

UNITED STATES TARIFF COMMISSION

**RADIOS, RADIO-PHONOGRAPHS, AND LOUDSPEAKER SYSTEMS:
WORKERS OF THE MILROY, PA., PLANT OF
FISHER ELECTRONICS, INC.,
SUBSIDIARY OF EMERSON ELECTRIC CO.**

**Report to the President
on Investigation No. TEA-W-176
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 that could result in the disclosure of the operations of an individual concern. This published report is the same as the report to the President, except that the above-mentioned information has been omitted. Such omissions are indicated by asterisks.

REPORT TO THE PRESIDENT

U.S. Tariff Commission,
March 30, 1973.

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (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 by a group of workers.

On January 29, 1973, the Tariff Commission received a petition from three former workers of the Milroy, Pa., plant of Fisher Electronics, Inc., a subsidiary of Emerson Electric Co., St. Louis, Mo., for a determination of eligibility to apply for adjustment assistance on behalf of the workers and former workers of said firm or an appropriate subdivision thereof. The Commission instituted the investigation (TEA-W-176) on February 5, 1973, to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with radio-tape combination sets, headphones and loudspeaker systems, stereo and quadraphonic AM/FM radios, and radio-phonograph and radio-phonograph-tape player combinations (of the types provided for in items 678.50, 684.70, 685.23, and 685.30 of the Tariff Schedules of the United States) 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.

Public notice of the investigation was given by posting copies of the notice at the office of the Commission in Washington, D.C., at the New York City office, and by publication in the Federal Register of February 8, 1973 (38 F.R. 3644). No public hearing was requested and none was held.

The information herein was obtained from Fisher Electronics, Inc., other domestic producers, importers, and merchandisers of the aforementioned articles, trade associations, and from the Commission's files.

Findings of the Commission

On the basis of its investigation, the Commission finds (Commissioners Leonard and Young dissenting) that articles like or directly competitive with radio receivers and radio-phonograph combinations produced by Fisher Electronics, Inc., subsidiary of Emerson Electric Co., are, 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, unemployment or underemployment of a significant number or proportion of the workers of Fisher Electronics, Inc., an appropriate subdivision of the firm.

The Commission further finds, by majority vote (Chairman Bedell, and Commissioners Leonard, Moore, Young, and Ablondi), that articles like or directly competitive with loudspeaker systems produced by Fisher Electronics, 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, unemployment or underemployment of a significant number or proportion of the workers of the firm or an appropriate subdivision thereof. Vice Chairman Parker made no finding with respect to loudspeaker systems.

With respect to radio-tape combination sets, radio-phonograph-tape player combinations, and headphones produced at Fisher Electronics, Inc., (Chairman Bedell and Commissioner Moore are unable to make a

finding and Vice Chairman Parker makes no finding whether articles like or directly competitive with such articles produced by Fisher Electronics, Inc., are, 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, unemployment or underemployment of a significant number or proportion of the workers of the firm or an appropriate subdivision thereof. Commissioners Leonard and Young find that articles like or directly competitive with such articles 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, unemployment or underemployment of a significant number or proportion of the workers of the firm or an appropriate subdivision thereof.

Views of Chairman Bedell, Vice Chairman Parker, and
Commissioner Moore 1/

This investigation relates to a petition for adjustment assistance under section 301(c)(2) of the Trade Expansion Act of 1962 on behalf of the workers and former workers of the Milroy, Pa., plant of Fisher Electronics, Inc., a subsidiary of Emerson Electric Co., St. Louis, Mo. The workers were engaged in the production of radio-tape combination sets, headphones and loudspeaker systems, stereo and quadraphonic AM/FM radios and radio-phonograph and radio-phonograph-tape player combinations. However, the manufacture of radio receivers, radio-phonographs, and loudspeaker systems have accounted for over *** percent of the total production man-hours expended on all electronic products in the Milroy plant. In ***, Fisher began to obtain complete radio receivers as well as radio chassis (utilized in the assembly of radio receivers and radio-phonograph combinations) from unaffiliated Far Eastern firms. In ***, Emerson purchased a facility in Hong Kong which became an additional source for these items.

Under the Trade Expansion Act of 1962, four criteria must be met in order for an affirmative determination to be made. Those criteria are as follows:

- (1) Articles like or directly competitive with those produced by the workers concerned must be imported in increased quantities;
- (2) The increased imports must be a result in major part of concessions granted under trade agreements;

1/ Commissioner Ablondi concurs in the result with respect to radio receivers, radio-phonograph combinations and loudspeaker systems.

- (3) The workers concerned must be unemployed or underemployed, or threatened with unemployment or underemployment; and
- (4) The increased imports resulting from trade-agreement concessions must be the major factor causing or threatening to cause the unemployment or underemployment.

Our determination ^{1/} in this investigation with respect to loud-speaker systems is negative because the third criterion has not been met. * * *. Therefore, these workers are not unemployed or underemployed or threatened with unemployment or underemployment.

With respect to radio receivers and radio-phonograph combinations, it is our judgment that each of the four criteria outlined above has been met. Therefore, we have made an affirmative determination regarding radio receivers and radio-phonograph combinations. A discussion of each of the four criteria as they apply to radio receivers and radio-phonograph combinations follows.

Increased imports

This criterion has been clearly met. Total imports of all home-type radio receivers increased from 28 million units in 1968 to 35 million units in 1969, decreased to 31 million units in 1970 and 1971, and then sharply increased to 42 million units in 1972; imports in 1972 were about 50 percent greater than in 1968. The value of imports

^{1/} Vice Chairman Parker makes no finding on loudspeaker systems, head-phones, radio-tape combination sets, radio-phonograph-tape player combinations because in his opinion available data were inadequate to make a determination.

increased from \$225 million in 1968 to \$405 million in 1972, an increase of 80 percent. Although apparent U.S. consumption followed the same trend as imports during the 1968-72 period, the ratio of imports to consumption increased each year 1968-72, rising from 80 percent in 1968 to 96 percent in 1972 by quantity and from 65 percent to 91 percent by value.

Total U.S. imports of AC-operated, solid state AM/FM and FM types of radio receivers (which include those types produced by Fisher) decreased from 3.8 million units in 1970 (the first year in which statistics are available) to 3.3 million units in 1971 and then increased to 3.6 million units in 1972. The value of imports of these types of radio receivers increased from \$86 million in 1970 to \$107 million in 1972, an increase of 24 percent. The ratio of imports to consumption of these types of radio receivers during the 1970-72 period followed the same pattern as the one for all home-type radio receivers, increasing from 84 percent to 91 percent by quantity and from 80 percent to 90 percent by value. Imports by Fisher of such radio receivers increased from * * * in 1972.

U.S. imports of radio-phonograph combinations remained relatively steady at about 1.6 million units each year during the 1968-71 period, but increased to 2.2 million units in 1972, an increase of 37 percent between 1968 and 1972. The value of imports increased in each year from \$30 million in 1968 to \$87 million in 1972. During this period, the ratio of imports to apparent U.S. consumption increased each year,

rising from 45 percent in 1968 to 60 percent in 1972 by quantity, and from 7 percent to 29 percent by value. Imports by Fisher of radio chassis which it utilized mainly in assembling radio-phonographs increased from * * * in 1972.

In major part

The second criterion of the Act is that increased imports must have resulted in major part from trade-agreement concessions. The rate of duty applicable to radio receivers has been reduced from 35 percent ad valorem in 1930 to 10.4 percent for solid-state type radios and to 6 percent for tube-type radios in 1972. For radio-phonograph combinations, the rate of duty has been reduced from 35 percent ad valorem in 1930 to 6.5 percent in 1972. All of these duty reductions have been the result of trade-agreement concessions.

The duty savings represented by the trade-agreement concessions (24.6 percentage points for solid-state type radios, 28.5 percentage points for radio-phonograph combinations) was sufficiently large that it provided an important price advantage to imported radios in the U.S. market. Since a radio receiver represents the major cost of a radio-phonograph combination, this duty saving also provides an important price advantage to radio-phonograph combinations utilizing imported radio receiver chassis. * * *. Therefore, in our judgment, Fisher would not have moved a large share of its radio-manufacturing operation offshore nor would have imports of complete

radios and radio chassis approached the present volume had it not been for the concessions.

Unemployment and threat thereof

This criterion has been met also. The average annual number of production and related workers engaged in the production of radio receivers (including radio chassis utilized in radio receivers and radio-phonographs) decreased * * *. In view of the foregoing, it is clear that a significant number of workers have become unemployed or are threatened with unemployment within the meaning of the act.

Major factor

The fourth criterion is that concession generated increased imports must have been the major factor in causing or threatening the unemployment or underemployment of the workers involved. In this case, a direct relationship between increased imports of radio receivers and radio chassis and the unemployment of the workers is evident * * *. As imports by Fisher of radio receivers and radio chassis increased, production of and employment on these items at the Milroy plant decreased substantially.

Accordingly, we have concluded that the increased imports have been the major factor in causing the unemployment of the workers concerned.

Conclusion

Since we find that all of the statutory criteria are met with respect to radio-receivers and radio-phonograph combinations, we conclude that the radio receiver and radio-phonograph combination workers who are unemployed or underemployed are eligible to apply for adjustment assistance.

Views of Commissioner Leonard

My determination in the instant investigation is negative because any increase in imports of articles like or directly competitive with the radio-tape combination sets, headphones and loudspeaker systems, stereo and quadraphonic AM/FM radios, and radio-phonograph and radio-phonograph-tape combinations produced by the workers of Fisher Electronics, Inc. is not the result in major part of concessions granted under trade agreements. My reasoning in support of this determination on the above named electronic products 1/ is set forth in statements of my views in previous Commission reports published in 1971 and 1972. 2/

1/ Headphones were not named in any such previous reports, but the impact of trade-agreement concessions on imports of this article would parallel that of loudspeakers and loudspeaker systems since they are all provided for in TSUS item 684.70.

2/ High Fidelity Stereo and Related Equipment: H. H. Scott, Inc., Maynard, Massachusetts, . . . Investigation No. TEA-F-13 . . . , TC Publication 355, pp. 3-5; Paper Cones for Loudspeakers: Fibre Form Corporation, Columbia City, Indiana, . . . Firm Investigation No. TEA-F-16 and Worker Investigation No. TEA-W-55 . . . , TC Publication 362, pp. 3-6; Television Receivers, Radios, and Phonographs: Former Workers at the Emerson Television and Radio Company, Jersey City, New Jersey, . . . Investigation No. TEA-W-77 . . . , TC Publication 380, pp. 8-9; Coils and Antennas: Bel-Tronics Corporation, Addison, Illinois, Investigation No. TEA-F-19 . . . , TC Publication 385, pp. 3-5; Phonographs and Radio-Phonograph and Other Combinations: Warwick Electronics, Inc., Zion, Ill., . . . Investigation No. TEA-W-96 . . . , TC Publication 409, pp. 5-6; Radio Receivers, Phonographs, and Tape Recorders: Workers of General Electric Co.'s Audio Electronics Products Department: Investigation No. TEA-W-142 . . . , TC Publication 495, p. 8; Loudspeakers: Jensen Manufacturing Division, Pemcor, Inc., Chicago, Ill., . . . Investigation No. TEA-W-158 . . . , TC Publication 522, pp. 6-10.

Views of Commissioner Young

This investigation relates to a petition filed on behalf of workers of Fisher Electronics, Inc. who were engaged principally in the production of stereo and quadraphonic AM/FM radios, radio-phonograph combinations, and loudspeaker systems, but also produced minor quantities of related consumer electronic products. The workers petitioned for a determination of their eligibility to apply for adjustment assistance under the provisions of the Trade Expansion Act of 1962.

In my judgment, a negative determination must be made in this case since all of the conditions imposed by section 301(c)(2) of that act have not been met. Specifically, I have concluded that any increased imports of articles like or directly competitive with radios and radio-phonograph combinations produced by the petitioning workers are not a result in major part of trade-agreement concessions. With respect to the other products, I determined that the workers did not suffer any unemployment or underemployment. My reasons with respect to the various products involved in this investigation are discussed in the following paragraphs.

Radios and radio-phonograph combinations

In 1971, the Tariff Commission conducted several investigations under the provisions of the Trade Expansion Act that involved television receivers. In the most recent of those cases (TEA-I-21), five Commissioners, including myself, made a negative determination on the

grounds that the increased imports of television receivers were not a result in major part of concessions granted under trade agreements.

In a joint statement, 1/ Chairman Bedell and Vice Chairman Parker and I discussed a number of the more important factors that had stimulated increased imports of television receivers--e.g., item 807.00 of the Tariff Schedules of the United States (which authorizes partial exemption from duty under specified conditions), the dumping of television receivers in the U.S. market by Japanese producers, export incentives granted by the Japanese Government, and the lower wage rates and more rapidly increasing labor productivity in Japan than in the United States. Taking into account the effect of these and other factors, we concluded that the increased imports of television receivers were not a result "in major part" of trade-agreement concessions. The same conclusion is valid today.

The factors, except dumping, that have stimulated U.S. imports of television receivers have also generally influenced U.S. imports of radio receivers and radio-phonograph combinations. The U.S. rates of duty applicable to these articles have been reduced on several occasions to carry out trade-agreement concessions; the bulk of the reductions generally occurred, however, before and immediately after World War II. Indeed, some of the recent changes in U.S. imports of radio receivers and radio-phonograph combinations appear to have borne little relationship to changes in rates of duty.

1/ Television Receivers and Certain Parts Thereof, . . . Investigation No. TEA-I-21 . . . , TC Publication 436, pp. 4-6.

The duty on solid state radio receivers was reduced little in the Kennedy Round negotiations under the General Agreement on Tariffs and Trade (GATT)--from 12.5 percent to 10.4 percent ad valorem, but imports of such radios have expanded greatly--from about \$160 million in 1967 (the year before the first of five stages of the Kennedy Round concessions was placed in effect) to \$433 million in 1972. Thus, U.S. imports of radios appear to be responding mostly to factors other than changes in the rates of duty.

The U.S. duty on radio-phonograph combinations was reduced as a result of Kennedy Round concessions--from 13.75 percent to 6.5 percent, and imports of such articles have increased materially--from \$26 million in 1967 to \$87 million in 1972. During 1960-67, however, while the rate of duty remained unchanged, imports increased irregularly from \$9 million in 1960 to \$26 million in 1967.

As in the case of television receivers, the imports of radio receivers and radio-phonograph combinations have been influenced by a number of factors other than trade-agreement concessions. Viewing all of the factors, I must conclude that the increased imports of radios and radio-phonograph combinations have not been a result "in major part" of trade-agreement concessions.

Other products

With respect to the other products, I base my negative determination on the fact that both the production of and employment on these products at the Milroy, Pa., plant of Fisher Electronics, Inc. have increased during 1968-72.

Conclusion

On the basis of the foregoing facts, it is my view that a negative determination is required in this case.

INFORMATION OBTAINED IN THE INVESTIGATION

Description of Articles Under Investigation

The principal electronic articles produced in the Milroy, Pa., plant of Fisher Electronics, Inc., which account for over *** percent of the total man-hours expended in the production of electronic equipment, are stereo and quadraphonic AM/FM radios, radio-phonograph combinations, and loudspeaker systems. 1/ * * *. No other Emerson Electric Co. domestic plant has produced the articles covered by this investigation.

Fisher radio receivers consist of a stereophonic tuner and an amplifier, combined in one cabinet, which feed sound signals into a loudspeaker system. Fisher ceased producing monaural radio receivers and receivers using electron tubes prior to 1968.

A radio-phonograph combination consists of a radio receiver, as previously described, and a loudspeaker system, combined with a record changer. Loudspeaker systems may be contained within the radio-phonograph cabinet (console/consolette) or may be in separate cabinets (compact). Normally in a compact radio-phonograph, the record changer

1/ Other articles produced in this facility and listed in the petition are radio-tape combination sets, radio-phonograph tape combination sets and headphones. * * *.

is mounted on top of the radio receiver cabinet. A radio receiver may be combined with a tape player or with both a tape player and a record changer to form a radio-tape player combination or a radio-phonograph-tape player combination, respectively.

For the purpose of this investigation, a loudspeaker system is defined as two or more speakers (together with appropriate mixing circuitry), mounted in either an external cabinet or within a console, to reproduce the range of audio frequencies required. Two or more loudspeaker systems are included as a component of a radio-phonograph combination. In addition to producing loudspeaker systems as components of radio-phonograph combinations, Fisher also manufactures loudspeaker systems for sale as end items.

Printed circuit board assemblies are produced in the Milroy plant but are all consumed in end products (radio receivers, radio-phonographs, and other combination sets).

U.S. Tariff Treatment

Under the Tariff Act of 1930, radio receivers, radio-phonographs, and loudspeakers were classified under paragraph 353 at 35 percent ad valorem, as "articles suitable for producing, rectifying, modifying, controlling, or distributing electrical energy".

Under the Tariff Schedules of the United States (TSUS), the articles considered in this investigation are entered under the following item numbers: 685.23 (radio receivers (solid-state) and radio receiver chassis ^{1/}); 685.25 (radio receivers (tube-type)); 685.30 (radio-phonograph combinations and radio-phonograph tape player combinations); 678.50 (radio-tape player combinations); and 684.70 (headsets and loudspeakers). As shown in the table on the following page, the original duty rates on these articles were reduced some 70 to 80 percent pursuant to successive trade agreements.

The rates of duty in effect in 1972 ranged from 5 to 10.4 percent ad valorem, reflecting the last stage of the five-stage concessions granted in the Kennedy Round negotiations under the General Agreement on Tariffs and Trade (GATT). There have been no duty rate reductions since 1972.

Some radio receivers, radio-phonograph combinations, and loudspeakers here considered enter the United States under TSUS item

^{1/} U.S. Customs classifies unfinished radios and/or subassemblies that will operate when power is applied in the same TSUS category as finished radios.

807.00, which provides that for imported articles assembled in whole or in part of U.S.-made components, the duty may be assessed only on the value added abroad, thus permitting duty-free entry of the U.S. components included in the articles provided they are not further advanced than by assembly and otherwise conform to the regulations pertaining to these articles. Item 807.00 has never been the subject of trade-agreement concessions.

Certain consumer electronic products: Effective date of U.S. rates of duty, June 18, 1930-Jan. 1, 1972

(In percent ad valorem)

Effective date	Authority	Radio receivers		Loud- speakers (TSUS item 684.70)	Radio- phonograph combi- nations (TSUS item 685.30)	Radio- tape players (TSUS item 678.50)
		Solid- state (TSUS item 685.23)	Tube- type (TSUS item 685.25)			
June 18, 1930-----	Tariff Act of : 1930.	: 35	: 35	: 35	: 35	: 35
Jan. 1, 1939-----	Bilateral with : United Kingdom.	: 25	: 25	: 25	: 25	: 25
Jan. 1, 1948-----	GATT concession.	: 15	: 15	: 15	: 15	: 15
June 6, 1951-----	Do.	: 12.5	: 13.75	: 13.75	: 13.75	: 13.75
July 1, 1962-----	Do.	: 12.5	: 13.75	: 13.75	: 13.75	: 12.5
July 1, 1963-----	Do.	: 12.5	: 12.5	: <u>1/15</u>	: 13.75	: 12.5
Aug. 1, 1963-----	Do.	: 12.5	: 12.5	: 15	: 13.75	: <u>1/10</u>
Jan. 1, 1968-----	Do.	: 12	: 11	: 13	: 12	: 9
Jan. 1, 1969-----	Do.	: 11.5	: 10	: 12	: 11	: 8
Jan. 1, 1970-----	Do.	: 11	: 8.5	: 10	: 9.5	: 7
Jan. 1, 1971 <u>2/</u> ---	Do.	: 10.4	: 7	: 9	: 8	: 6
Jan. 1, 1972-----	Do.	: 10.4	: 6	: 7.5	: 6.5	: 5

1/ This rate was the result of combining several different rates.

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

U.S. Producers

Currently, very few U.S. firms produce radios or radio-phonographs with components or subassemblies made in the United States. Most domestic producers import subassemblies on which further work is performed to make them into complete articles. These subassemblies consist of such items as printed circuit board assemblies, unfinished radio chassis, record changers, and tape players. Most domestic firms also import complete radios or radio-phonographs manufactured abroad by either a foreign subsidiary or a foreign-owned firm to complete their product lines.

From 1968 to 1971 (the most recent year for which data are available), the number of firms in the United States producing AC-operated table model AM/FM and FM radios (including the types made by Fisher) declined from 13 to 10. During the same period firms producing radio-phonographs (AM/FM) changed as follows: the number of producers of table models increased from 11 to 15, compared with a decrease in the number producing consoles from 31 to 23.

According to available information, six U.S. producers of loudspeakers and louspeaker systems account for the great bulk of U.S. production of loudspeakers for sale to others, with the remaining output of non-captive loudspeakers being shared by at least 20 other manufacturers. Firms producing loudspeakers for their own use are believed to number only three or four; however, these firms, most of whom produce a full range of loudspeaker systems, probably account for 20 to 30 percent of the total annual domestic output of loudspeakers. * * *

U.S. Consumption, Shipments, and Exports

Home-type radio receivers

Apparent U.S. consumption of all home-type radio receivers increased irregularly from 35.4 million units, valued at \$347 million, in 1968 to 43.9 million units, valued at \$446 million, in 1972 (table 1).

U.S. producers' shipments of such equipment declined each year during the 1968-72 period--from 7.5 million units, valued at \$127 million to 1.8 million units, valued at \$45 million. The average unit value increased from \$17 to \$25 which indicates a market trend toward higher quality radios. U.S. exports of radio receivers declined from 385,000 units, valued at \$5 million, in 1968 to 224,000 units, valued at \$3 million, in 1971, and then increased to 248,000 units, valued at \$4 million, in 1972 (table 1). Except for 1972, when they were equivalent to about 9 percent of the total value of sales, exports accounted for about 4 to 5 percent of the total value of shipments by domestic producers.

A further segregation of home-type radio receivers into AC-operated AM/FM and FM solid-state types is available for the years 1970-72 (TSUSA item 685.2350). These types correspond more closely to those produced by Fisher in the Milroy, Pa., plant. Apparent U.S. consumption of these types of radio receivers decreased from 4.5 million units, valued at \$107 million, in 1970 to 3.7 million units, valued at \$96 million, in 1971 and then increased in 1972 to 4.0 million units,

valued at \$119 million (table 2). U.S. producers' shipments decreased steadily from 720,000 units, valued at \$21 million, in 1970 to 250,000 units, valued at \$12 million, in 1972. However, in terms of value, Fisher's share of total domestic shipments was 32 percent in 1970, 46 percent in 1971, and 34 percent in 1972.

During the 1968-72 period, the average unit value of this type of radio receiver followed the trend set by all home-type radio receivers increasing from about \$29 to \$48. Export statistics on AC-operated AM/FM and FM solid-state radio receivers are not available but are believed to amount to well under 5 percent of U.S. factory shipments during the period covered by this investigation.

Radio-phonograph combinations

During the period 1968-72, apparent U.S. consumption of all radio-phonographs ranged between 3.2 million units and 3.7 million units with no decided trend (table 3). By value, however, apparent consumption of such articles decreased sharply each year (from \$404 million to \$301 million) indicating a decline in the average unit values of some 30 percent--or from about \$113 to about \$82 per unit. During the entire period, U.S. producers' shipments declined by about 25 percent in terms of numbers of units and by 42 percent in terms of value; the average unit value of such shipments decreased from about \$190 in 1968 to about \$147 in 1972 or 23 percent. In contrast, imports of radio-phonographs rose some 37 percent by quantity and 190 percent by value; the average

foreign unit values of the imports increased from \$19 to about \$39 during that period. U.S. exports of radio-phonograph combinations during the 1968-72 period were less than 3 percent of shipments in each year.

Loudspeakers

Loudspeaker data reported in official statistics include both individual loudspeakers and loudspeaker systems. Official data do not report domestic shipments of loudspeakers in terms of quantity; however, the Department of Commerce publishes the value of annual shipments.

* * *

Apparent U.S. consumption of loudspeakers increased in value from \$112 million in 1968 to \$130 million in 1969, decreased slightly to \$128 million in 1970, and thereafter increased each year to \$149 million in 1972 (table 4).

U.S. producers' shipments of loudspeakers increased in value from \$102 million in 1968 to \$113 million in 1969, declined to \$106 million in 1970, increased again to \$115 million in 1971, and then decreased to \$108 million in 1972. The 1972 decrease in shipments is believed to have been caused by an increase in imports that year of more than 50 percent (table 4).

U.S. exports of loudspeakers have steadily increased from a value of \$6 million in 1968 to \$24 million in 1972 (table 4). This represents an increase of 400 percent and is believed to consist primarily of large-sized speakers (over 6 inches in diameter) and loudspeaker systems.

Summary

The following table shows for the years 1968-72 the aggregate value of apparent consumption of all types of radio receivers, radio-phonograph combinations, and loudspeakers, along with comparable data on imports and producers' shipments. In the aggregate, the total value of consumption increased by about 4 percent during those years (from \$863 million to \$896 million). Over the same period, the value of producers' shipments declined by about 42 percent while the total value of imports doubled both in absolute amounts and in relation to total apparent consumption. * * *

Home radio receivers, radio-phonographs, and loudspeakers: U.S. consumption, producers' shipments, and imports 1968-72

Year	Value in millions of dollars			Ratio (percent) of imports to consumption
	Apparent consumption	Producers' shipments	Imports	
1968-----	863	606	271	32
1969-----	891	541	368	41
1970-----	824	459	383	47
1971-----	810	431	401	50
1972-----	896	373	557	62

Source: Compiled from the Appendix tables 1, 3, and 4.

U.S. Imports

Home-type radio receivers

U.S. imports of all home-type radio receivers (including those types not produced by Fisher) increased from 28 million units, valued at \$225 million, in 1968, to 35 million units, valued at \$306 million, in 1969, decreased to 31 million units, valued at \$305 million, in 1970, remained at about the same level in 1971, but increased sharply to 42 million units, valued at \$405 million, in 1972 (table 1). Table 5 shows the rates of duty and the value of U.S. imports of all types of radio receivers (including automobile types) during the period 1960-72.

Imports of AC-operated AM/FM and FM solid-state receivers decreased from 3.8 million units, valued at \$86 million, in 1970 to 3.3 million units, valued at \$7.9 million, in 1971, and then increased to 3.6 million units, valued at \$106 million, in 1972 (table 2). The unit value of these imports increased from \$23 in 1970 to \$30 in 1972. The ratio of imports to consumption of these receivers increased from 84 to 91 percent during this period.

These imports consist of complete radio receivers as well as sub-assemblies of radios for further assembly in the United States. ^{1/} Many of those subassemblies are incorporated into radio-phonograph and other combinations.

Imports of all home-type radio receivers under TSUS item 807.00 have increased in value from \$21 million, in 1968, to \$67 million, in 1972 (table 8). The value of U.S. components in such 807.00 imports increased from \$3 million in 1968, to \$11 million in 1972. Imports of AC-operated AM/FM and FM solid-state radio receivers brought in under TSUS item 807.00 have increased in value from \$5.8 million, in 1970, to \$8.5 million, in 1972. It is believed that these increases are, to some extent, the result of the manufacture by Fisher and other U.S. producers of complete radio receivers and subassemblies in offshore facilities.

Radio-phonograph combinations

For the years 1968-71, imports of radio-phonograph combinations fluctuated between 1.6 million units, valued at \$30 million, in 1968 and 1.5 million units, valued at \$54 million, in 1971 (table 3). However, in 1972 imports sharply increased to 2.2 million units, valued at \$87 million (table 3).

Table 6 shows the rates of duty and value of U.S. imports during the period 1960-72. In contrast with unit values of shipments by U.S. producers of radio-phonograph combinations which decreased during the

^{1/} U.S. Customs classifies unfinished radios and/or subassemblies that will operate when power is applied in the same TSUS category as finished radios.

period 1968-72 (from \$190 to \$147), the unit value of imported radio-phonograph combinations rose from \$19 in 1968 to \$39 in 1972, a percentage increase of 105. This implies that more high quality radio-phonograph combinations are imported now than previously.

Imports of radio-phonograph combinations under TSUS item 807.00 in 1968 were valued at \$3.5 million (table 8). In 1969, the value dropped by nearly one-half to \$1.8 million, but increased steadily to \$3.0 million, in 1971, and sharply increased to \$6.0 million, in 1972. As in the case of radio receivers, it is believed that the large increase in 1972 was, to some extent, due to U.S. producers making complete radio-phonograph combinations and subassemblies in offshore facilities. The value of U.S. components decreased irregularly from \$315,000 in 1968 to \$111,000 in 1971, but increased sharply to \$519,000 in 1972.

Loudspeakers

U.S. imports of loudspeakers have steadily increased from 23 million units, valued at \$16 million in 1968, to 53 million units, valued at \$65 million, in 1972 (table 4). In 1960, the first year in which statistical data were collected on loudspeakers, imports were only 601,000 units, valued at \$1.7 million. Rates of duty and the value of U.S. imports for the period 1960-72 are shown in table 7.

Japan is, by far, the major source of imports of loudspeakers by the United States, having supplied on the average about 90 percent of all U.S. imports of loudspeakers since 1967. However, Japan's exports

to the United States are concentrated in the smaller-sized speakers (2 to 6 inches in diameter) which can be shipped at the lower "per hundredweight" freight rate (rather than by volume) and U.S. imports of loudspeaker systems are relatively small.

From 1968 to 1972, imports of loudspeakers under TSUS item 807.00 have been less than 4 percent of total loudspeaker imports in terms of value (table 8). Nevertheless, the value of these 807.00 imports has increased from \$164,000, in 1967 to \$1.7 million, in 1972. The great bulk of these imports during this period came from Canada and Mexico and are small-sized loudspeakers. The value of U.S. components has increased from \$43,000 in 1968 to \$737,000 in 1972.

Emerson Electric Co.

Emerson Electric Co., of which Fisher Electronics, Inc. is a wholly-owned subsidiary, is a multinational conglomerate with headquarters in St. Louis, Mo. At the end of fiscal 1972 (September 30), it operated 53 domestic and 17 foreign manufacturing plants located in 18 states, Puerto Rico, and nine foreign countries. The average number of employees was 25,900 and the net sales were \$765 million for fiscal 1972. Commercial and industrial products in that year comprised 69 percent of sales, consumer products accounted for 30 percent, and the remaining 1 percent consisted of government and defense products. A simplified organizational chart of Emerson Electric Co. is shown on the following page.

* * * * *

Fisher Electronics, Inc.

The firm

The company was established in the 1930's by Mr. Avery Fisher for the purpose of manufacturing electronic products developed by Mr. Fisher. It was then called the Philharmonic Co. and was located in New York City. During the second World War, Philharmonic was engaged in defense production but resumed the manufacture of consumer electronics products in 1946 under the name of Fisher Radio Corp. which was then located on Long Island. In 1962 production was transferred to a new facility in Milroy, Pa.

Fisher Radio Corp. was purchased by Emerson Electric Co. on July 25, 1969 for 569,520 shares of Emerson common stock, which was valued at approximately \$29 million. The corporation was reorganized into two operations--the Fisher Radio Div., Emerson Electric Co., in Long Island City, N.Y., and Fisher Electronics, Inc., in Milroy, Pa.

* * *

The Fisher Radio Division in Long Island City, N.Y., houses the marketing, engineering, financial, service, and some of the corporate offices of Fisher Electronics, Inc. * * *

Emerson Electric of Hong Kong, another wholly-owned subsidiary of Emerson Electric, was purchased in * * * * *

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STATISTICAL APPENDIX

Table 1.--Home-type radio receivers: U.S. factory shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1968-72

Year	U.S. factory shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity (thousands of units)					
1968-----	7,455	28,346	385	35,416	80
1969-----	5,940	34,677	329	40,288	86
1970-----	4,359	31,150	245	35,264	88
1971-----	2,570	30,988	224	33,334	93
1972-----	<u>1/</u> 1,800	42,372	248	<u>1/</u> 43,924	<u>1/</u> 96
Value (millions of dollars)					
1968-----	127	225	5	347	65
1969-----	102	306	5	403	76
1970-----	79	305	4	380	80
1971-----	58	307	3	362	85
1972-----	<u>1/</u> 45	405	4	<u>1/</u> 446	<u>1/</u> 91
Unit value (dollars)					
1968-----	17	8	13	<u>2/</u>	<u>2/</u>
1969-----	17	9	15	<u>2/</u>	<u>2/</u>
1970-----	18	10	16	<u>2/</u>	<u>2/</u>
1971-----	23	10	13	<u>2/</u>	<u>2/</u>
1972-----	<u>1/</u> 25	10	16	<u>2/</u>	<u>2/</u>

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

2/ Not applicable.

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

Table 2.--Home-type radio receivers, AC-operated, solid-state AM/FM and FM types: U.S. factory shipments, imports for consumption, and apparent consumption, 1970-72

Year	U.S. factory shipments	Imports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity (thousands of units)				
1970-----	720	3,819	4,539	84
1971-----	429	3,250	3,679	88
1972-----	<u>1/</u> 250	3,586	<u>1/</u> 3,951	<u>1/</u> 91
Value (millions of dollars)				
1970-----	20,989	86,274	107,263	80
1971-----	16,682	78,920	95,602	83
1972-----	<u>1/</u> 12,000	106,736	<u>1/</u> 118,736	<u>1/</u> 90
Unit value (dollars)				
1970-----	29	23	24	<u>2/</u>
1971-----	39	24	26	<u>2/</u>
1972-----	48	30	30	<u>2/</u>

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

2/ Not applicable.

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

Table 3.--Radio-phonographs: U.S. factory shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1968-72

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity (thousands of units)					
1968-----	1,982	1,611	19	3,574	45
1969-----	1,848	1,658	28	3,478	48
1970-----	1,660	1,579	20	3,219	49
1971-----	1,761	1,531	27	3,265	47
1972-----	<u>1/</u> 1,500	2,213	40	<u>1/</u> 3,673	<u>1/</u> 60
Value (millions of dollars)					
1968-----	377	30	3	404	7
1969-----	326	36	4	358	10
1970-----	274	45	3	316	14
1971-----	258	54	4	308	18
1972-----	<u>1/</u> 220	87	6	<u>1/</u> 301	<u>1/</u> 29
Unit value (dollars)					
1968-----	190	19	158	<u>2/</u>	<u>2/</u>
1969-----	176	22	143	<u>2/</u>	<u>2/</u>
1970-----	165	28	150	<u>2/</u>	<u>2/</u>
1971-----	147	35	148	<u>2/</u>	<u>2/</u>
1972-----	147	39	150	<u>2/</u>	<u>2/</u>

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

2/ Not applicable.

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

Table 4.--Loudspeakers: U.S. factory shipments, imports for consumption exports of domestic merchandise, and apparent consumption, 1968-72

Item	1968	1969	1970	1971	1972
Shipments ^{1/}					
1,000 dollars--	101,749	113,028	105,684	114,735	^{2/} 108,000
Imports:					
Quantity---1,000 units--	23,061	30,787	30,802	34,697	53,459
Value----1,000 dollars--	16.298	26.086	32,908	40,348	65,055
Unit value (dollars)-----	0.71	0.84	1.07	1.16	1.22
Exports ^{1/}					
1,000 dollars--	6,337	9,138	10,496	15,211	23,708
Consumption ^{1/}					
1,000 dollars--	111,710	129,976	128,096	139,872	^{2/} 149,307
Ratio of imports to con-					
sumption-----percent--	15	20	26	29	^{2/} 43

^{1/} Data in shipments and exports are available only in terms of value and may be overstated somewhat owing to the inclusion of certain parts.

^{2/} Estimated by the U.S. Tariff Commission.

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

Table 5.--Radio receivers: U.S. rates of duty and imports for consumption, 1960-72 ^{1/}

Year	Rate of duty		U.S. imports	
	Percent ad valorem		1,000 dollars	
1960-----	12.5		67,663	
1961-----	12.5		81,564	
1962-----	12.5		88,462	
1963-----	12.5		86,438	
1964-----	12.5		92,964	
1965-----	12.5		125,016	
1966-----	12.5		144,107	
1967-----	12.5		172,135	
1968-----	^{2/} 12	^{3/} 11	^{2/} 229,454	^{3/} 7,563
1969-----	^{2/} 11.5	^{3/} 10	^{2/} 316,208	^{3/} 2,559
1970-----	^{2/} 11	^{3/} 8.5	^{2/} 324,233	^{3/} 1,951
1971-----	^{2/} 10.4	^{3/} 7	^{2/} 332,861	^{3/} 1,462
1972-----	^{2/} 10.4	^{3/} 6	^{2/} 432,658	^{3/} 1,151

^{1/} U.S. imports of radio receivers were not separately reported in official statistics prior to 1960.

^{2/} Solid-state (tubeless) units.

^{3/} Other than solid-state units.

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

Table 6.--Radio-phonograph combinations: U.S. rates of duty and imports for consumption, 1960-72 ^{1/}

Year	Rate of duty	Imports
	Percent ad valorem	1,000 dollars
1960-----	13.75	8,643
1961-----	13.75	12,940
1962-----	13.75	14,284
1963-----	13.75	11,282
1964-----	13.75	10,571
1965-----	13.75	11,890
1966-----	13.75	16,771
1967-----	13.75	25,731
1968-----	12	29,712
1969-----	11	36,313
1970-----	9.5	44,686
1971-----	8.0	53,616
1972-----	6.5	87,467

^{1/} U.S. imports of radio-phonograph combinations were not separately reported in official statistics prior to 1960.

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

Table 7.--Loudspeakers: U.S. rates of duty and imports
for consumption, 1960-72 ^{1/}

Year	Rate of duty	Imports
	Percent ad valorem	1,000 dollars
1960-----	13.75	1,747
1961-----	13.75	2,320
1962-----	13.75	2,994
1963 ^{2/} -----	15	3,495
1964-----	15	4,744
1965-----	15	6,757
1966-----	15	10,358
1967-----	15	10,557
1968 ^{3/} -----	13	16,298
1969 ^{3/} -----	12	26,086
1970 ^{3/} -----	10	32,908
1971 ^{3/} -----	9	40,348
1972 ^{3/} -----	7.5	65,055

^{1/} U.S. imports of loudspeakers were not separately reported in official statistics prior to 1960.

^{2/} Duty applicable to loudspeakers increased as a result of adoption of the TSUS, Aug. 31, 1963.

^{3/} Rate of duty was reduced.

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

Table 8.--U.S. imports: Total value of imports under TSUS item 807.00, and value of U.S. components imported under TSUS item 807.00 for home-type radio receivers, radio-phonograph combinations, and loudspeakers

Item	Value (1,000 dollars)				
	1968	1969	1970	1971	1972
Radio receivers:					
Total 807.00-----	20,715	43,229	40,564	42,814	66,679
U.S. components-----	3,228	6,322	6,003	8,898	11,252
Radio-phonograph combinations:					
Total 807.00-----	3,572	1,828	2,901	2,998	5,982
U.S. components-----	315	114	291	111	519
Loudspeakers:					
Total 807.00-----	164	299	534	1,171	1,920
U.S. components-----	43	294	270	506	737

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

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