	Starks Bldg., Louisville 2, Kentucky	3,500
Allison-Williams Company	Northwestern Bank Bldg., Minneapolis 2, Minnesota	3,500
Amott, Baker & Co., Incorporated	150 Broadway, New York 38, N. Y.	3,500
Austin, Dobbins & Calvert	National Bank of Commerce Bldg., San Antonio 5, Texas	3,500
Baumgartner, Downing & Co.	Mercantile Trust Bldg., Baltimore 2, Maryland	3,500
Bingham, Sheldon & Co.	735 North Water Street, Milwaukee 2, Wisconsin	3,500
M. H. Bishop & Co.	Northwestern Bank Bldg., Minneapolis 2, Minnesota	3,500
Blaine & Company, Inc.	1421 Chestnut Street, Philadelphia, Pennsylvania 19102	3,500
E. D. Boynton & Co., Inc.	111 Broadway, New York 6, N. Y.	3,500
Brooke, Sheridan, Bogan & Co., Inc.	2 Penn Center Plaza, Philadelphia 2, Pennsylvania	3,500
Brown, Lisle & Marshall	Turks Head Bldg., Providence 3, Rhode Island	3,500
Burrows, Smith and Company	174 South Main Street, Salt Lake City, Utah 84101	3,500
Byrd Brothers	11 Broadway, New York 4, N. Y.	3,500
Campbell, McCarty & Company Incorporated	1500 Buhl Bldg., Detroit 26, Michigan	3,500
Carter, Berlind & Weill	60 Broad Street, New York 4, N. Y.	3,500
The Cherokee Securities Company	4106 Hillsboro Road, Nashville 12, Tennessee	3,500
Chiles & Company	Farm Credit Bldg., Omaha 2, Nebraska	3,500
John W. Clarke & Co.	135 South La Salle Street, Chicago 3, Illinois	3,500
G. H. Crawford Co., Inc.	400 Barringer Bldg., Columbia 1, South Carolina	3,500
Dixon Bretscher Noonan Inc.	509 First National Bank Bldg., Springfield, Illinois	3,500
Oscar E. Dooly & Co.	612 Ingraham Bldg., Miami, Florida 33131	3,500
Draper, Sears & Co. Incorporated	50 Congress Street, Boston 2, Massachusetts	3,500
Eisele & King, Libaire, Stout & Co.	50 Broadway, New York, N. Y. 10004	3,500

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
Elder & Company	722 Chestnut Street,	
TOOO SEE AND SELECTIONS NOT SHOW	Chattanooga 2, Tennessee	3,500
Evans, MacCormack & Co., Inc.	453 South Spring Street,	
Find Committee Committee	Los Angeles 13, California	3,500
First Securities Corporation	111 Corcoran Street,	blmann 6
Constlan Countrie 9 C	Durham, North Carolina	3,500
Gerstley, Sunstein & Co.	211 South Broad Street,	
Goodland Noufold & Communa I	Philadelphia 7, Pennsylvania	3,500
Goodkind, Neufeld & Company, Inc.	711 Fifth Avenue, New York, N. Y. 10022	3,500
Granger & Company	111 Broadway, New York, N. Y. 10006	3,500
Gruss & Co.	30 Broad Street, New York, N. Y. 10004	3,500
Hardy & Co.	25 Broad Street, New York, N. Y. 10004	3,500
Wm. P. Harper & Son & Co., Inc.	1504 Third Avenue, Seattle, Washington	3,500
Heller & Meyer	520 Main Street, East Orange, New Jersey	3,500
T. C. Henderson & Co., Inc.	Sixth & Grand, Des Moines 9, Iowa	3,500
Henry, Franc & Co.	308 North 8th Street, St. Louis 1, Missouri	3,500
Hettleman & Co.	1 Wall Street, New York 5, N. Y.	3,500
Hill & Co.	2020 Carew Tower, Cincinnati 2, Ohio	3,500
June S. Jones Co.	509 U. S. Bank Bldg.,	3,300
	Portland 4, Oregon	3,500
John H. Kaplan & Co.	120 Broadway, New York, N. Y. 10005	3,500
Kaufman Bros. Co.	16 Selden Arcade, Norfolk 10, Virginia	
Kerr & Bell	210 West 7th Street,	3,500
	Los Angeles 14, California	3,500
Kinsley & Adams	6 Norwich Street,	0,000
2, Wisconsin	Worcester 8, Massachusetts	3,500
Richard E. Kohn & Co.	20 Clinton Street, Newark 2, New Jersey	3,500
Kormendi & Co., Inc.	11 Broadway, New York 4, N. Y.	3,500
McDaniel Lewis & Co.	Jefferson Bldg.,	3,300
	Greensboro, North Carolina	3,500
Lombard, Vitalis & Paganucci, Inc.	48 Wall Street, New York, N. Y. 10005	3,500
MacNaughton-Greenawalt & Co.	Michigan Trust Bldg.,	3,300
in Z. i emasylvamia sere ere a social a social	Grand Rapids 2, Michigan	3,500
The Marshall Company	Marine Plaza, 111 E. Wisconsin Avenue,	0,000
s. S. Knode Island	Milwaukee 2, Wisconsin	3,500
Mason & Co.	2801 Washington Avenue,	0,500
IVIS O TO THE STORY	Newport News, Virginia	3,500
Mason & Lee, Inc.	Church at Eighth Street, Lynchburg, Virginia	3,500
McJunkin, Patton & Co.	1/24 Oliver Bldg.,	0,000
Work York W. N. W. Street, N. W.	Pittsburgh 22, Pennsylvania	3,500
C. S. McKee & Company, Inc.	Union Trust Bldg.,	0,000
Comessee	Pittsburgh 19, Pennsylvania	3,500
McLean & Company, Inc.	772 Commerce Street, Tacoma 2, Washington	3,500
McMaster Hutchinson & Co.	105 South La Salle Street,	0,000
Til C	Chicago 3, Illinois	3,500
Aid-Continent Securities Company, Inc.	Central Bldg., Wichita 2, Kansas	3,500
Nauman, McFawn & Co.	Ford Bldg., Detroit 26, Michigan	3,500
Vorris & Hirshberg, Inc.	1550 Bank of Georgia Bldg.,	0,500
l, Illinois	Atlanta 3, Georgia	3,500
Paul J. Nowland & Co.	1201 Bank of Delaware Bldg.,	0,000
is Street.	Wilmington, Delaware 19899	3,500
Jugent & Igoe	592 Main Street, East Orange, New Jersey	3,500
flueger & Baerwald	Mills Bldg., San Francisco 4, California	3,500

Name of Underwriter	Address of Underwriter	Shares to be Purchased
Pyne, Kendall & Hollister	60 Wall Street, New York, N.Y. 10005	3,500
Quail & Co., Inc.	Davenport Bank Bldg., Davenport, Iowa	3,500
Rambo, Close & Kerner Incorporated	1518 Locust Street, Philadelphia 2, Pennsylvania	3,500
Rankin & Co.	53 Forsyth St. N.W., Atlanta, Georgia 3030	
Rosenthal & Co.	40 Wall Street, New York 5, N. Y.	3,500
Roulston & Company	1010 Euclid Avenue, Cleveland 15, Ohio	3,500
Earl M. Scanlan & Co.	Western Federal Bldg., Seventeenth at California, Denver 2, Colorad	o 3,500
Scharff & Jones, Inc.	140 Carondelet Street, New Orleans 12, Louisiana	3,500
Schweickhardt & Company, Inc.	Hibernia Bldg., New Orleans 12, Louisiana	3,500
H. B. Shaine & Co. Inc.	111 Pearl Street, N. W., Grand Rapids 2, Michigan	3,500
Smith, Hague & Company	539 Penobscot Bldg., Detroit 26, Michigan	3,500
Starkweather & Co.	115 Broadway, New York 6, N.Y.	3,500
Sterling, Grace & Co.	39 Broadway, New York 6, N.Y.	3,500
Taylor and Company	439 North Bedford Drive, Beverly Hills, California	3,500
Taylor, Rogers & Tracy Inc.	105 South La Salle Street, Chicago 3, Illinois	3,500
Burton J. Vincent & Co.	105 South La Salle Street, Chicago 3, Illinois	3,500
White & Company Incorporated	506 Olive Street, St. Louis, Missouri 63101	3,500
C. T. Williams & Company, Inc.	Fidelity Bldg., Baltimore 1, Maryland	3,500
F. J. Winckler Co.	1966 Penobscot Bldg., Detroit 26, Michigan	3,500
Woodard-Elwood & Company	1115 First National Bank Bldg., Minneapolis 2, Minnesota	3,500
Wyllie and Thornhill, Inc.	204 East Market Street, Charlottesville, Virginia	3,500
F. S. Yantis & Co. Incorporated	135 South La Salle Street, Chicago 3, Illinois	3,500
York & Co.	235 Montgomery Street, San Francisco 4, California	3,500

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SCHEDULE B

COMMUNICATIONS SATELLITE CORPORATION

Underwriters' Application for Issuance of Shares of Common Stock in Connection with Initial Offering

The undersigned, as Representatives of the several Underwriters named in Schedule A to the Purchase Contract between said Underwriters and Communications Satellite Corporation, a District of Columbia corporation (the "Corporation"), hereby make application for the issuance to each such Underwriter of the number of Shares of Common Stock, without par value ("Common Stock"), of the Corporation which such Underwriter in the Purchase Contract has severally agreed to purchase from the Corporation. Each Underwriter is engaged in the business of distributing securities and is participating in good faith in the ordinary course of such business in the distribution of Common Stock of the Corporation.

Each Underwriter agrees as follows, in respect of the Shares of Common Stock to be purchased by it pursuant to the Purchase Contract (the "Shares"):

(a) If any of the Shares are to be held by such Underwriter as nominee of, or subject to the direction or control of, another person (the "Owner"), such Underwriter will obtain from each such Owner a statement of the following information: (i) whether the Owner is an "Alien Person"*; (ii) whether the Owner is a "Communications Common Carrier"* or a subsidiary or affiliated company of a "Communications Common Carrier" or a trustee, officer or director of any of the foregoing; (iii) whether the Owner, or any syndicate or affiliated group of shareholders of the Corporation of which the Owner is a member, owns or holds more than 100,000 Shares of Common Stock.

(b) To the extent that the information furnished to such Underwriter shows that Shares held by it are owned by "Alien Persons"*, such Underwriter will take such action as may be appropriate to assure that such Shares are represented by a Foreign Shares Certificate or Foreign Shares Certificates.

(c) Such Underwriter will furnish to Continental Illinois National Bank and Trust Company of Chicago, 231 South LaSalle Street, Chicago, Illinois, principal Transfer Agent for Common Stock, within 60 days after the date of the issuance of the Shares, a report, dated as of the 40th day after the issuance of the Shares, stating whether such Underwriter holds any of the Shares as nominee of, or subject to the direction or control of, another person, and if so setting forth the following information: (i) whether such Underwriter is a securities broker or dealer having its principal place of business in the United States and registered in accordance with Section 15 of the Securities Exchange Act of 1934; (ii) whether such Underwriter is an "Alien Person"*; (iii) whether such Underwriter is a "Communications Common Carrier"* or a subsidiary or affiliated company of a "Communications Common Carrier" or a trustee, director or officer of any of the foregoing; (iv) whether such Underwriter, or any syndicate or affiliated group of shareholders of the Corporation of which such Underwriter is a member, owns or holds more than 100,000 Shares of Common Stock; (v) on the basis of information furnished to such Underwriter by the Owners, whether any of the Owners is a "Communications Common Carrier" or a subsidiary or affiliated company of a "Communications Common Carrier" or a trustee, officer or director of any of the foregoing; (vi) on the basis of information furnished to such Underwriter by the Owners, whether any of the Owners, or any syndicate or affiliated group of shareholders of the Corporation of which the Owner is a member, owns or holds more than 100,000 Shares of Common Stock.

Compliance by each Underwriter with its agreement hereunder shall be the responsibility of such Underwriter and not the responsibility of the Representatives as such.

Dated: June , 1964

MERRILL LYNCH, PIERCE, FENNER & SMITH Incorporated BLYTH & Co., INC. THE FIRST BOSTON CORPORATION KIDDER, PEABODY & Co. INCORPORATED KUHN, LOEB & CO. INCORPORATED LAZARD FRÈRES & CO. LEHMAN BROTHERS CARL M. LOEB, RHOADES & CO. PAINE, WEBBER, JACKSON & CURTIS WHITE, WELD & CO. INCORPORATED DEAN WITTER & Co.

By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By(Vice President)

*DEFINITION OF CERTAIN TERMS USED IN APPLICATION

"ALIEN PERSON" means

(1) any alien or the representative of any alien;

(2) any foreign government or the representative thereof;

(3) any corporation organized under the laws of any foreign government;

(4) any corporation of which any officer or director is an alien or of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country; or

(5) any corporation directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens, or of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any other corporation organized under the laws of a foreign country. tion organized under the laws of a foreign country.

"COMMUNICATIONS COMMON CARRIER" means

(1) any person (other than the Corporation) engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy, including a person so engaged through physical connection, or connection by radio, or by wire and radio, with the facilities of another carrier; or (2) any person which owns or controls, directly or indirectly, or is under direct or indirect common control with,

A person engaged in radio broadcasting is not, insofar as so engaged, deemed to be a "communications common carrier".

"PERSON" means an individual, partnership, association, joint-stock company, trust, corporation or other entity.

* See reverse side for definitions

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COMMUNICATIONS SATELLITE CORPORATION (A District of Columbia Corporation)

Common Stock (Without Par Value)

SELECTED DEALERS AGREEMENT

June , 196

Gentlemen:

We and the other Underwriters named in the enclosed Prospectus have severally agreed to purchase from Communications Satellite Corporation (the "Corporation"), an aggregate of 5,000,000 Shares of Common Stock, without par value, of the Corporation (the "Shares"). The Shares and certain of the terms on which they are being purchased and offered are more fully described in the enclosed Prospectus.

On behalf of the Underwriters, we are severally offering to certain dealers ("Selected Dealers") who are members of the National Association of Securities Dealers, Inc., among whom any of the Underwriters may be included, subject to prior sale and when, as and if delivered to and accepted by the Underwriters and subject to the approval of legal matters by their counsel and subject to the other terms and conditions hereof, a part of the Shares at the public offering price per Share less a concession of \$\phi\$ per Share. The public offering price of the Shares is to be \$20 per Share.

Orders for the Shares will be strictly subject to confirmation and we reserve the right in our uncontrolled discretion to reject any order in whole or in part, to accept or reject orders in the order of their receipt or otherwise, and to allot. Neither you nor any other person is authorized by the Corporation or the Underwriters to give any information or make any representations other than those contained in the Prospectus in connection with the sale of any of the Shares. No dealer is authorized to act as agent for the Underwriters when offering the Shares to the public or otherwise.

Upon release by us, you may offer the Shares at the public offering price, subject to the terms and conditions hereof. The Underwriters and the Selected Dealers may, with our consent, purchase Shares from and sell Shares to each other at the public offering price less the concession to Selected Dealers.

You agree to use your best efforts to offer the Shares purchased by you in a manner to encourage the widest distribution to the American public. In this connection, you agree that in filling orders for Shares to be purchased by you pursuant to this offering, you will first make allotments of not in excess of 50 Shares, and in no event will you make allotments in excess of 100 Shares unless by such limitation of allotments you would be unable to dispose promptly of all such Shares. Before making any allotments in excess of 100 Shares you will notify us, and if we request, you will sell to us for the accounts

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Payment for Shares purchased by you is to be made by certified or official bank check at the office of Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., at the public offering price less the above concession, on such date as we may advise, in New York Clearing House funds to the order of Merrill Lynch, Pierce, Fenner & Smith Incorporated, against delivery of the Shares to be purchased by you.

This Agreement shall terminate at the close of business on the 45th day after the effective date of the Registration Statement, unless earlier terminated. We may terminate this Agreement at any time by written or telegraphic notice.

In the event that prior to the termination of this Agreement we purchase, or contract to purchase, for the accounts of the Underwriters, in the open market or otherwise, any Shares delivered to you, you agree to repay to us for the accounts of the Underwriters the amount of the above concession to Selected Dealers plus brokerage commissions and transfer taxes paid in connection with such purchase or contract to purchase.

You agree that at any time or times prior to the termination of this Agreement you will, upon our request, report to us the number of Shares purchased by you under this Agreement which then remains unsold by you and will, upon our request, at any such time or times, sell to us for the account of one or more of the Underwriters such number of such unsold Shares as we may designate, at the public offering price less an amount to be determined by us not in excess of the concession allowed you.

We shall have full authority to take such action as we may deem advisable in respect of all matters pertaining to the offering. We shall be under no liability to you except for lack of good faith and for obligations expressly assumed by us in this Agreement. Nothing contained in this paragraph is intended to operate as, and the provisions of this paragraph shall not in any way whatsover constitute, a waiver by you of compliance with any provision of the Securities Act of 1933, as amended, or of the rules and regulations of the Securities and Exchange Commission issued thereunder.

Upon application to us, we will inform you as to the States in which we believe the Shares have been qualified for sale under, or are exempt from the requirements of, the respective securities laws of such States, but we assume no obligation or responsibility as to your right to sell Shares in any jurisdiction.

We will cause to be sent by registered mail to the Pennsylvania Securities Commission a copy of the Prospectus and a list of the Selected Dealers to whom this Agreement is initially being sent. We will also cause to be filed with the Department of State in New York a Further State Notice with respect to the Shares, if necessary.

Additional copies of the Prospectus will be supplied in reasonable quantities upon request.

Any notice from us to you shall be deemed to have been duly given if mailed or telegraphed to you at the address to which this Agreement is mailed.

Please confirm your agreement hereto and indicate the number of Shares ordered by you by telegraphing your acceptance and order and by signing and returning at once to us, c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., the enclosed duplicate of this

letter. Upon receipt thereof this letter and such signed duplicate copy will evidence the agreement between us.

Very truly yours,

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.

By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By(Vice President)

Acting on behalf of themselves and the other several Underwriters.

ACCEPTANCE AND ORDER

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated

Dean Witter & Co.
As Representatives of the Several Underwriters
c/o Merrill Lynch, Pierce, Fenner & Smith
Incorporated

70 Pine Street New York 5, N. Y.

Dear Sirs:

We hereby enter our order for shares of Common Stock, without par value, of Communications Satellite Corporation, a District of Columbia corporation, under the terms and conditions of the foregoing Agreement.

We hereby confirm our agreement to all the terms and conditions stated in the foregoing Agreement. We acknowledge receipt of the Prospectus relating to the above Shares and we further state that in entering this order we have relied upon said Prospectus and no other statements whatsoever, written or oral. We confirm that we are members in good standing of the National Association of Securities Dealers, Inc.

Dated, June , 1964.

By(Authorized Representative)

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out the Purchase Contract, this Agreement and the purchase, carrying, sale and distribution of the Shares, including authority to agree to any waiver or modification of the terms and provisions of the Purchase Contract (either before or after its execution) which in your judgment is not material.

Section 2. Sale to Public, Public Offering Price, and Purchase Price. It is expected that the sale to the public of the Shares will commence as soon after the Registration Statement has become effective as you may deem advisable, and on the terms set forth in the Prospectus. We will not sell any Shares until they are released by you for that purpose.

The initial public advertisement will appear on such date and will include the names of such of the Underwriters as you may determine.

The purchase price to be paid by the Underwriters for the Shares is set forth in Section 3 of the Purchase Contract. The initial public offering price of the Shares shall be \$20 per Share. After offering at the initial public offering price, the public offering price and the concession therefrom may be varied by you by reason of market conditions.

Section 3. Offering to Selected Dealers and Others. We authorize you, for our account, to reserve and offer for sale and to sell to dealers selected by you (the "Selected Dealers"), who shall be members of the National Association of Securities Dealers, Inc., among whom any of the Underwriters may be included, such number of Shares to be purchased by us as you shall determine. Such offering may be made under a Selected Dealers Agreement substantially in the form attached hereto as Exhibit B (the "Selected Dealers Agreement") or otherwise. The price to Selected Dealers shall be the public offering price less a concession of not in excess of 50ϕ per Share. We also authorize you, for our account, to reserve and offer for sale and to sell to others than Selected Dealers at the public offering price, Shares to be purchased by us. Such reservations for sales to others than Selected Dealers shall be as nearly as practicable in proportion to our underwriting obligation, unless you agree to a smaller proportion at our request. At or before the time of the public offering you will advise us of the number of Shares to be purchased by us which has not been reserved for sale as provided in this Section.

Sales to Selected Dealers and others shall be made as nearly as practicable in the ratio which the number of Shares reserved for our account bears to the aggregate number of Shares reserved for the accounts of all Underwriters, as calculated from day to day. It is understood that you may deliver to any of the Underwriters from time to time on or after the date of closing as determined in the Purchase Contract, (i) for carrying purposes, or (ii) for sale by such Underwriter, any of the Shares then reserved for offering and sale to, but not purchased and paid for by, Selected Dealers or others as above provided, but to the extent that Shares are so delivered for sale by such Underwriter, the number of Shares then reserved for the account of such Underwriter shall be correspondingly reduced. Shares delivered for carrying purposes only must be redelivered to you upon your demand.

We will repurchase any Shares sold by us, except through you, which shall be contracted for or purchased by you in the open market or otherwise during the life of this Agreement, on demand at a price equal to the cost of such purchase plus tax on redelivery and commission, if any. In lieu of delivering such Shares you may, in your discretion, sell the same for our account at such prices and upon such terms and to such persons, including any of the other Underwriters, as you may determine, charging the amount of any loss and expense or crediting the amount of any profit, less any expense, resulting from such sale, to our account, or charge our account with an amount not in excess of the concession to Selected Dealers.

Each Underwriter agrees that if any such offering is made pursuant to the Selected Dealers Agreement it will be governed by the terms and provisions thereof.

Section 4. Distribution Agreement. We agree to use our best efforts to offer the Shares retained by us for direct sale in a manner to encourage the widest distribution to the American public. In this connection, we agree that in filling orders for Shares retained by us for direct sale, we will first make allotments of not in excess of 50 Shares, and in no event will we make allotments in excess of 100 Shares unless by such limitation of allotments we would be unable to dispose promptly of all such

retained Shares. We understand that we shall not be deemed to be unable to dispose promptly of our retained Shares and thereby be permitted to make allotments in excess of 100 Shares, unless we shall have first notified you and afforded you the opportunity to sell to Selected Dealers as provided in Section 3 hereof such of said retained Shares as to which we have not made allotments of 100 Shares and less. Nothing herein shall be construed as requiring us to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which we believe will cause a concentration of holdings or adversely affect the distribution of the Shares. We will not sell any Shares to any dealer in securities unless such dealer has entered into an agreement with you substantially to the same effect as this Section and unless you first consent to such sale. Upon your request, we will furnish you, from time to time, with complete data as to our distribution of Shares.

Section 5. Payment and Delivery. Payment for the Shares to be purchased by each Underwriter is to be made by the delivery of its check to Merrill Lynch, Pierce, Fenner & Smith Incorporated at its office, 70 Pine Street, New York 5, New York, not later than 9:00 A.M., New York City Time, on the date of closing as determined in the Purchase Contract or such other date as you may advise. Payment shall be made by certified or official bank check in New York Clearing House funds to the order of Merrill Lynch, Pierce, Fenner & Smith Incorporated, and each Underwriter authorizes you for its account to make payment of the purchase price of the Shares against delivery to you of the Shares which it has agreed to purchase. Delivery of the Shares retained by us for direct sale will be made by you as soon as practicable.

Upon receiving payment for Shares reserved for Selected Dealers and others as provided in Section 3 hereof or sold for our account to Selected Dealers as provided in Section 4 hereof, you are to remit an amount equal to the purchase price paid by us for such Shares and credit or charge our account with the difference between the price at which such Shares were sold and our purchase price.

Section 6. Authority of the Representatives to Borrow. You are hereby authorized to advance your own funds for our account, charging current interest rates, or to arrange loans for the account of one or more of the Underwriters, severally and not jointly, to execute and deliver any notes or other instruments in connection therewith and to pledge all or any part of the Shares which such Underwriter or Underwriters shall have become obligated to purchase under any of the terms of this Agreement or of the Purchase Contract, as security therefor, as you may deem necessary or advisable to carry out the purchase and distribution of the Shares. Any lender is hereby authorized to accept your instructions as to the disposition of the proceeds of any such loans. Each Underwriter will be reimbursed or credited with the proceeds of loans made for its account.

Section 7. Trading Among Underwriters and Selected Dealers. You may purchase Shares from or sell Shares to any of the Selected Dealers or any of the Underwriters at the public offering price less a concession no greater than the concession allowed to Selected Dealers. The Underwriters and the Selected Dealers may, with your consent, purchase Shares from and sell Shares to each other at the public offering price less the concession allowed to Selected Dealers.

Section 8. Stabilization. In order to facilitate the distribution of the Shares, you may, for the account of each Underwriter, during the life of this Agreement, make purchases and sales of Common Stock of the Corporation, in the open market or otherwise for long or short account, at such prices, in such amounts and in such manner as you may determine, and, in arranging for sales to Selected Dealers or others, may over-allot for the account of such Underwriter, and either before or after the termination of this Agreement you may cover any short position incurred pursuant to this Section; provided that at the close of business on any day the net commitment of each Underwriter, either for long or short account, resulting from such purchases or sales (including over-allotments) shall not exceed 10% of the aggregate number of Shares which such Underwriter has agreed to purchase pursuant to the Purchase Contract, except that such percentage may be increased with the approval of a majority in interest of the Underwriters (including yourselves). Such purchases and sales (including over-allotments) shall be made for the accounts of the Underwriters as nearly as practicable in proportion to their

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respective underwriting obligations. Each Underwriter agrees to take up at cost on demand any Common Stock so purchased for its account and to deliver on demand any Common Stock so sold or over-allotted account, and to pay to you on demand the amount of any losses or expenses incurred for its account pursuant to this Section. In the event of default by one or more Underwriters in respect of their obligations under this Section, each non-defaulting Underwriter shall assume its proportionate share of the obligations of such defaulting Underwriter without relieving such defaulting Underwriter of its liability hereunder.

Each Underwriter agrees that during the life of this Agreement or such shorter period as you may determine it will not bid for or purchase for any account in which it has a beneficial interest any Common Stock of the Corporation, or attempt to induce any person to purchase any Common Stock of the Corporation; provided, however, that the foregoing shall not prohibit (i) offers to sell or the solicitation of offers to buy Shares to be acquired by an Underwriter pursuant to the Purchase Contract; (ii) brokerage transactions not involving solicitation of customers' orders; and (iii) transactions with your written consent or otherwise permitted under this Agreement.

Each Underwriter agrees that at any time or times prior to the termination of this Agreement it will, upon your request, report to you the number of Shares purchased by it and not reserved for offering to Selected Dealers and others, as herein provided, which then remains unsold and will, upon your request, at such time or times, deliver to you for its account or sell to you for the account of one or more of the Underwriters, such number of unsold Shares as you may designate at the public offering price less an amount to be determined by you not in excess of the concession allowed to Selected Dealers.

Each Underwriter authorizes you to file with the Commission any and all reports required by Rule 17a-2 of the Commission to be filed in connection with any purchases or sales made by you for its account pursuant to the authorization contained in this Section.

Section 9. Allocation of Expenses. The accounts of the Underwriters shall be charged with all transfer taxes on sales and other transfers for their respective accounts, and, in proportion to their respective underwriting obligations, with all expenses incurred by you or with your approval in connection with the Purchase Contract and this Agreement and the purchase, carrying, sale and distribution of the Shares. Your determination of the amount of such expenses and the allocation thereof as among the Underwriters shall be final and conclusive.

Funds of the Underwriters at any time in your hands may be held in your general funds without accountability for interest. You may in your discretion at any time make partial distribution of credit balances of the Underwriters and may at any time call on the Underwriters to pay their respective debit balances.

Section 10. Blue Sky Qualifications. Upon application, you will inform any of the Underwriters as to the States in which it is believed that the Shares are qualified for sale under, or are exempt from the requirements of, the respective securities laws of such States, but you, individually or as Representatives, assume no obligation or responsibility as to the right of any Underwriter to sell Shares in any jurisdiction.

We authorize you to cause to be sent by registered mail to the Pennsylvania Securities Commission a copy of the Prospectus and a list of dealers to whom you expect initially to offer Shares on behalf of the Underwriters and you agree to cause to be filed with the Department of State in New York a Further State Notice with respect to the Shares, if necessary.

Section 11. Membership in National Association of Securities Dealers, Inc. We understand that each of you is, and we hereby confirm that we are, a member in good standing of the National Association of Securities Dealers, Inc.

Section 12. Termination of Agreement. This Agreement shall terminate at the close of business on the 45th day after the effective date of the Registration Statement, unless earlier terminated. You may terminate this Agreement or any provision thereof at any time by written or telegraphic notice to us. As soon as practicable after any such termination the net credit or debit balance in the account of each Underwriter shall be paid to or collected from each Underwriter, provided that you may in your discretion reserve from distribution an aggregate of not exceeding \$10,000, to cover possible additional expenses chargeable to the respective Underwriters, but no statement by you of the amount of credit or debit balance or payment or reserve shall constitute any representation by you as to the existence or non-existence of any other charges, liabilities or expenses, for which the Underwriters shall continue liable. Notwithstanding any settlement on the termination of this Agreement, each Underwriter agrees to pay its proportion (determined on the basis provided in Section 9 hereof) of the amount of any liability or expense incurred by any Underwriter, based on the claim that the Underwriters constitute an association, unincorporated business or other separate entity.

Section 13. Default by Underwriters. Default by one or more Underwriters in respect of their several obligations pursuant hereto or to the Purchase Contract shall not release any other Underwriter from its obligations or in any way affect the liability of any defaulting Underwriter to the other Underwriters for damages resulting from such default. If one or more Underwriters default under the Purchase Contract, you are authorized, but shall not be obligated, to arrange for the purchase by other persons, including non-defaulting Underwriters, of the Shares not taken up by such defaulting Underwriters.

Section 14. Position of Representatives. Except as in this Agreement otherwise specifically provided, you shall have full authority to take such action as you may deem necessary or advisable in respect of all matters pertaining to the Purchase Contract, this Agreement and the purchase, carrying, sale and distribution of the Shares, but you shall be under no liability to us, except for your own want of good faith, for obligations assumed by you in this Agreement and for any liabilities arising under the Securities Act of 1933. Your authority hereunder and under the Purchase Contract may be exercised by Merrill Lynch, Pierce, Fenner & Smith Incorporated. No obligations not expressly assumed by you in this Agreement shall be implied hereby or inferred herefrom. Authority with respect to matters to be determined by you or by you and the Corporation pursuant to the terms of the Purchase Contract shall survive the termination of this Agreement.

Nothing herein contained shall constitute the Underwriters an association, or partners, with you, or with each other, or, except as otherwise provided in this Agreement, render any Underwriter liable for the obligations of any other Underwriter and the rights, obligations and liabilities of each of the Underwriters are several in accordance with their respective obligations and not joint.

Section 15. Indemnification. We will indemnify and hold harmless each other Underwriter and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act of 1933 to the extent that, and upon the terms upon which, each Underwriter agrees to indemnify and hold harmless the Corporation as set forth in the Purchase Contract. Such indemnity agreement shall survive the termination of this Agreement.

Section 16. Notices. Any notice from you to the undersigned shall be deemed to have been duly given if mailed, telephoned or telegraphed to us at our address appearing in the Prospectus.

Section 17. Execution of this Agreement. This Agreement is being executed by us and delivered to you in duplicate. Upon your receipt of identical agreements from each of the other Underwriters, please confirm this Agreement and return one copy to us.

Very truly	yours,
	(Official Signature)

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Confirmed as of the date first above written.

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.
as Representatives of the Several Underwriters

By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By(Vice President)

EXHIBIT A

COMMUNICATIONS SATELLITE CORPORATION (A District of Columbia Corporation)

Common Stock
(Without Par Value)

PURCHASE CONTRACT

June 2, 1964

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.

As Representatives of the Several Underwriters
c/o Merrill Lynch, Pierce, Fenner & Smith

Incorporated

70 Pine Street New York 5, N. Y.

Dear Sirs:

Communications Satellite Corporation, a District of Columbia corporation (the "Corporation"), confirms its agreement with each of the underwriters named in Schedule A annexed hereto, including yourselves (the "Underwriters", which term, when the context permits, also includes any underwriter substituted as hereinafter provided in Section 12), for whom you are acting as Representatives for the purposes of this Contract.

Section 1. Financing of the Corporation. The Corporation proposes to issue and sell, in accordance with the Communications Satellite Act of 1962 (the "Satellite Act"), an aggregate of 10,000,000 shares of its Common Stock, without par value ("Common Stock"). The Corporation has offered 50% of such shares of Common Stock to communications common carriers authorized by the Federal Communications Commission to own stock of the Corporation (the "Authorized Carriers") at the Offering Price set forth on the cover page of the Prospectus hereinafter mentioned. The Corporation has received from certain Authorized Carriers subscriptions to purchase shares of Common Stock, subject to the conditions and the allocation formula referred to under "Offering of Common Stock" in said Prospectus, which subscriptions, after application of said allocation formula to the extent required, aggregate 5,000,000 shares. The Corporation desires to obtain commitments for the purchase from it of the remaining 5,000,000 shares of Common Stock (said 5,000,000 shares being hereinafter called the "Shares").

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Section 2. Representations and Warranties of the Corporation. The Corporation represents and warrants to each Underwriter that:

(a) The Corporation has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 and an amendment thereto and related preliminary prospectuses for the registration under the Securities Act of 1933, as amended (the "Act"), of the 10,000,000 shares of Common Stock. The Corporation has prepared and will promptly file with the Commission a further amendment to said registration statement and an amended prospectus, and will not, at any time before the registration statement becomes effective, file any other amendment to the registration statement or any other amended prospectus which shall be reasonably disapproved by Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, on legal grounds, or by the Representatives on any other grounds. The registration statement as amended and the amended prospectus on file with the Commission at the time the registration statement becomes effective are hereinafter called the "Registration Statement" and the "Prospectus", respectively. The Corporation will not, at any time after the Registration Statement becomes effective, file any amendment to the Registration Statement or any amendment or supplement to the Prospectus which shall be reasonably disapproved by Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, on legal grounds, or by the Representatives on any other grounds.

(b) At the time the Registration Statement becomes effective the Registration Statement and the Prospectus will comply with the provisions of the Act and the rules and regulations of the Commission thereunder (the "Regulations"), and at the time the Registration Statement becomes effective the Registration Statement will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and at the time the Registration Statement becomes effective and at the Closing Time referred to in Section 3 the Prospectus will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that none of the representations and warranties in this subsection shall apply to statements in or omissions from the Registration Statement or Prospectus made in reliance upon and in conformity with information furnished to the Corporation in writing by any Underwriter through the Representatives expressly for use in the Registration Statement or Prospectus.

(c) The financial statements included in the Registration Statement and Prospectus present fairly the assets, preliminary survey, research, development, and organization expenses, and liabilities and capital of the Corporation at the dates indicated and the cash receipts and disbursements of the Corporation for the periods specified, in conformity with generally accepted accounting principles consistently applied, and the accountants who certified the financial statements are with respect to the Corporation independent public accountants as required by the Act and the Regulations.

(d) Since March 31, 1964: (i) there has not been any material adverse change in the condition of the Corporation, financial or otherwise, or in the affairs or business prospects of the Corporation except as set forth in the Registration Statement; (ii) the Corporation has not entered into any material transactions other than those necessary to or in connection with the establishment of its proposed business referred to in the Registration Statement and Prospectus; and (iii) the Corporation has not incurred any material contingent obligation not set forth or referred to in the Registration Statement and Prospectus.

Any certificate signed by any officer of the Corporation and delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Corporation to each Underwriter as to the statements made therein.

Section 3. Purchase by, and Sale and Delivery to, Underwriters—Closing Time. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Corporation agrees to sell to each Underwriter, and each Underwriter, severally and not jointly,

agrees to purchase from the Corporation, at the price of \$20 per Share, less an underwriting allowance or discount of 80ϕ per Share in consideration of the Underwriter's agreement to make a public offering of Shares as provided in Section 4, the number of Shares set forth in Schedule A opposite the name of such Underwriter.

Payment of the purchase price for, and delivery of certificates for, the Shares to be purchased by the Underwriters shall be made at the office of Manufacturers Hanover Trust Company, 40 Wall Street, New York 15, N. Y., or at such other place as shall be agreed upon by the Representatives and the Corporation at the following time (the "Closing Time"): 10:00 A.M., New York City Time, on the seventh full business day (unless postponed in accordance with the provisions of Section 12) after the day on which the Registration Statement becomes effective, or such other time after such effective date as shall be agreed upon by the Representatives and the Corporation. Such payment shall be made to the Corporation by certified or official bank check or checks, in New York Clearing House funds, payable to or upon the order of the Corporation by or on behalf of the respective Underwriters, against delivery to Merrill Lynch, Pierce, Fenner & Smith Incorporated for the respective accounts of the Underwriters of certificates for the Shares to be purchased by the Underwriters. The obligation of the Corporation to deliver certificates for the Shares to be purchased by the Underwriters is conditioned upon its receipt of an "Underwriters' Application for Issuance of Shares" in substantially the form of Schedule B annexed hereto, signed by the Representatives on behalf of the Underwriters. Certificates for the respective numbers of Shares to be purchased by the Underwriters shall be in such denominations and registered in such names as Merrill Lynch, Pierce, Fenner & Smith Incorporated may request in writing at least two business days before Closing Time. It is understood that each Underwriter has authorized Merrill Lynch, Pierce, Fenner & Smith Incorporated, for the account of such Underwriter, to make payment of the purchase price for, and to accept delivery of, its Shares and to receipt therefor. Any of you, individually and not as Representative, may (but shall not be obligated to) make payment for any Shares agreed to be purchased by any Underwriter whose check shall not have been received by Closing Time, for the account of such Underwriter, but any such payment shall not relieve such Underwriter from any obligations hereunder. The Corporation will permit Merrill Lynch, Pierce, Fenner & Smith Incorporated, on or before the first business day prior to Closing Time, to examine and package for delivery the certificates for the Shares to be purchased by the Underwriters.

Section 4. *Public Offering*. It is understood that subject to the terms and conditions herein set forth the Underwriters propose to make a public offering of the Shares as soon as practicable after the Registration Statement becomes effective at an initial public offering price of \$20 per Share.

The Underwriters agree that they will use their best efforts to offer the Shares in a manner to encourage the widest distribution to the American public. In this connection, each Underwriter agrees that in filling orders for Shares retained by it for direct sale (i.e. Shares other than those reserved by the Representatives for sales for the account of such Underwriter to Selected Dealers or others), it will first make allotments of not in excess of 50 Shares, and in no event will it make allotments in excess of 100 Shares unless by such limitation of allotments it would be unable to dispose promptly of all such retained Shares. It is understood that no Underwriter shall be deemed to be unable to dispose promptly of its retained Shares and thereby be permitted to make allotments in excess of 100 Shares unless such Underwriter shall have first notified the Representatives and afforded them the opportunity to sell for its account to Selected Dealers such of said retained Shares as to which such Underwriter has not made allotments of 100 Shares and less. Nothing herein shall be construed as requiring any Underwriter to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which it believes will cause a concentration of holdings or adversely affect the distribution of the Shares. The Representatives will obtain from each Selected Dealer to whom they make sales for the accounts of Underwriters an agreement substantially to the same effect as this paragraph. Each Underwriter will refrain, and such agreement will require each Selected Dealer to refrain, from selling Shares, with or without any discount from the public offering price, to any dealer in securities unless such dealer has entered into such an agreement with the Representatives and unless such sale is first consented to by the Representatives.

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- (a) The Corporation will notify the Representatives immediately and confirm the notice in writing (i) when the Registration Statement and any amendment thereto shall have become effective, (ii) of the receipt of any comments from the Commission, and (iii) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of the initiation of any proceedings for that purpose. The Corporation will make every reasonable effort to prevent the issuance by the Commission of any stop order and, if any such stop order shall at any time be issued, to obtain the lifting thereof at the earliest possible moment.
- (b) The Corporation will deliver to the Representatives, as soon as available, twelve signed copies of the registration statement as originally filed and of each amendment thereto and twelve sets of exhibits thereto, and will also deliver to the Representatives, a copy of the registration statement as originally filed and of each amendment thereto (without exhibits) for each of the Underwriters.
- (c) The Corporation will deliver to each Underwriter from time to time, before the registration statement becomes effective, such number of copies of the preliminary prospectus as originally filed and any amended preliminary prospectus, and as soon as the Registration Statement becomes effective and thereafter from time to time during the period when the Prospectus is required to be delivered under the Act, such number of copies of the Prospectus (as amended or supplemented) as the Representatives may reasonably request for the purposes contemplated by the Act or the Regulations.
- (d) During the period when the Prospectus is required to be delivered under the Act, the Corporation will comply so far as it is able, and at its own expense, with all requirements imposed upon it by the Act, as now and hereafter amended, and by the Regulations, as from time to time in force, so far as necessary to permit the continuance of sales of or dealing in the Common Stock during such period in accordance with the provisions hereof and the Prospectus.
- (e) If any event relating to or affecting the Corporation shall occur as a result of which it is necessary, in the opinion of counsel for the Underwriters, to amend or supplement the Prospectus in order to make the Prospectus not misleading in the light of the circumstances existing at the time it is delivered to a purchaser, the Corporation will forthwith prepare and furnish to the Underwriters, without expense to them, a reasonable number of copies of an amendment or amendments or a supplement or supplements to the Prospectus (in form and substance satisfactory to counsel for the Underwriters) which will amend or supplement the Prospectus so that as amended or supplemented it will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus is delivered to a purchaser, not misleading. For the purposes of this subsection the Corporation will furnish such information with respect to itself as the Representatives may from time to time reasonably request.
- (f) The Corporation will endeavor in good faith, in cooperation with the Underwriters, to qualify the Common Stock for offering and sale under the applicable securities laws of such States as the Representatives may designate; provided, however, that the Corporation shall not be obligated to file any general consent to service or to qualify as a foreign corporation in any State in which it is not so qualified. The Underwriters will cooperate with the Corporation in obtaining such qualification of the Common Stock. In each State where the Common Stock shall be qualified as above provided the Corporation will make and file such statements and reports in each year as are or may be reasonably required by the laws thereof.
- (g) The Corporation will make generally available to its security holders as soon as practicable, but not later than 90 days after the close of the period covered thereby, an earnings statement (in form complying with the provisions of Section 11(a) of the Act, which need not be certified by independent public accountants unless required by the Act or Regulations) covering a period of at least twelve months commencing not later than the first day of the second month following the month in which the Registration Statement becomes effective.

- (h) The Corporation will for a period of five years from the effective date of the Registration Statement furnish direct to each of the Underwriters as soon as the same shall be sent to stockholders copies of any annual or interim reports of the Corporation to its stockholders or to the President of the United States or the United States Congress, and it will also furnish each of the Representatives with the following:
 - (i) as soon as practicable after the end of each fiscal year, one copy of the annual independent accountants' report, including therein the accountants' certificate, and financial statements of the Corporation, together with such accountants' comments and notations with respect thereto in such detail as the Corporation may customarily receive from such accountants;
 - (ii) as soon as practicable after the end of each quarterly period, one copy of the financial statements of the Corporation, in reasonable detail, none of which statements need be audited but shall be prepared in conformity with generally accepted accounting principles and certified as correct by the Treasurer or the principal accounting officer of the Corporation;
 - (iii) copies of any report, application or document which the Corporation shall file with the Commission or any securities exchange; and
 - (iv) as soon as the same shall be sent to stockholders, each communication which shall be sent to the stockholders as a class.

Section 6. Payment of Expenses. The Corporation will pay all expenses incident to the performance of its obligations under this Contract, including (i) the printing and filing of the Registration Statement and Prospectus and the printing of this Contract and the Underwriters' Questionnaire, (ii) the authorization, issuance and delivery of the Shares, including the printing and filing of charter amendments, printing and engraving of stock certificates, all original issue taxes payable upon the issuance and sale of the Shares to the Underwriters, and transfer agents' and registrars' fees, (iii) the qualification of the Common Stock under State securities laws in accordance with the provisions of subsection (f) of Section 5, including the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification, (iv) the printing and delivery to the Underwriters in quantities as hereinbefore stated of copies of the registration statement and all amendments thereto, of the preliminary prospectus and amended preliminary prospectus, of the Registration Statement and any amendments thereto, and of the Prospectus and any amendments or supplements thereto and (v) the cost of printing and delivery to the Underwriters of copies of the Blue Sky Survey.

If this Contract is cancelled or terminated by the Representatives in accordance with the provisions of Section 7 or Section 11(b)(i), or is cancelled by the Corporation or prevented by the Corporation from becoming effective in accordance with the provisions of Section 8 or Section 11(a), the Corporation shall reimburse the Underwriters severally for their out-of-pocket expenses, including the reasonable fees and disbursements of counsel for the Underwriters.

- Section 7. Conditions of Underwriters' Obligations. The several obligations of the Underwriters hereunder are subject to the accuracy of and compliance with the representations and warranties of the Corporation, to the performance by the Corporation of its obligations hereunder, and to the following further conditions:
 - (a) The Registration Statement shall have become effective not later than 5:30 P.M., New York City Time, on June 2, 1964, or, with the consent of the Representatives, at a later time and date, not later, however, than 5:30 P.M., New York City Time, on June 4, 1964, or such later time and date as may be approved by a majority in interest of the Underwriters; and at Closing Time no stop order suspending the effectiveness of the Registration Statement shall have been issued under the Act or proceedings therefor initiated or threatened by the Commission.
 - (b) At Closing Time the Representatives shall have received:
 - (1) The favorable opinion of Messrs. Wilmer, Cutler & Pickering, counsel for the Corporation, in form and substance satisfactory to counsel for the Underwriters, to the effect that

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- (i) the Corporation has been duly created, organized and established in accordance with the provisions of the Satellite Act and has been duly incorporated and is validly existing as a corporation in good standing under the laws of the District of Columbia;
- (ii) the Corporation has the corporate power to carry on the business and to own the property which it proposes to carry on and own as described in the Registration Statement and Prospectus;
- (iii) the authorized capital stock of the Corporation consists of 10,000,100 shares of Common Stock, without par value, and is in accordance with the provisions of the Satellite Act;
- (iv) the offering of shares of Common Stock to Authorized Carriers as set forth in Section 1, the issuance and sale of shares of Common Stock to Authorized Carriers that have subscribed therefor, and the issuance and sale of the Shares to the Underwriters pursuant to this Contract are in accordance with the Satellite Act and the Articles of Incorporation of the Corporation;
- (v) the shares of Common Stock to be sold by the Corporation to Authorized Carriers that have subscribed therefor have been duly authorized for issuance and sale to such Authorized Carriers, and when issued and delivered to such Authorized Carriers against payment of the consideration referred to in Section 1, will be validly issued, fully paid and nonassessable; and the Shares to be sold by the Corporation to the Underwriters pursuant to the provisions of this Contract have been duly authorized for issuance and sale to the Underwriters and, when issued and delivered to the Underwriters pursuant to the provisions of this Contract against payment of the consideration therefor specified herein, the Shares will be validly issued, fully paid and nonassessable;
- (vi) the execution and delivery of this Contract have been duly authorized by all necessary action on the part of the Corporation, and this Contract constitutes the valid and binding agreement of the Corporation;
- (vii) the Registration Statement is effective under the Act, and to the best of their knowledge no proceedings for a stop order have been instituted or are pending or threatened under Section 8 (d) of the Act;
- (viii) at the time the Registration Statement became effective, the Registration Statement and the Prospectus (other than the financial statements contained therein, as to which no opinion need be rendered) complied as to form in all material respects with the requirements of the Act and the Regulations, and nothing has come to their attention that would lead them to believe that the Registration Statement at the time it became effective contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading or that the Prospectus at the time the Registration Statement became effective or at Closing Time contained an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;
- (ix) the terms and provisions of the Common Stock conform to the description thereof contained in the Registration Statement and Prospectus, and the forms of certificates used to evidence the Common Stock are in due and proper form;
- (x) to the best of their knowledge and information, there are no contracts or documents of a character required to be described in the Registration Statement or Prospectus or to be filed as exhibits to the Registration Statement other than those described therein or filed as exhibits thereto and the description thereof is correct;
- (xi) to the best of their knowledge and information, there are no legal proceedings, pending or threatened, of a character required to be disclosed in the Registration Statement and Prospectus;

- (xii) the information in the Prospectus under the captions "Regulation" and "Description of Common Stock", to the extent that it constitutes matters of law or legal conclusions, has been reviewed by them and is correct; and
- (xiii) no consent, approval, authorization or order of any regulatory authority, other than the Commission or authorities administering State securities laws, is legally required for the issuance and sale of the Common Stock to the Authorized Carriers as set forth in Section 1 or for the issuance and sale of the Shares to the Underwriters as herein contemplated.
- (2) The favorable opinion of Allen E. Throop, Esq., General Counsel of the Corporation, in form and substance satisfactory to counsel for the Underwriters, with respect to the matters set forth in subsection (b) (1) of this Section.
- (3) The favorable opinion of Messrs. Brown, Wood, Fuller, Caldwell & Ivey, counsel for the Underwriters, with respect to the matters set forth in (i) and (iii) to (ix), inclusive, of subsection (b)(1) of this Section.

With respect to matters of the law of the District of Columbia, Allen E. Throop, Esq. and Messrs. Brown, Wood, Fuller, Caldwell & Ivey may rely upon the opinion of Messrs. Wilmer, Cutler & Pickering.

- (4) A letter from Haskins & Sells, in form and substance satisfactory to the Representatives, confirming that with respect to the Corporation they are independent public accountants as required by the Act and the Regulations and stating in effect that (i) in their opinion the financial statements examined by them and included in the Registration Statement and Prospectus comply as to form in all material respects with the applicable accounting requirements of the Act and the Regulations, and (ii) a reading of the unaudited financial statements appearing in the Registration Statement and Prospectus, a reading of the latest available interim financial statements of the Corporation, a reading of the Minutes of the meetings of the Board of Directors of the Corporation since December 31, 1963, inquiries of certain responsible officials of the Corporation, and correspondence with the principal Registrar and the principal Transfer Agent of the Corporation's capital stock (which procedures and inquiries are intended to assist the Underwriters in their investigation of the information contained in the Registration Statement, do not constitute an examination made in accordance with generally accepted auditing standards, and would not necessarily reveal adverse changes in the financial position or inconsistencies in the application of generally accepted accounting principles) did not cause them to believe, nor did anything else cause them to believe: (a) that the unaudited financial statements included in the Registration Statement and Prospectus do not comply as to form in all material respects with the applicable accounting requirements of the Act and the Regulations, were not prepared in accordance with accounting principles and practices consistent in all material respects with those followed in the preparation of the financial statements examined by them (included in the Registration Statement and Prospectus) or would require any material adjustments for a fair presentation of the financial information purported to be shown, or (b) that during the period from April 1, 1964 to a date specified in such letter which is not more than five days prior to Closing Time, there was any change in the capital stock of the Corporation, any incurrence of a long-term debt of the Corporation (in this connection, the notes payable to banks, that mature not later than June 30, 1964, are not considered to be long-term debt), or any material adverse change in the financial position of the Corporation from that set forth in the latest financial statements included in the Registration Statement and Prospectus, except in all instances as set forth in or contemplated by the Registration Statement (the term "financial position" being used in its conventional accounting sense and thus relating to the financial statements of the business as a whole).
- (c) At Closing Time (i) there shall not have been from the respective dates as of which information is given in the Registration Statement and Prospectus any material adverse change

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- (d) At Closing Time, the Corporation shall have received from Authorized Carriers the purchase price for at least 90% of the 5,000,000 shares of Common Stock covered by subscriptions of Authorized Carriers as stated in Section 1.
- (e) At Closing Time counsel for the Underwriters shall have been furnished with such documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the sale of the Common Stock, including the Shares, as herein contemplated and related proceedings, or in order to evidence the accuracy or completeness of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Corporation in connection with the sale of the Common Stock, including the Shares, as herein contemplated shall be satisfactory to the Representatives as to matters of substance and to counsel for the Underwriters as to legal matters.

If any of the conditions specified in this Section shall not have been fulfilled when and as required by this Contract to be fulfilled, this Contract and all obligations of the Underwriters hereunder may be cancelled by the Representatives by notifying the Corporation of such cancellation in writing or by telegram at any time at or prior to Closing Time and any such cancellation shall be without liability of any party to any other party except as otherwise provided in this Contract.

Section 8. Condition of Corporation's Obligations. The obligations of the Corporation hereunder are subject to the condition that at Closing Time it shall have received from Authorized Carriers the purchase price for at least 90% of the 5,000,000 shares of Common Stock covered by subscriptions of Authorized Carriers as stated in Section 1. If this condition shall not have been fulfilled when and as required by this Contract to be fulfilled, this Contract and all obligations of the Corporation hereunder may be cancelled by the Corporation by notifying the Representatives of such cancellation in writing or by telegram at or prior to Closing Time and any such cancellation shall be without liability of any party to any other party except as otherwise provided in this Contract.

SECTION 9. Indemnification.

- (a) The Corporation agrees to indemnify and hold harmless each Underwriter and each person, if any, who controls any Underwriter within the meaning of Section 15 of the Act, as follows:
 - (i) against any and all loss, liability, claim, damage and expense whatsoever arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration

Statement (or any amendment thereto) or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, unless such statement or omission or such alleged statement or omission was made in reliance upon and in conformity with written information furnished to the Corporation by any Underwriter through the Representatives expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto);

- (ii) against any and all loss, liability, claim, damage and expense whatsoever to the extent of the aggregate amount paid in settlement of any litigation, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission or any such alleged untrue statement or omission, if such settlement is effected with the written consent of the Corporation; and
- (iii) against any and all expense whatsoever reasonably incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above.

In no case shall the Corporation be liable under this indemnity agreement with respect to any claim made against any Underwriter or any such controlling person unless the Corporation shall be notified in writing of the nature of the claim within a reasonable time after the assertion thereof, but failure so to notify the Corporation shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. The Corporation shall be entitled to participate at its own expense in the defense, or, if the Corporation so elects, within a reasonable time after receipt of such notice, to assume the defense of any suit brought to enforce any such claim, but if the Corporation so elects to assume the defense, such defense shall be conducted by counsel chosen by it and approved by the Underwriter or Underwriters or controlling person or persons, defendant or defendants in any suit so brought, which approval shall not be unreasonably withheld. In the event that the Corporation elects to assume the defense of any such suit and retain such counsel, the Underwriter or Underwriters or controlling person or persons, defendant or defendants in the suit, shall bear the fees and expenses of any counsel retained by them for services thereafter performed and expenses of such counsel thereafter incurred. The Corporation agrees to notify you within a reasonable time of the assertion of any claim against it, any of its officers or directors or any person who controls the Corporation within the meaning of Section 15 of the Act, in connection with the sale of the Common Stock, including the Shares.

(b) Each Underwriter severally agrees that it will indemnify and hold harmless the Corporation, its directors and each of its officers who signed the Registration Statement and each person, if any, who controls the Corporation within the meaning of Section 15 of the Act to the same extent as the indemnity contained in subsection (a) of this Section, but only with respect to statements or omissions made in the Registration Statement (or any amendment thereto) or any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with written information furnished to the Corporation by such Underwriter through the Representatives expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto). In case any action shall be brought against the Corporation or any person so indemnified based on the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto) and in respect of which indemnity may be sought against any Underwriter, such Underwriter shall have the rights and duties given to the Corporation, and the Corporation and each person so indemnified shall have the rights and duties given to the Underwriters, by the provisions of subsection (a) of this Section.

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Section 11. Effective Date of this Contract and Termination Thereof.

(a) This Contract shall become effective (i) at 11:30 A. M., New York City Time, on the first business day following the day the Registration Statement becomes effective, or (ii) at the time of the initial public offering by the Underwriters, after the Registration Statement becomes effective, of any of the Shares, whichever shall first occur. The time of the initial public offering shall mean the time of the release by you, for publication, of the first newspaper advertisement, which is subsequently published, relating to the Shares, or the time at which the Shares are first generally offered by the Underwriters to dealers by letter or telegram, whichever shall first occur. The Representatives or the Corporation may prevent this Contract from becoming effective by giving the notice indicated below in this Section prior to the time this Contract would otherwise have become effective as herein provided, but only in the event that, by reason of revocations of subscriptions of Authorized Carriers before such subscriptions are accepted, the Corporation is unable to accept subscriptions for at least 90% of the 5,000,000 shares of Common Stock covered by subscriptions of Authorized Carriers as set forth in Section 1. The Corporation shall give immediate notice to the Representatives as soon as any such inability has occurred. If the Representatives or the Corporation prevent this Contract from becoming effective pursuant to this subsection, it shall be without liability of any party to any other party, except as otherwise provided in this Contract.

(b) The Representatives shall have the right to terminate this Contract by giving the notice indicated below in this Section at any time at or prior to Closing Time (i) if there shall have been, since the respective dates as of which information is given in the Registration Statement and Prospectus, any material adverse change in the condition of the Corporation, financial or otherwise, or in the affairs or business prospects of the Corporation, or (ii) if a war involving the United States or other national calamity shall have occurred, or (iii) if trading on the New York Stock Exchange shall be suspended or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities on the New York Stock Exchange shall have been required by that Exchange or by order of the Commission or any other governmental authority having jurisdiction, or (iv) if a banking moratorium shall have been declared by either Federal or New York authorities. If the Representatives shall terminate this Contract, such termination shall be without liability of any party to any other party except as otherwise provided in this Contract.

If the Representatives elect to prevent this Contract from becoming effective or to terminate this Contract as provided in this Section, the Corporation and each other Underwriter shall be notified promptly by the Representatives, by telephone or telegram, confirmed by letter. If the Corporation elects to prevent this Contract from becoming effective as provided in this Section, the Representatives shall be notified promptly by the Corporation by telephone or telegram, confirmed by letter.

Section 12. Substitution of Underwriters or Increase in Underwriters' Commitments. If one or more of the Underwriters shall fail at Closing Time to purchase the Shares which it or they have agreed to purchase hereunder (the "Unpurchased Shares"), then the Representatives shall have the right within 24 hours after Closing Time to procure one or more of the non-defaulting Underwriters, or any others, to purchase Unpurchased Shares in such amounts as may be agreed upon and upon the terms herein set forth; if, however, during such 24 hours the Representatives shall not have completed such arrangements for the purchase of all Unpurchased Shares, then the Corporation shall have the right, by written notice to the Representatives within the next 24 hours, either to terminate this Contract or to require the non-defaulting Underwriters to purchase the Shares which they have severally agreed to purchase hereunder and, in addition, to purchase Unpurchased Shares in proportion to their respective commitments hereunder up to a number thereof equal to 10% of the respective number of Shares which such non-defaulting Underwriters otherwise agreed to purchase hereunder.

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The termination of this Contract by the Corporation pursuant to this Section shall be without liability on the part of the Corporation or any of said non-defaulting Underwriters. Nothing herein shall relieve any Underwriter so defaulting from liability, if any, for such default.

In the event of a default by any one or more Underwriters as set forth in this Section, Closing Time shall be postponed for 24 hours, and either the Representatives or the Corporation shall have the right to postpone Closing Time for an additional period of not exceeding 7 days, in order that any required changes in the Registration Statement and Prospectus or in any other documents or arrangements may be effected.

Section 13. Modification and Waiver. The Representatives and the Corporation expressly reserve the right, in their sole discretion and when mutually agreed upon, to make any modification herein or to waive any of the provisions hereof, and any such action when taken in accordance herewith shall be binding upon the other Underwriters.

Section 14. Notices. Except as herein otherwise provided, all communications hereunder shall be in writing and, if sent to the Underwriters, shall be mailed, delivered or telegraphed and confirmed to the Representatives c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., attention of Mr. J. H. Sedlmayr, or, if sent to the Corporation, shall be mailed, delivered or telegraphed and confirmed to the Corporation, at 3029 Klingle Road, N.W., Washington 8, D. C., attention of the Chairman and Chief Executive Officer. All communications hereunder from the Representatives shall be signed by Merrill Lynch, Pierce, Fenner & Smith Incorporated, acting on behalf of the Representatives.

Section 15. Parties. This Contract shall inure to the benefit of and be binding upon the Underwriters and the Corporation and their respective successors. Nothing expressed or mentioned in this Contract is intended or shall be construed to give any person, firm or corporation, other than the parties hereto and their respective successors and the controlling persons, directors and officers referred to in Section 9, any legal or equitable right, remedy or claim under or in respect of this Contract or any provision herein contained; this Contract and all conditions and provisions hereof being intended to be and being for the sole and exclusive benefit of the parties hereto and their respective successors and said controlling persons, directors and officers and for the benefit of no other person, firm or corporation. No purchaser of any Shares from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

This Contract shall be construed in accordance with the law of the State of New York.

If the foregoing is in accordance with your understanding of our agreement, kindly sign and return to us a counterpart hereof, whereupon this instrument along with all counterparts will become a binding contract between the Corporation and the Underwriters in accordance with its terms.

Number of	SCHEDULE A	
beauty of Underwrite Street to send	A 11 CITE demonstrate	Number of Shares to be Purchased
Name of Underwriter	Address of Underwriter	I di chasca
Merrill Lynch, Pierce, Fenner & Smith	TO D' Com New York 5 N V	100,000
Incorporated	70 Pine Street, New York 5, N. Y.	100,000
Blyth & Co., Inc.	14 Wall Street, New York 5, N. Y.	100,000
The First Boston Corporation	20 Exchange Place, New York, N. Y. 10005	100,000
Kidder, Peabody & Co. Incorporated	20 Exchange Place, New York 5, N. Y.	100,000
Kuhn, Loeb & Co. Incorporated	30 Wall Street, New York 5, N. Y.	100,000
Lazard Frères & Co.	44 Wall Street, New York 5, N. Y.	
Lehman Brothers	One William Street, New York 4, N. Y.	100,000
Carl M. Loeb, Rhoades & Co.	42 Wall Street, New York 5, N. Y.	100,000
Paine, Webber, Jackson & Curtis	25 Broad Street, New York 4, N. Y.	100,000
White, Weld & Co. Incorporated	20 Broad Street, New York 5, N. Y.	100,000
Dean Witter & Co.	45 Montgomery Street, San Francisco 6, California	100,000
Eastman Dillon, Union Securities & Co.	One Chase Manhattan Plaza,	£0,000
Valuar Lerchea & Co.	New York 5, N. Y.	50,000
Glore, Forgan & Co.	45 Wall Street, New York 5, N. Y.	50,000
Harriman Ripley & Co., Incorporated	60 Broad Street, New York 4, N. Y.	50,000
Hornblower & Weeks	1 Chase Manhattan Plaza,	50,000
	New York 5, N. Y.	50,000
Smith, Barney & Co. Incorporated	20 Broad Street, New York 5, N. Y.	
Stone & Webster Securities Corporation	90 Broad Street, New York 4, N. Y.	50,000
Bache & Co.	36 Wall Street, New York 5, N. Y.	29,000
Bear, Stearns & Co.	One Wall Street, New York 5, N. Y.	29,000
A. G. Becker & Co. Incorporated	120 South La Salle Street,	29,000
	Chicago 3, Illinois	29,000
Clark, Dodge & Co. Incorporated	61 Wall Street, New York 5, N. Y.	29,000
Dominick & Dominick, Incorporated	14 Wall Street, New York 5, N. Y.	29,000
Drexel & Co.	1500 Walnut Street,	29,000
	Philadelphia 1, Pennsylvania	29,000
Hallgarten & Co.	44 Wall Street, New York 5, N. Y.	29,000
Hayden, Stone Incorporated	25 Broad Street, New York, N. Y. 10004	29,000
Hemphill, Noyes & Co.	8 Hanover Street, New York 4, N. Y.	27,000
E. F. Hutton & Company Inc.	One Chase Manhattan Plaza, New York 5, N. Y.	29,000
sco, California 94104 18,500	14 Wall Street, New York, N. Y. 10005	29,000
W. E. Hutton & Co.	20 Broad Street, New York 5, N. Y.	29,000
Lee Higginson Corporation	60 Broad Street, New York, N. Y. 10004	29,000
F. S. Moseley & Co.		29,000
Reynolds & Co.	120 Broadway, New York 5, N. Y.	29,000
Shearson, Hammill & Co.	14 Wall Street, New York 5, N. Y.	29,000
Wertheim & Co.	1 Chase Manhattan Plaza, New York 5, N. Y.	29,000
Alex. Brown & Sons	135 East Baltimore Street,	25,500
	Baltimore 2, Maryland	25,500
Equitable Securities Corporation	Two Wall Street, New York 5, N. Y.	25,500
Goodbody & Co.	2 Broadway, New York 4, N. Y.	25,500
Johnston, Lemon & Co.	Southern Bldg., Washington 5, D. C.	25,500
Ladenburg, Thalmann & Co.	25 Broad Street, New York 4, N. Y.	
R. W. Pressprich & Co.	80 Pine Street, New York 5, N. Y.	25,500
L. F. Rothschild & Co.	120 Broadway, New York 5, N. Y.	25,500
Salomon Brothers & Hutzler	Sixty Wall Street, New York, N. Y. 10005	25,500

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
Shields & Company Incorporated	44 Wall Street, New York 5, N.Y.	25,500
F. S. Smithers & Co.	45 Wall Street, New York 5, N. Y.	25,500
Spencer Trask & Co.	60 Broad Street, New York, N. Y. 10004	25,500
Tucker, Anthony & R. L. Day	120 Broadway, New York 5, N. Y.	25,500
G. H. Walker & Co. Incorporated	45 Wall Street, New York 5, N.Y.	25,500
Wood, Struthers & Co., Inc.	20 Exchange Place, New York 5, N. Y.	25,500
Allen & Company	30 Broad Street, New York 4, N. Y.	23,500
American Securities Corporation	25 Broad Street, New York 4, N. Y.	23,500
Bacon, Whipple & Co.	135 South La Salle Street, Chicago 3, Illinoi	23,500
Robert W. Baird & Co., Incorporated	731 North Water Street, Milwaukee 1, Wisconsin	23,500
Baker, Weeks & Co.	One Wall Street, New York 5, N. Y.	23,500
William Blair & Company	135 South La Salle Street, Chicago 3, Illinois	23,500 s 23,500
Blair & Co., Granbery, Marache Incorporated	20 Broad Street, New York 5, N. Y.	23,500
Blunt Ellis & Simmons	111 West Monroe Street, Chicago 3, Illinois	23,500
J. C. Bradford & Co.	414 Union Street, Nashville 3, Tennessee	and the second second second
J. M. Dain & Co., Inc.	110 South Sixth Street,	23,500
	Minneapolis 2, Minnesota	23,500
Dick & Merle-Smith	48 Wall Street, New York 5, N.Y.	23,500
R. S. Dickson & Company, Incorporated	30 Broad Street, New York 4, N. Y.	23,500
F. Eberstadt & Co.	65 Broadway, New York 6, N.Y.	23,500
Estabrook & Co.	15 State Street, Boston 9, Massachusetts	23,500
W. C. Langley & Co.	115 Broadway, New York 6, N. Y.	23,500
McDonald & Company	Union Commerce Bldg., Cleveland 14, Ohio	23,500
New York Securities Co.	52 Wall Street, New York 5, N.Y.	23,500
The Ohio Company	51 North High Street, Columbus 15, Ohio	23,500
Piper, Jaffray & Hopwood	115 South Seventh Street,	=0,000
Street, New York 5, N. Y. 22,000	Minneapolis 2, Minnesota	23,500
Schwabacher & Co.	100 Montgomery Street	Dominica
William D. Charle C. C. T.	San Francisco 4, California	23,500
William R. Staats & Co. Incorporated	640 South Spring Street,	
Ball, Burge & Kraus	Los Angeles 14, California	23,500
Buil, Buige & Itiaus	1414 Union Commerce Bldg., Cleveland 14, Ohio	40 400
J. Barth & Co.	404 Montgomery Street,	18,500
ork 5, N. Story in Measure, research	San Francisco, California 94104	10 500
Burnham and Company	60 Broad Street, New York 4, N.Y.	18,500
Coffin & Burr	64 Wall Street, New York 5, N.Y.	18,500
Courts & Co.	11 Marietta Street N. W., Atlanta 3, Georgia	18,500
Dempsey-Tegeler & Co., Inc.	1000 Locust Street, St. Louis 1, Missouri	18,500
First of Michigan Corporation	2 Wall Street, New York 5, N.Y.	18,500
Folger, Nolan, Fleming & Co. Incorporated	725 1511 C 37 777 777	18,500
Fulton, Reid & Co., Inc.	2100 East Ohio Bldg., Cleveland 14, Ohio	18,500 18,500
Robert Garrett & Sons	South & Redwood Streets, Baltimore 3, Maryland	Alex. Bre
Hayden, Miller & Co.	TT · C	18,500 18,500
H. Hentz & Co.	7') \\17-11 C: . \\77 \\77 \\ 4 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	
Hirsch & Co., Incorporated	25 D 1 C 37 37 4 4	18,500
Irving Lundborg & Co.	310 Sansome Street,	18,500
	Con Touris A Case	18,500
McDonnell & Co. Incorporated	120 D 1 37 37 4 7 37 9	18,500
	LATER AND ADDRESS OF THE PARTY	

Name of Underwriter	Sh	umber of ares to b urchased
and the comment of the second	1612 Union Commerce Bldg.,	
Merrill, Turben & Co., Inc.	Cleveland 14, Ohio	18,500
11.71.10.0	120 Broadway, New York 5, N. Y.	18,500
Model, Roland & Co.	Union Trust Bldg.,	
Moore, Leonard & Lynch	Pittsburgh 19, Pennsylvania	18,500
	400 Olive Street, St. Louis 2, Missouri	18,500
Newhard, Cook & Co.	400 Locust Street, St. Louis 2, Missouri	18,500
Reinholdt & Gardner	40 Wall Street, New York 5, N. Y.	18,500
Riter & Co.	2000 Rhodes-Haverty Bldg.,	19. PARE
The Robinson-Humphrey Company, Inc.	Atlanta, Georgia 30303	18,500
Shuman, Agnew & Co.	155 Sansome Street, San Francisco 4, California	18,500
Singer, Deane & Scribner	Union Trust Bldg., Pittsburgh 19, Pennsylvania	18,500
Stroud & Company, Incorporated	123 South Broad Street,	10 500
THE STATE OF THE S	Philadelphia 9, Pennsylvania	18,500
Watling, Lerchen & Co.	Ford Bldg., Detroit 26, Michigan	18,500
Arnhold and S. Bleichroeder, Inc.	30 Broad Street, New York 4, N. Y.	12,500
Auchincloss, Parker & Redpath	Two Broadway, New York 4, N. Y.	12,500
Baker, Watts & Co.	Calvert & Redwood Streets, Baltimore 3, Maryland	12,50
Bateman, Eichler & Bingham Incorporated	453 South Spring Street,	10 50
Sateman, Elemer & Dingham 2	Los Angeles 13, California	12,50
Boettcher and Company	828 17th Street, Denver 2, Colorado	12,50
Bosworth, Sullivan & Company, Inc.	660—17th Street, Denver 2, Colorado	12,50
Butcher & Sherrerd	1500 Walnut Street, Philadelphia 2, Pennsylvania	12,50
Chapman, Howe & Co.	208 South La Salle Street, Chicago 4, Illinois	12,50
Julien Collins & Company	105 South La Salle Street, Chicago 3, Illinois	12,50
Crowell, Weedon & Co.	629 South Spring Street, Los Angeles 14, California	12,50
Eppler, Guerin & Turner, Inc.	1600 Fidelity Union Tower, Dallas 1, Texas	12,50
Fahnestock & Co.	65 Broadway, New York 6, N. Y.	12,50
First California Company Incorporated	300 Montgomery Street,	10 50
riist Camorina Company 22200-person	San Francisco, California 94104	12,50
First Southwest Company	Mercantile Bank Bldg., Dallas 1, Texas	12,50
Halle & Stieglitz	52 Wall Street, New York 5, N. Y.	12,50
The Illinois Company Incorporated	231 South La Salle Street,	10 50
The inmois company most person	Chicago, Illinois 60604	12,50
The Johnson, Lane, Space, Smith Corporation	101 East Bay Street, Savannah, Georgia	12,50
Laird & Company, Corporation	Wilmington Trust Bldg., Wilmington 99, Delaware	12,50
Laird, Bissell & Meeds	120 Broadway, New York 5, N. Y.	12,50
	22 Light Street, Baltimore 3, Maryland	12,50
Legg & Co.	623 South Hope Street,	1
Lester, Ryons & Co.	Los Angeles 17, California	12,50
Loewi & Co. Incorporated	225 East Mason Street, Milwaukee 2, Wisconsin	12,50
A. E. Masten & Co.	First National Bank Bldg.,	40.7
A. E. Wastell & Co.	Pittsburgh 22, Pennsylvania	12,50
	135 South La Salle Street, Chicago 3, Illinois	

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
The Milwaukee Company	207 East Michigan Street,	25,500
Mitchum, Jones & Templeton, Incorporated	Milwaukee 2, Wisconsin 510 South Spring Street,	12,500
Pacific Northwest Company	Los Angeles 13, California 1000 Second Avenue,	12,500
Rauscher, Pierce & Co., Inc.	Seattle, Washington 98104 1200 Mercantile Dallas Bldg.,	12,500
Wm. C. Roney & Co.	Dallas 1, Texas	12,500
Rotan, Mosle & Co.	2 Buhl Bldg., Detroit 26, Michigan 1510 Bank of the Southwest Bldg., Houston 2, Texas	12,500
Stein Bros. & Boyce, Inc.		12,500
Stern Brothers & Co.	One Charles Center, Baltimore 1, Maryland 1009-15 Baltimore Avenue,	12,500
Stifel, Nicolaus & Company, Incorporated	Kansas City 5, Missouri 314 North Broadway,	12,500
Stone & Youngberg	St. Louis 2, Missouri 1314 Russ Bldg.,	12,500
Sutro & Co.	San Francisco 4, California 460 Montgomery Street,	12,500
Underwood, Neuhaus & Co. Incorporated	San Francisco 4, California	12,500
Weeden & Co. Incorporated	Houston Club Bldg., Houston 2, Texas	12,500
Winslow, Cohu & Stetson Incorporated	25 Broad Street, New York 4, N. Y.	12,500
Abbott, Proctor & Paine	26 Broadway, New York 4, N. Y. 911 East Main Street, Richmond 14, Virginia	12,500
Anderson & Strudwick	913 East Main Street, Richmond 12, Virginia	8,000
Brush, Slocumb & Co. Inc.	465 California Street, San Francisco 4, California	8,000
Carolina Securities Corporation	Insurance Bldg., Raleigh, North Carolina	8,000
Richard W. Clarke Corporation	535 Fifth Avenue, New York 17, N. Y.	8,000
Common, Dann & Co.	502 Marine Trust Bldg., 237 Main Street, Buffalo, N. Y. 14203	8,000
Cooley & Company	100 Pearl Street, Hartford 4, Connecticut	8,000 8,000
Dallas Union Securities Co., Inc.	1001 Adolphus Tower, Dallas 2, Texas	8,000
Davis, Skaggs & Co.	111 Sutter Street,	0,000
DeHaven & Townsend, Crouter & Bodine	San Francisco 4, California 1500 Chestnut Street,	8,000
Dewar, Robertson & Pancoast	Philadelphia 2, Pennsylvania	8,000
Dittmar & Company, Inc.	Milam Bldg., San Antonio 5, Texas 201 North St. Mary's Street,	8,000
Dreyfus & Co.	San Antonio 6, Texas	8,000
Eddleman, Pollok & Fosdick Inc.	Two Broadway, New York 4, N. Y. 440 Bank of the Southwest Bldg., Houston 2, Texas	8,000
A. G. Edwards & Sons	409 North Eighth Street, St. Louis 1, Missouri	8,000
Elworthy & Co., Incorporated	111 Sutter Street, San Francisco 4, California	8,000
Emanuel, Deetjen & Co.		8,000
Fahey, Clark & Co.	120 Broadway, New York 5, N. Y. 1737 Union Commerce Bldg., Cleveland 14, Ohio	8,000
Faulkner, Dawkins & Sullivan	60 Broad Street, New York 4, N. Y.	8,000
ds La Selle Street, Chicago 3, Illinois 12,500	Don't Tolk T, IV. I.	8,000

Number of Shares to be	Sha	mber of res to be rchased
Name of Underwriter	1144100002 011441 11141	rchased
Ferris & Company	611 Fifteenth Street, N. W.	8,000
rie Terminal Blar., Cincinnas 2, Obliv., os. 200	Washington 5, D. C.	8,000
Gregory & Sons	40 Wall Street, New York 5, N. Y.	0,000
Hallowell, Sulzberger, Jenks, Kirkland & Co.	Philadelphia National Bank Bldg., Philadelphia 7, Pennsylvania	8,000
J. J. B. Hilliard & Son	419 West Jefferson Street,	0.000
2002 America Consornation in mile and a state of the	Louisville 2, Kentucky	8,000
Howard, Weil, Labouisse, Friedrichs and	211 Carondelet Street, New Orleans, Louisiana 70130	8,000
Company Janney, Battles & E. W. Clark, Inc.	Central-Penn National Bank Bldg.,	
Janney, Datties & E. W. Clark, Inc.	1401 Walnut Street,	0.000
	Philadelphia 2, Pennsylvania	8,000
Edward D. Jones & Co.	101 North Fourth Street, St. Louis 2, Missouri	8,000
Jones, Kreeger & Co.	1625 Eye Street, N. W., Washington 6, D. C.	8,000
Joseph, Mellen & Miller, Inc.	1400 East Ohio Bldg., Cleveland 14, Ohio	8,000
Mackall & Coe	738 15th Street, N. W., Washington 5, D. C.	8,000
Manley, Bennett, McDonald & Co.	1100 Buhl Bldg., Detroit, Michigan 48226	8,000
Mead, Miller & Co.	Charles and Chase Streets,	8,000
Field, Richards & Co.	Baltimore 1, Maryland	8,000
Mitchell, Hutchins & Co., Incorporated	231 South La Salle Street, Chicago 4, Illinois	8,000
Moroney, Beissner & Co., Inc.	Bank of the Southwest Bldg.,	8,000
777 11 0 0	Houston 2, Texas 135 South La Salle Street, Chicago 3, Illinois	8,000
Mullaney, Wells & Company	1401 Walnut Street,	0,000
Newburger & Co.	Philadelphia 2, Pennsylvania	8,000
Putnam & Co.	6 Central Row, Hartford, Connecticut 06103	8,000
Saunders, Stiver & Co.	One Terminal Tower, Cleveland 13, Ohio	8,000
Chas. W. Scranton & Co.	209 Church Street, New Haven 7, Connecticut	8,000
I. M. Simon & Co.	315 North Fourth Street,	
1. W. Simon & Co.	St. Louis 2, Missouri	8,000
Stern, Frank, Meyer & Fox	Union Bank Bldg.,	9 000
20150 etneudousanti.	Los Angeles, California 90014	8,000
J. S. Strauss & Co.	155 Montgomery Street, San Francisco 4, California	8,000
The state of the s	61 Broadway, New York, N. Y. 10006	8,000
C. E. Unterberg, Towbin Co.	40 Wall Street, New York 5, N. Y.	8,000
Van Alstyne, Noel & Co.	626 South Spring Street,	Lifern
Wagenseller & Durst, Inc.	Los Angeles 14, California	8,000
Adams & Peck	120 Broadway, New York, N. Y. 10005	6,500
Bioren & Co.	1424 Walnut Street,	105,08100
Bioten & Co.	Philadelphia 2, Pennsylvania	6,500
Boenning & Co.	The Alison Bldg., Rittenhouse Square,	6 500
The Court of the C	Philadelphia 3, Pennsylvania	6,500
Burgess & Leith	53 State Street, Boston 9, Massachusetts	6,500
Chace, Whiteside & Winslow, Inc.	24 Federal Street, Boston 10, Massachusetts	0,300
Chaplin, McGuiness & Co.	Peoples Bank Bldg., Pittsburgh 22, Pennsylvania	6,500
City Committee and another	147 Milk Street, Boston 9, Massachusetts	6,500
Clayton Securities Corporation	First National Bank Bldg.,	
Cunningham, Schmertz & Co., Inc.	Pittsburgh 22, Pennsylvania	6,500
Davenport & Co	1113 East Main Street, Richmond 19, Virgini	a 6,500
Davenport & Co. Shelby Cullom Davis & Co.	116 John Street, New York 38, N.Y.	6,500
Elkins, Morris, Stokes & Co.	428 Land Title Bldg.,	
Limito, Alexandre de Leo	Philadelphia 10, Pennsylvania	6,500

Name of Underwriter	SI SI	Number of hares to be Purchased
Evans & Co. Incorporated	300 Park Avenue, New York 22, N. Y.	6,500
W. D. Gradison & Co.	408 Dixie Terminal Bldg., Cincinnati 2, Ohio	6,500
Hickey & Co.	135 South La Salle Street, Chicago 3, Illinois	6,500
Hill Richards & Co., Incorporated	621 South Spring Street, Los Angeles 14, California	6,500
Hulme, Applegate & Humphrey, Inc.	586 Union Trust Bldg., Pittsburgh 19, Pennsylvania	6,500
ndianapolis Bond and Share Corporation	120 East Market Street, Indianapolis 4, Indiana	6,500
ngalls & Snyder	100 Broadway, New York 5, N. Y.	6,500
Kalman & Company, Inc.	136 Endicott Bldg., St. Paul 1, Minnesota	
Kay, Richards & Company	Union Trust Bldg., Pittsburgh 19, Pennsylvania	6,500
Mason-Hagan, Inc.	1017 East Main Street, Richmond 10, Virginia	6,500
AcKelvy & Company	1146 Union Trust Bldg.	a 0,500
Marie Company and Company	Pittsburgh 19, Pennsylvania	6,500
Middendorf, Colgate & Co.	51 Broad Street, New York 4, N.Y.	6,500
Newburger, Loeb & Co.	5 Hanover Square, New York 4, N. Y.	6,500
erce, Wulbern, Murphey, Inc.	222 West Adams Street,	0,500
Merrood, Neahaus & Caure upatalogo	Jacksonville 1, Florida	6,500
Vm. E. Pollock & Co., Inc.	45 Wall Street, New York 5, N. Y	6,500
cuss & Company, Incorporated	Alamo National Bldg., San Antonio, Texas	6,500
cherck, Richter Company, Inc.	408 Olive Street, St. Louis, Missouri 63102	6,500
chmidt, Roberts & Parke	123 South Broad Street, Philadelphia 9, Pennsylvania	
cott & Stringfellow	P. O. Box 1575, Richmond 13, Virginia	6,500
ilberberg & Co.	40 Wall Street, New York 5, N. Y.	6,500
tix & Co.	509 Olive Street, St. Louis 1, Missouri	6,500
homas & Company		6,500
ownsend, Dabney & Tyson	305 Porter Bldg., Pittsburgh 19, Pennsylvania 10 Post Office Square,	
I. C. Wainwright & Co.	Boston, Massachusetts 02105	6,500
C. Wheat & Co.	60 State Street, Boston 1, Massachusetts 1001 East Main Street,	6,500
rthur Wiesenberger & Co.	Richmond 19, Virginia	6,500
arnall, Biddle & Co.	61 Broadway, New York 6, N. Y. 1528 Walnut Street, Philadelphia 2 Propositions:	6,500
braham & Co.	Philadelphia 2, Pennsylvania	6,500
Imstedt Brothers	120 Broadway, New York 5, N. Y. 425 West Market Street,	5,000
rthurs, Lestrange & Co.	Louisville 2, Kentucky 2 Gateway Center,	5,000
arret, Fitch, North & Co. Incorporated	Pittsburgh 22, Pennsylvania 111 West Tenth Street,	5,000
ck M. Bass & Company	Kansas City 5, Missouri 315 Fourth Avenue, North,	5,000
Bank Eldg.	Nashville 3, Tennessee	5,000
rr, Wilson & Co., Inc.	155 Sansome Street, San Francisco 4, California	5,000
ewer, Glynn & Co.	1536 Railway Exchange Bldg, St. Louis 1, Missouri	5,000
eorge D. B. Bonbright & Co.	100 Powers Bldg., Rochester 14, N. Y.	The second second second
anch, Cabell & Co.	814 East Main Street, Richmond 19, Virginia	5,000

Name of Underwriter	Sha	mber of res to be rchased
	120 Broadway, New York, N. Y. 10005	5,000
P. W. Brooks & Co. Incorporated	First National Bank Bldg.,	0,000
Caldwell Phillips, Inc.	St. Paul 1, Minnesota	5,000
C. F. Cassell & Co., Inc.	114 Third Street, N.E.,	
J. F. Cassen & Co., Inc.	Charlottesville, Virginia	5,000
Childs Securities Corporation	One Liberty Street, New York 5, N. Y.	5,000
City Securities Corporation	Circle Tower, Indianapolis 4, Indiana	5,000
Clark, Landstreet & Kirkpatrick, Inc.	Life & Casualty Tower,	£ 000
	Nashville 3, Tennessee	5,000
Collin, Norton & Co.	Gardner Bldg., 506 Madison Avenue,	5,000
mm Bldg., Cleveland 15, Ohlo 5,000	Toledo 4, Ohio	5,000
C. C. Collings and Company, Inc.	Fidelity-Philadelphia Trust Bldg., Philadelphia 9, Pennsylvania	5,000
	616 E. Main Street,	
Craigie & Co., Inc.	Richmond, Virginia 23215	5,000
C : II & Co	Union Commerce Bldg.,	
Curtiss, House & Co.	Cleveland 14, Ohio	5,000
Doolittle & Co.	Liberty Bank Bldg., Buffalo 2, N. Y.	5,000
Field, Richards & Co.	1107 Central Trust Bank Tower,	
Field, Richards & Co.	Cincinnati, Ohio 45202	5,000
First Nebraska Securities Corporation	1001 O Street, Lincoln 1, Nebraska	5,000
First Southeastern Company	103 Twelfth Street, Columbus, Georgia	5,000
Freehling & Co.	120 South La Salle Street,	= 000
Preeming & Co.	Chicago 3, Illinois	5,000
Fridley & Frederking	617 Texas National Bank Bldg.,	£ 000
The state of the s	Houston 2, Texas	5,000
Funk, Hobbs & Hart, Inc.	1012 National Bank of Commerce Bldg.,	5,000
	San Antonio 5, Texas	5,000
Alester G. Furman Co., Inc.	South Carolina National Bank Bldg., Greenville, South Carolina	5,000
	522 Olive Street, St. Louis 1, Missouri	5,000
Fusz-Schmelzle & Co., Inc.	Third National Bldg., Dayton 2, Ohio	5,000
Greene & Ladd	25 Broad Street, New York 4, N. Y.	5,000
Hamershlag, Borg & Co.	332 Main Street,	E 793
Hanrahan & Co., Inc.	Worcester 8, Massachusetts	5,000
II	123 South Broad Street,	
Harrison & Co.	Philadelphia 9, Pennsylvania	5,000
Hess, Grant & Remington Incorporated	123 South Broad Street,	= 000
riess, Grant & Rennington Incorporation	Philadelphia 9, Pennsylvania	5,000
J. H. Hilsman & Co., Inc.	Citizens & Southern Bldg.,	£ 000
	Atlanta 1, Georgia	5,000
Interstate Securities Corporation	Johnston Bldg.,	5,000
	Charlotte 2, North Carolina	5,000
Investment Corporation of Norfolk	215 East Plume Street,	5,000
A TOTAL STORY AND STORY AND STORY	Norfolk 10, Virginia Ford Bldg., Detroit 26, Michigan	5,000
Kenower, MacArthur & Co.	320 South Fifth Street,	,,,,,
The Kentucky Company	Louisville 2, Kentucky	5,00
Will while Dattie Company	540 Omaha National Bank Bldg.,	
Kirkpatrick-Pettis Company	Omaha, Nebraska	5,00
TZ 11 0 Co	217 Carondelet Street,	
Kohlmeyer & Co.	New Orleans 30, Louisiana	5,0 0
	11 3T . 1 Did Con Antonio 5 Toyoc	5,00
Lentz, Newton & Co.	Alamo National Bldg., San Antonio 5, Texas 906 Marine Trust Bldg., Buffalo 3, N. Y.	5,00

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Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
W. L. Lyons & Co.	235 South Fifth Street,	007# SID
	Louisville 2, Kentucky	5,000
D. B. Marron & Co., Incorporated	63 Wall Street, New York, N. Y. 10005	5,000
Mason Brothers	1130 First Western Bldg.,	3,000
	Oakland 12, California	5,000
McCarley & Company, Inc.	35 Page Avenue, P. O. Box 14,	3,000
000.2 Indiana A Indiana	Asheville, North Carolina	F 000
McCourtney-Breckenridge & Company	1030 Boatmen's Bank Bldg.,	5,000
and the second s	St. Louis 2, Missouri	F 000
Milburn, Cochran & Company, Inc.		5,000
Murch & Co., Inc.	110 East First Street, Wichita 2, Kansas	5,000
W. H. Newbold's Son & Co.	330 Hanna Bldg., Cleveland 15, Ohio	5,000
W. II. Newbold's Son & Co.	1517 Locust Street,	
Omis Basilians & Ca	Philadelphia 2, Pennsylvania	5,000
Orvis Brothers & Co.	30 Broad Street, New York 4, N. Y.	5,000
Charles A. Parcells & Co.	639 Penobscot Bldg., Detroit 26, Michigan	5,000
Parker, Eisen, Waeckerle, Adams & Purcell,	men & Co.	0,000
Inc.	1012 Baltimore Avenue,	
	Kansas City 5, Missouri	5,000
H. O. Peet & Co.	23 West 10th Street,	3,000
	Kansas City 5, Missouri	5,000
Powell, Kistler & Co.	110 Old Street, Fayetteville, North Carolina	5,000
Quinn & Co.	200 Second Street, N.W.,	5,000
2000	Albuquerque New Merris	F 000
Raffensperger, Hughes & Co., Inc.	Albuquerque, New Mexico	5,000
Rancisperger, Trughes & Co., Inc.	20 North Meridian Street,	0,
Rand & Co.	Indianapolis 4, Indiana	5,000
	One Wall Street, New York 5, N. Y.	5,000
F. P. Ristine & Co.	123 South Broad Street,	
Di Texas	Philadelphia 9, Pennsylvania	5,000
Robinson and Lukens	909 Union Trust Bldg., Washington 5, D. C.	5,000
Rodman & Renshaw	209 South La Salle Street,	0,000
	Chicago 4, Illinois	5,000
Rowles, Winston & Co., Incorporated	1300 Southwest Tower, Houston, Texas 7700	2 5,000
Sage, Rutty & Co., Inc.	45 Exchange Street, Rochester 14, N. Y.	
Sanders & Company	Republic National Bank Bldg.	5,000
(100.2	Dallas 1, Texas	f 000
Schneider, Bernet & Hickman, Inc.		5,000
Seasongood & Mayer	1505 Elm Street, Dallas 1, Texas	5,000
	Security Savings Bldg., Cincinnati 2, Ohio	5,000
Simpson, Emery & Company, Inc.	1115-1117 Plaza Bldg.,	
C' O NI ' I	Pittsburgh 19, Pennsylvania	5,000
Sisson & Nair Incorporated	829 Jefferson Avenue,	mili H. Hilan
C 11075	Redwood City, California	5,000
Smith, Moore & Co.	509 Olive Street, St. Louis 1, Missouri	5,000
Southwick, Campbell, Waterman Co.	1740 Washington Bldg.,	0,000
	Seattle 1, Washington	5,000
Stern, Lauer & Co.	120 Broadway, New York, N. Y. 10005	5,000
Sterne, Agee & Leach, Inc.	First National Bldg.,	3,000
and the second s	Birmingham 3, Alabama	£ 000
Stewart, Eubanks, Meyerson & Co.	216 Montgomery Street,	5,000
,, <u>,</u>	San Francisco 4, California	f 000
Storz-Wachob-Bender Co.		5,000
	3624 Farnam Street, Omaha, Nebraska 68131	5,000
Strader and Company, Incorporated	502 Peoples National Bank Bldg.,	Koklimeye
Sunlag Vootman Marlon Co Torre	Lynchburg, Virginia	5,000
Suplee, Yeatman, Mosley Co. Incorporated	1500 Walnut Street,	
	Philadelphia 2, Pennsylvania	5,000

Name of Underwriter		Number of Shares to be Purchased
Constitute Service A Maillanne	On Dive Street New York 5 N V	5,000
Sutro Bros. & Co.	80 Pine Street, New York 5, N. Y.	The second secon
Sweney Cartwright & Co.	Huntington Bank Bldg., Columbus 15, Ohio	
Trubee, Collins & Co.	M. & T. Bldg., Buffalo 2, N. Y.	5,000
Uhlmann & Co., Inc.	141 West Jackson Blvd., Chicago 4, Illinois	
Varnedoe, Chisholm & Co., Inc.	One Bull Street, Savannah, Georgia	5,000
Willis, Kenny & Ayres, Incorporated	205 West Franklin Street, Richmond 20, Virginia	5,000
Woodcock, Moyer, Fricke & French, Inc.	123 South Broad Street, Philadelphia 9, Pennsylvania	5,000
Wyatt, Neal & Waggoner	First National Bank Bldg., Atlanta 3, Georgia	5,000
TI ' O Woods	819 Pine Street, St. Louis 1, Missouri	5,000
Yates, Heitner & Woods	530 Hamilton Street,	
Warren W. York & Co., Inc.	Allentown, Pennsylvania	5,000
County Day Maintain Manager	120 Broadway, New York, N. Y. 10005	5,000
Zilkha Corporation	30 Broad Street, New York 4, N. Y.	5,000
Zuckerman, Smith & Co.		3,500
Alden & Co., Inc.	Starks Bldg., Louisville 2, Kentucky	3,300
Allison-Williams Company	Northwestern Bank Bldg.,	3,500
	Minneapolis 2, Minnesota	3,500
Amott, Baker & Co., Incorporated	150 Broadway, New York 38, N. Y.	3,300
Austin, Dobbins & Calvert	National Bank of Commerce Bldg.,	3,500
Bunnage J. Vissossysh Copt shokoM , ShouA on	San Antonio 5, Texas	3,300
Baumgartner, Downing & Co.	Mercantile Trust Bldg., Baltimore 2, Maryland	3,500
Bingham, Sheldon & Co.	735 North Water Street, Milwaukee 2, Wisconsin	3,500
M. H. Bishop & Co.	Northwestern Bank Bldg., Minneapolis 2, Minnesota	3,500
Blaine & Company, Inc.	1421 Chestnut Street, Philadelphia, Pennsylvania 19102	3,500
orog Morti Carolina 14 pro 2 2 200	111 Broadway, New York 6, N. Y.	3,500
E. D. Boynton & Co., Inc.	2 Penn Center Plaza,	A DESCRIPTION
Brooke, Sheridan, Bogan & Co., Inc.	Philadelphia 2, Pennsylvania	3,500
Brown, Lisle & Marshall	Turks Head Bldg., Providence 3, Rhode Island	3,500
Burrows, Smith and Company	174 South Main Street,	2 500
Darrons, Simulation Company	Salt Lake City, Utah 84101	3,500
Byrd Brothers	11 Broadway, New York 4, N. Y.	3,500
Campbell, McCarty & Company Incorporated	1500 Buhl Bldg., Detroit 26, Michigan	3,500
Carter, Berlind & Weill	60 Broad Street, New York 4, N. Y.	3,500
The Cherokee Securities Company	4106 Hillsboro Road, Nashville 12, Tennessee	3,500
	Farm Credit Bldg., Omaha 2, Nebraska	3,500
Chiles & Company		-,
John W. Clarke & Co.	135 South La Salle Street, Chicago 3, Illinois	3,500
G. H. Crawford Co., Inc.	400 Barringer Bldg., Columbia 1, South Carolina	3,500
Dixon Bretscher Noonan Inc.	509 First National Bank Bldg., Springfield, Illinois	3,500
O E Dooly & Co	612 Ingraham Bldg., Miami, Florida 33131	3,500
Oscar E. Dooly & Co.	50 Congress Street,	
Draper, Sears & Co. Incorporated	Boston 2, Massachusetts	3,500
Eisele & King, Libaire, Stout & Co.	50 Broadway, New York, N. Y. 10004	3,500

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
Elder & Company	722 Chestnut Street,	
Evans, MacCormack & Co., Inc.	Chattanooga 2, Tennessee 453 South Spring Street.	3,500
First Securities Corporation	Los Angeles 13, California 111 Corcoran Street,	3,500
Gerstley, Sunstein & Co.	Durham, North Carolina 211 South Broad Street.	3,500
Goodkind, Neufeld & Company, Inc.	Philadelphia 7, Pennsylvania	3,500
Granger & Company	711 Fifth Avenue, New York, N. Y. 10022	3,500
Gruss & Co.	111 Broadway, New York, N. Y. 10006	3,500
Hardy & Co.	30 Broad Street, New York, N. Y. 10004	3,500
Wm. P. Harper & Son & Co., Inc.	25 Broad Street, New York, N. Y. 10004	3,500
Heller & Meyer	1504 Third Avenue, Seattle, Washington	3,500
T. C. Henderson & Co., Inc.	520 Main Street, East Orange, New Jersey	3,500
Henry, Franc & Co.	Sixth & Grand, Des Moines 9, Iowa	3,500
Hettleman & Co.	308 North 8th Street, St. Louis 1, Missouri	3,500
Hill & Co.	1 Wall Street, New York 5, N. Y.	3,500
June S. Jones Co.	2020 Carew Tower, Cincinnati 2, Ohio 509 U. S. Bank Bldg.,	3,500
andway, New York 38, N. Y	Portland 4, Oregon	2 500
John H. Kaplan & Co.	120 Broadway, New York, N. Y. 10005	3,500
Kaufman Bros. Co.	16 Selden Arcade, Norfolk 10, Virginia	3,500
Kerr & Bell	210 West 7th Street, Los Angeles 14, California	3,500
Kinsley & Adams	6 Norwich Street, Worcester 8, Massachusetts	3,500
Richard E. Kohn & Co.	20 Clinton Street, Newark 2, New Jersey	3,500
Kormendi & Co., Inc.	11 Broadway, New York 4, N. Y.	3,500
McDaniel Lewis & Co.	Jefferson Bldg., Greensboro, North Carolina	3,500
Lombard, Vitalis & Paganucci, Inc.	48 Wall Street, New York, N. Y. 10005	3,500
MacNaughton-Greenawalt & Co.	Michigan Trust Bldg., Grand Rapids 2, Michigan	3,500
The Marshall Company	Marine Plaza, 111 E. Wisconsin Avenue, Milwaukee 2, Wisconsin	3,500
Mason & Co.	2801 Washington Avenue,	3,500
	Newport News, Virginia	3,500
Mason & Lee, Inc.	Church at Eighth Street, Lynchburg, Virginia	3,500
McJunkin, Patton & Co.	1724 Oliver Bldg., Pittsburgh 22, Pennsylvania	
C. S. McKee & Company, Inc.	Union Trust Bldg., Pittsburgh 19, Pennsylvania	3,500
McLean & Company, Inc.	772 Commerce Street, Tacoma 2, Washington	3,500
McMaster Hutchinson & Co.	105 South La Salle Street, Chicago 3, Illinois	
Mid-Continent Securities Company, Inc.		3,500
Nauman, McFawn & Co.	Central Bldg., Wichita 2, Kansas Ford Bldg., Detroit 26, Michigan	3,500
Norris & Hirshberg, Inc.	1550 Bank of Georgia Bldg.,	3,500
Monda Dismosa Commission Commission of the Commi	Atlanta 3, Georgia	3 500
Paul J. Nowland & Co.	1201 Bank of Delaware Bldg.,	3,500
NT O T	Wilmington, Delaware 19899	3,500
Nugent & Igoe	592 Main Street, East Orange, New Jersey	3,500
Pflueger & Baerwald	Mills Bldg., San Francisco 4, California	3,500

Name of Underwriter	Address of Underwriter	Number of Shares to be Purchased
Pyne, Kendall & Hollister	60 Wall Street, New York, N.Y. 10005	3,500
Quail & Co., Inc.	Davenport Bank Bldg., Davenport, Iowa	3,500
Rambo, Close & Kerner Incorporated	1518 Locust Street,	
Kampo, Close & Remer Incorporated	Philadelphia 2, Pennsylvania	3,500
Rankin & Co.	53 Forsyth St. N.W., Atlanta, Georgia 3030	03 3,500
Rosenthal & Co.	40 Wall Street, New York 5, N. Y.	3,500
Roulston & Company	1010 Euclid Avenue, Cleveland 15, Ohio	3,500
Earl M. Scanlan & Co.	Western Federal Bldg.,	
	Seventeenth at California, Denver 2, Colora	do 3,500
Scharff & Jones, Inc.	140 Carondelet Street,	2 500
The fall and a second of the first and the f	New Orleans 12, Louisiana	3,500
Schweickhardt & Company, Inc.	Hibernia Bldg., New Orleans 12, Louisians	a 3,500
H. B. Shaine & Co. Inc.	111 Pearl Street, N. W.,	3,500
training securities and is	Grand Rapids 2, Michigan	
Smith, Hague & Company	539 Penobscot Bldg., Detroit 26, Michigan	3,500
Starkweather & Co.	115 Broadway, New York 6, N. Y.	3,500
Sterling, Grace & Co.	39 Broadway, New York 6, N. Y.	3,300
Taylor and Company	439 North Bedford Drive, Beverly Hills, California	3,500
	105 South La Salle Street,	0,000
Taylor, Rogers & Tracy Inc.	Chicago 3, Illinois	3,500
Duntan I Vincent & Co	105 South La Salle Street,	manuO
Burton J. Vincent & Co.	Chicago 3, Illinois	3,500
White & Company Incorporated	506 Olive Street, St. Louis, Missouri 6310	3,500
C. T. Williams & Company, Inc.	Fidelity Bldg., Baltimore 1, Maryland	3,500
F. J. Winckler Co.	1966 Penobscot Bldg., Detroit 26, Michigan	3,500
Woodard-Elwood & Company	1115 First National Bank Bldg.,	
woodard Diwood & Company	Minneapolis 2, Minnesota	3,500
Wyllie and Thornhill, Inc.	204 East Market Street,	2 500
assession of the disconstruction of the property of	Charlottesville, Virginia	3,500
F. S. Yantis & Co. Incorporated	135 South La Salle Street,	3,500
	Chicago 3, Illinois	3,300
York & Co.	235 Montgomery Street, San Francisco 4, California	3,500
	San Trancisco T, Camornia	
		5,000,000

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COMMUNICATIONS SATELLITE CORPORATION

Underwriters' Application for Issuance of Shares of Common Stock in Connection with Initial Offering

The undersigned, as Representatives of the several Underwriters named in Schedule A to the Purchase Contract between said Underwriters and Communications Satellite Corporation, a District of Columbia corporation (the "Corporation"), hereby make application for the issuance to each such Underwriter of the number of Shares of Common Stock, without par value ("Common Stock"), of the Corporation which such Underwriter in the Purchase Contract has severally agreed to purchase from the Corporation. Each Underwriter is engaged in the business of distributing securities and is participating in good faith in the ordinary course of such business in the distribution of Common Stock of the Corporation.

Each Underwriter agrees as follows, in respect of the Shares of Common Stock to be purchased by it pursuant to the Purchase Contract (the "Shares"):

- (a) If any of the Shares are to be held by such Underwriter as nominee of, or subject to the direction or control of, another person (the "Owner"), such Underwriter will obtain from each such Owner a statement of the following information: (i) whether the Owner is an "Alien Person"*; (ii) whether the Owner is a "Communications Common Carrier"* or a subsidiary or affiliated company of a "Communications Common Carrier" or a trustee, officer or director of any of the foregoing; (iii) whether the Owner, or any syndicate or affiliated group of shareholders of the Corporation of which the Owner is a member, owns or holds more than 100,000 Shares of Common Stock.
- (b) To the extent that the information furnished to such Underwriter shows that Shares held by it are owned by "Alien Persons"*, such Underwriter will take such action as may be appropriate to assure that such Shares are represented by a Foreign Shares Certificate or Foreign Shares Certificates.
- (c) Such Underwriter will furnish to Continental Illinois National Bank and Trust Company of Chicago, 231 South LaSalle Street, Chicago, Illinois, principal Transfer Agent for Common Stock, within 60 days after the date of the issuance of the Shares, a report, dated as of the 40th day after the issuance of the Shares, stating whether such Underwriter holds any of the Shares as nominee of, or subject to the direction or control of, another person, and if so setting forth the following information: (i) whether such Underwriter is a securities broker or dealer having its principal place of business in the United States and registered in accordance with Section 15 of the Securities Exchange Act of 1934; (ii) whether such Underwriter is an "Alien Person"*; (iii) whether such Underwriter is a "Communications Common Carrier"* or a subsidiary or affiliated company of a "Communications Common Carrier" or a trustee, director or officer of any of the foregoing; (iv) whether such Underwriter, or any syndicate or affiliated group of shareholders of the Corporation of which such Underwriter is a member, owns or holds more than 100,000 Shares of Common Stock; (v) on the basis of information furnished to such Underwriter by the Owners, whether any of the Owners is a "Communications Common Carrier" or a subsidiary or affiliated company of a "Communications Common Carrier" or a trustee, officer or director of any of the foregoing; (vi) on the basis of information furnished to such Underwriter by the Owners, whether any of the Owners, or any syndicate or affiliated group of shareholders of the Corporation of which the Owner is a member, owns or holds more than 100,000 Shares of Common Stock.

Compliance by each Underwriter with its agreement hereunder shall be the responsibility of such Underwriter and not the responsibility of the Representatives as such.

Dated: Tune , 1964

MERRILL LYNCH, PIERCE, FENNER & SMITH Incorporated BLYTH & Co., INC. THE FIRST BOSTON CORPORATION KIDDER, PEABODY & Co. INCORPORATED KUHN, LOEB & CO. INCORPORATED LAZARD FRÈRES & Co. LEHMAN BROTHERS CARL M. LOEB, RHOADES & CO. Paine, Webber, Jackson & Curtis White, Weld & Co. Incorporated DEAN WITTER & Co.

By MERRILL LYNCH, PIERCE, FENNER & SMITH Incorporated

Ву

*DEFINITION OF CERTAIN TERMS USED IN APPLICATION

"ALIEN PERSON" means

(1) any alien or the representative of any alien;
(2) any foreign government or the representative thereof;
(3) any corporation organized under the laws of any foreign government;
(4) any corporation of which any officer or director is an alien or of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country; or
(5) any corporation directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens, or of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any other corporation organized under the laws of a foreign country. tion organized under the laws of a foreign country.

"COMMUNICATIONS COMMON CARRIER" means

(1) any person (other than the Corporation) engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy, including a person so engaged through physical connection, or connection by radio, or by wire and radio, with the facilities of another carrier; or (2) any person which owns or controls, directly or indirectly, or is under direct or indirect common control with,

A person engaged in radio broadcasting is not, insofar as so engaged, deemed to be a "communications common carrier".

"PERSON" means an individual, partnership, association, joint-stock company, trust, corporation or other entity.

^{*} See reverse side for definitions.

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COMMUNICATIONS SATELLITE CORPORATION (A District of Columbia Corporation)

Common Stock (Without Par Value)

SELECTED DEALERS AGREEMENT

June 2, 1964

Gentlemen:

We and the other Underwriters named in the enclosed Prospectus have severally agreed to purchase from Communications Satellite Corporation (the "Corporation"), an aggregate of 5,000,000 Shares of Common Stock, without par value, of the Corporation (the "Shares"). The Shares and certain of the terms on which they are being purchased and offered are more fully described in the enclosed Prospectus.

On behalf of the Underwriters, we are severally offering to certain dealers ("Selected Dealers") who are members of the National Association of Securities Dealers, Inc., among whom any of the Underwriters may be included, subject to prior sale and when, as and if delivered to and accepted by the Underwriters and subject to the approval of legal matters by their counsel and subject to the other terms and conditions hereof, a part of the Shares at the public offering price per Share less a concession of 50ϕ per Share. The public offering price of the Shares is to be \$20 per Share.

Orders for the Shares will be strictly subject to confirmation and we reserve the right in our uncontrolled discretion to reject any order in whole or in part, to accept or reject orders in the order of their receipt or otherwise, and to allot. Neither you nor any other person is authorized by the Corporation or the Underwriters to give any information or make any representations other than those contained in the Prospectus in connection with the sale of any of the Shares. No dealer is authorized to act as agent for the Underwriters when offering the Shares to the public or otherwise.

Upon release by us, you may offer the Shares at the public offering price, subject to the terms and conditions hereof. The Underwriters and the Selected Dealers may, with our consent, purchase Shares from and sell Shares to each other at the public offering price less the concession to Selected Dealers.

You agree to use your best efforts to offer the Shares purchased by you in a manner to encourage the widest distribution to the American public. In this connection, you agree that in filling orders for Shares to be purchased by you pursuant to this offering, you will first make allotments of not in excess of 50 Shares, and in no event will you make allotments in excess of 100 Shares unless by such limitation of allotments you would be unable to dispose promptly of all such Shares. Before making any allotments in excess of 100 Shares you will notify us, and if we request, you will sell to us for the accounts

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of the Underwriters such number of Shares as to which you have not made allotments of 100 Shares and less as we may designate, at the public offering price less the concession allowed you. Nothing herein will be construed as requiring you to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which you believe will cause a concentration of holdings or adversely affect the distribution. You agree that you will not sell any Shares to any dealer in securities unless such dealer has entered into an agreement with us substantially to the same effect as this paragraph and unless we shall first consent to such sale. Upon our request, you will furnish us, from time to time, with complete data as to your distribution of Shares.

Payment for Shares purchased by you is to be made by certified or official bank check at the office of Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., at the public offering price less the above concession, on such date as we may advise, in New York Clearing House funds to the order of Merrill Lynch, Pierce, Fenner & Smith Incorporated, against delivery of the Shares to be purchased by you.

This Agreement shall terminate at the close of business on the 45th day after the effective date of the Registration Statement, unless earlier terminated. We may terminate this Agreement at any time by written or telegraphic notice.

In the event that prior to the termination of this Agreement we purchase, or contract to purchase, for the accounts of the Underwriters, in the open market or otherwise, any Shares delivered to you, you agree to repay to us for the accounts of the Underwriters the amount of the above concession to Selected Dealers plus brokerage commissions and transfer taxes paid in connection with such purchase or contract to purchase.

You agree that at any time or times prior to the termination of this Agreement you will, upon our request, report to us the number of Shares purchased by you under this Agreement which then remains unsold by you and will, upon our request, at any such time or times, sell to us for the account of one or more of the Underwriters such number of such unsold Shares as we may designate, at the public offering price less an amount to be determined by us not in excess of the concession allowed you.

We shall have full authority to take such action as we may deem advisable in respect of all matters pertaining to the offering. We shall be under no liability to you except for lack of good faith and for obligations expressly assumed by us in this Agreement. Nothing contained in this paragraph is intended to operate as, and the provisions of this paragraph shall not in any way whatsover constitute, a waiver by you of compliance with any provision of the Securities Act of 1933, as amended, or of the rules and regulations of the Securities and Exchange Commission issued thereunder.

Upon application to us, we will inform you as to the States in which we believe the Shares have been qualified for sale under, or are exempt from the requirements of, the respective securities laws of such States, but we assume no obligation or responsibility as to your right to sell Shares in any jurisdiction.

We will cause to be sent by registered mail to the Pennsylvania Securities Commission a copy of the Prospectus and a list of the Selected Dealers to whom this Agreement is initially being sent. We will also cause to be filed with the Department of State in New York a Further State Notice with respect to the Shares, if necessary.

Additional copies of the Prospectus will be supplied in reasonable quantities upon request.

Any notice from us to you shall be deemed to have been duly given if mailed or telegraphed to you at the address to which this Agreement is mailed.

Please confirm your agreement hereto and indicate the number of Shares ordered by you by telegraphing your acceptance and order and by signing and returning at once to us, c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., the enclosed duplicate of this

letter. Upon receipt thereof this letter and such signed duplicate copy will evidence the agreement

Very truly yours,

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.

By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By(Vice President)

Acting on behalf of themselves and the other several Underwriters.

ACCEPTANCE AND ORDER

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers

Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.

As Representatives of the Several Underwriters c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated

70 Pine Street New York 5, N. Y.

Dear Sirs:

We hereby enter our order for shares of Common Stock, without par value, of Communications Satellite Corporation, a District of Columbia corporation, under the terms and conditions of the foregoing Agreement.

We hereby confirm our agreement to all the terms and conditions stated in the foregoing Agreement. We acknowledge receipt of the Prospectus relating to the above Shares and we further state that in entering this order we have relied upon said Prospectus and no other statements whatsoever, written or oral. We confirm that we are members in good standing of the National Association of Securities Dealers, Inc.

Dated, June , 1964.

By(Authorized Representative)

COMMUNICATIONS SATELLITE CORPORATION

Common Stock (Without Par Value)

DISTRIBUTION AGREEMENT

May 7, 1964

Dear Sirs:

Underwriters represented by us may be in a position to offer shares of Common Stock, without par value, of the above Corporation (the "Shares") to Selected Dealers after the effectiveness of the Registration Statement relating to the Shares.

If any of the Shares are allotted to you and you accept such allotment, you agree to use your best efforts to offer the Shares purchased by you in a manner to encourage the widest distribution to the American public. In this connection, you agree that in filling orders for Shares to be purchased by you, you will first make allotments of not in excess of 50 Shares, and in no event will you make allotments in excess of 100 Shares unless by such limitation of allotments you would be unable to dispose promptly of all such Shares. Before making any allotments in excess of 100 Shares you will notify us, and if we request, you will sell to us for the accounts of the Underwriters such number of Shares as to which you have not made allotments of 100 Shares and less as we may designate, at the public offering price less the concession allowed you. Nothing herein will be construed as requiring you to enter or fill any particular orders, to allot Shares on the basis of any fixed or consistent ratio, or to allot Shares in any manner which you believe will cause a concentration of holdings or adversely affect the distribution. You agree that you will not sell any Shares to any dealer in securities unless such dealer has entered into an agreement with us substantially to the same effect as this Agreement and unless we shall first consent to such sale. Upon our request, you will furnish us, from time to time, with complete data as to your distribution of Shares

We do not expect to be in a position to allot any Shares to you unless you have entered into this Agreement by May 26, 1964. This Agreement does not obligate us to allot any Shares to you, nor does it obligate you to accept any allotment that may be made, but in the event that an allotment is made and accepted, this Agreement shall be part of any agreement pursuant to which the Shares are sold to you.

Please confirm the foregoing and acknowledge receipt of the Preliminary Prospectus relating to the Shares by signing in the space provided below and returning to us, c/o Merrill Lynch, Pierce, Fenner & Smith Incorporated, 70 Pine Street, New York 5, N. Y., attention of Mr. Norman Smith, the enclosed duplicate of this Agreement.

Very truly yours,

Merrill Lynch, Pierce, Fenner & Smith
Incorporated
Blyth & Co., Inc.
The First Boston Corporation
Kidder, Peabody & Co. Incorporated
Kuhn, Loeb & Co. Incorporated
Lazard Frères & Co.
Lehman Brothers
Carl M. Loeb, Rhoades & Co.
Paine, Webber, Jackson & Curtis
White, Weld & Co. Incorporated
Dean Witter & Co.

By Merrill Lynch, Pierce, Fenner & Smith Incorporated

By Norman Smith Vice President

Acting on behalf of themselves and the other several Underwriters.

Confirmed as of the date first above written.

By

, 1963

Communications Satellite Corporation Washington, D. C.

Gentlemen:

The undersigned, a person appointed by the President of the United States pursuant to Section 302 of the Communications Satellite Act of 1962 as an Incorporator of the Communications Satellite Corporation authorized to be created by said Act, hereby offers to subscribe for and purchase one (1) share of Common Stock, without par value, of Communications Satellite Corporation, a corporation organized under the District of Columbia Business Corporation Act (hereinafter called the Corporation), at a subscription price of One Hundred Dollars (\$100) per share. A check payable to the order of the Corporation, in the amount of One Hundred Dollars (\$100), is transmitted herewith in payment of the subscription price for such share.

The undersigned hereby agrees that, in the event that such offer by him is accepted by the Corporation and a share of Common Stock of the Corporation is issued to him, (i) without the approval of the Board of Directors of the Corporation, he will not assign or transfer such share or any interest therein to any person prior to the expiration of one year after the completion of the initial offering of Common Stock of the Corporation (as the term "initial offering" is defined in the Articles of Incorporation of the Corporation), (ii) the Corporation may at any time within one year after the completion of such initial offering of Common Stock, elect to repurchase such share at a purchase price of One Hundred Dollars (\$100) by delivering to him at his address shown at the time on the books of the Corporation a notice of such election, (iii) in the event that the Corporation shall so elect to repurchase such share, he will promptly deliver to the Corporation the certificate representing such share, duly endorsed to the Corporation or accompanied by an appropriate stock power permitting the Corporation to effect the transfer of such share to itself, against payment to him by the Corporation of the purchase price for such share stated above, and (iv) the certificate representing such share may bear such notation referring to this agreement as the Board of Directors of the Corporation may require.

If the offer of the undersigned set forth above is acceptable to you, please complete the form of acceptance at the foot of the enclosed copy of this letter and return such copy to the undersigned, whereupon this letter will constitute a binding agreement between the Corporation and the undersigned, on the terms and conditions stated therein, the obligations of the undersigned hereunder to be binding upon his heirs, executors, and administrators, and to inure to the benefit of the Corporation, its successors and assigns.

Very truly yours,

The foregoing offer is accepted as of the date set forth above.

COMMUNICATIONS SATELLITE CORPORATION

By.....

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This Agreement, dated as of February 19, 1963, between Communications Satellite Corporation, a corporation organized under the District of Columbia Business Corporation Act (herein called Company), the banks named on the signature pages hereof (herein collectively called Banks and individually called Bank), and Continental Illinois National Bank and Trust Company of Chicago, as Agent (herein called Agent),

WITNESSETH:

I. Subject to the terms and conditions of this Agreement, each Bank commits itself to participate in the making of loans to the Company in such amounts as the Company may from time to time request, on or before February 28, 1964, up to an aggregate amount of \$5,000,000 from all Banks. Each Bank's participation in any such loan shall be ten per cent (10%) of the amount requested by the Company. The obligation of each Bank to participate in the making of loans hereunder is herein called its commitment.

Loans hereunder shall be made at the office of the Agent on two (2) business days notice to the Agent, which shall give notice of such borrowing to the other Banks. Each such loan shall be evidenced by a promissory note (hereinafter individually called Note and collectively called Notes) in the form of Exhibit A, with appropriate insertions, dated the date of the loan and payable to the order of the Agent at its office on February 28, 1964. Each Note shall bear interest on the unpaid principal amount thereof, payable at said office on maturity, at the rate at which the Agent is making unsecured 90-day loans to prime commercial borrowers on the date of such Note. The Agent shall, upon receipt of each Note, issue and deliver to each Bank a Certificate of Participation, in the form of Exhibit B, in an amount equal to ten per cent (10%) of each such Note for each Bank.

II. Notwithstanding the provisions of Paragraph I of this Agreement, each Note hereunder shall become due and payable, prior to its stated maturity date, on the 10th day after receipt by the Company of the proceeds of the sale of its capital stock referred to in Paragraph IV-A of this Agreement.

III. The Company may from time to time prepay the Notes to the Agent in whole or in part without premium, and upon payment of the interest then accrued on the principal sum prepaid. The Agent shall apply each payment of principal of, or interest on, each Note (including any prepayments) pro rata among the Banks according to their respective commitments.

IV. To induce the Banks to make the loans provided for herein, the Company agrees that, so long as any of the Notes is outstanding:

A. The Company will exercise its best efforts to arrange for the initial offering of its capital stock as provided by Section 304(a) of the Communications Satellite Act of 1962.

B. The Company will furnish to the Agent, at least once in any given three month period, a balance sheet and a statement of profit and loss, neither of which need be audited and, within three months after the close of the fiscal year of the Company, an audited balance sheet as of the close of such fiscal year and an audited statement of profit and loss for the fiscal year then ended.

C. The Company will not, without prior written consent of the holders of seventy per cent (70%) or more of the unpaid principal amount of the Notes or certificates of participation therein, (1) incur or permit to exist any indebtedness for borrowed money, except for loans made hereunder, or (2) create or permit to exist any mortgage, pledge, title retention lien or other encumbrance or security interest (hereinafter collectively referred to as liens) with respect to any assets now owned or hereafter acquired, except (a) liens of current taxes not delinquent or as security for taxes being contested in good faith, (b) liens in connection with workmen's compensation insurance, unemployment insurance or Social Security, liens of mechanics and materialmen for sums not due or sums being contested in good faith, (c) liens to secure the performance of bids, trade contracts, leases, statutory obligations, surety and appeal bonds and other obligations of like nature incurred

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V. The Banks agree that no recourse shall be had for the payment of the principal of, or interest on, any of the Notes or for any claim based thereon or on this Agreement, to or against any incorporator, shareholder, officer or director, past, present or future, of the Company whether by virtue of any constitutional provision or statute or rule of law, all such liability being hereby expressly waived.

VI. The Commitments of the Banks hereunder are subject to the following conditions:

A. At or before the making of the initial loan hereunder, the Company will furnish to the Agent (1) a copy certified by the Secretary or an Assistant Secretary of the Company of resolutions of the Board of Directors of the Company, authorizing or ratifying and approving the execution and delivery by the Company of this Agreement and authorizing the borrowing in respect of the initial loan hereunder and the execution and delivery of the Note evidencing such loan, and (2) an opinion of Messrs. Wilmer, Cutler & Pickering, Counsel for the Company, satisfactory in form and substance to the Agent, to the effect that the Company is a corporation duly organized and existing under the District of Columbia Business Corporation Act as the Communications Satellite Corporation authorized to be created by Section 301 of the Communications Satellite Act of 1962, that the Company has full power to execute and deliver this Agreement, to borrow moneys hereunder, to execute and deliver the Notes, and to perform its obligations under this Agreement and the Notes; that the execution and delivery of this Agreement, the borrowing in respect of the initial loan hereunder and the execution and delivery of the Note evidencing the initial loan hereunder, have been duly authorized by all necessary corporate action and are not in conflict with any provision of law or of the Articles of Incorporation or By-laws of the Company, nor in conflict with any agreement binding upon the Company of which such Counsel has knowledge; that the borrowing by the Company from the Banks under the provisions of this Agreement of up to \$5,000,000 has been duly authorized by the Federal Communications Commission pursuant to Section 201(c)(8) of the Communications Satellite Act of 1962; and that this Agreement is, and the Notes when executed and delivered by the Company will be, the legal and binding obligations of the Company, subject to bankruptcy laws and other laws affecting creditors' rights generally.

B. At or before the making of each loan, other than the initial loan, hereunder, the Company will furnish to the Agent (i) a copy, certified by the Secretary or an Assistant Secretary of the Company, of resolutions of the Board of Directors of the Company, authorizing the borrowing in respect of such loan and the execution and delivery of the Note evidencing such loan, and (ii) an opinion of Messrs. Wilmer, Cutler & Pickering, satisfactory in form and substance to the Agent, confirming as of the date of such loan the opinion of such firm delivered pursuant to Paragraph A of this Section and to the effect that the borrowing in respect of such loan and the execution and delivery of the Note evidencing such loan have been duly authorized by all necessary corporate action and are not in conflict with any provision of law or of the Articles of Incorporation or By-laws of the Company, nor in conflict with any agreement binding upon the Company of which such Counsel has knowledge.

C. At the time of making each loan hereunder, the Company will furnish to the Agent a Certificate signed by the President, or one of the Vice Presidents, or the Treasurer or an Assistant Treasurer of the Company to the effect that no event of default, or no event which, with notice or lapse of time or both, would become such an event of default, has occurred and is continuing.

VII. If one or more of the following events of default occur:

A. Default in the performance of any of the Company's agreements herein set forth and there is continuance of such default for 30 days after written notice thereof to the Company from the Agent or any Bank; or

B. The Communications Satellite Act of 1962 is repealed or amended in such a manner as to impair materially the ability of the Company to repay the Notes,

then the Agent may, on request of the holders of seventy per cent (70%) or more of the unpaid principal amount of the Notes or certificates of participation therein, declare all Notes to be due and payable, without notice of any kind. The Agent shall promptly advise the Company of any such declaration, but failure to do so shall not impair the effect of such declaration.

VIII. The refusal or failure of any Bank to carry out its commitment shall not release any of the other Banks from its commitment.

IX. In each case in which this Agreement requires that the Company furnish a document (other than a Note) to the Agent, the Company shall furnish to the Agent signed copies of such document in number sufficient for Agent to furnish one signed copy to each Bank.

X. This Agreement shall be deemed to be a contract under the laws of the State of Illinois and for all purposes shall be construed in accordance with the laws of said State.

XI. All notice or other communications in respect of this Agreement or of the Notes shall, if addressed to the Company, be addressed to it at 3029 Klingle Road, Washington, D. C. or at such other address as the Company may designate by notice to the Agent, and, if addressed to the Agent or any Bank, shall be addressed to the Agent at its principal office.

IN WITNESS WHEREOF, each of the parties hereto has caused a counterpart of this Agreement to be duly executed as of February 19, 1963.

COMMUNICATIONS SATELLITE CORPORATION

By /s/ Bruce G. Sundlun

By /s/ BYRNE LITSCHGI

Amount of Commitment

\$ 500,000

CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO, in its individual corporate capacity and as Agent, as aforesaid.

By /s/ John H. Perkins Vice President

BANK OF AMERICA NATIONAL TRUST AND SAVINGS ASSOCIATION

By /s/ A. W. CLAUSEN
Vice President

Wells Fargo Bank

By /s/ D. W. CHAPMAN

Executive Vice President

500,000

500,000

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EXHIBIT A

\$ Due February 28, 1964 Chicago, Illinois,, 19
For value received, Communications Satellite Corporation, a corporation organized under the District of Columbia Business Corporation Act (herein called Company) promises to pay to the order of the Continental Illinois National Bank and Trust Company of Chicago, at its office in Chicago, Illinois, on February 28, 1964, Dollars, with interest thereon at the rate of per cent per annum from date to maturity and at the rate of 6 per cent per annum from maturity until paid. Interest shall be computed on the basis of a year consisting of 365, or when appropriate 366, days.
This Note evidences indebtedness incurred under, and is subject to the terms and provisions of, an Agreement dated as of February 19, 1963 (and, if amended, all amendments thereto) between the Company, certain banks (including the payee), and Continental Illinois National Bank and Trust Company of Chicago, as Agent, to which reference is hereby made for a statement of said terms and provisions.
Communications Satellite Corporation
By By
Address:

Address:
3029 Klingle Road
Washington, D. C.

EXHIBIT B

CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO
231 South LaSalle Street
Chicago 90, Illinois

CERTIFICATE OF PARTICIPATION

To:	Date

We acknowledge receipt of \$\frac{1}{2}\$ in payment of your participation in that amount in a loan of \$\frac{1}{2}\$ made to Communications Satellite Corporation evidenced by note dated \$\frac{1}{2}\$, due February 28, 1964, with interest at \$\text{per cent per annum, payable February 28, 1964.} Such loan is subject to the terms and provisions of a Loan Agreement dated February 19, 1963 (and, if amended, all amendments thereto) between Communications Satellite Corporation, certain banks (including the payee), and Continental Illinois National Bank and Trust Company of Chicago, as Agent, to which reference is hereby made for a statement of said terms and provisions.

We hereby confirm that in consideration of said payment we are holding for your account a pro rata interest in the unpaid principal of said promissory note, together with the same proportionate interest in any and all interest to accrue on said note from and after date, together with any guaranties thereof.

It is expressly understood that we do not make any representations or assume any responsibility with respect to the validity, genuineness or collectibility of said note, or guaranties thereof, and that we are entitled to use our discretion with respect to exercising or refraining from exercising any rights, or taking or refraining from taking any actions which may be vested in us, or which we may be entitled to take or assert under the terms of our note and that, although we will exercise the same care to protect your interest as we do to protect our own, we shall not, so long as we exercise such care, be under any liability to you with respect to anything which we may do or refrain from doing in the exercise of our judgment or which may seem to us to be necessary or desirable in the premises.

Any expenses incurred by us in connection with the collection of any indebtedness, or the enforcement of any of the provisions of this loan, shall be borne proportionately by you and us on the basis of our respective interests.

CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO

Ву

ACCEPTED:

Ву

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This supplemental agreement dated as of February 21, 1964, among Communications Satellite Corporation, a corporation organized under the District of Columbia Business Corporation Act (herein called Company), the Banks named on the signature pages hereof (herein collectively called the Banks), and Continental Illinois National Bank and Trust Company of Chicago, as Agent for the Banks (herein called Agent),

WITNESSETH:

Whereas, the Agreement dated as of February 19, 1963, among the Company, the Banks and the Agent (herein called the Agreement) provides that, subject to the terms and conditions thereof, each of the Banks will participate in the making of loans to the Company in such amounts, not exceeding \$5,000,000 in the aggregate from all Banks, as the Company may from time to time request on or before February 28, 1964, each such loan to be evidenced by a Note of the Company, in the form of Exhibit A annexed to the Agreement, dated the date of such loan in the principal amount thereof, payable on February 28, 1964, or, as provided in Paragraph II of the Agreement, prior to the maturity date of said Notes, on the 10th day after the receipt by the Company of the proceeds of the sale of the capital stock of the Company referred to in Paragraph IVA of the Agreement;

Whereas, the Company has issued and delivered to the Agent (i) the $4\frac{1}{2}\%$ Note of the Company, dated February 28, 1963, in the principal amount of \$500,000, (ii) the $4\frac{1}{2}\%$ Note of the Company, dated August 14, 1963, in the principal amount of \$250,000, (iii) the $4\frac{1}{2}\%$ Note of the Company dated November 8, 1963, in the principal amount of \$400,000, and (iv) the $4\frac{1}{2}\%$ Note of the Company dated January 31, 1964, in the principal amount of \$250,000, evidencing loans made by the Banks to the Company pursuant to the Agreement, and each of said Notes (herein collectively called the Outstanding Notes) is held by the Agent pursuant to the Agreement as of the date hereof;

Whereas, the sale of the capital stock of the Company referred to in Paragraph IVA of the Agreement has not been effected as of the date hereof and it presently is expected by the Company that such sale of the capital stock of the Company will be effected, and that the proceeds of such sale will be received by the Company, by a date after February 28, 1964, but not later than June 30, 1964;

Whereas, the Company desires that (a) subject to the provisions of Paragraph II of the Agreement, the maturity of each of the Outstanding Notes be extended to June 30, 1964, and (b) the Agreement be amended (i) to extend to June 30, 1964, the term of the commitment of the Banks specified therein to participate in the making of loans to the Company and (ii) to provide that, subject to the provisions of Paragraph II of the Agreement, each loan hereafter made by the Banks to the Company pursuant to the Agreement shall be payable on June 30, 1964; and

Whereas, the Banks are willing so to extend the maturity of each of the Outstanding Notes and to enter into an agreement so amending the Agreement;

Now, THEREFORE, in consideration of the premises and of the agreements hereinafter set forth, the parties hereto agree as follows:

I. The Banks agree that, subject to the provisions of Paragraph II of the Agreement, each of the Outstanding Notes shall be payable on June 30, 1964, and shall bear interest, from the date thereof at the rate specified therein as being payable to maturity, on the unpaid principal amount thereof, payable at the office of the Agent upon maturity. The Banks agree that the Agent shall place on each of the Outstanding Notes the following legend:

"The Agreement referred to herein has been amended by a Supplemental Agreement dated as of February 21, 1964, which provides, among other things, that this Note, and interest on the principal amount thereof from the date of this Note, shall be payable on June 30, 1964."

II. Paragraph I of the Agreement is amended by substituting the word and figures "June 30, 1964" for the word and figures "February 28, 1964" in each of the two places where such word and figures appear therein.

III. For the form of Note annexed to the Agreement as Exhibit A, the form of Note annexed hereto as Annex 1 is substituted in the case of Notes issued hereafter under the Agreement.

IV. For the form of Certificate of Participation annexed to the Agreement as Exhibit B, the form of Certificate of Participation annexed hereto as Annex 2 is substituted in respect of Notes issued hereafter under the Agreement.

V. In connection with the execution and delivery on behalf of the Company of this Supplemental Agreement, there has been delivered to the Agent (A) a copy, certified by the Secretary of the Company, of resolutions adopted by the Board of Directors of the Company authorizing the execution and delivery on behalf of the Company of this Supplemental Agreement, and (B) an opinion of Messrs. Wilmer, Cutler & Pickering, Washington, D. C., counsel for the Company, (1) confirming, as of the date of such opinion and subject to the effect of the execution and delivery of the Supplemental Agreement, the opinion of such counsel dated February 28, 1963, delivered to the Agent pursuant to Paragraph VIA-(2) of the Agreement, and (2) to the effect that (a) the Company has full power to execute and deliver the Supplemental Agreement, to borrow monies under the Agreement, as amended and supplemented by the Supplemental Agreement (the Agreement, as so amended and supplemented, being hereinafter called the Amended Agreement), to execute and deliver Notes under the Amended Agreement and to perform its obligations under the Amended Agreement and such Notes; (b) the execution and delivery on behalf of the Company of the Supplemental Agreement have been duly authorized by all necessary corporate action of the Company and are not in conflict with any provision of law or of the Articles of Incorporation or By-laws of the Company, nor in conflict with any agreement binding upon the Company of which such counsel has knowledge; (c) the execution and delivery by the Company of the Supplemental Agreement have been duly authorized by the Federal Communications Commission (hereinafter called the Commission) pursuant to Section 201(c)(8) of the Communications Satellite Act of 1962 (hereinafter called the Act); (d) the Amended Agreement is the legal and binding obligation of the Company in accordance with its terms and the Outstanding Notes are the legal and binding obligations of the Company in accordance with their terms and the terms of the Amended Agreement, subject to bankruptcy laws and other laws affecting creditors' rights generally; and (e) Notes executed and delivered by the Company pursuant to the provisions of the Amended Agreement will be the legal and binding obligations of the Company, subject to bankruptcy laws and other laws affecting creditors' rights generally. The opinion of such counsel with respect to the matters referred to in clauses (a) and (e) above, may be made subject to a qualification to the effect that the authorization of the Commission pursuant to Section 201(c)(8) of the Act will be required in connection with the execution and delivery by the Company of any Note pursuant to the provisions of the Amended Agreement.

VI. At or before the making of each loan under the Amended Agreement, the Company will deliver to the Agent, in lieu of the opinion of Messrs. Wilmer, Cutler & Pickering provided for by Paragraph VIB(ii) of the Agreement, an opinion of such counsel satisfactory in form and substance to the Agent (A) confirming, as of the date of such opinion and subject to the effect of the execution and delivery of the Supplemental Agreement, the opinion of such counsel dated February 28, 1963, delivered to the Agent pursuant to Paragraph VIA-(2) of the Agreement, (B) confirming, as of the date of such opinion, the opinion of such counsel which shall have been delivered to the Agent pursuant to Paragraph V of this Supplemental Agreement, with respect to the matters referred to in Paragraph VB-(2) of this Supplemental Agreement, and (C) to the effect that the borrowing in respect of such loan and the execution and delivery of the Note evidencing such loan have been duly authorized by all necessary corporate action and are not in conflict with any provision of law or of the Articles of Incorporation or By-laws of the Company, nor in conflict with any agreement binding upon the Company of which such counsel has knowledge.

IN WITNESS WHEREOF, each of the parties hereto has caused a counterpart of this Supplemental Agreement to be duly executed as of February 21, 1964.

COMMUNICATIONS SATELLITE CORPORATION

Attest:

/s/ DAVID J. MELAMED Secretary

By /s/ L. Welch

By /s/ Joseph V. Charyk

CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO, in its individual corporate capacity and as the Agent mentioned in the Agreement referred to herein.

By /s/ ROBERT C. SUHR Vice President

Bank of America National Trust and Savings Association

By /s/ M. E. MILLER
Assistant Vice President
Wells Fargo Bank

By /s/ C. K. Bomberger Vice President The First National Bank of Chicago

By /s/ Chauncey E. Schmidt
Assistant Vice President
Bankers Trust Company

By /s/ Edgar A. Manning, Jr.
Vice President
The Chase Manhattan Bank

By /s/ R. S. Weeks, Jr.
Assistant Treasurer
Chemical Bank New York Trust Company

By /s/ HAROLD F. SELESKY Vice President FIRST NATIONAL CITY BANK

By /s/ Roy H. Dickerson Vice President Manufacturers Hanover Trust Company

By /s/ John J. Sullivan
Vice President
Morgan Guaranty Trust Company of
New York

By /s/ Gerard M. Ives Vice President

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Annex	

EXHIBIT A

\$	No	Due June 30, 1964
	Chicago, Illino	ois,, 19
of Columbia Busine Continental Illinois on June 30, 1964, the rate of per	Communications Satellite Corporation, a corporation Act (herein called Company) National Bank and Trust Company of Chica cent per annum from date to maturity and a paid. Interest shall be computed on the basis cys.	promises to pay to the order of the ago, at its office in Chicago, Illinois, Dollars, with interest thereon at at the rate of 6 per cent per annum
Agreement dated as February 21, 1964	es indebtedness incurred under, and is subject s of February 19, 1963, as amended by a S (and, if further amended, all such further banks (including the payee), and Continenta	Supplemental Agreement dated as of amendments thereto), between the

Company of Chicago, as Agent, to which reference is hereby made for a statement of said terms and

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Ву	• • • •																	
By																		

Address:

3029 Klingle Road Washington, D. C.

Annex 2

EXHIBIT B

CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO 231 South LaSalle Street Chicago 90, Illinois

CERTIFICATE OF PARTICIPATION

То:	Date

in payment of your participation in that amount in a loan of We acknowledge receipt of \$, due June 30, 1964, with interest at per cent per annum, payable June 30, 1964. Such loan is subject to the terms and provisions of a Loan Agreement dated February 19, 1963, as amended by a Supplemental Agreement dated as of February 21, 1964 (and, if further amended, all such further amendments thereto), between Communications Satellite Corporation, certain banks (including the payee) and Continental Illinois National Bank and Trust Company of Chicago, as Agent, to which reference is hereby made for a statement of said terms and provisions.

We hereby confirm that in consideration of said payment we are holding for your account a pro rata interest in the unpaid principal of said promissory note, together with the same proportionate interest in any and all interest to accrue on said note from and after date, together with any guaranties

It is expressly understood that we do not make any representations or assume any responsibility with respect to the validity, genuineness or collectibility of said note, or guaranties thereof, and that we are entitled to use our discretion with respect to exercising or refraining from exercising any rights, or taking or refraining from taking any actions which may be vested in us, or which we may be entitled to take or assert under the terms of our note and that, although we will exercise the same care to protect your interest as we do to protect our own, we shall not, so long as we exercise such care, be under any liability to you with respect to anything which we may do or refrain from doing in the exercise of our judgment or which may seem to us to be necessary or desirable in the premises.

Any expenses incurred by us in connection with the collection of any indebtedness, or the enforcement of any of the provisions of this loan, shall be borne proportionately by you and us on the basis of our respective interests.

CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO

	Ву
Accepted:	
Ву	

NEGOTIATED CONTRACT [Conformed Copy]

This agreement, made this 24th day of March 1964, between Hughes Aircraft Company, a Delaware Corporation, and Communications Satellite Corporation, a District of Columbia Corporation, Witnesseth:

Hughes Aircraft Company agrees to furnish and deliver to Communications Satellite Corporation all the supplies and perform all the services set forth in the attached schedule, for the consideration stated therein. The rights and obligations of the parties to this contract shall be as set forth in the Schedule and the Terms and Conditions attached.

Contractual Contents:*

Cover Page, consisting of 1 page
Index, consisting of 1 page
Schedule, consisting of 13 pages
Terms and Conditions, consisting of 16 pages
Appendix I, consisting of 2 pages

HUGHES AIRCRAFT COMPANY

By /s/ C. Gordon Murphy

C. Gordon Murphy
Name

Associate Manager Space Systems Div.

Title

Date 11 March 1964

COMMUNICATIONS SATELLITE CORPORATION

By:

/s/ ALLEN E. THROOP
Allen E. Throop
Name

Vice President and General Counsel Title /s/ Lewis C. Meyer Lewis C. Meyer Name

Finance Coordinator
Title

Date March 24, 1964

^{*}Page references relate to pagination in agreement as executed.

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APPENDIX I—Test Equipment for Andover

SCHEDULE

Part I Supplies and Services to be Furnished by the Hughes Aircraft Company

- Item 1 Prepare and submit for approval by Communications Satellite Corporation the System Qualification and Acceptance Test Specifications. These tests must be designed to demonstrate compliance with Spacecraft Specifications.
- Item 2 Design, develop, fabricate, assemble and test one (1) prototype spacecraft, as described in the Spacecraft Specifications.
- Item 3 Fabricate, assemble, test and deliver two (2) HS 303 flight spacecraft, as described in the Spacecraft Specifications.
- Item 4 Provide one complete set of materials for one (1) HS 303 spacecraft, as described in the Spacecraft Specifications.
- Item 5 Provide engineering support and adequate spares for checkout and launch at the Atlantic Missile Range for two (2) HS 303 spacecraft.
- Item 6 Install telemetry and control equipment listed in Appendix I at Andover, Maine, Communication Station.
- Item 7 Provide one year of field service and support for maintaining on station, in orbit, one or more HS 303 spacecraft, commencing with the date of the first successful injection of an HS 303 spacecraft. Computations for look angles for operating ground stations are included in this task.

Part II Delivery Schedule

- Item 1 Submit to Communications Satellite Corporation no later than four (4) months after effective date of the contract, System Qualification and Acceptance Test Specifications. Hughes Aircraft Company and Communications Satellite Corporation will undertake to agree upon a set of such specifications mutually satisfactory to them within one (1) month of delivery.
- Item 2 Complete the Qualification Tests on one (1) HS 303 prototype spacecraft no later than eleven (11) months after effective date of the contract. The prototype will be retained by Hughes Aircraft Company and will be delivered to Communications Satellite Corporation, f.o.b., Washington, D. C., or such other destination as may be designated by Communications Satellite Corporation at the completion of field service and support under Item 7 of Part I, as such service and support may have been extended by exercise of Option 3.
- Item 3 Delivery of the first HS 303 flight spacecraft, at the expense of Hughes Aircraft Company, shall be made to the Atlantic Missile Range twelve (12) months from the effective date of the contract after successful completion of the Acceptance Tests.
 - Delivery of the second HS 303 flight spacecraft to the Atlantic Missile Range after successful completion of the Acceptance Tests, shall be made, at the expense of Hughes Aircraft Company, at such date, not earlier than thirteen (13) months and not later than twenty-one (21) months from the effective date of the contract, as Communications Satellite Corporation shall designate by at least twenty (20) days' written notice to Hughes Aircraft Company.
- Item 4 Place in bonded storage at Hughes Aircraft Company plant at Culver City, California, ten (10) months from effective date of the contract, one set of materials for a flight space-craft, ready for assembly. If Option No. 1 herein expires unexercised, deliver said set of materials to Communications Satellite Corporation, f.o.b. Washington, D. C., or such other destination as may be designated by the Communications Satellite Corporation. Pending such delivery, Hughes Aircraft Company bears the risk of loss or damage to such materials.

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- Item 5 Engineering support and spares for checkout and launch shall be provided, commencing with date of delivery of each HS 303 flight spacecraft to the Atlantic Missile Range. After delivery of the second spacecraft under Item 3 of Part II, deliver residual spares to Communications Satellite Corporation, f.o.b., Washington, D. C., or such other destination as may be designated by the Communications Satellite Corporation. In the event of exercise of Option Nos. 1 or 2, spares will be returned to Hughes Aircraft Company as customer furnished equipment for launch support.

 Item 6 Telemetry and control equipment shall be installed at Andover Mains Communications.
- Item 6 Telemetry and control equipment shall be installed at Andover, Maine, Communication Station beginning not later than ten (10) months after effective date of the contract. Installation must be completed to the satisfaction of Communications Satellite Corporation by twelve (12) months after effective date of the contract.
- Item 7 Field service and support shall commence upon date of the first successful injection of an HS 303 spacecraft.

Part III Spacecraft Specifications

The prototype and flight spacecraft shall meet the following specifications:

- 1. Weight in transfer orbit shall not exceed 155 pounds including an apogee kick stage with delta velocity increment of at least 4360 ft/sec.
- 2. The physical dimensions of the HS 303 spacecraft shall be compatible with the thrust augmented Thor-Delta utilizing the extended low drag fairing or the standard low drag fairing if extended 6.0 inches in the cylindrical section.
- 3. There shall be two independent control subsystems each of which shall have the capacity adequate to provide a velocity increment of 270 feet per second in the continuous mode or 180 feet per second in the pulse mode.
- 4. There shall be two 136 megacycle transmitters, each of which shall provide 1.6 watts rf power output measured at the transmitter.
 - 5. Communication equipment in HS 303 spacecraft

5.1 Output Power

- 1.1 Communication carrier ERP at 83 \pm 1° satellite aspect angle
- a) With two carriers, each 10 dbw min
- 1.3 Transmit antenna gain will be achieved with no more than 6 elements
- 1.4 Maximum ERP variation in one revolution of the satellite on its spin axis at any aspect angle within the beamwidth ±.5 db

5.2 Receiving Sensitivity

- 2.1 Minimum receiver sensitivity is defined by the following items:
 - (1) Antenna Gain
 4 db

 (2) Line Loss
 1.5 db
 - (3) Noise figure 9.5 db

The above three items may be adjusted in any way so long as (1) minus (2) minus (3) equals minus 7 db or better.

2.2 Maximum variation of receiver antenna gain

a) Over the 76	to 90°	satellite aspect angle	— 1 db
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5.3 Gain

5.4 Noise Power Ratio

The NPR in any baseband frequency slot should be...... 35 db min

This specification is subject to the following conditions:

- a) Multichannel rms noise deviation 2 Mc/s
- b) 240 channel flat noise shall be used
- c) RF back-to-back test equipment test. NPR in any slot... 45 db min
- d) Group delay equalizer may be used
- e) Single carrier through each of the two transponders but with simultaneous noise loading on each of the carriers.

5.5 Intelligible Crosstalk

The intelligible crosstalk or crosscoupling of modulation between the two carriers as produced by the satellite shall not exceed -45 db over the 12 Kc to 1.1 Mc baseband frequency range. This specification will be met under the following test conditions:

- a) The earth transmitter (or its simulating equivalent) gain flatness shall be better than .05 db/MC over a ± 12.5 Mc band around its center frequency.
- b) The two carriers may have a 6 db input power difference at their respective inputs

5.6 Antenna Polarization

The transmit and receiving polarization should be orthogonal with an accuracy of 10°.

5.7 Command System

The command system shall not exhibit spurious commands when the received carrier is modulated with a 240 channel noise load, or a TV signal (either a test pattern or a live program) at normal deviation.

5.8 Operating Frequencies

Transponder No. 1

Receive	6389.97	Mc,
Transmit	4160.75	66
IF	59.538	66
Beacon	4137.86	66
Oscillator	16.4855	66

Transponder No. 2

ransponder No. 2		
Receive	6301.02	Mc,
Transmit	4081.00	66
IF	71.808	66
Beacon	4104.14	66
Oscillator	16.2219	66

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Part IV Price and Incentive Price

Price

The price for Items 1, 2, 3, 5, 6, and 7 of Part I, Supplies and Services to be Furnished by the Hughes Aircraft Company, is \$7,500,000, subject to adjustment in accordance with Provision No. 8(A) and subject also to the Incentive Price provision below.

The price for Item 4 of said Part I is \$335,000.

Incentive Price

- 1. This section, consisting of 7 numbered paragraphs, entitled *Incentive Price*, shall be deemed operative only in the event that an HS 303 spacecraft as described in Spacecraft Specifications (Schedule, Part III) is successfully injected (as hereinafter defined) into the required orbit.
- 2. If only one of the two HS 303 spacecraft is successfully injected, this incentive price provision shall be applicable only to the HS 303 spacecraft which is successfully injected.
- 3. If both HS 303 spacecraft are successfully injected, the incentive price provision shall be applicable to each HS 303 spacecraft independently.
- 4. If either HS 303 spacecraft is not successfully injected, the price for such spacecraft (including related services required by Items 1, 2, 5 and 6 of Part I) shall be \$3,750,000, subject to adjustment in accordance with Provision No. 8 (A).
- 5. If either HS 303 spacecraft is successfully injected and thereupon fails to operate satisfactorily (as hereinafter defined), the price for that spacecraft (including related services required by Items 1, 2, 5, 6 and 7 of Part I) shall be \$3,000,000, subject to adjustment in accordance with Provision No. 8 (A).
- 6. If either HS 303 spacecraft is successfully injected and thereupon operates satisfactorily (as hereinafter defined) the price for that HS 303 spacecraft shall be \$3,000,000 (subject to adjustment in accordance with Provision No. 8(A)) plus an amount equal to \$125,000 (subject to adjustment in accordance with the last paragraph of the Section entitled "Satisfactory Operation"), multiplied by the number of operating months (as hereinafter defined) and fractions thereof during which such HS 303 spacecraft operates satisfactorily, provided, however, that the total incentive payments for such spacecraft shall in no event exceed \$2,250,000.
- 7. If no revenue traffic from voice communications shall be passed through an HS 303 spacecraft on an operational/commercial basis after a period of six (6) operating months from the date of successful injection, paragraph 6 under this Section entitled "Incentive Price" shall after such period be of no force or effect as to that spacecraft.

Successful Injection

Injection of the spacecraft shall be considered successful if all of the following circumstances occur:

- 1. No damage to the spacecraft occurs which can be shown to have resulted from launch vehicle malfunction.
 - 2. The spin rate in the transfer orbit is within the range 130 to 170 rpm.
 - 3. The spin axis attitude in the transfer orbit differs from nominal by 3 degrees or less.
- 4. The spacecraft is separated from the launch vehicle within 5 minutes after 3rd stage ignition time.
- 5. The elements of the transfer orbit established by the launch vehicle are such that with a nominal spacecraft apogee boost, the resulting orbit can be corrected to synchronism while still

leaving a reserve of 1.2 pounds of hydrogen peroxide after orientation of the spin axis to the operating position. This calculation shall be based on:

- (a) Apogee motor ignition at the most favorable time.
- (b) No reorientation of the spin axis from its actual direction in the transfer prior to apogee boost.
- (c) The hydrogen peroxide system exhibiting a specific impulse of 157 seconds for continuous operation, and an effective specific impulse for pulsed operation based on the rpm in the transfer orbit but not less than 100 seconds.
- 6. The final orbit calculated in accordance with (5) above, while meeting the requirements in regard to hydrogen peroxide reserve after synchronization, would be acceptable for communication. In this calculation, maneuvers which meet the reserve requirement but are not optimal from the standpoint of fuel utilization shall be considered and any feasible set of maneuvers which meet both requirements will be allowed.

Note: Of the eight parameters involved in determining whether the criteria in (5) above are met, the most significant is the magnitude of the inertial velocity at third stage burnout. With other parameters nominal, the criteria permit approximately ± 150 fps deviation of the inertial velocity from nominal (nominal means the value defined in the vehicle manufacturer's "Detailed Test Objectives Trajectory" document).

Satisfactory Operation

An orbiting HS 303 spacecraft shall be considered as operating satisfactorily if:

- 1. It is continuously in such a position that the angle formed by the line of sight from each of three ground terminals located at Andover, Maine, USA; Pleumeur-Bodou, France; and Goonhilly Downs, UK, and a plane tangential to the earth at each such site is in excess of 6 degrees.
- 2. It has been reoriented so that the angle between the spacecraft spin axis and the plane of the orbit is greater than 88 degrees.
- 3. The satellite performance meets the requirements given in Section 5 of the Spacecraft Specifications.

Notwithstanding the fact that an HS 303 spacecraft does not fully meet the criteria set forth above in paragraphs 1, 2 and 3 of this Section entitled "Satisfactory Operation", if the spacecraft nevertheless is operable in passing Transatlantic or Transpacific voice communications, such spacecraft shall be deemed to be operating satisfactorily. In that event the rate of \$125,000 set forth in Paragraph 6 under the Section entitled "Incentive Price" shall be reduced to a rate obtained by multiplying \$125,000 by a fraction. The numerator of the fraction will be the number of CCIR quality duplex voice channels which the spacecraft is capable of passing and the denominator will be the number of CCIR quality duplex voice channels which the satellite would pass if it fully met the criteria set forth in paragraphs 1, 2 and 3 above. The resulting rate as calculated shall be substituted for \$125,000 in the said paragraph 6 under the Section entitled "Incentive Price", and shall be effective for the number of operating months and fractions thereof during which the HS 303 spacecraft does not meet the criteria set forth in paragraphs 1, 2 and 3 above, but meets the requirements of the first sentence of this paragraph.

Operating Month

An "outage" shall be deemed to occur, with respect to a particular spacecraft, whenever and so long as it is not operating satisfactorily in accordance with the provisions of the Section entitled "Satisfactory Operation" (unless the failure to meet such criteria is attributable to eclipse). An "operating month", with respect to a particular spacecraft, consists of a series of thirty (30) operating days (not necessarily consecutive). An "operating day", with respect to a particular spacecraft, consists of a period of twenty-four (24) hours, from 12:01 a.m. to midnight of the same day, Eastern Standard Time (a "calendar day"), during all of which such spacecraft is operating satisfactorily (disregarding, however, any outage in such period caused by eclipse), except that, notwithstanding the satisfactory opera-

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tion of a spacecraft throughout a particular calendar day, such day shall not constitute an operating day, and no further incentive payments shall be made, under any of the following conditions:

- 1. There shall have previously occurred an outage during all or any part of each of thirty (30) or more consecutive calendar days;
- 2. There shall have previously occurred an outage during all or any part of each of at least fifteen (15) and not more than twenty-nine (29) consecutive calendar days, and the spacecraft, after being restored to service, shall have suffered an outage;
- 3. There shall have previously occurred an outage after which the spacecraft shall not have operated satisfactorily for a period of at least thirty (30) consecutive calendar days; or
- 4. There shall have previously occurred more than one outage and the number of calendar days on which such outages shall have occurred shall aggregate thirty (30) days or more.

If, after the provisions of any of the preceding numbered paragraphs have operated to terminate the obligation of Communications Satellite Corporation to make incentive payments with respect to a particular spacecraft, such spacecraft shall be used for the passing of commercial voice revenue traffic, then, notwithstanding such provisions, each calendar day on which such use occurs and during all of which such spacecraft is operating satisfactorily, as stated above, shall, for the purpose of the incentive price provisions of Part IV be deemed an operating day with respect to such spacecraft and the provisions of the preceding numbered paragraphs shall thereafter be applicable with respect to such satellite as if it had had no outage prior to the initial date of such use.

Part V Payments

Payment of agreed price shall be made by Communications Satellite Corporation to Hughes Aircraft Company within thirty (30) days after submission of invoices by Hughes Aircraft Company. Invoices shall contain a certification of completion of each portion of the work set forth in the following schedules, which, except in the case of Item 1, shall have been confirmed by a duly authorized representative of Communications Satellite Corporation.

1.	System Qualification and Acceptance Test Specifications—Item 1—Part 1	\$	400,000
2.	Ninety-five percent of drawings required for fabrication as itemized in HS 303 master drawing list	\$	1,400,000
3.	One (1) complete set of materials for an HS 303 spacecraft		335,000
4.	Subsystem fabrication, test and deposit in honded storeroom at Hughes Air	ed i	lectrical to
5	craft Company		2,125,000
6	Fabrication of HS 303 prototype	\$	100,000
0.	Two (2) HS 303 flight spacecraft and one (1) set of operational spare parts, subject to meeting of acceptance tests	\$	300,000
7.	Procurement or fabrication by Hughes Aircraft Company of Hughes Aircraft Company-furnished test equipment, per list furnished, and modification by Hughes Aircraft Company of government owned equipment, per list furnished	ni m	375,000
8.	Launch preparation services for HS 303 spacecraft and delivery and installation of Hughes Aircraft Company Ground Terminal equipment to Anderson		bas S , I
0	Maine, Communication Station	\$	150,000
9.	Engineering support and spares for first launch of an HS 303 spacecraft	\$	200,000
10.	Management services from inception of contract through first launch of HS 303 spacecraft (total amount of \$750,000 payable in equal monthly installments		
1 31	01 \$62,500)	\$	750,000
11.	Engineering support for second launch of an HS 303 spacecraft	\$	200,000

The above amounts total \$6,335,000. The balance of payments due in excess of such amounts shall be paid as follows:

If either HS 303 spacecraft covered by Item 3 of Part I shall not be successfully injected, payment of \$750,000 (subject, in the case of the first such spacecraft, to adjustment in accordance with Provision No. 8(A)) shall be made within thirty (30) days following launch of that spacecraft. If either such spacecraft is successfully injected, no such payment shall be made with respect to the successfully injected spacecraft, but payments with respect to such spacecraft shall be made at the end of each operating month in amounts determined under Paragraph 6 of the Section entitled "Incentive Price". If the HS 303 spacecraft which is first launched is successfully injected and no launching of the second spacecraft is required by Communications Satellite Corporation during the period specified in Item 3 of Part II, then payment of \$750,000 shall be made within thirty (30) days after delivery of such second spacecraft.

TERMS AND CONDITIONS

Provision No. 1 Communications Satellite Corporation Coordination Responsibilities

Communications Satellite Corporation agrees to make available such equipment, facilities and services of other contractors and agencies which will enable Hughes Aircraft Company to perform under this contract, including

- a) Use of Atlantic Missile Range facilities normally associated with Delta-Syncom Launches, and the services of Government agencies customarily furnished with respect thereto.
- b) Use of NASA COMPUT, NETCOM, COMSOC minitrack and other required launch facilities, and the services of NASA field projects branch personnel, and Goddard Space Flight Center personnel as required.
- c) Use of North American Ground Terminal installation facilities at Andover, Maine, for the HS 303 command and telemetry functions.

Any delays in performance of this contract caused by acts or omissions of the Communications Satellite Corporation, or other contractors of the Communications Satellite Corporation or agencies participating in the Communications Satellite Corporation program not privy to this contract, other than sub-contractors of Hughes Aircraft Company, shall be deemed excusable delays to this contract, and Hughes Aircraft Company shall be entitled to an equitable adjustment in the delivery schedules, prices and provisions for payment hereunder.

Without limiting the generality of the foregoing paragraph, if an HS 303 spacecraft is launched later than thirty (30) days after delivery of such HS 303 spacecraft to the Atlantic Missile Range, time beyond said thirty (30) days shall be deemed an excusable delay and shall be subject to an equitable adjustment in delivery schedules, prices, and provisions for payment hereunder.

Provision No. 2 Assistance in Procurement of Apogee Motors

The Communications Satellite Corporation shall exert its best efforts to make it possible for Hughes Aircraft Company to purchase from the NASA or the Jet Propulsion Laboratories, four (4) each apogee motors, Hughes Aircraft Company Part No. 443702-100. (One of such motors shall be used for batch test at JPL.)

In the event that Hughes Aircraft Company is prevented from purchasing the said apogee motors from the NASA or Jet Propulsion Laboratories, Communications Satellite Corporation agrees to deliver three (3) each of said motors to Hughes Aircraft Company at the Atlantic Missile Range thirty (30) days prior to launch as customer-furnished equipment. In such case the price of Item No. 3 of Part I shall be reduced by \$36,000, and the price of Item 4 of Part I shall be reduced by \$12,000.

Provision No. 3 Assistance in Obtaining Consent to Use Government Equipment

Within the time necessary for use on the contract the Communications Satellite Corporation agrees to obtain the consent of the Government for Hughes Aircraft Company to use, and where so necessary,

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modify and use, existing Government-owned equipment in the performance of this contract on a rentfree non-interference basis. Such equipment is presently in the possession of the Hughes Aircraft Company.

The cost of modifying such Government equipment is included in the contract price.

Provision No. 4 Federal, State or Local Taxes

Prices do not include federal, state or local sales, use, excise, or similar taxes or import duties applicable to the sale, production, transportation, or use of the materials covered by this contract; except that Communications Satellite Corporation shall not be liable for and Hughes Aircraft Company indemnifies Communications Satellite Corporation with respect to any such taxes or duties imposed by the State of California or any municipality or other political subdivision of that State. Any such taxes or duties, other than those imposed by the State of California or a municipality or other political subdivision of that State, if required to be paid initially by Hughes Aircraft Company, shall be separately invoiced by Hughes Aircraft Company and reimbursed to it by Communications Satellite Corporation if, at least twenty (20) days prior to the payment thereof, Hughes Aircraft Company shall have given Communications Satellite Corporation written notice as to the nature and amount of such tax or duty proposed to be paid by it; provided, however, that Communications Satellite Corporation shall be under no obligation to reimburse Hughes Aircraft Company for the amount of such tax or duty if, within fifteen (15) days after receipt of such notice, Communications Satellite Corporation shall have filed with Hughes Aircraft Company written objection to the payment thereof and shall have agreed to indemnify Hughes Aircraft Company against all liability by reason of the non-payment of such tax or duty.

Provision No. 5 Communications Satellite Corporation's Right to Terminate

The Communications Satellite Corporation, by written notice to Hughes Aircraft Company, may terminate this contract for its convenience at any time prior to completion. In event of such termination by the Communications Satellite Corporation, it is agreed that the termination charges shall be 115% of the total costs, both direct and indirect, incurred by Hughes Aircraft Company in performance of this contract, including costs incurred with respect to termination and settlement with vendors and subcontractors as a result of Communications Satellite Corporation's termination.

Indirect costs shall be calculated as follows:

General Administrative expense 9.3% of the sum of direct costs and the

agreed overhead expense

Hughes Aircraft Company agrees to advise Communications Satellite Corporation of all proposed settlements with subcontractors in event of termination.

Direct costs shall be determined in accordance with Hughes Aircraft Company's standard accounting practices applicable to commercial contracts, and verified by Hughes Aircraft Company's independent Certified Public Accountants, Haskins & Sells. Communications Satellite Corporation shall pay the Hughes Aircraft Company the aforesaid termination charges within sixty (60) days following submission of such total costs verified by Haskins & Sells to Communications Satellite Corporation. Final payment shall be in the amount of the total termination charge, less the following:

- (1) Amounts previously paid by Communications Satellite Corporation to Hughes Aircraft Company in accordance with the contract terms and conditions.
- (2) Amounts representing total Hughes Aircraft Company's cost of segregable items of inventory not desired by Communications Satellite Corporation which Hughes Aircraft Company may elect to retain for its use.

In such event, all inventory generated under this contract shall become the property of Communications Satellite Corporation.

Notwithstanding the provisions of the first paragraph of this Provision No. 5, if, at the time of termination of this contract by Communications Satellite Corporation, delays designated as "excusable delays" in this contract singly or in the aggregate shall have prevented such performance by Hughes Aircraft Company as is required in order to make deliveries under the Delivery Schedule of this contract within one year after the times specified therein, it is agreed that the percentage to be applied pursuant to the first paragraph of this Provision No. 5 in determining the amount of termination charges shall be $107\frac{1}{2}\%$, in lieu of 115%.

In no event shall the total costs, both direct and indirect, which are made the basis of termination charges upon termination pursuant to this Provision No. 5 exceed \$7,000,000, (as adjusted for changes due to excusable delays or other mutually agreed price changes).

Provision No. 6 Hughes Aircraft Company's Right to Terminate

In the event that any delays designated as "excusable delays" in this contract singly or in the aggregate shall have prevented such performance by Hughes Aircraft Company as is required in order to make deliveries under Part II of the Schedule of this contract within one year after the times specified therein, Hughes Aircraft Company shall have the right at any time thereafter, by written notice to Communications Satellite Corporation, to terminate this contract, and upon such termination the amount payable by Communications Satellite Corporation to Hughes Aircraft Company shall be ascertained in the same manner as provided under Provision No. 5 with respect to Communications Satellite Corporation's right to terminate, except that the termination charges made the basis for the determination of the amount so payable shall be 100% of the total costs of Hughes Aircraft Company, as defined in said Provision No. 5. In such event all inventory generated under this contract shall become the property of Communications Satellite Corporation. In no event shall the total costs, both direct and indirect, which are made the basis of termination charges upon termination pursuant to this Provision No. 6 exceed \$7,000,000, (as adjusted for changes due to excusable delays or other mutually agreed price changes).

Provision No. 7 Excusable Delays

Without limiting any other provision specifying what constitutes an excusable delay under this contract, acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes and freight embargoes which cause failure to perform hereunder, and in every case are beyond the reasonable control and without the fault or negligence of the Hughes Aircraft Company and/or its subcontractors hereunder, shall constitute an excusable delay, if notice thereof is given to Communications Satellite Corporation within twenty (20) days after such event shall have occurred. In event of delay resulting from any of the above causes the delivery requirements shall be extended accordingly, subject to the rights of Communications Satellite Corporation under Provision No. 5, "Communications Satellite Corporation's Right to Terminate".

Provision No. 8(A) Delivery Incentive

If the first of the HS 303 flight spacecraft is not delivered within fifteen (15) days after the date specified in Item 3 of Part II of the Schedule of this contract for the delivery of such spacecraft, after giving effect to "excusable delays", as defined herein, then, in view of the value to Communications Satellite Corporation of prompt delivery to it of the spacecraft deliverable under this contract in the establishment as early as practicable of a communications satellite system and in view of the difficulty of fixing the amount of loss which Communications Satellite Corporation would suffer by reason of delay in such delivery, the price otherwise payable (except for incentive payments, if any) for the first of such spacecraft (including related services required by Items 1, 2, 5, 6 and 7 of Part I of the Schedule) shall be reduced as follows: For each day subsequent to fifteen (15) days after delivery date specified (not to exceed a period of seventy five (75) days from the delivery date specified) by which delivery is delayed, \$5,000. The reduction in price provided for by the foregoing portion of this

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provision for the 75-day period following the specified delivery date shall be in lieu of any rights or remedies of Communications Satellite Corporation based solely on delay in delivery of said first space-craft but shall in no way affect the rights or remedies of the Communications Satellite Corporation for further delays in the delivery of said first spacecraft, nor for delays in other deliveries nor for breach of contract by Hughes Aircraft Company for reasons other than delays in deliveries. Any such amount shall be credited against the amount otherwise payable by Communications Satellite Corporation to Hughes Aircraft Company at the time of delivery of the first flight spacecraft or, if such amount is greater than the amount payable at that time by Communications Satellite Corporation to Hughes Aircraft Company, the excess shall be payable to Communications Satellite Corporation.

If the first HS 303 flight spacecraft is delivered earlier than fifteen (15) days prior to the date specified in Item 3 of Part II of the Schedule of this contract for the delivery of such spacecraft, after giving effect to "excusable delays" as defined herein, then the price otherwise payable for such spacecraft (including related services required by Items 1, 2, 5, 6 and 7 of Part I of the Schedule) shall be increased as follows in the case of such flight spacecraft: For each day earlier than fifteen (15) days prior to the delivery date specified (not to exceed a period of seventy-five (75) days earlier than delivery date specified) by which delivery is accelerated, \$5,000. Any such amount shall be added to the amount otherwise payable by Communications Satellite Corporation to Hughes Aircraft Company, and shall be paid to Hughes Aircraft Company within thirty (30) days after delivery of such flight spacecraft.

Provision No. 8(B) Material Delay and Limitation on Recovery

It is mutually agreed that, without limitation of any rights or remedies of Communications Satellite Corporation based on any other failure by Hughes Aircraft Company to perform any of its obligations hereunder, it shall be deemed to be a material breach of this contract if Hughes Aircraft Company fails to make delivery of either spacecraft deliverable under Item 3 of Part II of the Schedule of this contract within seventy-five (75) days after the date on which such spacecraft is deliverable pursuant to said Part II, after giving effect to "excusable delays" as defined herein; provided, however, that Communications Satellite Corporation shall have given to Hughes Aircraft Company written notice of default and Hughes Aircraft Company does not remedy such default within a period of twenty (20) days after receipt of such notice. No recovery by Communications Satellite Corporation for breach of contract shall exceed the contract price.

Provision No. 9 Patent Indemnity

Hughes Aircraft Company agrees to defend at its expense any suit against Communications Satellite Corporation or its customers based on a claim that any item furnished under this contract or the normal use or sale thereof infringes on any U. S. Letters Patent, and to pay costs and damages finally awarded in such suit, provided Hughes Aircraft Company is notified in writing of the suit and given assistance at Hughes Aircraft Company expense for the defense of same.

Provision No. 10 Inventions

- (a) Upon completion of this contract, Hughes Aircraft Company will furnish to Communications Satellite Corporation a written report containing complete technical information concerning any invention conceived or first actually reduced to practice by employees of Hughes Aircraft Company or its subsidiaries in the performance of work under or in anticipation of this contract during the period commencing January 1, 1964.
- (b) With respect to each invention required to be reported by Hughes Aircraft Company to Communications Satellite Corporation under (a) above, Hughes Aircraft Company hereby grants to Communications Satellite Corporation an irrevocable, nonexclusive, nontransferable and royalty-free license to practice such invention throughout the world, together with the right in Communications Satellite Corporation to grant licenses to others, under such terms and conditions as the Communications Satellite Corporation may prescribe, for the practice of such invention throughout the world in the design, develop-

ment, manufacture, operation, maintenance, and testing of communications satellite systems, equipment and components with respect to any communications satellite system in which Communications Satellite Corporation has or is to have an interest and all ground tracking, transmitting and receiving facilities relating thereto.

- (c) Hughes Aircraft Company will take all customary measures and precautions necessary to protect the patent rights in any invention required to be reported under (a) above, including promptly filing or causing to be filed a United States patent application therefor unless an application covering the invention has already been filed, and Hughes Aircraft Company will, on request, furnish to Communications Satellite Corporation an irrevocable power to inspect and make copies of each such United States patent application. Upon receipt of the serial number and filing date, Hughes Aircraft Company will furnish same, together with a copy of the application as filed, to Communications Satellite Corporation.
- (d) Hughes Aircraft Company will execute and furnish to Communications Satellite Corporation instruments fully confirmatory of the rights herein granted to Communications Satellite Corporation.
- (e) With respect to any license granted by Hughes Aircraft Company and any sublicense granted by any licensee of Hughes Aircraft Company for the practice of any invention required to be reported under (a) above, Hughes Aircraft Company will require that each instrument granting such license or sublicense contain a notation of the rights granted herein to Communications Satellite Corporation, and, upon request, will furnish information to Communications Satellite Corporation concerning the granting of such licenses and sublicenses, together with the relevant terms and conditions thereof.
- (f) In the event any United States patent application filed on such invention, or any patent issued thereon, becomes involved in interference proceedings, Hughes Aircraft Company will make no concession of priority, abandonment of contest, nor disclaimer, except with the written consent of Communications Satellite Corporation, without first obtaining an irrevocable, nonexclusive, nontransferable, royalty-free license for the practice of such invention throughout the world by Communications Satellite Corporation, together with the right in Communications Satellite Corporation to grant licenses to others, under such terms and conditions as Communications Satellite Corporation may prescribe, for the practice of such invention throughout the world in the design, development, manufacture, operation, maintenance, and testing of communications satellite systems, equipment and components with respect to any communications satellite system in which Communications Satellite Corporation has or is to have an interest and all ground tracking, transmitting and receiving facilities relating thereto.
- (g) In the event that Hughes Aircraft Company decides not to file a United States patent application on any invention required to be reported under (a) above, or elects not to continue prosecution of any application already filed, Hughes Aircraft Company
 - (1) will convey to Communications Satellite Corporation the entire right, title, and interest in the invention by delivering to Communications Satellite Corporation such duly executed instruments as are necessary to vest in Communications Satellite Corporation the right, title, and interest aforesaid, subject to the reservation to Hughes Aircraft Company of an irrevocable, nonexclusive, royalty-free, nontransferable license to practice the invention, and
 - (2) will inform Communications Satellite Corporation in writing of any act known to Hughes Aircraft Company which constitutes a potential statutory bar to the filing of a patent application under 35 U.S.C. 102.

Provision No. 11 Other Indemnification

Hughes Aircraft Company agrees to defend at its expense any suit against Communications Satellite Corporation brought by American Telephone and Telegraph Company or Bell Telephone Laboratories, Inc. or others based upon a claim of damage to persons or property caused by acts of personnel in the employ of Hughes Aircraft Company at the ground terminal facilities of Bell Telephone Laboratories, Inc. at Andover, Maine.

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Provision No. 12 Title and Assumption of Risk

Title to an HS 303 spacecraft which is delivered for the purpose of launch shall pass to Communications Satellite Corporation at the time of launch thereof. From and after said transfer of title Communications Satellite Corporation assumes all risk of loss or damage and agrees to defend at its expense and to pay costs, including attorneys' fees, and damages awarded in any suit or proceeding brought against Hughes Aircraft Company for injury to person or property caused by said spacecraft. Title to all other deliverable items shall pass to Communications Satellite Corporation at time of delivery. Any loss or damage to deliverable items prior to passing of title shall be at Hughes Aircraft Company's risk.

Provision No. 13 Compliance with FCC Regulations

Hughes Aircraft Company shall comply with the procurement regulations of the Federal Communications Commission contained in Part 25 Subpart B of the Regulations of the Commission and agrees that in any contracts made by it with others relating to the materials or services to be furnished by Hughes Aircraft Company to Communications Satellite Corporation, it will include a provision under which each subcontractor for subcontracts of \$25,000 or more, will agree to comply with such regulations. Hughes Aircraft Company further agrees to furnish to Communications Satellite Corporation promptly the appropriate information with respect to all subcontracts for \$25,000 or more in effect at the time of execution and delivery of this contract and shall from time to time as further such subcontracts are awarded furnish to Communications Satellite Corporation similar information as to such subcontracts. The information so furnished shall, as to each such subcontract, include the name and address of the subcontractor, the property or service furnished and the amount of the award.

Provision No. 14 Price and Delivery Schedule Adjustment

To the extent that, notwithstanding the best efforts of Hughes Aircraft Company or others to comply with Part 25 Subpart B of the Regulations of the Federal Communications Commission, action taken by the Commission or third parties, notice of which shall have been given by Hughes Aircraft Company to Communications Satellite Corporation promptly after Hughes Aircraft Company shall have had notice thereof, shall cause delay in performance of this contract, any such delay shall be deemed an excusable delay and equitable adjustments in price, delivery schedule and payment schedule shall be made; provided, however, that no such delay shall be made the basis for termination of this contract by either party.

Provision No. 15 Disputes—Arbitration

If, within fifteen (15) days (or such other period as may be mutually agreed upon in writing), after written notice from either party to the other that a dispute exists under this contract, Hughes Aircraft Company and Communications Satellite Corporation shall fail to agree on a settlement of such dispute, the controversy shall, upon demand of either party, be disposed of by arbitration in accordance with the procedure herein set forth with respect to the method of choosing arbitrators and, in other respects, in accordance with the Commercial Arbitration Rules of the American Arbitration Association in effect at the time said written notice is given. Either party which demands arbitration of the controversy shall in writing specify the matter to be submitted to arbitration and, at the same time, choose and nominate a competent person to act as an arbitrator; thereupon, within fifteen (15) days after receipt of such written notice, the other party to this agreement shall in writing choose and nominate a competent arbitrator. The two arbitrators so chosen shall meet and endeavor to resolve the question in dispute and, if they agree upon such determination, the determination so made shall be in writing and signed by both arbitrators. If such two arbitrators fail to agree, they shall forthwith select a third arbitrator, giving written notice to both parties of the choice so made and fixing a time and place in the County of Los Angeles, California, at which both parties may appear and be heard with respect to such controversy. In case the two arbitrators shall fail to agree upon a third arbitrator within a reasonable period of time, or if either party shall fail to appoint an arbitrator, or if for any other reason there shall be a lapse in the naming of an arbitrator or arbitrators, or in filling a vacancy, or in the failure or refusal of any arbitrator or arbitrators to attend or fulfill his or their duties, then upon application by either party to the controversy, an arbitrator or arbitrators shall, upon application of either party, be named by the Chief Judge of the Superior Court of the County of Los Angeles, California. If such Chief Judge shall be incapacitated or shall fail or refuse to appoint such arbitrator within a reasonable time after such application, the senior judge in point of service shall make such appointment. The arbitration award made shall be final and binding upon the parties and judgment may be entered thereon upon the application of either party by any court having jurisdiction. Each party shall bear the cost of preparing and presenting its case; and the cost of the arbitration, including the fees and expenses of the arbitrator or arbitrators, will be shared equally by the parties unless the award otherwise provides.

Provision No. 16 Options

Option No. 1

At any time within two (2) years after effective date of the contract, Communications Satellite Corporation may at its option, order the assembly, test and delivery of one HS 303 spacecraft described in the Spacecraft Specifications, and engineering support and adequate spares for checkout and launch, directing use of the complete set of materials procured as Item 4 of Part I of the Schedule. In such event, the price of assembly, test, delivery and engineering support and adequate spares for checkout and launch, and the date of delivery thereof shall be negotiated, provided that in no event shall the fixed price (if a straight fixed price contract is negotiated) or the target price (if a fixed price incentive contract is negotiated), exceed \$1,425,000.

Option No. 2

At any time within three (3) years after effective date of contract, Communications Satellite Corporation may, at its option, procure from one (1) to ten (10) HS 303 spacecraft described in the Spacecraft Specifications and engineering support and adequate spares for checkout and launch for each at prices and delivery dates to be negotiated, provided that in no event shall the fixed price (if a straight fixed price contract is negotiated) or the target price (if a fixed price incentive contract is negotiated) exceed \$1,875,000 for each HS 303 spacecraft and launch services pertaining thereto.

Option No. 3

Thirty (30) days prior to completion of Item No. 7 of Part I of Schedule, Communications Satellite Corporation may, at its option, extend the one (1) year of field service and support for one (1) or more months at the price of \$25,000 per month.

Options Independent

Any one or combination of options herein may be exercised independently in accordance with its own terms, and no option shall be deemed contingent upon the exercise or non-exercise of any other option.

Provision No. 17 FCC Notice—Condition Precedent

This contract is subject to favorable action by the Federal Communications Commission on the application of Communications Satellite Corporation (File No. CSS-1-P-64), a copy of which has been furnished to Hughes Aircraft Company, relating to the construction of the spacecraft described in Part I—Item 3 of the Schedule. The effective date of this contract shall be the date of receipt by Hughes Aircraft Company from Communications Satellite Corporation of notice of such action by the Federal Communications Commission. In the event that the Federal Communications Commission has not taken such favorable action on or prior to April 15, 1964, Hughes Aircraft Company may, at its option, terminate this contract in its entirety by written notice to Communications Satellite Corporation prior to the taking of favorable action by the Commission on the above-mentioned application. Unless and until the Federal Communications Commission shall have taken favorable action on the above-mentioned application, Communications Satellite Corporation shall be under no financial obligation under this contract.

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Provision No. 18 Governing Law

Except as otherwise provided herein, the rights and obligations of the parties under this contract shall be governed by the laws of the State of California.

Provision No. 19 Assignment by Communications Satellite Corporation

Communications Satellite Corporation may assign its rights under this contract, with the exception of rights under Provision No. 10 entitled "Inventions", but no such assignment shall relieve it of any of its obligations hereunder.

APPENDIX I

TEST EQUIPMENT FOR ANDOVER

Item	Type	Quantity
*EMR Discriminator	EMR 167A-01	1
*Output Filter	EMR 167C-01	1
*Channel Selector	EMR 167B-01	1
Telemetry Switch Panel	HAC 443808-100	1
Synchronous Control Console	HAC 496906-100	1
*Impedance Matching Amps	Kintel 112	6
Synchronous Drum Unit	HAC 496905-100	1
Time Code Generator	ECCO 812A	1
Time Code Amplifier	HAC P/N 479154	1
Telemetry Receiver	Hallamore 0285-2	2
RF Converter	Hallamore 0484	2
Headphone & Crossover	WE 52BW	2
RF Patch Panel (HAC 241442)	SK 121-2552	1
Receiver Power Supply	Lambda C881M-0242 Lambda C881M-1409	2
Receiver Filament Supply	Sorenson Q86-3 Sorenson Q86-8	2
Counter	CMC 737	1
Counter Power Supply & Mixer	CMC 737	1
Printer	HP 562A	1
Oscilloscope	HP 120	1
Wide Range Oscillator	HP 200CD	1
Tape Recorder	PI 207	1
Patch Panels	Switcheroft 2632A MT 332A	4
Subcarrier & Reference Osc	241428	1
Oscillograph	Offner 482	1
Oscillograph	Offner RC Dynograph	1
Audio Monitor	HAC 496910-100	1
Power Panel	HAC 494909-100	1
Nexus Amplifier	CDA-2	1
Line Amplifier	HAC 241449	1
Phone Subcarrier Osc.	HAC 241428	1
Stabiloc Generator	Hallamore 0490-2	1
Equipment Racks	Stone & Smith XP 241357	4
Intercom	HAC X241376	2

^{*} These items are Hughes Aircraft Company owned or to be acquired. All other items are NASA owned.