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UNITED STATES TARIFF COMMISSION

ELECTRONIC RECEIVING TUBE MOUNTS:  
WORKERS OF THE REYNOLDSVILLE, PA.,  
PLANT OF ERSKINE INDUSTRIES, INC.

Report to the President  
on Investigation No. TEA-W-203  
Under Section 301(c)(2) of the Trade Expansion Act of 1962



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UNITED STATES TARIFF COMMISSION

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Note.--The whole of the Commission's report to the President may not be made public since it contains certain information the publication of which would result in the disclosure of the operation of an individual firm. This published report is the same as the report to the President, except that the above-mentioned information has been omitted. Such

REPORT TO THE PRESIDENT

U.S. Tariff Commission,  
August 13, 1973.

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (TEA) (76 Stat. 885), the U.S. Tariff Commission herein reports the findings of an investigation made under section 301(c)(2) of the act in response to a petition filed on behalf of a group of former workers.

On June 14, 1973, the Tariff Commission accepted a petition filed by four former workers of the Reynoldsville, Pa., plant of Erskine Industries, Inc. for a determination of eligibility to apply for adjustment assistance on behalf of the former workers of said firm or an appropriate subdivision thereof. <sup>1/</sup> The Commission instituted an investigation (TEA-W-203) on June 14, 1973, to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with electronic receiving tube mounts (of the types provided for in item 687.60 of the Tariff Schedules of the United States (TSUS)) produced by said firm are being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers of such firm or an appropriate subdivision thereof.

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<sup>1/</sup> In accordance with section 201.4(b) (19 CFR 201.4(b)) of its Rules of Practice and Procedure, the Commission waived its time requirement set forth in Rule section 206.17 (19 CFR 206.17).

Public notice of the investigation was given by posting copies of the notice at the office of the Commission in Washington, D.C., and at the New York City office, and by publication in the Federal Register of June 20, 1973 (38 F.R. 16118). No public hearing was requested and none was held.

The information herein was obtained from Erskine Industries, Inc., domestic manufacturers and importers of electronic receiving tubes, trade associations, and the Commission's files.

#### Finding of the Commission

On the basis of its investigation, the Commission 1/ finds that articles like or directly competitive with electronic receiving tube mounts (of the types provided for in item 687.60 of the TSUS) produced by Erskine Industries, Inc., are not, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers of such firm or an appropriate subdivision thereof.

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1/ Vice Chairman Parker made no finding, but recommended dismissal of the petition without prejudice for the reasons set forth in his statement of views. Commissioners Leonard and Young did not participate in the decision for the reasons set forth in their statement of views.

Views of Chairman Bedell and Commissioner Moore 1/

This statement is in support of our negative determination under section 301(c)(2) of the Trade Expansion Act of 1962 (TEA), with respect to the petition filed on behalf of the former workers of the Reynoldsville, Pa., plant of Erskine Industries, Inc.

Erskine Industries, Inc., 2/ has been a contract assembler of electronic receiving tube mounts since 1945. The company does not own the parts necessary for assembling the mounts, but receives them on consignment from GTE Sylvania and assembles them into tube mounts according to the specifications of GTE Sylvania. In other words, Erskine Industries, Inc., supplies under contract only its assembly services. It does not produce and sell an article within the meaning of section 301 of the TEA. 3/ Consequently, it is our view that the workers of the firm are not proper petitioners under this section.

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1/ Commissioner Ablondi concurs in the result.

2/ Prior to 1967, Erskine Industries, Inc., operated under the name of Cameron Manufacturing Corporation.

3/ See the views of Chairman Bedell, Vice Chairman Parker, Commissioner Moore, and former Commissioner Sutton in connection with Investigation No. TEA-F-34, Certain Bovine Leathers . . ., TC Publication 433, pp. 3-7.

## Views of Vice Chairman Parker

I have abstained from making a determination on the merits in this proceeding. I would dismiss the petition of the workers without prejudice and permit them, if they so desire, to file an amended petition for an investigation designed to encompass all the facts and issues concerning their employment and provide them the opportunity to establish eligibility as employees of GTE Sylvania.

I do not agree that the disposition of this proceeding is controlled or governed by the principles enunciated in the matter of Rex Tanning Corporation (TEA-F-34). In that case, the Commission found that the Rex Tanning Corporation was not a proper petitioning firm under the Trade Expansion Act because it sold tanning services only and did not produce and sell a product "like or directly competitive" with an imported article.

In my judgment, the effect of the majority determination under the facts of this case is to read the workers out of the statute and to deprive them of an opportunity to qualify for the statutory benefits.

This case is clearly distinguishable from Rex Tanning Corporation in a number of respects: (1) The petitioner in this proceeding consists of a group of workers; (2) such workers are engaged in the production of electronic receiving tube mounts which are like or directly competitive with imported electronic receiving tube mounts; and (3) the production of such articles at the Reynoldsville plant of Erskine Industries, Inc., was under the control and direction of GTE Sylvania. It owned substantially all of the machinery and equipment on which the

mounts were produced; it owned and supplied all the parts and materials used in such production; it owned and took possession of all the mounts produced without any intervening sale being necessary; it furnished all the funds from which the workers were paid and, in other respects, demonstrated its ownership and control over the production of the electronic receiving tube mounts.

In Rex Tanning, the firm itself was the petitioner. It merely sold tanning services on leather supplied by owners, rather than a product. The workers of Rex Tanning were not parties to that proceeding.

The foregoing differences are significant and, in my judgment, demonstrate the inapplicability of Rex Tanning to the case in hand. The question of the eligibility and standing of the petitioning workers to claim the benefits under the TEA should be determined independently and without regard to the possible eligibility of Erskine Industries, Inc. to petition for adjustment relief.

It was not until the final days of this investigation that facts were developed giving rise to the question of the relationship between Erskine Industries, Inc., and GTE Sylvania, and whether a negative determination is required under the principles of Rex Tanning. Although the information currently available probably is not adequate to determine the precise nature of the arrangements between Erskine and GTE Sylvania and of the legal consequences of such arrangements, insofar as they may affect the rights of petitioning workers under the TEA, there is clearly sufficient information, in my judgment, to preclude a negative determination on the theory of Rex Tanning.

The contractual arrangements between Erskine Industries, Inc., and GTE Sylvania purports to establish an independent contractor relationship. Such a provision in the contract may appropriately determine the respective rights and duties as between the parties, but it is not determinative of the rights of the workers under the TEA. The workers were employed to assemble and produce the articles. GTE Sylvania caused and was responsible for their production and provided the funds for the payment of the wages earned. Certainly, the Commission should not rely upon a technical legal concept of independent contractor to deny workers a right to claim under the statute. To do so is to disregard economic reality and to nullify the objectives of the statute. The TEA is remedial and should be liberally construed, particularly under these facts where the workers had nothing to say about the arrangements between Erskine and GTE Sylvania. GTE Sylvania was the sole recipient of the work product of the workers. It was in effective control of the production and determined the quantity of the articles to be produced. From the foregoing facts, there is substantial basis for determining that, for the purposes of the TEA, the workers are employees of GTE Sylvania and, therefore, have standing to seek the benefits provided under the TEA.

## Statement of Commissioners Leonard and Young

We are not participating in the instant determination because we believe the report of the Tariff Commission of such determination is being made more than 60 days after the date on which the petition was filed and thus is in violation of the Trade Expansion Act of 1962. We set out the applicable statutory provisions and Tariff Commission's rules below, followed by a discussion of the present case in light of those provisions and rules, and our reasoning in reaching the decision not to participate.

The Trade Expansion Act of 1962 provides 1/ that, when a petition for a determination of eligibility to apply for adjustment assistance

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1/ Section 301(a)(2) A petition for a determination of eligibility to apply for adjustment assistance under chapter 2 may be filed with the Tariff Commission by a firm or its representative, and a petition for a determination of eligibility to apply for adjustment assistance under chapter 3 may be filed with the Tariff Commission by a group of workers or by their certified or recognized union or other duly authorized representative. . . . (c)(2) In the case of a petition by a group of workers for a determination of eligibility to apply for adjustment assistance under chapter 3, the Tariff Commission shall promptly make an investigation to determine whether, as a result in major part of concessions granted under trade agreements, an article like or directly competitive with an article produced by such workers' firm, or an appropriate subdivision thereof, is being imported into the United States in such increased quantities as to cause, or threaten to cause, unemployment or underemployment of a significant number or proportion of the workers of such firm or subdivision. . . . (f)(3) The report of the Tariff Commission of its determination under subsection (c)(1) or (c)(2) with respect to any firm or group of workers shall be made at the earliest practicable time, but not later than 60 days after the date on which the petition is filed.

is filed with the Tariff Commission by a group of workers or their union or other duly authorized representative, the Commission shall promptly make an investigation in order to report its determination to the President and such report shall be made at the earliest practicable time, but not later than 60 days after the date on which the petition is filed.

The Commission's Rules of Practice and Procedure (hereinafter the Commission's rules) provide in section 201.8(a) 1/ that the date of filing of documents shall be deemed to be the date on which such documents, if "properly filed," are actually received by the Commission. In section 201.8(b) it is provided that "no document aiming at the initiation of any investigation by the Commission shall be considered properly filed unless it conforms with the pertinent rules prescribed" by the Commission. One such pertinent rule in the case of worker petitions is that the date of filing of such petitions must be within one year from the time the workers became unemployed (section 206.17 of the Commission's rules 2/). Finally, section 201.4(b) 3/ provides

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1/ Section 201.8(a) . . . Such documents, if properly filed, will be deemed to be filed on the date on which they are actually received in the Commission.

2/ Section 206.17 . . . The workers by whom or on whose behalf the petition is filed must be persons who are, or who have been within one year prior to the date of the petition, employed regularly in the production of the named or described domestic article by the firm whose workers are claimed to be unemployed, underemployed, or threatened with unemployment or underemployment, by reason of the increase in imports of the named or described foreign article, which increase resulted in major part from concessions granted under trade agreements.

3/ Section 201.4(b) . . . A rule may be waived or suspended only when in the judgment of the Commission there is good and sufficient reason therefor, provided the rule is not a matter of procedure required by law.

the Commission may waive or suspend a rule when in its judgment good and sufficient reason for such waiver or suspension exists.

In the present case, the worker petition was filed with the Commission on May 29, 1973. The petition contained a statement that . . . "the plant closed in April, 1972." The petition was in conformity with all the pertinent Commission's rules except that the above quoted statement in the petition made it apparent that it did not conform to the Commission's rule that the petition be filed within one year of the date on which the petitioners became unemployed. Since it did not conform with that rule, section 201.8(b) of the Commission's rules requires the conclusion that the petition was not "properly filed" and, hence, could not have been accepted by the Commission.

As has long been the Commission's practice in cases where a workers' petition is filed after the one year deadline, the matter was submitted to the Commission for a determination as to whether the rule providing for the one-year deadline should be waived pursuant to section 201.4(b) of the Commission's rules. Although the petition was filed and received by the Commission on May 29, 1973, the question of waiver of the one-year rule was not submitted to the Commission until June 11, 1973. The Commission acted on June 14, and did, in fact, waive the one-year rule. A majority of the Commission also determined, in effect, that the petition was not filed until the rule was waived by the Commission on June 14, 1973, and that therefore the 60 days for the conduct of the investigation began on that date.

The fact is that the petition was received in the Commission on May 29, 1973. It is our belief that this is the date on which the petition was actually filed with the Commission within the meaning of the Statute. Therefore this date should be the controlling date for determining the beginning of the 60-day period for the conduct of the investigation, rather than the date on which the Commission accepted the petition (by waiver of the one-year rule) and instituted the investigation, in this case, June 14, 1973.

No petition filed with the Commission is automatically accepted, of course. In each case the Commission must determine to accept or not accept the petition, the question of acceptance usually being submitted within a very few days of actual receipt of the petition, and the determination turning on whether the petition is in conformity (or substantial conformity) with the Commission's rule or whether the Commission will waive a particular rule.

In the instant case, the Commission had submitted to it on June 11, 1973, the question of whether to accept or not accept the petition. The Commission decided on June 14 to accept the petition (by waiver of the one-year rule) and thus instituted the investigation. There was nothing to distinguish this decision from all others involving the acceptance or nonacceptance of a petition. Yet, in addition to accepting the petition, a majority of the Commissioners also decided to set as the date for the beginning of the 60-day period June 14, 1973, the date of acceptance of the petition rather than May 29, 1973, the date of filing.

Unfortunately, in the case of many petitions, a majority of the Commission has recently begun this practice of establishing the date of the beginning of the 60-day period as the date of the institution of the investigation rather than the date on which the petition was actually filed and received by the Commission. This makes a mockery of the statutory provision since it permits the Commission to decide how long a time may expire "after the date on which the petition is filed" before the termination of its investigation and the report of its determination is made to the President, instead of the 60 days clearly specified in plain words by the statutory provision.

It is not a pleasant position for us to be in constant disagreement with the majority of the Commission on the issue of the proper starting date of the statutorily imposed 60-day period. However, we find no legal basis whatsoever for the position of the majority of the Commission in view of the clear words of the statute as well as the legislative history which reinforces the establishment of the deadline. 1/

We earnestly believe that determinations made by the Commission and its reports thereof to the President submitted after the date provided in the statute for such action are clearly without legal foundation. Therefore, we have no alternative other than to refuse to participate in such determinations. In cases where there has been available to us sufficient results of the investigation on which we can base a

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1/ For a discussion of the legal aspects of this issue, see Barbers' Chairs and Parts Thereof. . . , Inv. No. TEA-F-9. . . , TC Publication 320, 1970, Views of Commissioners Clubb and Moore.

determination prior to the expiration of the 60-day deadline, we have done so and filed our determination in the office of the Secretary of the Tariff Commission. In the instant case, the only information we had on which to base a determination during the 60-day period was the petition, and it did not afford us sufficient evidence on which we could reach a conclusion.

## INFORMATION OBTAINED IN THE INVESTIGATION

## Description and Uses

From 1968 until the cessation of its operations on Apr. 30, 1972, the only articles assembled at the Reynoldsville, Pa., plant of Erskine Industries, Inc., were electronic receiving tube mounts for GTE Sylvania, a large, diversified, multinational electronics producer. <sup>1/</sup> These mounts are used in a great number of different types of electronic receiving tubes, which are used in television receivers and other home-entertainment devices, as well as in industrial and military electronic equipment.

An electronic receiving tube mount consists of a round, flat glass disc with the functioning elements of the tube mounted thereon, such as the cathode(s), plate(s), grid(s), and filament(s), as well as such accessory parts as getters, metal heat dissipating shields, and contacts for external connections. The tube is completed by placing a glass or metal envelope over the mount, sealing the envelope to the base, exhausting the air from the interior to create a vacuum, and then sealing the envelope. Some tube types include a phenolic base which is attached to the glass disc described previously.

The manufacture of the components of the mount requires a number of machine operations, such as stamping mica spacers and metal parts and winding fine coils to form grids. Assembling the components

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<sup>1/</sup> The Clearfield, Pa., plant of Erskine Industries also assembles electronic receiving tube mounts for GTE Sylvania.

requires numerous meticulous operations such as welding fine wire connections. For those mounts produced in large volume, a high degree of mechanization is possible. However, setting up automatic machinery for long production runs is both time consuming and costly and is often accompanied by a high rejection rate during initial assembly. Some operations are **extremely** difficult to automate and mounts made in limited quantities are **usually** assembled more economically by hand. Generally, mounts assembled in domestic facilities, such as those of Erskine Industries, Inc., require the least amount of labor. Mounts which are highly labor intensive are assembled in foreign facilities of U.S. producers of electronic receiving tubes.

In recent years, technological advances in solid-state semiconductor components, beginning with diodes and transistors and followed by integrated circuits, have permitted these devices to replace electronic receiving tubes in an ever-increasing number of applications. These components do not incorporate the product formerly made by Erskine's Reynoldsville plant.

Diodes include most semiconductors having two terminals; i.e., rectifiers, signal diodes, and switches. <sup>1/</sup> A transistor is most often a three-terminal device which performs most functions of a diode but is frequently used for signal amplification. Integrated circuits, which

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<sup>1/</sup> Rectifiers convert an alternating current signal to a direct current signal. Some rectifiers, such as thyristors, have three or more terminals. Signal diodes perform many functions depending upon their voltage-current characteristics; e.g., tunnel diodes may be used as detectors, amplifiers, or switches in electronic circuits. Switches are used to permit or inhibit the movement of an electronic signal; they may have two or more terminals, and one switch may provide many switching functions.

include small-, medium-, and large-scale integration arrays, may consist of both active and passive components integrated on a single substrate. Integrated circuits may function as, or include the functions of, thousands of diodes, transistors, resistors, capacitors, and inductors.

Semiconductor diodes, transistors, and integrated circuits have already displaced vacuum tubes and other electronic components in many applications such as most consumer electronic products, computers, communications equipment, industrial controls, and military electronic equipment. However, vacuum-tube diodes and receiving tubes continue to be used, largely in high-voltage or high-current circuits and as replacements in equipment previously produced which utilize vacuum tubes. The largest market for vacuum tubes at present is for original equipment and replacement use in television receivers.

## U.S. Tariff Treatment

Electronic receiving tube mounts, the articles produced at the Reynoldsville, Pa., plant of Erskine Industries, Inc., are classified under item 687.60 of the TSUS, which also provides for receiving tubes and transistors, certain other electronic tubes, semiconductors, and related parts. Under the original schedules of the Tariff Act of 1930, these articles were classifiable in a group of electrical articles under paragraph 353 at the rate of 35 percent ad valorem. This rate remained unchanged from June 18, 1930, through December 31, 1938. Television receivers (TSUS item 685.20), the end product for receiving tubes which utilize the Reynoldsville plant's products, as well as diodes, transistors, and integrated circuits, were also classifiable under paragraph 353 of the Tariff Act of 1930.

Pursuant to successive trade-agreement concessions beginning in 1939, the applicable rates of duty have been substantially reduced. The rates of duty currently (1973) in effect on these articles range from 5 percent ad valorem to 6 percent, reflecting the final stage, effective January 1, 1972, of the five-stage concessions granted in the Kennedy Round negotiations under the General Agreement on Tariffs and Trade (GATT).

The effective dates of the various rates of duty applicable to the aforementioned articles under the Tariff Act of 1930, as modified by trade-agreement concessions and the Tariff Classification Act of 1962, are given in the following table.

Certain electronic components and television receivers: U.S. rates  
of duty, 1930-72

(In percent ad valorem)

Effective date	Authority	Receiving tubes, transistors, diodes, and integrated circuits (TSUS item 687.60)	Television receivers (TSUS item 685.20)
June 18, 1930-----	Tariff Act of 1930	35	35
Jan. 1, 1939-----	Trade agreement with the United Kingdom.	25	25
Jan. 1, 1948-----	GATT concession	15	15
Jan. 6, 1951-----	-----do-----	12.5	12.5
June 30, 1956-----	-----do-----	12.5	11.5
June 30, 1957-----	-----do-----	12.5	11
June 30, 1958-----	-----do-----	12.5	10.5
July 1, 1962-----	-----do-----	12.5	10
Aug. 31, 1963-----	<u>1/</u>	12.5	10
Jan. 1, 1968-----	GATT concession	11	9
Jan. 1, 1969-----	-----do-----	10	8
Jan. 1, 1970-----	-----do-----	8.5	7
Jan. 1, 1971 <u>2/</u> ---	-----do-----	7	6
Jan. 1, 1972-----	-----do-----	6	5

1/ Tariff Classification Act of 1962.

2/ An additional 10-percent import duty was imposed from Aug. 16, 1971, to Dec. 19, 1971 (Presidential Proclamations 4074 and 4098).

## U.S. Producers

Three large producers of electronic receiving tubes in the United States account for nearly all of the domestic production--RCA Corp., General Electric Co., and GTE Sylvania. All of these firms produce some or all of the electronic receiving tube mounts which they consume in their production of receiving tubes. All three companies import some of their mounts from foreign affiliates in \* \* \*. In addition, GTE Sylvania utilizes two subcontractors to assemble mounts out of parts supplied by GTE Sylvania. These subcontractors are Galeton Products, Galeton, Pa., and Erskine Industries, Inc., Clearfield, Pa. Erskine also operated an electronic receiving tube mount facility in Reynoldsville, Pa., which closed in April 1972.

The number of U.S. producers of transistors and diodes (with shipments valued at \$100,000 or more) has generally declined from about 35 in 1966 to about 25 in 1971. <sup>1/</sup> The number of producers of integrated circuits (with shipments valued at \$100,000 or more) has remained at approximately 30 since 1967. Many manufacturers of integrated circuits also produce transistors and diodes.

U.S. producers of semiconductors (most are multinational firms with plants and offices in undeveloped, as well as developed countries) have effected rapid technological changes in the years since the transistor was first demonstrated in 1947. Subsidiaries of the U.S. producers,

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<sup>1/</sup> Available data on U.S. producers of semiconductors are contained in Department of Commerce, Current Industrial Reports, through 1971.

situated in Republic of China, Hong Kong, Singapore, and Mexico accomplish a large share of the necessary manual assembly work. Many firms entered and many firms left the semiconductor industry as new products and new techniques were developed.

### U.S. Consumption, Shipments, and Imports

#### Electronic receiving tube mounts

Apparent U.S. consumption of electronic receiving tube mounts is identical to the production of electronic receiving tubes, except for spoilage of mounts during tube production operations, since there is one mount included in each tube. However, official statistics do not report mounts as separate items. Therefore, the data on U.S. production and U.S. imports of electronic receiving tube mounts were obtained by responses to questionnaires sent to the three largest domestic manufacturers of electronic receiving tubes. These firms are believed to have accounted for the great bulk of the U.S. production of electronic receiving tube mounts during the 1968-72 period. Apparent U.S. consumption of electronic receiving tube mounts has decreased from \* \* \* million units, valued at \* \* \* million, in 1968 to 176 million units, valued at \$64 million, in 1972 (table 1).

Reported U.S. factory shipments of electronic receiving tube mounts declined from 244 million units, valued at \$78 million, in 1968 to 143 million units, valued at \$55 million, in 1972.

Reported imports of electronic receiving tube mounts (all brought in under TSUS items 807.00 and 806.30) increased from \* \* \* million units, valued at \* \* \*, in 1968 to 33.4 million units, valued at \$9.0 million in 1972, a \* \* \* increase in quantity and a \* \* \* increase in value. In 1968, imported electronic receiving tube mounts accounted for \* \* \* percent of both the quantity and value of the mounts used by U.S. producers of electronic receiving tubes in their domestic operations. In 1972, the share of imported mounts so used was about 19 percent, in terms of quantity, and about 14 percent, in terms of value. The value of U.S. components in imported electronic receiving tube mounts brought in under TSUS items 807.00 and 806.30 increased from \* \* \* in 1968 to \$5.3 million in 1972. \* \* \*. There were no exports of electronic receiving tube mounts reported during the 1968-72 period.

Electronic receiving tubes

Consumption of receiving tubes declined steadily in recent years as consumer electronic products utilizing semiconductors have become increasingly popular. The expanding use of improved semiconductors in these products has limited the use of receiving tubes, in large part, to television receivers and the replacement market.

Apparent U.S. consumption of receiving tubes declined from 288 million units, valued at \$241 million, in 1968 to 206 million units, valued at \$199 million, in 1972 (table 2). U.S. producers' shipments followed the same trend. U.S. imports of receiving tubes, which were generally stable, accounted for an increasing share of apparent consumption in terms of value; the quantity and value of imports fluctuated between 46 and 49 million units and \$18 million and \$21 million, respectively, during 1968-72. Table 3 shows the rates of duty and the value of imports of receiving tubes during the period 1964-72. In addition to imports of electronic receiving tubes used in domestically produced end items and for replacement purposes, substantial quantities are imported as parts of imported television receivers. \* \* \*

\* \* \*

As indicated in the table below, imports of receiving tubes entered under TSUS item 807.00 (primarily units assembled by foreign subsidiaries of U.S. firms in Taiwan and Mexico) increased markedly in 1971 and 1972. There were no imports reported under this classification in 1969 and 1970 and imports were very small in 1968. Imports entered under item 807.00 accounted for about 8 percent of total imports in 1972, compared with about 0.05 percent in 1968 (based on value). The percentage of U.S. components in total 807.00 imports, by value, declined from 79 percent in 1971 to 68 percent in 1972. This percentage is expected to decline further in the future as U.S.- and foreign-owned firms increase production of parts for electronic receiving tubes in the Far East and Mexico.

Electronic receiving tubes: U.S. imports entered  
under item 807.00, 1968-72

Item	1968	1969	1970	1971	1972
Quantity---units--	13,299	-	-	1,572,073	5,969,307
Total value					
dollars--	8,927	-	-	346,630	1,654,781
Value of U.S. components, duty:					
exempt-dollars--	1,149	-	-	274,531	1,120,475
Foreign value					
added--dollars--	7,778	-	-	72,099	534,306

Source: Compiled from official statistics of the U.S. Department of Commerce.

Television receivers

Apparent U.S. consumption of television receivers (monochrome and color) increased from 12.8 million units, valued at \$2.4 billion, in 1968 to 16.4 million units, valued at \$2.7 billion, in 1972 (table 4). Even though color receivers, which are more expensive than monochrome units, accounted for a larger share of consumption in 1972 than in 1968, the growth in value of consumption during this period (an increase of 12 percent) was not commensurate with the growth in the quantity of consumption (an increase of 27 percent). This disparity reflects a marked decline in the prices of both monochrome and color receivers and a trend towards increased consumption of small- and medium-screen-size portable and table model sets.

Despite the increase in apparent consumption, U.S. producers' shipments of domestically produced television receivers (monochrome and color) declined sharply from 10.3 million units, valued at \$2.2

billion, in 1968 to 8.7 million units, valued at \$2.0 billion, in 1971, and then increased to 10.2 million units, valued at \$2.2 billion, in 1972. On a quantity basis, the share of total shipments of domestically produced units represented by monochrome receivers declined from about 50 percent in 1968 to about 27 percent in 1972.

U.S. exports of television receivers have been small but have generally increased, from 144,000 units, valued at \$28 million, in 1968 to 224,000 units, valued at \$59 million, in 1972. At no time during the 1968-72 period did the quantity of units exported exceed 2.2 percent of the total quantity shipped.

During 1968-72, annual U.S. imports of television receivers (monochrome and color) increased each year--rising from 2.7 million units, valued at \$204 million, in 1968 to 6.4 million units, valued at \$497 million, in 1972 (table 4). The rates of duty and the value of imports of television receivers during 1964-72 are shown in table 5.

As indicated in the table below, imports of television receivers entered under tariff item 807.00 (primarily units assembled by foreign subsidiaries of U.S. firms in Taiwan and Mexico) increased rapidly during 1968-72. Imports entered under item 807.00 accounted for 29 percent of total imports in 1972, compared with 11 percent in 1968 (based on value).

Television receivers: U.S. imports entered under item 807.00,  
1968-72

Item	1968	1969	1970	1971	1972
Quantity-----1,000 units--	445	940	1,197	1,423	2,765
Total value-----million dollars--	21.6	47.0	56.1	71.9	144.5
Value of U.S. components, duty exempt-----million dollars--	5.8	17.7	19.7	22.4	30.5
Foreign value added, dutiable million dollars--	15.8	29.3	36.4	49.5	114.0

Source: Compiled from official statistics of the U.S. Department of Commerce.

### Semiconductors

Semiconductors consist of three major types--transistors, diodes, and integrated circuits. These devices do not incorporate the mounts which are the subject of this investigation. Substitution of semiconductors for tubes has become increasingly important due to the introduction of new products utilizing these components and technological improvements in existing products. In recent years, integrated circuits have been used widely in place of transistors, diodes, and electronic receiving tubes. Hundreds of transistors and diodes, as well as large quantities of passive components, such as resistors, capacitors, and inductors, may be displaced by a single integrated circuit array.

U.S. consumption of semiconductors increased by 93 percent in quantity during 1968-72. Apparent consumption of semiconductors increased from 3.1 billion units, valued at \$0.9 billion, in 1968 to 4.3 billion

units, valued at \$1.0 billion, in 1969, declined to about 3.9 billion units, valued at \$1.1 billion, in both 1970 and 1971, and then rose markedly to 6.1 billion units, valued at \$1.7 billion, in 1972 (table 6). During 1968-72, the average unit value of transistors, diodes, and integrated circuits declined from 47 cents to 32 cents, from 15 cents to 14 cents, and from \$2.23 to \$1.47 cents, respectively. The share of apparent U.S. consumption of semiconductors, indicating the growing importance of integrated circuits, is shown in the following table.

Share of apparent U.S. consumption of semiconductors,  
by types, 1968-72

Type	1968	1969	1970	1971	1972
Percent of total quantity					
Integrated circuits-----	<u>1/</u>	<u>1/</u>	13	17	20
Transistors-----	38	38	36	36	42
Diodes-----	<u>1/</u>	<u>1/</u>	51	47	38
Total-----	100	100	100	100	100
Percent of total value					
Integrated circuits-----	<u>1/</u>	<u>1/</u>	42	50	61
Transistors-----	44	42	38	34	28
Diodes-----	<u>1/</u>	<u>1/</u>	20	16	11
Total-----	100	100	100	100	100

1/ Not separately available.

Source: Compiled from official statistics of the U.S. Department of Commerce.

The volume and value of U.S. producers' shipments of semiconductors were at their highest levels in 1969 and 1972. U.S. imports rose sharply in 1969 and 1972, but remained at about the 1969 level in

1970 and 1971. The ratio of imports to consumption rose steadily during 1968-72; it increased from 31 percent in 1968 to 49 percent in 1972 terms of volume, and from 8 percent in 1968 to 19 percent in 1972 in terms of value. Table 7 shows the rates of duty and the value of imports of semiconductors during 1964-72.

The great bulk of U.S. imports of semiconductors in recent years were classified under TSUS items 806.30 and 807.00 and were entered by a few U.S. firms, principally Texas Instruments, Fairchild, and Motorola. As shown in table 8, these imports accounted for 86 percent, in terms of quantity, and 84 percent, in terms of value, of total imports of semiconductors in 1968 (980 million units, valued at \$71.5 million). This compares with 84 percent and 79 percent, respectively, of total imports of semiconductors in 1972 (3.0 billion units, valued at \$316 million, table 8). However, such imports increased from 847 million units, valued at \$59 million, in 1968 to 2,498 million units, valued at \$249 million, in 1972. The share of the duty-exempt value of those imports declined from 60 percent in 1968 to 51 percent in 1972.

Transistors.--Apparent U.S. consumption of transistors increased from 1,203 million units, valued at \$400 million, in 1968 to 1,614 million units, valued at \$436 million, in 1969, declined to 1,389 million units, valued at \$382 million, in 1971, and then rose to 2,580 million units, valued at \$477 million, in 1972 (table 9). The quantity and value of U.S. producers' shipments and exports generally followed the same trend, as did the quantity of U.S. imports. The value of U.S.

imports increased steadily from \$45 million in 1968 to \$100 million in 1972. The ratio of imports to consumption increased from 38 percent in 1968 to 55 percent in 1972, in terms of quantity, and from 11 percent in 1968 to 21 percent in 1972, in terms of value. Table 7 shows the rates of duty and the value of imports of transistors during 1964-72.

Diodes.--Apparent U.S. consumption of diodes decreased from 2,006 million units, valued at \$211 million, in 1970 to 1,795 million units, valued at \$176 million, in 1971, before rising to 2,292 million units, valued at \$189 million, in 1972 (table 10). U.S. producers shipments followed the same trend as that for transistors. Imports increased from 614 million units, valued at \$28 million, in 1970 to 901 million units, valued at \$36 million, in 1972

Integrated circuits.--Apparent U.S. consumption of integrated circuits increased from 474 million units in 1970 to 1.2 billion units in 1972, an increase of 153 percent (table 11). Similarly, the value increased from \$434 million to \$1.0 billion during this period, an increase of 130 percent. U.S. producers' shipments of integrated circuits followed the same trend as consumption, increasing from 292 million units, valued at \$455 million in 1970, to an estimated 624 million units, valued at \$962 million, in 1972. Imports of integrated circuits increased from 249 million units, valued at \$69 million, in 1970 to 670 million units, valued at \$180 million, in 1972. Exports, however, declined from 66 million units, valued at \$92 million, in 1970 to 54 million units,

valued at \$91 million, in 1971, but increased sharply in 1972 to 92 million units, valued at \$105 million. The ratio of imports to consumption declined from 52.4 percent in 1970 to 49.3 percent in 1971, and then increased to 55.8 percent in 1972 in terms of quantity. However, in terms of value, this ratio steadily increased from 16.0 percent in 1970 to 17.4 percent in 1972. Table 7 shows the rates of duty and the value of imports of integrated circuits during 1964-72.

Erskine Industries, Inc.

The firm

Erskine Industries, Inc. was first incorporated at Cameron Manufacturing Corp., Reynoldsville, Pa., on July 4, 1944. The firm originally produced proximity fuses as a subcontractor to Hercules Powder Co. and Atlas Powder Co. The fuse subcontract was terminated as of VJ day in 1945 and Erskine immediately obtained a contract for the assembly of electronic receiving tube mounts for GTE Sylvania (formerly Sylvania Electric Corp.). All parts for these mounts were furnished by GTE Sylvania and title to them remained with GTE Sylvania. This has been the only operation of Erskine Industries since that time. From its opening until it was closed on April 30, 1972, the Reynoldsville facility was the largest employer in the Reynoldsville area. The name of the firm was changed from Cameron Manufacturing Corp. to Erskine Industries, Inc., in 1967. The Clearfield, Pa., facility, the only other plant operated by Erskine Industries, Inc., was opened in March 1966. There has never been any corporate relationship between Erskine Industries, Inc. and GTE Sylvania.

\* \* \* \* \*

The Reynoldsville plant formerly assembled and the Clearfield plant currently assembles electronic receiving tube mounts for virtually all types of receiving tubes.

The Reynoldsville, Pa., plant, where the petitioning workers were employed, is a two-story building of stucco construction which was owned by Erskine Industries, Inc. It contains 18,000 square feet of floor space, of which approximately \* \* \* square feet were devoted to the assembly operations. There were no additions to the building during the period it was occupied by Erskine Industries, Inc. The facility is now used by a clothing manufacturer under lease to the Reynoldsville Area Industrial Development Association.

The Clearfield plant which currently assembles electronic receiving tube mounts, is a single-story building with a partial basement and is of brick and cinder-block construction. It was completely renovated before Erskine Industries, Inc. took occupancy. Prior to the Erskine takeover, the building had been unoccupied for many years. The building contains 48,000 square feet of floor space, of which approximately \* \* \* square feet have been devoted to assembly operations since the plant opened. \* \* \*.

#### The Reynoldsville, Pa., plant

The basic operations of the Reynoldsville, Pa., plant were similar to those currently in practice at the Clearfield, Pa., plant. All material for tube mounts was furnished by GTE Sylvania and was in the form of raw material (single pieces) and processed material which included partially assembled mounts. These raw materials and processed materials were assembled into complete receiving tube mounts, tested, and shipped to GTE Sylvania. \* \* \*.

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APPENDIX A  
STATISTICAL APPENDIX



Table 1.--Electronic receiving tube mounts: U.S. factory shipments, imports for consumption, and apparent consumption, 1968-72

(Quantity in millions of units; value in millions of dollars)

Year	Factory shipments	Imports	Apparent consump- tion	Ratio (percent) of imports to consumption
Quantity				
1968-----	244.2	***	***	***
1969-----	238.8	***	***	***
1970-----	188.6	***	***	***
1971-----	173.1	16.6	189.7	8.8
1972-----	142.6	33.4	176.0	19.0
Value				
1968-----	78.1	***	***	***
1969-----	69.3	***	***	***
1970-----	64.7	***	***	***
1971-----	64.4	4.9	69.3	7.1
1972-----	55.1	9.0	64.1	14.0

Source: Compiled from data submitted to the Commission by domestic producers and importers of electronic receiving tube mounts in response to the Commission's questionnaire.

Note.--There were no reported exports of electronic receiving tube mounts during the 1968-72 period.



Table 2.--Receiving tubes: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1968-72

(Quantity in millions of units; value in millions of dollars)

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1968-----	252.4	47.4	11.5	288.3	16.4
1969-----	231.4	48.7	11.9	268.2	18.2
1970-----	188.5	46.7	12.7	222.5	21.0
1971-----	175.4	47.9	10.7	212.6	22.5
1972-----	<sup>1/</sup> 170.0	45.5	9.8	205.7	22.1
Value					
1968-----	234.2	18.9	12.5	240.6	7.9
1969-----	224.2	18.4	13.2	229.4	8.0
1970-----	204.4	17.6	13.3	208.7	8.4
1971-----	196.6	18.7	12.7	202.6	9.2
1972-----	<sup>1/</sup> 190.4	21.1	12.9	198.6	10.6

<sup>1/</sup> Estimated by the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 3.--Electronic receiving tubes: U.S. rates of duty and imports for consumption, 1964-72

Year	Rate of duty	Imports
	Percent ad valorem	Million dollars
1964-----	12.5	15.2
1965-----	12.5	25.7
1966-----	12.5	33.3
1967-----	12.5	21.3
1968-----	11	18.9
1969-----	10	18.4
1970-----	8.5	17.6
1971-----	7	18.7
1972-----	6	21.1

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 4.--Television receivers: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1968-72

(Quantity in thousands of units; value in millions of dollars)

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1968-----	10,328	2,711	144	12,895	21
1969-----	8,721	4,033	157	12,597	32
1970-----	8,308	4,512	126	12,694	36
1971-----	8,740	5,449	162	14,027	39
1972-----	10,219	6,376	224	16,371	39
Value					
1968-----	2,222	204	28	2,398	9
1969-----	1,852	296	33	2,115	14
1970-----	1,714	315	26	2,003	16
1971-----	1,976	413	37	2,352	18
1972-----	2,248	497	59	2,686	19

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 5.--Television receivers: U.S. rates of duty and imports for consumption, 1964-72

Year	Rate of duty	Imports		
		Monochrome	Color	Total
		<u>Million</u> <u>dollars</u>	<u>Million</u> <u>dollars</u>	<u>Million</u> <u>dollars</u>
	<u>Percent</u> <u>ad valorem</u>			
1964-----	10	<u>1/</u>	<u>1/</u>	39
1965-----	10	<u>1/</u>	<u>1/</u>	60
1966-----	10	<u>1/</u>	<u>1/</u>	115
1967-----	10	<u>1/</u>	<u>1/</u>	124
1968-----	9	97	106	204
1969-----	8	152	143	296
1970-----	7	174	142	316
1971-----	6	208	205	413
1972-----	5	262	235	497

1/ U.S. imports of monochrome and color television receivers were not separately reported in official statistics prior to 1967.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to the totals shown.

Table 6.--Semiconductors: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1968-72

(Quantity in millions of units; value in millions of dollars)

Year	U.S. producers' shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1968-----	2,436.4	980.4	270.4	3,146.4	31.2
1969-----	3,233.3	1,534.4	497.1	4,270.6	35.9
1970-----	2,977.9	1,464.8	544.7	3,898.0	37.6
1971-----	2,655.7	1,516.3	331.3	3,840.7	39.5
1972-----	<u>1/</u> 3,563.0	2,979.4	468.6	6,073.8	49.1
Value					
1968-----	958.7	71.5	125.6	904.6	7.9
1969-----	1,154.0	104.3	211.0	1,047.3	10.0
1970-----	1,141.1	157.2	246.0	1,052.3	14.9
1971-----	1,140.7	179.1	191.2	1,128.6	15.9
1972-----	<u>1/</u> 1,617.5	316.4	229.6	1,704.3	18.6

1/ Estimated by the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 7.--Semiconductors, by type: U.S. rates of duty and imports for consumption, 1964-72

Year	Rate of duty	Imports			
		Transistors	Diodes	Integrated circuits	Total
		<u>Million</u> <u>dollars</u>	<u>Million</u> <u>dollars</u>	<u>Million</u> <u>dollars</u>	<u>Million</u> <u>dollars</u>
	<u>Percent</u> <u>ad valorem</u>				
1964-----	12.5	5.6	1/	1/	8.4
1965-----	12.5	15.1	1/	1/	24.3
1966-----	12.5	28.7	1/	1/	42.2
1967-----	12.5	26.7	1/	1/	43.4
1968-----	11	44.7	1/	1/	71.5
1969-----	10	59.0	1/	1/	104.3
1970-----	8.5	59.8	27.9	69.4	157.2
1971-----	7	60.4	24.5	94.2	179.1
1972-----	6	100.1	35.9	180.5	316.4

1/ Not separately available.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to the totals shown.

Table 8.--Semiconductors: Share of total U.S. imports represented by imports under TSUS items 806.30 and 807.00, by types, 1968-72

Type	1968	1969	1970	1971	1972
Percent of total quantity					
Integrated circuits-----	<u>1/2/</u> 84	<u>1/2/</u> 86	97	85	80
Transistors-----	89	92	91	86	87
Diodes-----	<u>2/</u>	<u>2/</u> :)			( 81
Rectifiers-----	<u>2/</u>	<u>2/</u> :)	86	82	( 88
Other-----	<u>2/</u>	<u>2/</u> :)			( 81
Average-----	86	89	90	84	84
Percent of total value					
Integrated circuits-----	<u>1/2/</u> 77	<u>1/2/</u> 81	95	87	79
Transistors-----	87	86	89	87	82
Diodes-----	<u>2/</u>	<u>2/</u> :)			( 61
Rectifiers-----	<u>2/</u>	<u>2/</u> :)	<u>3/</u> 72	<u>3/</u> 69	( 88
Other-----	<u>2/</u>	<u>2/</u> :)			( 66
Average-----	84	84	88	85	79

1/ Data do not include integrated circuits imported under TSUS item 806.30.

2/ Data on diodes, rectifiers, and other semiconductors are included with those on integrated circuits.

3/ Data on diodes, rectifiers, and other semiconductors are aggregated.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 9.--Transistors: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1968-72

(Quantity in millions of units; value in millions of dollars)

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1968-----	874.8	451.4	123.4	1,202.8	37.5
1969-----	1,192.3	701.4	280.2	1,613.5	43.5
1970-----	1,064.4	602.3	249.5	1,417.2	42.5
1971-----	969.2	559.7	139.6	1,389.3	40.3
1972-----	<u>1/</u> 1,384.0	1,408.3	212.3	2,580.0	54.6
Value					
1968-----	406.7	44.7	51.1	400.3	11.1
1969-----	460.5	59.0	83.1	436.4	13.5
1970-----	435.8	59.8	88.9	406.7	14.7
1971-----	372.0	60.4	50.3	382.1	15.8
1972-----	<u>1/</u> 438.0	100.1	61.3	476.8	21.0

1/ Estimated by the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 10.--Diodes: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1968-72

(Quantity in millions of units; value in millions of dollars)

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1968-----	1,413.9	1/	126.1	1/	1/
1969-----	1,762.4	1/	162.0	1/	1/
1970-----	1,621.8	613.8	229.2	2,006.4	30.6
1971-----	1,299.0	633.1	137.5	1,794.6	35.3
1972-----	<u>2/</u> 1,555.0	901.2	163.8	2,292.4	39.3
Value					
1968-----	221.5	1/	38.4	1/	1/
1969-----	234.8	1/	55.5	1/	1/
1970-----	240.7	27.9	57.3	211.3	13.2
1971-----	200.8	24.5	49.6	175.7	13.9
1972-----	<u>2/</u> 217.5	35.9	64.7	188.7	19.0

1/ Not separately available.

2/ Estimated by the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 11.--Integrated circuits: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1970-72

(Quantity in thousands of units; value in thousands of dollars)

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1970-----	291,701	248,710	66,004	474,407	52.4
1971-----	387,495	323,458	54,211	656,742	49.3
1972-----	<sup>1/</sup> 624,000	669,974	92,483	1,201,491	55.8
Value					
1970-----	464,607	69,444	99,768	434,283	16.0
1971-----	567,925	94,248	91,243	570,930	16.5
1972-----	<sup>1/</sup> 962,000	180,459	105,541	1,036,918	17.4

<sup>1/</sup> Estimated by the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Data for integrated circuits are not differentiated from other semiconductors in 1968 and 1969 and, thus, are not available.

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