CERTAIN AMPLIFIER ASSEMBLIES
AND PARTS THEREOF FROM JAPAN

Determination of the Commission
in Investigation No. 731-TA-48
(Preliminary) Under Section 733(a)
of the Tariff Act of 1930,
Together With the Information
Obtained in the Investigation

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Notes.-- Information that would disclose confidential operations of individual concerns may not be published and therefore has been deleted from this report. Deletions are indicated by asterisks.
UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.  
Investigation No. 731-TA-48 (Preliminary)  
CERTAIN AMPLIFIER ASSEMBLIES AND PARTS THEREOF FROM JAPAN

Determination

On the basis of the record 1/ developed in investigation No. 731-TA-48 (Preliminary), the Commission unanimously determines that there is a reasonable indication that an industry in the United States is threatened with material injury by reason of imports from Japan of certain amplifier assemblies and parts thereof, provided for in item 685.29 of the Tariff Schedules of the United States, which are alleged to be sold in the United States at less than fair value (LTFV). 2/

Background

On July 24, 1981, the U.S. International Trade Commission and the U.S. Department of Commerce each received a petition from Aydin Corp., Fort Washington, Penn., 3/ alleging that imports from Japan of certain amplifier assemblies 4/ are being, or are likely to be, sold in the United States at LTFV. Accordingly, the Commission instituted a preliminary antidumping investigation under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an

1/ The record is defined in sec. 207.2(j) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(j)).
2/ Vice Chairman Calhoun determines that there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, by reason of imports of the subject merchandise.
3/ MCL., Inc., La Grange, Ill., joined Aydin Corp. as a copetitioner on July 29, 1981.
4/ For purposes of this investigation, the subject merchandise is defined as radio-frequency power amplifier assemblies, and parts thereof, specially designed for transmission in the C, X, and Ku bands from fixed earth stations to communications satellites, provided for in item 685.29 of the Tariff Schedules of the United States.
industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of the imports of such merchandise into the United States. The statute directs that the Commission make its determination within 45 days of its receipt of the petition, or in this case by September 8, 1981.

Notice of the institution of the Commission's investigation and of the public conference to be held in connection therewith was duly given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register on August 5, 1981 (46 F.R. 39912). The conference was held in Washington, D.C. on August 19, 1981, and all persons who requested the opportunity were permitted to appear in person or by counsel.
Domestic industry

Section 771(4)(A) of the Tariff Act of 1930 defines the term "industry" as the "domestic producers as a whole of a like product or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." 1/ "Like product" is defined as a product which is like, or in the absence of like, most similar in characteristics and uses with, the article under investigation. 2/

The imported articles subject to this investigation are radio-frequency power amplifiers specially designed for transmission in the C, X, and Ku bands 3/ from fixed earth stations to communications satellites. These articles were made according to specifications in COMSAT contracts ESOC 1263 and ESOC 1264. ESOC 1263 is a contract for nine klystron 3-kilowatt (kW) 4/ amplifiers designed for use on the C band. ESOC 1264 is a contract for 20 traveling-wave-tube (TWT) 5/ 3-kW amplifiers designed for use on the C

2/ 19 U.S.C. 1677(10).
3/ Operating frequencies for radio transmitters are assigned by the Federal Communications Commission. Commercial satellite communications systems are assigned the C band (5.9-6.4 gigahertz (GHz)) and Ku band (12-14 GHz) frequencies, and military systems are assigned the X band (7.9-8.4 GHz).
4/ Power is measured in kilowatts and amplifiers are engineered for certain power ranges depending on design characteristics and intended uses.
5/ Both klystron and traveling-wave tubes provide the power amplification needed to transmit the signals to a satellite. The klystron and TWT amplifiers are somewhat different in terms of the manner in which they perform. The TWT amplifier is capable of sending signals over a much wider bandwidth than a klystron amplifier. As a result, the TWT amplifier does not need to be retuned as frequently, and one amplifier can be used to send signals to several transponders on a satellite. Nevertheless, klystron and TWT amplifiers are essentially performing the same function, in that they amplify the signal for uplink transmission to a communications satellite. We therefore believe that klystron and TWT amplifiers are like in terms of the statute.
Both of these contracts were for amplifiers for sending signals to communications satellites and both were won by Nippon Electric Co. (NEC) of Japan.

We find that the products in this investigation that are like those imported under ESOC 1263 and ESOC 1264 are klystron and TWT amplifiers of over 1 kW for use on the C, X, or Ku bands. Amplifiers that have power ratings above 1 kW can be used to send all types of signals to communications satellites, including video signals. The best information available indicates that amplifiers below 1 kW would not be capable of sending video signals. On this basis, we believe that only amplifiers above 1 kW should be considered like the 3-kW amplifiers involved in the two COMSAT contracts.

Section 771(4)(D) directs the Commission to assess the effect of dumped imports in relation to the U.S. production of a like product if available data permit the separate identification of that product in terms of such criteria.

6/ The COMSAT contracts call for amplifiers designed to broadcast on the C band, which is the principal band in the United States for civilian satellite broadcasting. Amplifiers that broadcast to satellites on the X or Ku bands are essentially the same as C-band amplifiers except that radio-frequency components and the tubes are designed to broadcast on the appropriate wavelengths. Because this is only a minor variation, we are of the view that the C, X, and Ku band amplifiers are like in terms of the statute.

7/ See additional views of Vice Chairman Calhoun.

8/ The type of signal that can be sent to communications satellites is a function of the power of the amplifier and the size of the antenna. In defining the like product, we assume use of an antenna in the range normal in the industry. The vast majority of transmitter stations use antennas in the normal range because it is not economical to do otherwise.

9/ It is our view that an amplifier with a linearizer, which is included in ESOC 1264, but not in ESOC 1263, is not significantly different in characteristics or uses from an amplifier without a linearizer. The purpose of a linearizer is to adjust for distortions in a signal as it passes through the amplifier. ESOC 1264 is the first COMSAT contract that has called for the use of this device. Although the linearizer may have a beneficial effect (there is some difference of opinion in this regard among producers and users), the essential characteristics of the amplifier remain the same.
as the production process or the producers' profits. In this investigation, however, the available data permit the Commission to assess the effect of only the allegedly dumped imports on the overall operations of U.S. producers (i.e., employment and financial performance) on the production of high-powered amplifiers (HPA's) rather than limiting that assessment to operations regarding amplifiers of over 1 kW. The U.S. industry consists of those portions of Aydin Corp., Varian Associates, Inc., MCL, Inc., Hughes Aircraft Corp., and Comtech Telecommunications devoted to the production of the subject HPA's. 10/ Threat of material injury 11/

The Senate Finance Committee report on the Trade Agreements Act of 1979 makes clear that an affirmative finding on threat of material injury "must be based upon information showing that the threat is real and injury is imminent, not a mere supposition or conjecture." 12/ The report of the Committee on Ways and Means of the House of Representatives states that, with respect to threat, the Commission should focus on demonstrable trends—for example, the rate of increase of the . . . dumped exports to the U.S. market, capacity in the exporting country to generate exports, the likelihood that such exports will be directed to the U.S. market taking into account the availability of other export markets, . . . 13/

10/ Staff Report at A-5-6.
11/ Vice Chairman Calhoun, in voting material injury or threat takes the view that, except in unusual circumstances, data collected in preliminary investigations are not normally suitable for use in reaching especially precise conclusions such as whether injury is threatened or is extant. Nor, in his view, is such precision required in preliminary investigations. Consequently, in most preliminary investigations his vote is in the alternative pending receipt of more definitive data from the final investigation.
Despite the current healthy conditions of the U.S. industry with regard to many of the factors listed in section 771(7)(c)(iii) of the Tariff Act of 1930, \(^{14}\) including sales, profits, and employment, data collected during the investigation point to a reasonable indication of threat of material injury to that industry. \(^{15}\) Imports of the subject amplifiers from Japan and the market penetration of such imports rose dramatically in 1981. \(^{16}\) There is reason to believe that such import trends will continue in the immediate future as amplifiers are imported under the terms of the COMSAT contracts and future lost sales occur. We note that even though present indicators show a healthy industry, the injury occurring from the loss of the two COMSAT contracts has not yet manifested itself in the financial data.

The prices offered by NEC on the two COMSAT contracts on which dumping is alleged were significantly below those of U.S. producers, \(^{17}\) and demonstrate NEC's desire and ability to compete aggressively in the growing U.S. market for satellite communications equipment. This substantial price undercutting may prevent the U.S. industry from raising its prices to a significant degree. If price suppression develops, the U.S. industry will experience adverse effects on investment and may be unable to retain highly skilled personnel or fund research and development plans.

The structure of this high-technology industry and the market in which it operates is such that funds for research and development and the retention of highly skilled personnel are very significant factors in the continued health

\(^{14}\) U.S.C. 1677(7)(iii).
\(^{15}\) Specific company-related data are confidential and cannot be discussed in this public document.
\(^{16}\) Staff Report at A-9, 11, and 12.
\(^{17}\) Id. at A-16 and 19.
of the industry. Because of long lead times and the built-to-specification nature of this market, every firm faces periods of rapid increases in sales and periods of lesser activity. Therefore, price suppression that threatens the domestic industry's ability to retain essential personnel and carry on necessary research and development require especially close scrutiny.

COMSAT provided the Commission with detailed information on its reasons for awarding both contracts to NEC. COMSAT's letter, which is reproduced in the report, 18/ indicates that NEC was awarded both contracts because of several considerations, including technical superiority and delivery schedule. However, in each of the two instances, COMSAT has stated that proposals by some domestic firms were deemed adequate in terms of the non-price criteria. COMSAT operates under Federal Communications Commission rules that require that cost of the product be a major factor in determining the awarding of a contract. 19/ Given "technical adequacy" of several bidders, the lower price offered by NEC was a deciding factor in the sales lost by the domestic producers.

NEC is a major world producer of HPA's, with vertically integrated manufacturing facilities capable not only of providing HPA's, but also all major components of HPA's, as well as entire earth stations for communication satellites on a turnkey basis. 20/ NEC's success in winning the two COMSAT contracts will allow them to demonstrate technical capabilities and performance credibility with a large and technically exacting U.S. consumer.

18/ Id. at A-30-42.
20/ Staff Report at A-15.
This could help NEC to make further inroads into the rapidly growing U.S.
market for satellite communications equipment.

In sum, we determine that there is a reasonable indication that the rapid
increase in market penetration by the alleged LTFV imports, together with the
capture by NEC of two major procurements at prices well below those of its
U.S. competitors, and NEC's ability to generate future exports to the United
States will have a detrimental impact on the performance of the domestic
industry in terms of profitability, productivity, return on investments,
utilization of capacity, employment, and other areas. Thus, the investigation
should continue.
In finding the like product in this case to be Klystron and TWT amplifiers of over 1 kW for use on the C, X, or Ku bands, we have found domestically produced articles to be like products for which there is no imported counterpart and for which there is an absence of any allegation or substantial information suggesting fungibility between them and the products actually being imported. 1/ To the extent this finding carries to the final investigation, its effect is to broaden the scope of the domestic production against which material injury or threat must be assessed under section 771(4)(D). Such a broadening would, thus, include products which may not be suffering any adverse impact from imports because, in the marketplace, they may not, in fact, face competition from imports. The result of such a broadening, then, is a tendency to reduce the likelihood of an affirmative finding because we would be assessing import impact against production which may be unaffected by imports. This would seem to frustrate the effectiveness of a law designed to provide relief to producers of products adversely affected by unfair imports.

Despite the potential of our broad like product finding to dilute the impact of imports, it seems appropriate because of the particular

1/ The articles which are actually to be imported are 9 Klystron-tube 3 kilowatt (kW) amplifiers designed for use on the C band and 20 travelling-wave-tube (TWT) 3 kW amplifiers designed for use on the C band. Therefore, the products included in the like product category which are not being imported are amplifiers over 1 kW but under 3 kW and amplifiers over 3 kW, both categories for use on C, X, or Ku bands. Included, as well, are amplifiers of 3 kW for use on X or Ku bands.
circumstances of this case. As a general rule, a finding of the domestic like product should follow, as close as practicable, the characteristics and uses of the imported article. That is, the like product ought to be the domestic product which the marketplace considers to be the closest thing to the article being imported. This approach is difficult, here, because, unlike most cases, the specific amplifiers in question are not standard production items, either domestically or abroad, in that they are to be manufactured in accordance with COMSAT specifications. Indeed, production of amplifiers for transmission from earth stations to communication satellites seem, generally, to take place on a made-to-specification basis. Thus, applying this general rule to find like products, in cases involving products made to order, leaves the finding dependent solely on the fortuity of there being some domestic production of a product having specifications close to those of the imported article. Such decisionmaking, based upon happenstance, cannot be sound policy.

Therefore, in reaching a finding of like product, a somewhat different approach has been undertaken. This approach should eliminate dependence on coincidence and should result in a like product finding which accurately identifies that production most likely to be impacted by imports. In this regard, then, while the specific requirements of particular users of amplifiers for transmission from earth to satellite may vary, there are, nevertheless, domestic producers who are capable of meeting the terms of specific contracts and ought to be entitled to the benefits of our trade laws. More relevant, however, is the fact that it is possible to describe rather particular characteristics of the category of amplifiers produced by
these manufacturers which, subject to special efforts to meet particularized specifications, would meet the uses to which COMSAT and other consumers are likely to put such amplifiers. These characteristics and uses are discussed in the opinion and are the basis for my view that this category of amplifiers is most similar to the imported articles.

With such a view of like product, given the data thus far collected, we assess the impact of imports on the production of amplifiers which are generally capable of meeting the terms of a particular contract since production of more closely related amplifiers may or may not exist. This, then, makes the focus of our investigation properly on producers who are capable of competing with foreign producers for specification contracts for amplifiers for earth to satellite transmission.

I have explained my reasoning in some detail as an invitation to parties to address more closely in the final investigation the issue of like product and to supply the relevant data on a product line basis that tracks as close as possible our like product finding. These two matters are likely to be especially important considerations in our final investigation.
INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On July 24, 1981, the U.S. International Trade Commission and the U.S. Department of Commerce received a petition from Aydin Corp., Fort Washington, Pa., alleging that certain amplifier assemblies and parts thereof from Japan are being sold in the United States at less than fair value (LTFV). Accordingly, effective July 24, 1981, the Commission instituted a preliminary antidumping investigation under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Japan of certain amplifier assemblies and parts thereof provided for in item 685.29 of the Tariff Schedules of the United States (TSUS) which the petition alleges are being, or are likely to be, sold in the United States at LTFV. The statute directs that the Commission make its determination within 45 days of its receipt of the petition, or in this case by September 8, 1981. Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was duly given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register of August 5, 1981 (46 F.R. 39912). 1/ The public conference was held in Washington, D.C., on August 19, 1981. The Commission's vote in the investigation was taken on September 1, 1981.

The Product

Description and uses

The amplifier assemblies which are the subject of this investigation are high-power, radio frequency amplifiers used in the "uplink" transmission of high frequency, wide bandwidth 2/ radio signals to earth satellites from fixed earth stations. They are distinguished from other amplifiers principally by their output power, wide range of operating frequencies, extremely low distortion across all frequencies of operation, high reliability, and the frequency bands for which they are designed. For purposes of this report, such amplifier assemblies will be referred to as high-power amplifiers (HPA's). 3/

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1/ A copy of the Commission's notice of the investigation and conference and a list of witnesses appearing at the conference are presented in app. A. A copy of the Commerce Department's notice of investigation is presented in app. B.

2/ Bandwidth defines the limits of the frequency range over which a particular device will operate efficiently and without introducing excessive distortion.

3/ For a description of the items allegedly sold at LTFV, see p. A-4.
Component parts in a typical satellite communication amplifier for uplink transmission include the main power amplifier (which uses either a klystron tube or a traveling wave tube (TWT)), an intermediate power amplifier (IPA), magnet, radio-frequency components, electrical components, cable, cabinets, and panels. The tube provides the power amplification which is required to transmit the signal to the satellite. The required output is so high, however, that single-stage amplification is not sufficient and a preamplifier, or IPA, is also necessary. As mentioned, two types of tubes are currently used in the HPA. Both perform basically the same function, but are distinguished by different internal structures and different bandwidth capabilities. The klystron tube used in HPA's is a relatively wide bandwidth device compared with klystrons used for other applications or communication systems, and will drive a single satellite transponder effectively. However, communication satellites carry many transponders, which divide their full frequency coverage, and, therefore, many klystron HPA's are required to exercise the satellite over its full range of frequencies. The TWT, on the other hand, has a much wider bandwidth capability so that an HPA with a single TWT can replace as many as 24 klystron HPA's.

The output power of an HPA must be great enough to transmit a wide bandwidth signal to the satellite. Power is measured in kilowatts (kW), and the amplifiers generally fall into certain power ranges, depending on design characteristics and intended use. Added to the requirement for wide bandwidth is the requirement for amplification with extremely low distortion. Although moderate distortion is tolerable in some of the older transmission systems (such as voice telephone), such is not the case in satellite systems. The earth station should be capable of accepting any kind of signal (television, telephone, telemetry, facsimile, high-speed digital data, and so forth) for transmission, and it is important that the signal suffer as little damage (distortion) as possible during transmission. Such low distortion is difficult to achieve in wide bandwidth systems (including even the most advanced TWT systems). Some users of HPA's believe that signal distortion can be reduced by incorporating a device called a "linearizer" in the system. The linearizer is placed first in the amplification chain and produces the mirror image of the distortion expected to be produced by the HPA. In other words, it predistorts the input signal so that when the signal passes through the HPA, the distortions are canceled. Such linearizers are adjusted for the individual characteristics of each HPA and therefore require retuning whenever the tube is replaced. There are differences of opinion among producers and users of HPA's concerning the usefulness of linearizers, but a large contract that forms part of the basis for the LTFV allegations in this investigation specified the inclusion of such a device.

Perhaps the most important characteristic of satellite communication amplifiers is that of reliability. The failure of a TWT amplifier being used to transmit to all of the transponders on a given satellite would result in a complete interruption of service for that satellite. Unless a standby amplifier is designed into the system, the loss of revenue could be severe. Therefore, the utmost attention must be given to achieving a failure rate of zero over the life of the tube (1 to 2 years).

1/ A device that receives the uplink transmission and sends it back to the earth-based receiver.
Operating frequency ranges for radio transmitters are assigned by the Federal Communications Commission. Commercial satellite communication systems currently are assigned the so-called C band (5.9–6.4 gigahertz (GHz)) 1/ and the Ku band (12–14 GHz) frequencies; military systems are assigned the X band (7.9–8.4 GHz).

Although satellite communication amplifiers are manufactured to technical specifications prescribed by the users and therefore cannot be considered to be "off-the-shelf" items, they are constructed of relatively standard components. Because they are made to order, completed assemblies are usually not kept in inventory (although various components may be) or mass produced.

Klystron and TWT HPA's are divided into four distinct product groups by their power output rating. The domestic producers of HPA's manufacture klystron HPA's capable of a power output rating of approximately 1.5–3.5 kW, and much larger models of 10–12 kW. Similarly, TWT HPA's are offered in ranges of 50–700 watts (W) and 3 kW, 8 kW, and 12 kW. The jump in power output from the smaller to the larger amplifier dictates significant changes in the size, construction, and price of the unit. The smaller amplifiers may be only slightly larger than an amplifier for a home stereo system, whereas the larger HPA's can occupy 3 or 4 cabinets, each of door height and width. The larger TWT HPA's utilize a TWT of different construction and employ more complex (and many times, depending on the manufacturer, different) systems for heat dissipation, safety, noise abatement, and preamplification. Finally, the prices of the higher powered units are generally several times greater than those of the smaller HPA's.

Another type of HPA is used in systems which transmit radio signals from earth stations to the troposphere, where they are bounced back to the earth. These systems are called troposcatter stations, and their operation is analogous to shining a searchlight on a cloud. In the case of the troposcatter systems, however, the radio-frequency energy bounces off aberrations in the troposphere rather than being sent to a satellite and being beamed back to earth. Transmission ranges extending from 200 to 400 miles are usual. The troposcatter transmitter (and therefore the amplifier subassembly), when compared with a satellite communications earth station transmitter, is characterized by generally higher output power, a different frequency band of operation, narrow bandwidth, and, often, construction to military specifications, and would not normally be considered a substitute for an earth station transmitter.

U.S. tariff treatment

The amplifier assemblies which are the subject of this investigation are dutiable under the provisions of item 685.29 of the TSUS. This item is a basket category and includes a variety of merchandise, such as antennas, transmitters, and radio apparatus not elsewhere classified in TSUS.

1/ A GHz is 1 billion hertz; hertz is the international unit of frequency equal to 1 cycle per second.
The column 1 (most-favored-nation) rate of duty for this item is 6 percent ad valorem. There is no least developed developing country (LDDC) rate of duty for this item. The column 2 (statutory) rate of duty is 35 percent ad valorem. 1/ The column 1 rate of duty has been in effect since January 1, 1972, and the Geneva (1979) Protocol to the General Agreement on Tariffs and Trade does not affect the rates of duty applicable to item 685.29. The column 1 rate is applicable to imports from Japan. Merchandise entered under item 685.29 may be eligible for duty-free treatment under the Generalized System of Preferences (GSP). 2/

Nature and Extent of Alleged Sales at LTFV

The petition filed in this investigation contains allegations of sales at LTFV based on a comparison between the constructed value of HPA's produced in Japan and the selling price of such HPA's sold by NEC America, Inc. (NEC America) to The Communications Satellite Corp. (COMSAT) for use in that company's earth satellite stations in the United States. Two sales made by NEC America are alleged to be at LTFV; one for 9 3-kW klystron HPA's which are to be produced in Japan and scheduled for shipment by ***, and the other for 20 3-kW TWT HPA's which are scheduled for production and shipment by **.

The constructed value of the amplifiers is based on petitioner's estimates of material cost of the amplifier assemblies, 3/ direct labor, general, administrative, and selling expenses, and profit at 8 percent. The

1/ The rates of duty in rate of duty column numbered 1 are most-favored-nation (MFN) rates, and are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(f) of the TSUS. However, such rates would not apply to products of developing countries which are granted preferential tariff treatment under the GSP or under the LDDC rate of duty column.

The rates of duty in rate of duty column LDDC are preferential rates (reflecting the full U.S. Multilateral Trade Negotiation (MTN) concession rate for a particular item without staging) and are applicable to products of the least developed developing countries designated in general headnote 3(d) of the TSUS which are not granted duty-free treatment under the GSP. If no rate of duty is provided in the LDDC column for a particular item, the rate of duty provided in column numbered 1 applies.

The rates of duty in the column numbered 2 apply to imported products from those Communist countries and areas enumerated in general headnote 3(f) of the TSUS.

2/ The GSP, under title V of the Trade Act of 1974, provides duty-free treatment of specified eligible articles imported directly from designated beneficiary developing countries. GSP, implemented by Executive Order No. 11888 of Nov. 24, 1975, applies to merchandise imported on or after Jan. 1, 1976, and is scheduled to remain in effect until Jan. 4, 1985, unless modified by the President or terminated. All beneficiary developing countries except Singapore are presently eligible for the GSP under item 685.29.

3/ The constructed material cost in the petition includes costs of all major components of the amplifier assembly, with the important exceptions of the tube and the linearizer, a component required by COMSAT in its TWT amplifier contract only.
alleged margins of dumping as set forth in the petition are based on a comparison of these constructed costs and the bids of NEC America on the two COMSAT contracts. The resultant margins are ** percent for the klystron HPA contract, and ** percent for the TWT HPA contract. 1/

U.S. Market and_channels of Distribution

The U.S. market for HPA's can be divided into 2 segments: (1) end users such as COMSAT and the military, which purchase HPA's for use in their own earth stations, and (2) firms such as Scientific Atlanta, Harris, GTE-International, Litton, and Ford Aerospace, which purchase HPA's which are integrated into complete systems and sold to end users (turnkey operations).

Because the military and commercial bands, X and C respectively, and power requirements, 5 kW and 3 kW, respectively, are different, these products are not interchangeable even though they are similar. Almost all of the klystron HPA's are purchased by commercial users.

HPA's are marketed by a competitive bidding process. Both end users and firms which offer turnkey stations will solicit bids from vendors when they have HPA requirements. After receiving the bids, the purchaser will choose 1 or 2 vendors and begin negotiations for a contract. Price, quality, and delivery date are usually important considerations in the selection of a vendor.

U.S. Producers

There are five major producers of HPA's in the United States: Aydin Corp., Varian Associates, Inc., MCL, Inc., Hughes Aircraft Corp., and Comtech Telecommunications Corp. Three of these, Aydin, Varian, and MCL, make both klystron and TWT HPA's in the power range, under consideration; Comtech makes only klystron HPA's in this power range, and Hughes makes lower power TWT HPA's.

Aydin Corp. makes klystron and TWT HPA's at Aydin Microwave Division, which is located in San Jose, Calif. Aydin Microwave was elevated to division status in 1979 and moved into a separate facility in 1980. Much of this facility is designed specifically for the production and testing of HPA's. Various equipment configurations were engineered to handle the special requirements of HPA manufacture dictated by the size of the HPA, the power required in production and testing, and the heat and noise generated. In addition to HPA's, Aydin Microwave also makes troposcatter equipment, solid state amplifiers, and microwave radio equipment in its San Jose plant. In

1/ These percentages are calculated by subtracting NEC America's bid price from the constructed value of the amplifier assemblies and dividing by the constructed value. Excluded from these calculations are constructed values of the tubes and the linearizer. Based on data provided by the petitioner, the inclusion of the klystron tube decreases the alleged dumping margin on the klystron contract to ** percent, and inclusion of the TWT decreases the margin to ** percent on the TWT contract. NEC's bid price on the linearizer is not known.
satellite communications amplifier production, Aydin Microwave concentrates on the production of higher power amplifiers (200 watts and over). This is because the tube represents a substantial portion of the cost of a small amplifier, and Aydin has to buy tubes from other firms since it doesn't make them. The tube represents a smaller share of the production cost in a large HPA, which gives Aydin more flexibility in pricing.

Varian Associates, Inc., produces HPA's at its Microwave Components & Subsystems Division, which was elevated to division status in 1979, and is located in Santa Clara, Calif. This division produces a variety of satellite communications power amplifiers ranging from 20 w to 12 kW. Varian also produces TWT's and and klystron tubes in a separate facility; Varian is the sole domestic source of TWT's used in 3-kW HPA's that operate in the C band.

MCL, Inc., produces the subject HPA's at its plant located at La Grange, Ill. MCL also produces a variety of equipment, including satellite communications amplifiers that range from 20 watts to 3 kilowatts, lower frequency microwave equipment, and electronic-countermeasures equipment. MCL does not make klystron tubes or TWT's.

Comtech Telecommunications Corp. produces 3-kW klystron HPA's at its facility in Hauppauge, N.Y. It does not produce the 3-kW TWT HPA of interest, but does make lower power TWT satellite communications amplifiers, low-noise receiver amplifiers, frequency converters, and baseband equipment. Hughes makes the lower power amplifiers of 50-700 w at its Electron Dynamics Division in Torrance, Calif. Hughes also makes TWT's, but does not make 3-kW TWT's for C band.

U.S. Importers

Nippon Electronic Co., Ltd., of Japan (NEC, Ltd.) through its U.S. subsidiary NEC America, is the only known foreign producer of the subject HPA's which exports them to the United States. NEC America first began importing HPA's from its facility in Japan in 1979. The contracts between NEC America and COMSAT (ESOC 1263 and ESOC 1264), upon which LTFV sales have been alleged, stipulate delivery of the HPA's to begin in September 1981.

Foreign Producers

NEC, Ltd., of Japan produces a wide variety of satellite communications equipment, including HPA's of the type under investigation, satellite antennas, low-noise amplifiers, signal-terminal equipment, and satellite transponders. NEC, Ltd., also supplies complete earth stations to customers around the world on a turnkey basis.

In Europe, major producers of satellite communications equipment, including HPA's, are Thomson-CSF in France (Thomson also makes a linearizer), AEG Telefunken in West Germany, Italtel in Italy, and Marconi in the United Kingdom. These producers make HPA's for the Ku band, the satellite communications band employed in Europe.
Varian Associates has a facility located in Canada that has been producing klystron HPA's; however, Varian intends to move this capability to its Santa Clara plant.

The Question of Material Injury

U.S. production, capacity, and producers' inventories

The Commission did not solicit data on U.S. producers' production and capacity to produce the amplifier assemblies which are the subject of the instant investigation. Preliminary data provided to the Commission staff and interviews with industry representatives indicated that (1) production of the subject amplifier assemblies closely approximated shipments, because these items are typically custom made to specifications provided by the HPA consumer; and (2) production of these items basically involves the manufacture of circuit boards, assembly of components, and installation of wiring and purchased parts in multiproduct, multifunction workplaces. Production and related workers are typically highly skilled workers who are capable of manufacturing and assembling a variety of products used in the telecommunications sector of the economy. Given the great flexibility of the facilities and labor which characterize the industry, as well as the tendency of orders for amplifier assemblies to come in clumps because of the procurement needs of consumers, production of these custom-made items could fluctuate widely from year to year.

Due to the nature of the products, and following submission of preliminary data and subsequent discussions with industry representatives, the Commission decided not to solicit data on producers' inventories. Production of the certain amplifier assemblies which are the subject of this investigation involves the manufacture of these items to consumer specifications, which may vary greatly from contract to contract. Therefore, it is not the general practice of firms in the industry to build large inventories, although economies of scale sometimes dictate production of more amplifier assemblies than are called for from the firm's secured contracts.

The larger klystron and TWT amplifier assemblies being provided COMSAT by NEC America which represent the imports upon which LTFV allegations have been made have never been produced for inventory by the U.S. industry.

U.S. producers' domestic shipments

The Commission received usable data on the quantity and value of U.S. producers' shipments from three of the five domestic producers of HPA's. These three firms are believed to together account for approximately 80 percent of the domestic industry's total shipments of these products during 1978-81. Data on U.S. producers' shipments of both klystron and TWT HPA's for 1978-81 are given in table 1.

1/ See the petition of Aydin Corp., attachment A, sec. 3.
2/ Ibid.
Table 1.—Certain amplifier assemblies and parts thereof: U.S. producers' domestic shipments, by types, 1978-81 1/

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity</th>
<th>Installed value 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Klystron HPA's</td>
<td>TWT HPA's</td>
</tr>
<tr>
<td></td>
<td>1.5-3.5 kW</td>
<td>10-12 kW</td>
</tr>
<tr>
<td>1978</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>1979</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>1980</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>1981</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

1/ As the procurement practices of HPA's consumers involve bidding on contracts which state definite delivery and payment dates, domestic producers were able to provide data on shipments from January 1978 through June 1981, and projected shipments to Dec. 31, 1981, upon which they have secured contract commitments.

2/ Because many of the shipments of U.S. producers involve HPA's built to unique specifications, the value added in the installation phase of the assemblies may be significant. Thus, the Commission requested data on an installed-value basis.

The quantity and value of U.S. producers' shipments fluctuated erratically among the four product groups of HPA's from 1978 to 1981. In general, the shipments of the smaller klystron and TWT HPA's increased, whereas shipments of the larger HPA's of both types decreased. The larger klystron and TWT HPA's, however, are not high-volume items. The peak year for shipments of these assemblies was 1978, when *** units were shipped.

U.S. exports

All three domestic producers of HPA's which responded to Commission questionnaires export such items to earth satellite ground stations throughout the world and consider export sales an important part of their total business. The quantity and value of such exports for the period 1978-81 are given in table 2.

Respondents' data on exports show TWT HPA's representing the vast bulk of the total quantity and installed value of all exports from 1978 to 1981. The lower powered TWT HPA's represented 97 percent of the quantity of total exports of TWT HPA's, but only 79 percent of the value of exports of these products during 1978-81.

U.S. imports

Data on imported HPA's are not reported separately in the official statistics of the U.S. Department of Commerce. Such imports are included in the data reported for all articles entered under TSUS item 685.29, which, in addition to the products that are the subject of this investigation, includes such diverse items as antennas, transceivers, and transmitters.

The only known foreign exporter to the United States of the HPA's which are the subject of this investigation is NEC, Ltd., of Toyko, Japan. These articles are imported by that firm's subsidiary in the United States, NEC America. The quantity and value of U.S. imports of the HPA's which are the subject of the investigation are given in table 3.

The total imports from Japan of the HPA's which are the subject of the investigation represent three contracts secured by NEC America from U.S.-based satellite communications companies. The imports of the lower power TWT HPA's represent shipments to Satellite Business Systems, Inc., to partially fulfill a contract to provide 100 complete earth stations. This contract was secured in 1978, and delivery of the earth stations will be completed by ** *. The imports of klystron HPA's represent complete fulfillment by NEC America of a contract secured from COMSAT in 1981 (contract No. ESOC 1263). The imports of the larger TWT HPA's represent partial fulfillment by NEC America of a contract secured from COMSAT in 1981 (ESOC 1264). Shipment from Japan of all the HPA's under this contract is to be made by ** *. These latter two contracts represent the sales by NEC America upon which LTFV allegations have been made.
Table 2.—Certain amplifier assemblies and parts thereof: U.S. exports, by types, 1978-81.

<table>
<thead>
<tr>
<th>Year</th>
<th>Klystron HPA's</th>
<th>TWT HPA's</th>
<th>Klystron HPA's</th>
<th>TWT HPA's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity</td>
<td></td>
<td>Installed value</td>
<td></td>
</tr>
<tr>
<td>1978-1978</td>
<td>1.5-3.5 kW</td>
<td>10-12 kW</td>
<td>50-700 w</td>
<td>3-12 kW</td>
</tr>
<tr>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>1979-1979</td>
<td>1.5-3.5 kW</td>
<td>10-12 kW</td>
<td>50-700 w</td>
<td>3-12 kW</td>
</tr>
<tr>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>1980-1980</td>
<td>1.5-3.5 kW</td>
<td>10-12 kW</td>
<td>50-700 w</td>
<td>3-12 kW</td>
</tr>
<tr>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>1981-1981</td>
<td>1.5-3.5 kW</td>
<td>10-12 kW</td>
<td>50-700 w</td>
<td>3-12 kW</td>
</tr>
<tr>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

Table 3.--Certain amplifier assemblies and parts thereof: U.S. imports for consumption, by types, 1978-81. 1/

<table>
<thead>
<tr>
<th>Type</th>
<th>1978</th>
<th>1979</th>
<th>1980</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity (units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Klystron HPA's:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5-3.5 w</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>10-12 kW</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>TWT HPA's:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-700 w 2/</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>3-12 kW 3/</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Grand Total</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

Table 3.--Certain amplifier assemblies and parts thereof: U.S. imports for consumption, by types, 1978-81. 1/  

<table>
<thead>
<tr>
<th>Type</th>
<th>1978</th>
<th>1979</th>
<th>1980</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Installed value (1,000 dollars)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Klystron HPA's:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5-3.5 kW</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>10-12 kW</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>TWT HPA's:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-700 w 2/</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>3-12 kW 3/</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Grand total</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

1/ Because the procurement practices of HPA consumers involve bidding on contracts which state definite delivery and payment dates, the importer was able to provide data on imports shipped from 1978 through June 1981, and on projected import shipments to Dec. 31, 1981, upon which it had secured contract commitments.

2/ All of the imports reported for TWT HPA's of 50-700 w are part of a contract won by NEC America to provide 100 earth stations to Satellite Business Systems, Inc. (SBS). Each earth station contains 1 250 w TWT HPA. The remaining *** TWT HPA's, valued at approximately ***, are to be delivered to SBS by ***.

3/ All of the imports reported for the 3-12 kW TWT HPA's are part of a contract won by NEC America to provide 20 such assemblies to COMSAT. Each amplifier assembly is a 3-kW TWT HPA. The remaining *** HPA's, valued at approximately ***, are to be shipped to COMSAT ***.

In addition to the above contracts, NEC America provided COMSAT with two 10-kw klystron HPA's (contracts ES 13 and 16) in 1966 and 1967. The quantity of imports of HPA's from Japan increased irregularly, from *** in 1978 to *** in 1981. The value of such imports increased from *** in 1978 to *** in 1981. The increase in such imports was by far the most pronounced in 1981, when imports increased *** percent by quantity and *** percent by value from those amounts in the previous year. These large increases are attributable to NEC America's commencement of delivery of the HPA's to be provided COMSAT under contracts 1263 and 1264, as well as continued delivery of the 100 earth stations to SBS, which commenced in 1979.

Employment and wages

Employment data collected from three domestic producers of the HPA's which are the subject of this investigation are presented in the following table.

Table 4.—Average number of production and related workers engaged in the production of certain amplifier assemblies and parts thereof, hours worked by such workers, and average hourly wages received, 1978-80.

<table>
<thead>
<tr>
<th>Item</th>
<th>1978</th>
<th>1979</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of production and related workers—</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Hours worked by production and related workers—</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Average weekly hours per worker—</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Average hourly wages received—</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>


Production and related workers employed by the domestic industry are typically highly skilled workers, who are capable of producing a variety of electrical components and assemblies for use in the telecommunications sector of the economy. The number of such workers employed in respondents' facilities increased from *** in 1978 to *** in 1980, or by *** percent. The hours worked by such workers and hourly wages received also increased over the 3-year period, but average weekly hours worked remained at around 40 hours per week.

Financial experience of U.S. producers

The Commission received complete profit-and-loss data from 3 of the 5 domestic producers of certain amplifiers. The responding firms account for an estimated 80 percent of the quantity of shipments of these products. Financial data are not broken out by domestic producers in terms of the type of tube utilized in the amplifier or the power rating of the amplifier, so that profit-and-loss data are given on the production of all HPA's. These data are presented in table 5.

<table>
<thead>
<tr>
<th>Item</th>
<th>1978</th>
<th>1979</th>
<th>1980</th>
<th>January-June--</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1980</td>
</tr>
<tr>
<td>Net sales----1,000 dollars--</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Cost of goods sold----do----</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Gross profit----------do----</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>General, selling, and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>administrative expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000 dollars--</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Net operating profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or (loss)--1,000 dollars--</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Ratio of net operating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>profit (loss) to net sales--------</td>
<td>(5.1)</td>
<td>7.4</td>
<td>8.6</td>
<td>7.9</td>
</tr>
<tr>
<td>Number of firms reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>net operating losses---------------</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>


The net operating loss experienced by respondents in 1978 is attributable solely to ***. In general, domestic producers which responded to the Commission's questionnaire experienced uninterrupted growth in net sales, gross profit, and net operating profit during 1978-80. These trends continued in January-June 1981, with net sales increasing *** percent and net operating profit *** percent compared with levels in January-June 1980.

The Question of Threat of Material Injury

Rate of increase of imports and market penetration

As part of its consideration of the question of threat of material injury, the Commission may examine the rate of increase, if any, of exports to the U.S. market allegedly sold at LTFV, and the rate of increase of the market penetration of such exports. In the present case, HPA imports from Japan first entered the U.S. market in 1979, and have increased rapidly since then, rising from *** units in 1979 to *** units in 1981. 1/ Imports on a value basis rose at an even more rapid pace, from *** in 1979 to almost *** times that in 1981. When reviewing these large increases, however, it should be noted that they represent deliveries in partial fulfillment of three contracts awarded NEC by U.S. customers, and represent the first import shipments of such items into the U.S. market.

1/ For the table on which these data are based, see table 3, p. A-11 of this report.
Likewise, market penetration of imports from Japan has also increased at a rapid pace. Again, the increase for total HPA imports is greater on a value basis than on a quantity basis. 1/ In 1981, the share of imports from Japan to apparent U.S. consumption is ** percent on a quantity basis and *** percent on a value basis.

Market life of the product and research and development costs

The legislative history of the Trade Act of 1979 notes that in consideration of the question of threat of material injury, the Commission may

... focus on the conditions of trade and competition and the nature of the particular industry in each case. For example, in some cases, e.g., an industry producing a product which has a relatively short market life and significant research and development costs associated with it, a rapid increase in market penetration could quickly result in material injury to that industry.

The average life of an HPA assembly is from 12 to 15 years. 2/ Research and development funds expended from January 1979 to January-June 1981 on development of the HPA's which are the subject of this investigation are given in the following tabulation:

<table>
<thead>
<tr>
<th>Period</th>
<th>Expenditures (1,000 dollars)</th>
<th>Expenditures as a share of net sales (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979-----------------</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>1980-----------------</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>1981 (January-June)</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

Respondents' expenditures on research and development increased substantially from 1979 to 1980, and expenditures in January-June 1981 were nearly twice those of all of 1979 and 1980 combined. Research and development expenditures as a share of net sales also increased substantially over the 2-1/2-year period, and were well above the 3 percent of net sales reported as the average for those domestic firms producing goods in the radio-apparatus-manufacturing sector. 3/

1/ See tables 6 and 7 of this report.
2/ Petition, p. 49. This estimate refers to the assembly itself, not the klystron or traveling wave tube, which must be replaced every 1-1/2 to 2 years. See transcript of the conference, p. 42.
Capacity of Nippon Electric Co. (NEC) to generate exports to the United States, and the availability of other export markets

Nippon Electric Co., Ltd., of Toyko, Japan, reported sales of approximately $4 billion for the fiscal year ending March 31, 1980, entirely in the field of electrical components, subsystems, and systems, 1/ and is one of the four largest communications equipment manufacturers in Japan. 2/ In the area of satellite communications, NEC is a vertically integrated manufacturer of component parts (such as klystron and traveling wave tubes), antennas, amplifiers, satellites, and entire earth stations on a turnkey basis. In total, NEC-made systems and equipment are being used in approximately one-half of the world’s International Telecommunication Satellite Consortium (INTELSAT) 3/ earth stations.

NEC manufactures HPA's of the type which are the subject of this investigation, both as identifiable products themselves and as part of completed earth stations. It also manufactures all of the major components of the HPA assemblies, including the tube and linearizer, when required. According to an NEC sales publication, the company offers the HPA's shown in the following tabulation:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Tube</th>
<th>Output power</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.925-6.425 GHz</td>
<td>TWT</td>
<td>700/1kW, 400w/700w</td>
</tr>
<tr>
<td>5.925-6.425 GHz</td>
<td>TWT</td>
<td>3kW, 6kW, 12kW</td>
</tr>
<tr>
<td>14.0-14.5 GHz</td>
<td>TWT</td>
<td>250w, 1kW, 3kW</td>
</tr>
<tr>
<td>30 GHz</td>
<td>TWT</td>
<td>20w, 500w</td>
</tr>
<tr>
<td>5.925-6.425 GHz</td>
<td>Klystron</td>
<td>400w, 1.5kW/3.5kW</td>
</tr>
<tr>
<td>14.0-14.5 GHz</td>
<td>Klystron</td>
<td>2kW/3kW</td>
</tr>
<tr>
<td>30 GHz</td>
<td>Klystron</td>
<td>500w</td>
</tr>
</tbody>
</table>

The INTELSAT system is global in scope, and NEC, as well the U.S. manufacturers of HPA's, export these products. Currently, NEC has satellite communications equipment in place in over 70 countries; however, the United States still represents the largest single market for satellite communications equipment and systems. NEC has supplied COMSAT with telecommunications equipment since 1967.

Effect of the loss of COMSAT contracts on the domestic industry

As part of its consideration of the question of threat of material injury, the Commission asked questionnaire respondents to detail the potential negative effects, if any, of imports from Japan of certain amplifier assemblies

2/ Japan Economic Yearbook, 1980/81, p. 129
3/ INTELSAT is a global satellite communication system with 104 member countries. The U.S. representative to this consortium is COMSAT.
and parts thereof. A summary of the responses of U.S. manufacturers are as follows.

* * *    *   *   *   *

The Question of the Causal Relationship Between Alleged LTFV Imports and Alleged Material Injury or Threat Thereof

Market penetration

Data on the market penetration of imports from Japan of the amplifier assemblies which are the subject of this investigation are given in tables 6 and 7.

Table 6 shows some import penetration by certain amplifier assemblies from Japan in each of the amplifier assembly product categories, with the exception of ***. Tables 6 (total) and 7 summarize total consumption and market penetration by Japan of all of the HPA's which are the subject of this investigation. In terms of the share of apparent U.S. consumption on a quantity basis, imports from Japan rose each year throughout the period, from *** in 1978 to *** percent in 1981. The share of imports from Japan on a value basis rose at an even greater rate, from *** in 1978 to *** percent of apparent U.S. consumption in 1981. The higher share of apparent consumption held by imports from Japan on a value basis is due to the *** 3-kW TWT amplifier assemblies scheduled for shipment to the United States by December 31, 1981, under terms of COMSAT contract ESOC 1264. These larger assemblies are much more expensive than other assemblies provided heretofore by NEC America to U.S. consumers.

Prices

In response to Commission questionnaires, domestic producers and the sole importer reported prices bid on contracts from January 1979 to June 1981. The Commission requested data on prices bid, contract numbers, types of amplifiers, the winning bidder, and the winning bid. Responses were received from three domestic producers and the importer.

Neither the importer, NEC America, nor the petitioner, Aydin Microwave Division of Aydin Corp., ***. In 1980, each of the domestic producers and NEC America bid on at least one of two COMSAT contracts, numbers ESOC 1263 and ESOC 1264, which are the subject of the petitioner's complaint. Contract ESOC 1263 included the production and installation of nine 3-kW klystron HPA's, and contract ESOC 1264 covered the production and installation of 20 3-kW TWT HPA's. The petitioner estimated that the second of these contracts is equivalent to at least 2 years' production of commercial 3-kW TWT HPA's in the United States. Both contracts were awarded to the importer.
Table 6.—Certain amplifier assemblies and parts thereof: U.S. producers' shipments, exports, imports for consumption, and apparent U.S. consumption, by types, 1978-81

<table>
<thead>
<tr>
<th>Type and year</th>
<th>U.S. producers' shipments</th>
<th>Exports</th>
<th>Imports 1/</th>
<th>Apparent consumption</th>
<th>Ratio of imports to apparent consumption</th>
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<tr>
<td></td>
<td>Units</td>
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<td>Percent</td>
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<tr>
<td>1.5-3.5-kW klystron:</td>
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<td>10-12-kW klystron:</td>
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<td>50-700-W TWT:</td>
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<td>3-12-kW TWT:</td>
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<td>1981</td>
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</tbody>
</table>

1/ All from Japan.

Table 7.—Certain amplifier assemblies and parts thereof: 1/ U.S. producers' shipments, exports, imports for consumption, and apparent U.S. consumption, 1978-81

<table>
<thead>
<tr>
<th>Type and year</th>
<th>U.S. producers' shipments</th>
<th>Exports</th>
<th>Imports 2/</th>
<th>Apparent consumption</th>
<th>Ratio of imports to apparent consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
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<td>1981</td>
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</tbody>
</table>

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1/ Includes all HPAs in table 6 of this report.
2/ All from Japan.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission
The importer underbid ** by a margin of *** percent on contract ESOC 1263 and by a margin of *** percent on contract ESOC 1264. The margin of underbidding by the importer against **, was *** percent on contract ESOC 1263. No margin of underbidding by the importer against **, on contract ESOC 1264 was calculated since the bid made by ** did not include all parts specified in the contract. **. The company spokesman estimated that had these items been included in its bid, the amount of their bid would have been raised from *** million to *** million. The margin of underbidding by the importer against **, was *** percent on contract ESOC 1263; ** did not bid on contract ESOC 1264. The following table shows domestic producers' and the importer's bids and the importer's margins of underbidding on contracts ESOC 1263 and ESOC 1264, in 1980.

Table 8.--Certain amplifier assemblies and parts thereof: Bids tendered and won, by contract numbers, 1980

| Item | Contract number | Type of amplifier | Units | Bids tendered | Bids won | Margins of underbidding by the importer
<table>
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<tr>
<td>Domestic producers:</td>
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<td>Percent</td>
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<td>** **-----: ESOC 1263: 3kW klystron:</td>
<td>9</td>
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<td>: ESOC 1264: 3kW TWT</td>
<td>20</td>
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<td>** **-----: ESOC 1263: 3kW klystron:</td>
<td>9</td>
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<td>: ESOC 1264: 3kW TWT</td>
<td>20</td>
<td>***</td>
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<tr>
<td>Importer:</td>
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<tr>
<td>NEC-----: ESOC 1263: 3kW klystron:</td>
<td>9</td>
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<tr>
<td>: ESOC 1264: 3kW TWT</td>
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</table>


The petitioner alleges that the fair market value of a single 3-kW klystron HPA (the subject of contract ESOC 1263) is ** without the tube and that NEC America offered the same unit for **, representing a margin of ** percent. The petitioner also alleges that the fair market value per unit of 3-kW TWT HPA's (the subject of contract 1264) is ** without the tube or the linearizer, and that NEC America offered the same unit for **, representing a margin of ** percent per unit. **.
Lost sales

All three of the producers of HPA's which responded to the Commission questionnaire cited COMSAT contracts ESOC 1263 and 1264 as instances of lost sales to a customer because of imports from Japan. Representatives of COMSAT were contacted by the Commission concerning these lost sales allegations, to which COMSAT has replied in writing. 1/

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1/ A copy of COMSAT's letter to the Commission is presented in app. C.
APPENDIX A

U.S. INTERNATIONAL TRADE COMMISSION NOTICE OF INVESTIGATION AND CONFERENCES AND LIST OF WITNESSES APPEARING AT THE CONFERENCE
SUMMARY: The U.S. International Trade Commission hereby gives notice of the institution of investigation No. 731-TA-48 (Preliminary) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Japan of certain amplifier assemblies and parts thereof, which are allegedly sold or likely to be sold in the United States at less than fair value (LTFV). For purposes of this investigation, certain amplifier assemblies are defined as radio frequency power amplifier assemblies, and parts thereof, specially designed for transmission in the C, X, and Ku bands from fixed earth stations to communications satellites, as provided for in item 685.29 of the Tariff Schedules of the United States.

EFFECTIVE DATE: July 24, 1981.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION: On July 24, 1981, petitions were simultaneously filed with the U.S. Department of Commerce and the U.S. International Trade Commission by counsel representing Aydin Corp., Fort Washington, Pa., alleging that certain amplifier assemblies and parts thereof from Japan are being sold in the United States at LTFV and that an industry in the United States is being materially injured or threatened with material injury by reason of such imports.

Accordingly, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673(b(a)), the Commission is instituting preliminary antidumping investigation No. 731-TA-48 (Preliminary) to determine whether a reasonable indication of such injury exists. The Commission must make its determination within 45 days after the date on which the petition was received, or in this case by September 8, 1981. The investigation will be conducted according to the provisions of part 207, subpart B, of the Commission's Rules of Practice and Procedure (19 CFR 207).

Written Submissions

Any person may submit to the Commission a written statement of information pertinent to the subject of the investigation. A signed original and nineteen (19) true copies of each submission must be filed at the Office of
the Secretary, U.S. International Trade Commission Building, 701 E Street, NW.,
Washington, D.C. 20438, on or before August 24, 1981. All written submissions
except for confidential business data will be available for public inspection.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope and all pages of such submissions must be clearly labeled “Confidential Business Information.” Confidential submissions and requests for confidential treatment must conform with the requirements of section 201.6 of the Commission’s Rules of Practice and Procedure (19 CFR 201.6).

For further information concerning the conduct of the investigation and rules of general application, consult the Commission’s Rules of Practice and Procedure, part 207, subparts A and B (19 CFR 207), and part 201, subparts A through E (19 CFR 201).

Conference

The Director of Operations of the Commission has scheduled a conference in connection with this investigation for 10 a.m., e.d.t., on Wednesday, August 19, 1981, at the U.S. International Trade Commission Building. Parties wishing to participate in the conference should contact the supervisory investigator for this investigation, Mr. Lynn Featherstone (202-523-0242). It is anticipated that parties in support of the petition for the imposition of antidumping duties and parties opposed to such petition will each be collectively allocated one (1) hour within which to make an oral presentation at the conference. Further details concerning the conduct of the conference will be provided by the supervisory investigator.

Inspection of the Petition

The petition filed in this case is available for public inspection at the Office of the Secretary, U.S. International Trade Commission.

This notice is published pursuant to section 207.12 of the Commission’s Rules of Practice and Procedure (19 CFR 207.12).

Issued: July 29, 1981.

By order of the Commission.

Kenneth R. Mason,
Secretary.
CALENDAR OF PUBLIC CONFERENCE

Investigation No. 731-TA-48 (Preliminary)

CERTAIN AMPLIFIER ASSEMBLIES AND PARTS THEREOF FROM JAPAN

Those listed below appeared as witnesses at the United States International Trade Commission conference held in connection with the subject investigation on Wednesday, August 19, 1981, in room 117 of the USITC building.

In support of the petition

Brownstein Zeidman and Schomer—Counsel
Washington, D.C.
on behalf of

Aydin Corp. and MCL Corp.

Robert Moyes, President, Aydin Microwave Division, Aydin Corp.
Edward Kaitz, Edward M. Kaitz & Associates

David Lambert) — OF COUNSEL
Keith Baker ) — OF COUNSEL

In opposition to the petition

Coudert Brothers—Counsel
New York, N.Y.
on behalf of

Nippon Electric Company of America, Inc.

Kunitomo Matsuoka, Manager, Marketing (Satellite Communication System), Nippon Electric Company of America, Inc.
Bert Walker, President, Walker Telecommunications Corp.

Milo Coerper ) — OF COUNSEL
James Breckenridge) — OF COUNSEL
APPENDIX B

U.S. DEPARTMENT OF COMMERCE NOTICE OF INVESTIGATION
Initiation of Antidumping Investigation; High-Power, Microwave Amplifiers and Components Thereof From Japan

AGENCY: U.S. Department of Commerce.

ACTION: Initiation of Antidumping Investigation.

SUMMARY: We are initiating an antidumping investigation to determine whether high-power, microwave amplifiers and components thereof from Japan are being sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission of this action so that it may preliminarily determine whether these imports are materially injuring or threatening to materially injure a U.S. industry. If both investigations proceed normally, the ITC will announce its preliminary determination by September 8, 1981, and we will announce ours by December 31, 1981.

EFFECTIVE DATE: August 17, 1981.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:

Initiation of Investigation

On July 24, 1981, we received a petition from counsel for Aydin Corporation of Port Washington, Pennsylvania, MCL Inc. of LaGrange, Illinois has been granted co-petitioner status. Complying with the filing requirements of (CFR 353.35), the petition alleges that high-power, microwave amplifiers and components thereof from Japan are being sold in the United States at less than fair value and that such sales are materially injuring a U.S. industry. It also claims that the case presents “critical circumstances” because massive amounts of this merchandise are imported during a relatively short period.

After conducting a summary review of the petition as section 732(c)(1) of the Tariff Act of 1930, as amended (the Act), requires we have found that its information reasonably supports its allegations and justifies further
investigation. Therefore we are immediately initiating an antidumping investigation to determine whether high-power, microwave amplifiers from Japan are being sold in the United States at less than fair value. We are publishing this notice in accordance with 19 CFR 353.37(b). Unless we extend this investigation, we will make our preliminary determination by December 31, 1981.

Scope of Investigation

For purposes of this investigation, high-power, microwave amplifiers are radio-frequency power amplifier assemblies and components thereof, specifically designated as uplink transmission in the C, X, and Ku bands from fixed earth stations to communications satellites, believed to be classified under item 685.29 of the Tariff Schedules of the United States. This merchandise is used primarily for the final amplification of signals transmitted to communications satellites.

Critical Circumstances

The petition alleged that critical circumstances exist within the meaning of section 733(e)(1) of the Act. In order to determine that critical circumstances exist, the Department must find that there is a reasonable basis to believe or suspect that: (1)(a) there is a history of dumping in the United States or elsewhere of the class or kind of merchandise which is the subject of the investigation; or (b) that the person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise which is the subject of the investigation at less than fair value; and (2) there have been massive imports of the class or kind of merchandise which is the subject of the investigation over a relatively short period.

Since the petition has failed to provide us with sufficient information which establishes either a prior history of dumping or that the importer knew, or should have known, the exporter was selling the subject merchandise at less than fair value, we determine that at this time there is not a reasonable basis for concluding that critical circumstances exist with respect to imports of high-power, microwave amplifiers from Japan. Accordingly, we have not addressed the issue of massive imports at this time.

ITC Notification and Preliminary Determination

Section 732(d) of the Act also requires us to notify the U.S. International Trade Commission (ITC) of this decision and to give it the information which we used to arrive at it. We will make available to the ITC all nonprivileged and nonconfidential information. We will also allow the ITC access to all privileged and confidential information in our files, provided it confirms that it will not disclose such information, either publicly or under administrative protective order, without the written consent of the Deputy Assistant Secretary for Import Administration.

The ITC will determine by September 8, 1981, whether the petition reasonably indicates that imports of high-power, microwave amplifiers from Japan are likely to injure a U.S. industry. If the ITC's determination is negative, this investigation will terminate, otherwise, it will proceed to its conclusion.

Gary N. Horlick,
Deputy Assistant Secretary for Import Administration.

[FR Doc. 81-23914 Filed 8-16-81; 8:45 am]
BILLING CODE 3510-25-M
APPENDIX C

LETTER TO THE COMMISSION FROM COMSAT
August 27, 1981

Mr. Kenneth R. Mason, Secretary
U.S. International Trade Commission
701 E. Street, N.W.
Washington, D.C.

Attention: Pat McGrath

Re: COMSAT Contracts ESOC-1263 and 1264

Dear Mr. Mason:

Communications Satellite Corporation (COMSAT) is in receipt of your August 20, 1981 letter to Mr. William Berman concerning COMSAT's Contracts ESOC-1263 and 1264. Inasmuch as these contracts involve the procurement of equipment by the World Systems Division of COMSAT, I have been asked by Mr. Berman to respond to your letter.

It is my understanding that your office is currently conducting an investigation under Section 731 of the Trade Agreements Act of 1979 to determine if a U.S. industry is materially injured or threatened with material injury by reason of imports of certain amplifier assemblies from Japan that are allegedly being sold at less than fair value. You have asked that COMSAT provide you with information regarding the factors which were considered by COMSAT in making its decision to purchase the Japanese amplifier assemblies, including whether price or other factors were of prime consideration. In order to assist the Commission in its investigation, the following background facts are provided.

COMSAT was created by an act of Congress (Communications Satellite Act of 1962, as amended, 47 USC Section 701
et. seq. ["the Act"]) and was designated as the U.S. representative for participation in the International Telecommunications Satellite Organization ("INTELSAT").

COMSAT's procurement activities are subject to and governed by the Communications Satellite Procurement Regulations (47 CFR 25.151) which were promulgated by the Federal Communications Commission (FCC) pursuant to Section 401 of the Act. As a common carrier, COMSAT's rates are subject to review by the FCC. The rates COMSAT charges for its services are reflective of its costs. As a result, cost, schedule and technical acceptability are major factors in COMSAT's procurement evaluations.

The FCC Procurement Regulations, a copy of which is enclosed, are designed to insure effective competition in the procurement by the Corporation of apparatus, equipment, and services required for the establishment and operation of the communications satellite system and satellite terminal stations. Consistent with these Regulations, COMSAT does not discriminate between suppliers, foreign or domestic, except that pursuant to Section 25.176 of the Procurement Regulations, special consideration is to be afforded small business concerns.

Under Section 25.174 of the Procurement Regulations, an award of a negotiated contract must be made to the person or firm whose proposal is most advantageous to the Corporation on the basis of the criteria established, price and other factors considered. Both referenced contracts were negotiated awards to NEC America, Inc. (NEC). The factors which COMSAT considered in the award of these contracts will be discussed below.

**CONTRACT ESOC-1263**

Contract ESOC-1263 covers the design, fabrication and testing of nine (9) three-kilowatt Klystron high-powered amplifiers (HPA) to be delivered to the Earth Station Ownership Consortium's (ESOC) Brewster and Andover earth stations. COMSAT is manager of the Consortium's earth stations. The RFP was issued September 29, 1980, to thirteen (13) companies. Proposals were received from NEC and two domestic companies by the due date of October 29, 1980. One late proposal was submitted by a third domestic supplier. The technical proposals were evaluated against pre-established criteria which covered HPA performance characteristics, power supplies, electromechanical considerations, controls, indicators and protection features, cooling system, testing, documentation, and spares. Each bidder took some exceptions to COMSAT's technical specification. One domestic supplier, the late bidder, made a proposal that was rated technically unacceptable and was
eliminated from further consideration. For this bidder, then, price was not a prime consideration. The other three proposals were judged technically responsive. It is worth noting, however, that NEC's proposal was rated technically superior to the other bidders by a relatively wide margin.

Another factor which COMSAT considered during the evaluation process was the schedule each bidder proposed. The RFP required delivery in 8.5 months after notice to proceed with the work. NEC and one domestic supplier proposed to meet COMSAT's schedule. The remaining responsive domestic supplier proposed delivery in 9.25 months. This variation to the delivery schedule was considered a significant exception to the RFP.

The final factor which COMSAT considered was the price each responsive bidder proposed. One domestic supplier was eliminated from further consideration since, along with its delivery schedule problem mentioned above, its price proposal was 28.5% higher than the low bidder, NEC, and 26.8% higher than the other domestic bidder. Since the price difference between the NEC proposal and the next lowest bidder was only 2.9%, COMSAT determined that it was in the Consortium's best interests to negotiate with both firms.

Negotiations were held with NEC and one domestic supplier in December 1980. In both cases, a mutually acceptable statement of work and specification were agreed upon. At the conclusion of the negotiations, a technical determination was made that both proposals were essentially equal and both proposals would meet the scheduled delivery date. It should be noted that while NEC's price remained relatively the same, the domestic bidder's price increased 16.4% during negotiations. Since all other factors were equal, COMSAT decided that it was in ESOC's best interests to award the Contract ESOC-1263 to the lowest responsive bidder, NEC.

**CONTRACT ESOC-1264**

Contract ESOC-1264 covers the design, fabrication and testing of twenty (20) three-kilowatt TWT HPAs to be delivered to various ESOC earth stations.

The RFP was issued on September 29, 1980 to thirteen (13) companies. Proposals were received from NEC and two domestic companies by the deadline date of October 31, 1980. One domestic supplier submitted a late proposal. The technical proposals were evaluated against pre-established criteria, which included HPA performance characteristics, power supplies, electromechanical characteristics, controls, indicators and protection features, cooling system, linearizer, testing, documentation, and spares. One domestic company (the late bidder), was disqualified. For the
disqualified domestic company, price was not a prime consideration. All other proposals were judged technically acceptable, but there was a significant disparity between the technical rating each bidder received. NEC's proposal was considered technically superior to the other bids by a relatively wide margin, since its design appeared to be very effective in terms of simplicity and anticipated reliability. Moreover, NEC's proposal to use either a NEC TWT Tube or a Varian TWT Tube promised greater flexibility for COMSAT with respect to the final amplifier. Finally, NEC's proposal to use an all solid-state-RF driver stage promised the best reliability of all the bidders.

The proposal of the domestic bidder who finished second to NEC in the technical evaluation did not meet COMSAT's stringent specification for current waveform distortion and power. In addition, its vacuum tube regulator was criticized by the evaluation group on the grounds that thermionic devices have a finite lifetime and are prone to sudden failure. At the same time, this bidder could not provide a solid-state driver with sufficient power to operate its HPA. Its proposed use of a vacuum tube RF driver TWT was unacceptable since, in COMSAT's experience these devices have a higher incidence of traffic interruptions. Finally, unlike NEC, this bidder did not propose an alternate source for the TWT Tubes.

The third place domestic bidder's proposal was seriously flawed with incorrect assumptions and errors. It was COMSAT's determination that this proposal would require significant design assistance by COMSAT in order to make its equipment compatible to the RFP. It is for this reason that the proposal was considered only marginally acceptable.

Upon completion of the technical evaluation, COMSAT reviewed the schedule each responsive bidder proposed. NEC and the third place domestic bidder agreed to meet COMSAT's delivery schedule of eight to twelve months from notice to proceed with the work. However, the second place domestic supplier promised delivery nine to sixteen months after notice.

The final factor which COMSAT considered during the evaluation process was the price each bidder proposed. NEC was the low bidder. The price proposals submitted by the two domestic bidders who met the technical requirements were 39.45% and 40.47% higher than the NEC bid. In light of this fact, and the fact that NEC was rated technically superior and agreed to meet the delivery schedule, a determination was made that it was in the best interest of the ESOC that negotiations should proceed with NEC.
Negotiations were held with NEC in December of 1980. NEC's proposed design was discussed in detail and the Statement of Work was agreed upon. At the conclusion of the negotiations, COMSAT awarded Contract ESOC-1264 to NEC.

I might note in conclusion that a complaint was submitted by Aydin to the FCC concerning the referenced procurements. The FCC staff concluded that COMSAT's procurement complied with the FCC's Rules. (See attached letter of William F. Adler.)

We hope that the foregoing material will assist the Commission in its investigation of this matter.

Respectfully submitted,

COMMUNICATIONS SATELLITE CORPORATION

[Signature]

Lawrence M. DeVore  
Vice President and General Counsel  
World Systems Division

GLE/jp
SUBPART A—GENERAL

§ 25.101 Basis and scope.

(a) The rules and regulations in this part are issued pursuant to the authority contained in section 201(c)(11) of the Communications Satellite Act of 1962.

(b) The rules and regulations in this part supplement, and are in addition to, the rules and regulations contained in, or to be added to, other parts of this chapter currently in force, or which may subsequently be promulgated, and which are applicable to matters relating to communications by satellites.

§ 25.102 [Reserved]

§ 25.103 Definitions.

(a) Communications common carrier. The term “communications common carrier” as used in this part means any person (individual, partnership, association, joint-stock company, trust, corporation, or other entity) 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 such carriers as are described in subsection 2(b)(2) and (3) of the Communications Act of 1934, as amended, and, in addition, for purposes of Subpart H of this part, includes any individual, partnership, association, joint-stock company, trust, corporation, or other entity which owns or controls, directly or indirectly, or is under direct or indirect common control with, any such carrier.

(b) Authorized carrier. (1) Except as provided in subparagraph (2) of this paragraph, the term “authorized carrier” means a communications common carrier which is authorized by the Federal Communications Commission under the Communications Act of 1934, as amended, to provide services by means of communications satellites.

(2) For the purposes of Subpart H of this part, the term “authorized carrier” means a communications common carrier which is specifically authorized or which is a member of a class of carriers authorized by the Commission to own shares of stock in the Corporation.

(c) Communications satellite corporation. (1) The terms “communications satellite corporation” or “corporation” as used in this part mean the corporation created pursuant to the provisions of Title III of the Communications Satellite Act of 1962.

(2) The corporation shall be deemed to be a common carrier within the meaning of section 3(b) of the Communications Act of 1934.

(d) Communication-satellite earth station complex. The term communication-satellite earth station complex includes transmitters, receivers, and communications antennas at the earth station site together with the interconnecting terrestrial facilities (cables, lines, or microwave facilities) and modulating and demodulating equipment necessary for processing of traffic received from the terrestrial distribution system prior to transmission via satellite and of traffic received from the satellite prior to transfer of channels of communication to terrestrial distribution system(s).

(e) Communication-satellite earth station complex functions. The communication-satellite earth station complex interconnected with terminal equipment of common carriers or authorized entities at the interface; accepts traffic from such entities at the interface, processes for transmission via satellite and performs the transmission function; receives traffic from a satellite or satellites, processes it in a form necessary to deliver channels of communication to terrestrial common carriers or such other authorized entities and delivers the processed traffic to such entities at the interface.

(1) Interface. The point of interconnection between two distinct but adjacent communications systems having different functions. The interface in the communication-satellite service is that point where communications terminal equipment of the terrestrial common carriers or other authorized entities interconnects with the terminal equipment of the communications-satellite earth station complex. The interface in the communication-satellite service shall be located at the earth station site, or if this is impracticable as close thereto as possible.

SUBPART B—COMMUNICATIONS SATELLITE PROCUREMENT REGULATIONS

§ 25.151 Scope, purpose and application of this subpart.

The provisions of this subpart govern the administration of section 201(c)(1) of the Communications Satellite Act of 1962, and are designed to insure effective competition in the procurement by the corporation and communications common carriers of apparatus, equipment, and services required for the establishment and operation of the communications satellite system and satellite terminal stations, and to insure that small business concerns are given an equitable opportunity to share in such procurements. This subpart establishes uniform policies and procedures applicable to all procurements except where:

(a) The value of the procurement is less than $25,000, except as provided in §25.176(c).

(b) The procurement is for electric power or energy, gas, water, or other utility service.

(c) The procurement is from or through a government instrumentality.

(d) The procurement is for personal services.

The provisions with respect to notification (§§25.162-25.167) shall apply only to the Corporation, other communications common carriers, and their respective prime contractors.

(e) The procurement is made by or on behalf of the International Telecommunications Satellite Organization (INTELSAT) established pursuant to Definitive Arrangements (TIAS 7332) which went into effect on February 12, 1973, at Washington and the Special
Agreement signed pursuant to Article II of the Interim Arrangements. Such procurements are governed by the INTELSAT Procurement Regulations, copies of which may be obtained from the Communications Satellite Corporation, Washington, D.C. 20004.

§§ 25.152-25.155 [Reserved]

§ 25.156 Definitions

Except as otherwise provided, the following terms shall have the following meanings when used in this subpart. (See also § 25.103.)

(a) *Bidders' mailing list.* The term "bidders' mailing list" means one of a number of lists classified by types of property or services containing the names of those suppliers, including small business concerns, who have made requests for inclusion and who appear to be qualified for inclusion therein, or who may appear from other information to be qualified.

(b) *Carrier.* The term "carrier" has the same meaning as that of communications common carrier. (See § 25.103(a).)

(c) *Contracts.* The term "contracts" means all types of agreements and purchase orders for procurement by a party making procurement.

(d) *Government instrumentality.* The term "government instrumentality" means any of the following:

(1) An agency or instrumentality of the Federal Government; a possession of the United States; or the Commonwealth of Puerto Rico;

(2) A State or local government or an agency or instrumentality thereof.

(e) *Party making procurement.* The term "party making procurement" means any person or firm engaged in the procurement of property or services required primarily for the establishment and operation of a communications satellite system or a satellite terminal station including the corporation, carriers, prime contractors, and subcontractors: *Provided, however,* For the purposes of §§ 25.162-25.167, inclusive, the term "party making procurement" means the corporation, carriers, and prime contractors.

(f) *Procurement.* The term "procurement" means all procedures for the purchasing, renting, leasing, or the obtaining by any other means of all properties or services required primarily for the establishment and operation of a communications satellite system or a satellite terminal station.

(g) *Property.* The term "property" means all tangible property, including apparatus, equipment, and supplies.

(h) *Prime contractor.* The term "prime contractor" means any person or firm to whom any contract is awarded directly by the corporation or a carrier.

(i) *Services.* The term "services" shall include but is not limited to research, development, construction, maintenance, and repair activities.

(j) *Small business concern.* The term "small business concern" shall have the same definition as promulgated by the Small Business Administration for procurement purposes as set forth in 13 CFR Part 121. If the size status of any small business concern is questioned, the matter shall be referred to the Small Business Administration for a determination.

(k) *Subcontract.* The term "subcontract" means any contract to perform any work or to make or furnish any property or service required for the performance under any one or more prime contracts or subcontracts.

(l) *Subcontractor.* The term "subcontractor" means any person or firm to whom any contract is awarded by a prime contractor or subcontractor under a prime contract.

§§ 25.157-25.159 [Reserved]

§ 25.160 Emergencies.

(a) Any party making procurement confronted by a serious emergency occasioned by conditions unforeseen by him, and beyond his control, which prevents his compliance with this subpart, may make such procurements as may be required by the circumstances without regard to the other requirements of this subpart, provided he immediately informs the Commission of the nature of the emergency and of the action he has taken or proposes to take.

(b) In addition to notifying the Commission immediately any party making procurement under paragraph (a) of this section shall file with the Commission within 10 days following such procurement a statement in writing setting forth in detail all the terms and conditions of the transaction(s).

§ 25.161 Contract requirements.

Every contract or subcontract shall contain a provision that each party making procurement shall comply with the provisions of this subpart.

§ 25.162 Persons required to give prior notification.

No party making procurement as defined in § 25.156 (e) shall award a contract or subcontract for property or services unless notification shall have been given to the Commission in accordance with §§ 25.163-25.167; however, the Commission may waive or modify the foregoing requirements or any other provisions of this subpart in accordance with § 1.3 of this chapter.

§ 25.163 Contents of notification.

Each notification submitted under this subpart shall contain or incorporate the following information:

(a) Name and address of the party making procurement.

(b) Names and addresses of all companies who have responded to the invitation for bids or request for proposals of the party making procurement.

(c) The method of procurement used and a statement that such method has been carried out in compliance with the provisions of this subpart applicable thereto.

(Ed. 3/74)
(d) Copy of the contract or subcontract to be awarded or a description of its material provisions.

(e) The name of the person or firm to whom the contract or subcontract will be awarded. In the event the award is not to be made to the lowest bidder, under formal advertising or two-step procurement, a statement of the reasons therefor.

(f) If the party making procurement has a financial interest in the person or firm to whom the award will be made, the nature and extent of such interest.

(g) A statement containing a full and complete disclosure of the real party or parties in interest, if other than the parties named in the contract or subcontract.

§ 25.164 Who may sign the notification.

(a) Each notification or amendment thereto shall be personally signed by the party making procurement, if said party is an individual; by one of the general partners, if said party is a partnership; by an officer or duly authorized employee, if said party is a corporation; or by a member who is an officer, if said party is an unincorporated association.

(b) Only the original of any notification and any amendment thereto need be signed; copies may be confirmed.

(c) Notification and amendments thereto need not be signed under oath; however, wilful false statements made therein are punishable by fine and imprisonment (18 U.S.C. Sec. 1001), and by other appropriate administrative sanctions.

§ 25.165 Form of notification, number of copies, etc.

(a) The original notification and five copies thereof shall be filed with the Commission. Each copy shall bear the dates and signatures that appear on the original and shall be complete in itself.

(b) All notifications shall be on paper approximately 8 by 10¼ inches with left hand margin not less than 1½ inches wide. The impression shall be on one side of the paper only and shall be double spaced. Notifications and accompanying papers, except charts, shall be typewritten or prepared by mechanical processing methods. All copies must be clearly legible.

§ 25.166 Action upon notification.

The party making procurement may award the proposed contract or subcontract at any time subsequent to 10 days after the date of filing with the Commission at its office in Washington, D.C., or 13 days after deposit in the mail, of such notification or last amendment thereto, unless within such period either the party making procurement, by written or telegraphic notice to the Commission, extends such period, or the Commission notifies such party during such 10-day period or any extension thereof that his notification statement is defective or that the Commission cannot, without further investigation, determine whether its rules and regulations have been complied with. In the latter event, the Commission shall issue a public notice and proceed in accordance with paragraphs (a) and (b) of this section:

(a) Within 10 days following issuance of such notice by the Commission, any interested person may file written comments with respect to the proposed contract or subcontract. Such comments shall also be served on the party making procurement who shall be afforded 5 days in which to file written reply comments.

(b) The party making procurement may award the proposed contract or subcontract at any time subsequent to 30 days following issuance of such notice by the Commission, unless within the 30-day period such party is further notified in writing by the Commission that it is unable to find that the rules and regulations of this subpart have been complied with and the reasons therefor. Such further notice shall specify a reasonable time within which such party may respond thereto. Upon receipt and consideration of such response, if any, and all other relevant information, the Commission shall enter an order either permitting the award of the contract or subcontract or institute such further proceedings as appear appropriate.

§ 25.167 Amendments.

The Commission may at any time order or require the party making procurement to amend his notification so as to make it more definite and certain or to submit such additional documents or statements as in the judgment of the Commission may be necessary.

§ 25.168 [Reserved]

§ 25.169 Publication requirements.

Every invitation for bids or request for proposals issued by a party making procurement shall be publicized through the bidders' mailing list and the party making procurement is encouraged to use the Commerce Business Daily, published by the Department of Commerce (see 41 CFR Subpart 1-1.10). A copy of every such invitation or request, together with a list of all concerns which have been notified, and a statement of the method of procurement to be used and of the reasons therefor, shall be filed with the Commission by the party making procurement within 5 days from the date of issuance of such invitation or request.

(a) Bidders' mailing lists shall be compiled and maintained by the party making procurements who shall file such lists with the Commission prior to the issuance of his first invitation for bids or request for proposals. Current revisions of such lists shall be filed annually commencing on June 1, 1964.

(b) The party making procurement shall consult with the Small Business Administration to obtain names and addresses of small business concerns who are considered by that organization to have the technical and other capabilities required to provide the type of property or services for which the bidders' mailing lists are intended.

(c) Less than the complete bidders' mailing list may be utilized if a reasonable number of suppliers are solicited. When less than the complete bidders' mailing list is utilized, all small business concerns on such list shall be solicited, except that only a reason-
§ 25.171 Methods of procurement.

All procurements by a party making procurement shall be initiated and made by formal advertising except where two-step procurement or negotiations are otherwise authorized under this subpart.

§ 25.172 Formal advertising.

Formal advertising means procurement by competitive bids and awards as prescribed in this section and involves the following basic requirements:

(a) Contents of the invitation for bids. The invitation for bids shall contain a detailed description of the requirements of the party making procurement. The invitation shall specify the date by which the bid must be submitted, the time and place established for the opening of bids, delivery requirements, all applicable contractural provisions (including any requirements for bonds, liquidated damage provisions, etc.) and shall contain a complete set of all applicable specifications, technical data, and drawings or the place where such specifications, technical data, and drawings may be obtained by bidders and any other information deemed appropriate.

(b) Publicizing the invitation for bids. The bids shall be solicited, and the invitation shall be publicized, and the Commission shall be notified in accordance with the procedures set forth in § 25.160.

(c) Submission of bids by prospective contractors. Bids must be submitted in the form and manner prescribed in the invitation for bids and comply with all the requirements contained therein. Bids may be modified or withdrawn at any time prior to opening. After opening, such modifications or withdrawals may be permitted by the party making procurement provided they are not to the detriment of other bidders or in no way detract from the competitive nature of the procurement. Notice of any withdrawals permitted or modifications made after opening shall be furnished to the Commission within 5 days thereafter, together with a statement of reasons therefor.

(d) Evaluation and award. To the extent possible, all bids for a given procurement shall be opened at the time and place set forth in the invitation for bids by the party making procurement who shall record all bids. Unless all bids are rejected, an award shall be made to that bidder whose bid, conforming to the invitation, is most advantageous to the party making procurement, price and other factors considered. (See also § 25.176(b).) When an award has been made, an unsuccessful bidder shall upon request be notified by the party making procurement of the reasons its bid was not accepted.

§ 25.173 Two-step procurement.

Two-step procurement is a means of procurement conducted in two steps. Step one consists of the request for, and the submission, evaluation, and if necessary, discussion of, technical proposals without pricing. Step two consists of a formally advertised procurement limited to those contractors submitting technically acceptable proposals in step one.

(a) Limitations on use. This method of procurement may be used only when available specifications or purchase descriptions do not permit formal advertising without engineering evaluations and discussion with respect to the technical aspects thereof so as to insure mutual understanding between contractors and the party making procurement.

(b) Request for technical proposals—step one. Technical proposals shall be requested, the request publicized, and the Commission notified in accordance with the procedures set forth in § 25.160. The request for technical proposals shall contain or incorporate the following information:

(1) The best available description of the property or services required.

(2) A statement that the procurement will be conducted in two steps and notification to contractors of the scope of each step.

(3) The minimum acceptable technical information required to be submitted by the bidders.

(4) The criteria for evaluating technical proposals, and a statement that modifications of the criteria may be permitted provided it is not to the detriment of other bidders or in any way detracts from the competitive nature of the procurement.

(5) A statement that technical proposals shall not be accompanied by prices or pricing information.

(6) Notification that prospective bidders may discuss the request and their technical proposals with the party making procurement.

(7) A statement that only those bidders submitting acceptable technical proposals will be permitted to participate in the second step of the procurement.

(8) The date by which the technical proposal must be submitted.

(9) Any other information deemed appropriate.
RULES AND REGULATIONS

(c) Evaluation of technical proposals—step one. The following procedures shall govern the evaluation of technical proposals:

(1) Upon receipt and review of technical proposals submitted in step one, all reference to pricing or cost data shall be removed and may not be given consideration.

(2) Evaluation of technical proposals shall be made upon the criteria set forth in the request for technical proposals, and any permissible modifications.

(3) Technical proposals shall be categorized, by the party making procurement, as follows: acceptable, acceptable requiring further discussion, or unacceptable. Upon evaluation of technical proposals received in step one, the party making procurement shall, if additional proposals are necessary to insure effective competition or equitable opportunity for small business, arrange for necessary discussions with those bidders submitting technical proposals which might become acceptable after further discussion.

(d) Step two. Upon completion of the procedures required in step one, invitations for bids shall be extended to those parties whose technical proposals have been evaluated and determined to be acceptable or become acceptable after further discussion. A list of such parties shall be filed with the Commission within 5 days from the date such invitations for bids are extended. The invitation shall specify the date by which the bid must be submitted, the time and place established for the opening of bids, delivery requirements, all applicable contractual provisions (including any requirements for bonds, liquidated damage provisions, etc.), and any other information deemed appropriate. Such parties shall be informed in the invitation that they will be limited to the property or service set forth in the acceptable technical proposals and if they submit pricing for other property or service their bid shall be rejected.

(e) Evaluation and award. To the extent possible, all bids for a given procurement shall be opened at the time and place set forth in the invitation for bids by the party making procurement who shall record all bids. Unless all bids are rejected, an award shall be made to that bidder whose bid, conforming to the invitation, is most advantageous to the party making procurement, price and other factors considered. (See also § 25.176 (b).) When an award has been made, an unsuccessful bidder shall upon request be notified by the party making procurement of the reasons its bid was not accepted.

§ 25.174 Negotiation.

This section sets forth the basic requirements for procurement by means of negotiation and the circumstances under which negotiation shall be permitted.

(a) Limitations on use. This method of procurement may be used only when it is not feasible or practicable to procure property or service through either formal advertising or two-step procurement, or if otherwise specifically authorized by the Commission.

(b) Preparation of the request for proposals. Negotiations shall be initiated by a request for proposals which, to the extent feasible, shall clearly and completely set forth the requirements of the procurement; the criteria upon which proposals will be evaluated; the type of contract that is intended to be utilized; the availability of special tools or equipment necessary to fulfill the technical requirements of the contract; the time for receipt of proposals; the general terms and conditions of the contract to be awarded; and any other information deemed appropriate.

(c) Request for proposals. Proposals shall be requested, the request publicized, and the Commission notified in accordance with the procedures set forth in § 25.169.

(d) Evaluation and award. When discussion of proposals with prospective contractors is deemed necessary, such discussions may not be used to give preference to any particular contractor, or to disclose the technical or costing data submitted by other prospective contractors. The award of a negotiated procurement shall be made to that person or firm whose proposal is most advantageous to the party making procurement on the basis of the criteria established, price and other factors considered. (See also § 25.176 (b).) When an award has been made, an unsuccessful party shall upon request be notified by the party making procurement of the reasons its proposal was not accepted.

§ 25.175 [Reserved]

§ 25.176 Small business.

(a) Whenever economically and technically feasible, the party making procurement shall divide any procurement into reasonably small lots in order to permit bidding by small business concerns on quantities less than the total requirements. The maximum amount of time practicable shall be allowed for preparation, submission of bids or proposals, and delivery schedules.

(b) When a procurement made by a party making procurement can be fulfilled or furnished by a small business concern, price and other factors considered, the award of such procurements shall be made to such concern. A list of such awards shall be filed annually with the Commission commencing on June 1, 1964.

(c) In addition to complying with the requirements applicable to procurements of $25,000 or more, all parties making procurements shall cooperate with the Small Business Administration to the extent feasible, even if the value of the procurement is less than $25,000, for the purpose of insuring that small business has an equitable opportunity to participate in all procurements.

(d) The Corporation shall maintain an office responsible for the supervision and administration of small business activities, compliance with the small business provisions of this subpart, and for liaison with the Commission, the Small Business Administration, and contractors.
§ 25.177 Maintenance of records.

(a) The Corporation and carriers shall obtain information on all subcontracts awarded under each of their prime contracts. Such information shall include the name and address of each subcontractor, the property or service purchased, and the amount of the award. Reports reflecting such information shall be filed annually, commencing on June 1, 1964, with the Commission.

(b) The party making procurement shall maintain records of all awards for 3 years. Such records shall set forth the property or service purchased; the name of the firm receiving the award and the names of any other firms solicited; and the reason for selecting the firm receiving the award.

§ 25.178 Inspection.

The Commission may, from time to time, inspect the procurement practices and procedures of any party making procurement to ascertain whether such practices and procedures are in compliance with the provisions of this subpart. In connection therewith, the Commission shall at all reasonable times have access to, and the right of inspection of the actual operations, accounts, records and memoranda, including all documents, papers and correspondence now or hereafter existing, of any party making procurement pertinent to that party's procurement of property or services required primarily for the establishment and operation of the communications satellite system or satellite terminal stations.

§§ 25.179-25.199 [Reserved]

SUBPART C—TECHNICAL STANDARDS

§ 25.201 Definitions.

Active satellite. An earth satellite carrying a station intended to transmit or re-transmit radiocommunication signals.

Communication-satellite earth station. An earth station in the communication-satellite service.

Communication-satellite service. A space service:
—between earth stations, when using active or passive satellites for the exchange of communications of the fixed or mobile service, or
—between an earth station and stations on active satellites for the exchange of communications of the mobile service, with a view to their re-transmission to or from stations in the mobile service.

Communication-satellite space station. A space station in the communication-satellite service, on an earth satellite.

Coordination distance. For the purposes of this part, the expression “coordination distance” means the distance from an earth station, within which there is a possibility of the use of a given transmitting frequency at this earth station causing harmful interference to stations in the fixed or mobile service, shar-

ing the same band, or of the use of a given frequency for reception at this earth station receiving harmful interference from such stations in the fixed or mobile service.

Earth station. A station in the space service located either on the earth's surface, including on board a ship, or on board an aircraft.

Fixed earth station. An earth station intended to be used at a specified fixed point.

Mobile earth station. An earth station intended to be used while in motion or during halts at unspecified points.

Passive satellite. An earth satellite intended to transmit radio communication signals by reflection.

Space service. A radiocommunication service:
—between earth stations and space stations,
or between space stations,
or between earth stations when the signals are re-transmitted by space stations, or transmitted by re-direction from objects in space excluding reflection or scattering by the ionosphere or within the earth's atmosphere.

Space station. A station in the space service located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the earth's atmosphere.

Space telecommand. The use of radiocommunication for the transmission of signals to a space station to initiate, modify or terminate function of the equipment on a space object, including the space station.

Space telemetry. The use of telemetry for the transmission from a space station of results of measurements made in a spacecraft, including those relating to the functioning of the spacecraft.

Space tracking. Determination of the orbit, velocity or instantaneous position of an object in space by means of radio determination, excluding primary radar, for the purpose of following the movement of the object.

Stationary satellite. A satellite, the circular orbit of which lies in the plane of the earth's equator and which turns about the polar axis of the earth in the same direction and with the same period as those of the earth's rotation.

Terrestrial service. Any radio service defined in this chapter, other than a space service or the radio astronomy service.

Terrestrial station. A station in a terrestrial service.

§ 25.202 Frequencies, frequency tolerance and emission limitations.

(a) Frequency bands. The following frequency bands are available for use by the communication-satellite service on a shared basis with terrestrial radio services. Precise frequencies and bandwidths of emission will be assigned on a case-by-case basis.

<table>
<thead>
<tr>
<th>Band</th>
<th>Frequency Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satellite-to-earth</td>
<td>3700-4200 MHz</td>
</tr>
<tr>
<td>Earth-to-satellite</td>
<td>5925-6425 MHz</td>
</tr>
</tbody>
</table>

*This band may also be used for the transmission of tracking and telemetry signals associated with communication-satellite space stations operating in the same band.
Mr. David M. F. Lambert
Brownstein, Zeidman & Schomer
Suite 900
1025 Connecticut Avenue, N.W.
Washington, D.C. 20036

Re: Comsat Contract ESOC-1264

Dear Mr. Lambert:

This will respond to Aydin Corporation's objections to Comsat's awarding the referenced contract for twenty high power amplifiers (HPAs) to NEC America, Inc. and to Comsat's activity after the award. The controversy began in mid-February when Aydin and another losing bidder, Varian, informally alleged possible violations of U.S. anti-dumping laws and Commission Regulations. In response to those allegations, we directed Comsat, on March 2, to suspend procurement for 30 days pending an inquiry. Aydin then filed a letter on March 5 stating its objections with more particularity. Comsat responded on March 17, and Aydin replied on March 27. On April 1, we directed Comsat to continue to suspend procurement and to respond to Aydin's allegations in its letter of March 27. Comsat responded on April 15, and Aydin replied on April 22.

The issues raised here fall broadly into two areas: (1) whether Comsat has violated Commission procurement regulations and the terms of the 1962 Satellite Act; and (2) whether NEC America has violated any trade law by dumping its product (i.e., selling at less than cost) in the United States. On the basis of the information in the documents available to us, we cannot conclude that Comsat has violated any rule or regulation or that the public interest otherwise requires our intervention at this time. We further conclude that the Commission has no authority to take any action under the Tariff Act of 1930, as amended by the Trade Agreements Act of 1979, and the regulations promulgated under those laws. Our informal decision not to take further action at this time is without prejudice to any action which Aydin may initiate before the Commission, or any action before the International Trade Commission (ITC) or the International Trade Administration (ITA) of the Department of Commerce.
Looking first at the anti-dumping laws, it is clear that the Commission has no jurisdiction to examine the merits of a dumping complaint. The question we considered was whether the procurement from NEC should be held in abeyance pending resolution of the complaint which Aydin intends to file with ITA and ITC on or about June 19. Even if Aydin prevails, the remedy is only the payment of import duties on the underpriced product; the product itself is not excluded. The dumping issue is a matter between the seller of the product and the U.S. Government which does not implicate the buyer - Comsat - in any wrongdoing whether or not Comsat (as Aydin alleges) had knowledge that the product was being dumped. To be sure, Comsat may incur liability of some kind by proceeding with its procurement, but that is a risk Comsat is entitled to assume.

Of greater concern is whether Comsat has violated the Satellite Act, the Communications Act of 1934 or the Commission's Regulations by undermining the competitive procurement standards or disregarding the requirements of Part 25 of the Commission's Regulations. Keeping in mind that this is the first complaint involving Comsat procurement, we cannot conclude either that this one incident evinces anticompetitive behavior or that there is a developing course of conduct which may be contrary to law or the public interest. We see no threat at this point to effective competition in the procurement of equipment. Nor can we conclude at this time, based on the exchange of letters, that Comsat violated Part 25 as Aydin alleges.

We agree with Aydin that dumping, if it occurs, is contrary to U.S. public policy and inconsistent with the goal of insuring effective competition under the Satellite Act. On the other hand, Comsat's position that it must act in the best interests of its stockholders and ratepayers and that it cannot and need not look behind every low bid it accepts is also reasonable and relevant here. Even actions which do not fully comport with prevailing standards of competitive behavior may still be acceptable if, on balance, they further some aspect of the public interest. In this case, we cannot conclude that there is a basis for staying Comsat's procurement any longer.

Sincerely,

William F. Adler
Chief, International Facilities
Authorization & Licensing Division
Common Carrier Bureau

cc: Mr. Lawrence M. DeVore, Comsat
Mr. Lewis C. Meyer, Comsat
Mr. Frank P. Morgan, MCL, Inc.
Mr. James F. Kasik, Varian
Mr. Kunitomo Matsuoka, NEC America