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**UNITED STATES TARIFF COMMISSION**

**PHONOGRAPHS AND RADIO-PHONOGRAPH AND  
OTHER COMBINATIONS:  
WARWICK ELECTRONICS, INC.  
ZION, ILL.**

**Report to the President on  
Worker Investigation No. TEA-W-96  
Under Section 301 (c)(2) of the Trade Expansion Act of 1962**



**TC Publication 409  
Washington, D. C.  
July 1971**

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.



## Introduction

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 results of an investigation made under section 301(c)(2) of the act in response to a petition filed by a group of workers.

On June 1, 1971, the International Union of Electrical, Radio and Machine Workers filed a petition for a determination of eligibility to apply for adjustment assistance on behalf of the employees at the Zion, Ill., plant of Warwick Electronics, Inc. The Commission instituted the investigation (TEA-W-96) on June 16, 1971, to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with the phonographs and radio-phonograph and other combinations produced at Warwick's Zion plant 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 at such plant. <sup>1/</sup>

Public notice of the investigation was given in the Federal Register (36 F.R. 11886) on June 22, 1971. A public hearing requested by the petitioner was held July 7.

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<sup>1/</sup> The Commission deleted television receivers from among the articles listed in the petition because the production of television receivers had been discontinued at the Zion plant more than a year ago. Under the Rules of Practice and Procedure of the U.S. Tariff Commission, "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..." (subpt. D, sec. 206.17).

The information contained herein was obtained principally from the Commission's files and through field interviews with officials of Warwick Electronics, Inc., and Local Union 1022, of the International Union of Electrical, Radio and Machine Workers.

#### Finding of the Commission

On the basis of its investigation, the Commission 1/ finds (Commissioner Moore dissenting) that articles like or directly competitive with phonographs and radio-phonograph and radio-phonograph-tape player combinations produced by the Zion, Ill., manufacturing plant of Warwick 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 such plant. 2/

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1/ Chairman Bedell did not participate in the decision.

2/ Commissioner Young concurs in the result.

## Views of Commissioner Sutton

This investigation relates to a petition filed on behalf of workers at the plant of Warwick Electronics, Inc., located at Zion, Illinois. In the recent time period of concern to the Commission, the plant produced phonographs, radio-phonograph combinations, and radio-phonograph-tape player combinations. The petitioning workers claim that the principal cause of recent unemployment has been Warwick's imports of radio chassis which have displaced chassis produced at Zion in the radio-phonographs and radio-phonograph-tape combinations assembled there.

I have made a negative determination in this investigation because, in my view, the increased imports of consumer electronic products that are like or directly competitive with those produced at Zion have not resulted "in major part" from trade-agreement concessions. U.S. rates of duty that are applicable to imports of such products have been reduced substantially during the course of the trade agreements program. The rates of duty that were applicable before any trade agreements were negotiated were 30 percent or 35 percent ad valorem, the particular rate depending on the product involved; the current rates range from 6 percent to 10.4 percent ad valorem. The bulk of the duty reductions, however, occurred two decades or more ago, long before the articles involved became the important import articles they are today; these concessions could not have been the major cause of the recent increase in imports. The consumer electronic products involved were subject to trade-agreement concessions in the Kennedy Round negotiations.

The duty reductions resulting therefrom, staged over a 5-year period, have not resulted in marked changes in U.S. rates of duty. Hence, although imports of most of these articles have increased in recent years, I have concluded that the increased trade could not have been caused in major part by trade-agreement concessions.

For the foregoing reasons, I have made a negative determination in this investigation.



## Views of Commissioner Leonard

My determination in this investigation is in the negative because all of the conditions imposed by section 301(c)(2) of the Trade Expansion Act of 1962 have not been satisfied.

The petitioning workers have been employed at the Zion, Ill., plant of Warwick Electronics, Inc., in the assembly of phonographs and radio-phonograph combinations, some of which included tape recorders or tape players and/or clocks. Many parts used in the assembly operations are purchased; radio chassis, phonograph amplifier circuit boards, and plastic cabinets for portable phonographs are produced at the plant. Articles like or directly competitive with the products of the Zion plant include phonographs, phonograph amplifier circuit boards, record changers, turntables, radio receivers, radio chassis, tape recorders, tape players, and various combinations thereof.

In a previous investigation under the Trade Expansion Act, 1/ I held that increased imports of such articles were not a result "in major part" of concessions granted under trade agreements.

As I indicated in the Emerson case, the U.S. rates of duty applicable to imports of the cited products have been reduced substantially-- from statutory rates of 30 percent and 35 percent ad valorem prior to trade-agreement concessions to current rates of 6 percent to 10.4 percent ad valorem. The major concessions, however, accounting in most instances

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1/ Television Receivers, Radios, and Phonographs: Former Workers at Emerson Television and Radio Company . . . , Investigation No. TEA-W-77, TC Publication 380, April 1971, pp. 8-9.

for about two-thirds of the total duty reductions, were granted more than two decades ago--before such products had become significant items of trade. No evidence has been produced to overcome the presumption that those early concessions are not the major cause of increasing imports as much as 20 years later. But what of more recent concessions, namely, the Kennedy Round concessions which began to be effective in 1968?

Imports of the like or directly competitive articles in this investigation began to increase in quantity in the late fifties and early sixties before the 1968 concessions and, of course, could not have been caused by concessions that followed by several years. Imports since the Kennedy Round concessions first took effect have continued to increase. Certainly lower duties do not inhibit import growth, but one to two percentage point reductions a year in duties on the articles in the instant investigation did not in major part cause the increased imports of 1968 and later. Rather the duty cuts were just one of a combination of factors that contributed to the strengthening of the market position that imports had attained prior to the recent concessions.

Thus, failing to find that one of the conditions necessary for an affirmative determination--increased imports in major part the result of concessions under trade agreements--is met by the facts at hand, I must make a negative determination in this investigation.

### Dissenting Views of Commissioner Moore

This investigation relates to a petition for adjustment assistance filed on behalf of employees at the Zion, Ill., plant of Warwick Electronics, Inc. pursuant to section 301(c)(2) of the Trade Expansion Act of 1962. For the past 18 months the Zion plant of Warwick has been engaged in the production of audio electronic products including radio receiver chassis, phonographs and radio-phonograph combinations (including units with clocks and/or tape equipment). According to testimony by the petitioner, the decline in employment at the plant during the past year occurred primarily because the company has begun importing radio chassis which it incorporates in its combination units rather than chassis assembled at the Zion plant.

Under section 301(c)(2) of the Trade Expansion Act of 1962, four requirements must be met for the Commission to make an affirmative determination:

- (1) Imports of an article like or directly competitive with an article produced by the petitioning workers must be increasing;
- (2) The increase in imports must be a result in major part of trade-agreement concessions;
- (3) The workers concerned must be unemployed or underemployed, or threatened with unemployment or underemployment; and
- (4) The increased imports must be the major factor in causing or threatening to cause the unemployment or underemployment.

In my opinion, each of the four conditions has been met in this case. I have, therefore, made an affirmative determination. My views with respect to each of the four criteria are as follows.

Increased imports

This requirement of the Trade Expansion Act clearly has been met. U.S. imports of most consumer audio electronic products increased greatly from 1966 to 1970, and generally supplied large and increasing proportions of U.S. consumption. For example, total U.S. imports of phonographs, radio receivers, radio-phonographs, and tape equipment were two and a half times larger in value in 1970 than in 1966; the share of the value of U.S. consumption of such products supplied by imports rose from 25 percent in 1966 to more than fifty percent in 1970.

As noted by the petitioners, moreover, Warwick itself began in 1970 to import radio chassis for assembly into its combination units produced at its Zion plant. The company's imports of such chassis have continued into 1971, \* \* \*.

In major part

The second requirement of the act is that increased imports of the competitive items must be a result in major part of trade-

agreement concessions. In an earlier case, 1/ I found that increased imports of radios, phonographs, and tape players and recorders have resulted in major part from trade-agreement concessions. As I stated then, the rates of duty applicable to such products and those under consideration in this case were reduced from 35 percent ad valorem in 1930 to various levels in 1970, ranging from 7 percent to 11 percent ad valorem. All of the reductions in duty on these articles resulted from trade-agreement concessions, except an insignificant reduction in 1963 when the Tariff Schedules of the United States (TSUS) were placed in effect. The duty savings on these imported audio products resulting from trade-agreement concessions have provided important price advantages in the U.S. market. Clearly, imports of such articles would not have approached the present volume, had it not been for such concessions.

With respect to radio chassis now being imported by Warwick, trade-agreement concessions have accorded the imported article a decisive cost advantage. \* \* \*. Thus, in the absence of trade-agreement concessions, Warwick would find the imported chassis more costly than a chassis produced at Zion.

While other factors, such as differentials in wage rates, costs of production between the United States and Japan, and differing

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1/ 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, April 1971, pp. 4-5.

technologies of the United States and Japan, must be and have been considered, it is clear that the increased imports have resulted in major part from trade-agreement concessions. Some may contend that the differential in wage rates is more important than trade-agreement concessions as a factor in increased imports of the items under consideration herein. Although full data respecting unit labor costs in Japan and in the United States are not available, information obtained during this investigation shows that the difference between the United States and Japan in direct labor costs in the assembly of a typical radio chassis is less than one-fourth of the total duty reduction resulting from trade-agreement concessions.

#### Unemployment or underemployment

This statutory requirement has been met. Employment of production and related workers at the Zion plant in the production of consumer audio products, which began in 1968, \* \* \* declined materially. \* \* \*. Moreover, Warwick plans to close the Zion plant manufacturing activities in late 1971. A significant number of workers are unemployed or are threatened with unemployment as required by the statute.

#### Major factor

The final requirement of the statute is that concession-generated increased imports must have been the major factor in causing or threatening to cause the unemployment or underemployment of the workers

involved. In this case, a direct relationship between increased imports of radio chassis and the unemployment of a significant number of the workers involved is clear. Warwick, faced with the need to supply audio products to its major customer, Sears, Roebuck and Co., at prices competitive with imports, reduced its costs by importing radio chassis rather than assembling them at Zion. The unemployment resulting directly from this shift to imported components has adversely affected a significant number or proportion of the workers at the Zion plant. Accordingly, I have concluded that, under the Trade Expansion Act, increased imports have been the major factor causing the present and future unemployment of the workers at the Zion, Ill., plant of Warwick Electronics, Inc.

#### Conclusion

Since each of the four criteria of the Trade Expansion Act of 1962 have been met, I believe an affirmative determination is required in this case.





INFORMATION OBTAINED IN THE INVESTIGATION

Description of the Articles Under Investigation

The Zion, Ill., plant of Warwick Electronics, Inc., produces phonographs and radio-phonograph combinations, including units with clock and/or tape recorder or tape player. All the products are types for home entertainment use.

A phonograph is an instrument for reproducing and amplifying a channel of sound generated from the track on a record and directing that channel of sound to a speaker or speaker system. In stereophonic phonographs, two or more channels of sound are involved, together with a speaker system. In its basic form, a phonograph consists of a sound pickup, a tone arm, a turntable (including a motor), an amplifying system, and a speaker or speaker system. Phonographs may also be called record players.

A radio receiver is an apparatus consisting of a tuner and an amplifier, combined in one cabinet, that reproduces sound originally transmitted by a radio station. The tuner accepts the transmitted radio wave, converts it into a weak audio signal, and the amplifier strengthens the signal sufficiently to energize a speaker or speaker system.

A tape player is a device for reproducing and amplifying a channel of sound that has been magnetically recorded on specially coated tape. One, two, four, or eight tracks of sound are stored on tapes. In stereophonic tape players, two tracks of sound are reproduced

simultaneously, each directed to a separate speaker. A tape recorder is an instrument that is capable of recording sound on tape and reproducing sound from tape.

Two or more of the aforementioned products may be combined in a single cabinet; such a unit is called a combination and may be made for use as a portable unit, as a compact or table model, or as a console (free-standing unit). A combination may utilize one amplifying unit and one speaker system for all its functions.

All the articles produced by the Zion plant reproduce sound electronically for home entertainment use. In such uses they compete with a variety of articles. Although radio receivers, tape players, and tape recorders are not made as separately cased, finished units by the Warwick plant at Zion, they are included in the investigation because they compete, either alone or along with other articles, with the products of the Zion plant.

Audio products are those for aural use only, as opposed to audio-visual products, which are to be viewed as well as heard. The articles discussed herein are audio products.

## U.S. Tariff Treatment

Under the Tariff Act of 1930, phonographs were specified under paragraph 1542 as dutiable at 30 percent ad valorem; radio receivers, radio-phonograph combinations, and tape players, tape recorders, and combinations thereof were classifiable in a group of electrical articles under paragraph 353 and were dutiable at 35 percent ad valorem from June 18, 1930, through December 31, 1938.

Pursuant to successive trade-agreement concessions beginning in 1939, these rates have been reduced substantially. The rates of duty currently in effect on these articles range from 6 percent ad valorem to 10.4 percent ad valorem. The current rates reflect the fourth stage of the five-stage concession granted in the Kennedy Round negotiations under the General Agreement on Tariffs and Trade (GATT). The final stage of that concession is scheduled to become effective on January 1, 1972.

Under the Tariff Schedules of the United States (TSUS), these articles are provided for as follows: Radio receivers including radio chassis, items 685.23 and 685.25; radio-phonograph combinations, item 685.30; phonographs, record players, record changers, turntables, and parts, including phonograph amplifier circuitry, item 685.32; tape recorders, item 685.40; combinations with tape recorders, item 685.50; and tape players (including combinations containing tape players), item 678.50.

The effective dates of the various rates of duty applicable to the aforementioned articles under the Tariff Act of 1930, as amended, are given in the table below.

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

(In percent ad valorem)

Effective date	Radio receivers		Radio-phonograph combinations	Phonographs (item 685.32)	Recorders (item 685.32)	Tape recorders (item 685.40)	Tape recorders (item 685.50)
	Solid-state (item 685.23)	Tube-type (item 685.25)	(item 685.30)				
June 18, 1930--	35	35	30	35	35	35	35
Jan. 1, 1939--	25	25	1/	25	27.5	25	25
Jan. 1, 1948--	15	15	15	15	15	15	15
June 6, 1951--	12.5	13.75	1/	13.75	13.75	1/	13.7
July 1, 1962--	1/	1/	13.5	12.5	12.5	1/	12.5
July 1, 1963--	1/	1/	12	11.5	11.5	1/	11.5
Aug. 31, 1963--	12.5	12.5	13.75	2/ 11.5	1/	15	2/10
Jan. 1, 1968--	12	11	12	10	10	13	9
Jan. 1, 1969--	11.5	10	11	9	9	12	8
Jan. 1, 1970--	11	8.5	9.5	8	8	10	7
Jan. 1, 1971--	10.4	7	8	6.5	6.5	9	6
Jan. 1, 1972--	1/	6	6.5	5.5	5.5	7.5	5

1/ No change.

2/ This rate, established with the adoption of the Tariff Schedules of the United States, represents an average of the rates to which the products included hereunder were previously subject.

Some radio receivers, phonographs, and tape players and recorders have been entered under item 807.00, which provides that for imported articles assembled in whole or in part of U.S. fabricated components the duty may be assessed only on the value added abroad, thus permitting the U.S. components to be entered duty free.

Television receivers, produced by the Zion plant prior to 1970, received the same tariff treatment as radio receivers prior to June 30, 1956, at which time they were specifically dutiable at 11.5 percent ad valorem; this rate has been gradually reduced to the current 6 percent ad valorem.

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

Data on U.S. consumption, shipments, and exports of phonographs (including record changers and turntables), radio receivers, radio-phonographs, and tape players and recorders are given in appendix tables 1, 2, 3, and 4, respectively. These data indicate the magnitude and trend of consumption, shipments, and exports of the types of products made by Zion, as well as competitive, but not necessarily identical, products.

Consumption of phonographs, record changers, and turntables declined in value from \$271 million in 1966 to \$236 million in 1967 and then rose to an estimated \$280 million in 1970. Domestic shipments in 1966-70 accounted for by far the principal share of the value of consumption (82 percent in 1970), but only a major share of the quantity (54 percent in 1970). Exports were small (table 1).

Consumption of radio receivers fluctuated in 1966-70; the supply consisted mainly and increasingly of imports. Exports were small (table 2).

Consumption of radio-phonograph combinations in 1966-70 rose from 2.5 million units, valued at \$326 million, in 1966 to 3.6 million units, valued at \$405 million, in 1968, then declined somewhat to an estimated 3.4 million units, valued at an estimated \$370 million, in 1970. Domestic shipments accounted for about two-thirds of the units consumed in 1966, but only for somewhat over half in 1967-70; domestic shipments accounted for the preponderant share of the value of consumption, partly because they included most of the large, more expensive console types being supplied. Exports were small (table 3).

As consumption of tape players and recorders, including imported combinations containing tape players, almost tripled in value in 1966-70, domestic shipments declined sharply from 41 percent of the supply to 9 percent. Exports are believed to have been nil or negligible in 1966-70 (table 4).

#### U.S. Imports

Data on U.S. imports of phonographs (including record changers and turntables), radio receivers, radio-phonographs, and tape players and recorders (including combinations with tape players) are presented in tables 1, 2, 3, and 4, respectively. The aggregate value of imports of this group was about \$735 million in 1970, representing a rise of 155 percent from 1966. Imports of tape players and recorders and combinations thereof rose most rapidly; the import value of such products in 1970 was almost 4.5 times that in 1966. The import value of radio receivers increased by 115 percent and that of radio-phonograph combinations, by 165 percent, during the same years. Phonographs, et cetera, were the only items for which the import value was less in 1970 than in 1966 (although it increased in 1967-70).

For certain products in the group, the rapid growth of the value of imports was accompanied by a much slower increase in the quantity, indicating that the composition of imports shifted toward more expensive items. While in 1966-70 the total value of imports of radio receivers increased by 115 percent, quantitatively the increase was only 25 percent. The same applies to imports of radio-phonograph combinations, the value of which increased by 165 percent and the quantity, by only 91 percent.

The ratios of imports to consumption in terms of value in 1966 and 1970 and in terms of quantity in 1970 are presented in the following table.

Certain consumer electronic products: Ratio (percent) of imports to consumption, 1966 and 1970

Item	:Phonographs, : record : changers, and : turntables :	: Radio : receivers:	: Radio- : phonograph : combina- : tions :	:Tape players, :recorders, and : combinations : with players
Based on value:	:	:	:	:
1966-----	20 :	41 :	5 :	59
1970-----	18 :	80 :	12 :	91
Based on quantity:	:	:	:	:
1966-----	<u>1/</u> 45 :	65 :	33 :	<u>1/</u> 92
1970-----	46 :	88 :	46 :	96
:	:	:	:	:

1/ Applies to 1968; data for 1966 and 1967 are not available.

For each product group above, except phonographs, et cetera, imports supplied a fast-increasing proportion of the value of U.S. consumption during 1966-70. For phonographs and radio-phonograph combinations, the ratio of imports to consumption in 1970 was still significantly higher in terms of quantity than in terms of value, indicating much greater market penetration by imports of low-value items than by those of high-value items.

Japan has been the largest single source of most consumer electronic items. The United Kingdom, however, has been by far the principal source of record changers. Console radio-phonograph combinations are imported chiefly from Canada and West Germany.

For a comparison of the tariff-rate histories and the imports of various consumer electronic products, see tables 5 through 8.

Included in the imports discussed above were articles entered under the 807.00 provisions of the TSUS. Such imports, compared with total imports of the same products, are shown in the table below. In 1970 the portion of total imports accounted for by 807.00 imports declined for radio receivers to 14 percent from 17 percent in 1969, and for phonographs to 28 percent from 46 percent. Radio-phonograph combinations entered under 807.00 accounted for 6 percent of total imports in 1970, compared with 5 percent in 1969 and 12 percent in 1967 and 1968. Imports of tape players and recorders under 807.00 accounted for less than 1 percent of total imports of these items in 1970.

Selected consumer electronic products: Value of 807.00 imports  
and of total imports, 1967-70

(In millions of dollars)

Item	1967	1968	1969	1970
Radio receivers:				
Total imports-----	163.4	225.1	305.5	305.2
807.00 imports, total-----	18.7	27.9	51.1	42.0
U.S. value-----	3.8	4.5	8.5	6.2
Foreign value added-----	14.9	23.4	42.7	35.8
Phonographs and record changers:				
Total imports-----	37.8	42.6	47.3	50.0
807.00 imports, total-----	14.1	20.2	21.8	13.8
U.S. value-----	2.7	3.6	3.5	2.3
Foreign valued added-----	11.4	16.7	18.3	11.4
Radio-phonograph combinations:				
Total imports-----	25.7	29.7	36.3	44.7
807.00 imports, total-----	3.1	3.6	1.8	2.9
U.S. value-----	.2	.3	.1	.3
Foreign value added-----	2.9	3.3	1.7	2.6
Tape players and recorders:				
Total imports-----	104.7	180.2	273.4	335.3
807.00 imports, total-----	<u>1/</u>	<u>1/</u>	<u>1/</u>	2.2
U.S. value-----	<u>1/</u>	<u>1/</u>	<u>1/</u>	.3
Foreign value added-----	<u>1/</u>	<u>1/</u>	<u>1/</u>	1.9

1/ Not available.

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



## U.S. Producers

Currently, about 20 domestic firms account for virtually all U.S. production of the consumer electronic products considered here. This number has decreased from about 30 in 1965 through attrition, mergers, and acquisitions. Ten firms, according to trade information, have accounted for a substantial part of the domestic production of radio receivers, phonographs, et cetera, tape players and recorders, and various combinations of such products. Additional domestic production of such articles by several other firms consists of units assembled for the most part in foreign establishments and generally subjected to only minor processing in domestic establishments.

Most of the principal U.S. producers in 1970 were situated in the North Central States and the Middle Atlantic States. Most of the domestic producers are large and diversified--in addition to the consumer electronic products, their production includes complex electronic products of advanced technology for use by industry and the military. Often, however, consumer electronic products are the most important product lines.

Although some of the domestic firms produce a portion of their requirements of electronic components and parts and cabinets, all of them purchase a variety of components and parts from a large number of small companies.

Warwick Electronics, Inc.

Warwick Electronics, Inc., was founded in 1932 as a partnership to manufacture radios. In 1938 the firm was incorporated as the Warwick Manufacturing Co., and in 1963 it assumed its present name. Through acquisitions and the building of new facilities in the fifties and sixties, the company broadened its product line to include several consumer electronics articles, including television receivers, console stereo and portable phonographs, electronic organs, and stereo components such as tuners, amplifiers, tape decks, and record changers.

\* \* \*

Warwick is presently a diversified, multinational corporation with domestic operations in several States and foreign operations in Mexico. The company also established a buying office in Tokyo, Japan, in 1967 under the name of Warwick Electronics International, Ltd. Warwick's headquarters are in Niles, Ill., in the greater Chicago area. In 1958 Sears, Roebuck and Co. purchased a majority interest in Warwick, and in 1966 Whirlpool Corp. purchased the majority interest from Sears. At present, Whirlpool and Sears jointly own 83 percent of Warwick's shares. Warwick's common stock is traded publicly in over-the-counter markets.

Warwick is one of the larger domestic electronics companies, with total net sales in 1970 of \$163 million. The company showed net losses of \$10.9 million in 1970 and \$2.8 million in 1969. As a result of a 1970 agreement, Sears now purchases Warwick's products

when they are produced rather than when they are shipped. This change reportedly has a salutary effect on Warwick's 1971 profit potential.

#### The Zion plant

Warwick purchased the original two buildings of the facilities at Zion, Ill., in 1952 for the manufacture of television receivers. The facilities were subsequently expanded to the present 10 interconnecting buildings \* \* \*. Production of color sets at the plant was terminated in mid-1968, and that of black-and-white sets, in late 1969. The television product line at Zion was replaced by console stereo phonographs in 1968 and portable phonographs in late 1969; both have also been combined variously with radios, clocks, tape recorders, and tape players. The Zion plant performs assembly operations predominantly, but does some manufacturing of electronic components (principally radio receiver chassis and phonograph amplifier circuitry) going into the finished product.

Warwick is closing down the Zion plant. Most manufacturing activities are **s**cheduled to cease on December 3, 1971, and the plant is scheduled to close down completely in July 1972.

APPENDIX A

TABLES

Table 1.--Phonographs, record changers, and turntables: U.S. shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1966-70

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

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1966-----	4,686	<u>1/</u>	35	<u>1/</u>	<u>1/</u>
1967-----	4,285	<u>1/</u>	34	<u>1/</u>	<u>1/</u>
1968-----	4,748	<u>3/</u> 820	41	<u>8/</u> 527	45
1969-----	5,083	4,260	45	9,298	46
1970-----	<u>2/</u> 5,300	4,451	34	<u>2/</u> 9,700	46
Value					
1966-----	220	<u>3/</u> 54	3	271	20
1967-----	201	<u>3/</u> 38	3	236	16
1968-----	223	43	3	263	16
1969-----	218	47	3	262	18
1970-----	<u>2/</u> 230	50	2	<u>4/</u> 280	18

1/ Not available.

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

3/ Includes parts of phonographs, record changers, and turntables.

4/ Derived partly from rounded figures.

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

Table 2.--Radio receivers: U.S. shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1966-70

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

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1966-----	13,536	24,950	218	38,268	65
1967-----	9,362	23,579	254	32,687	72
1968-----	7,455	28,346	385	35,416	80
1969-----	6,008	34,677	329	40,356	86
1970-----	<u>1/</u> 4,600	31,151	245	<u>2/</u> 35,500	88
Value					
1966-----	210	142	4	347	41
1967-----	151	164	4	311	53
1968-----	127	225	5	347	65
1969-----	104	306	5	405	75
1970-----	<u>1/</u> 80	305	4	<u>2/</u> 380	80

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

2/ Derived from rounded figures.

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

Note.--Includes only home-type radio receivers used primarily for entertainment; excludes automobile radios, transceivers, and the like.

Table 3.--Radio-phonograph combinations: U.S. shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1966-70

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

Year	Shipments	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity					
1966-----	1,702	828	17	2,513	33
1967-----	1,730	1,315	18	3,027	43
1968-----	1,982	1,611	19	3,574	45
1969-----	1,886	1,658	28	3,516	47
1970-----	<u>1/</u> 1,850	1,579	20	<u>2/</u> 3,400	46
Value					
1966-----	312	17	2	326	5
1967-----	324	26	3	347	7
1968-----	379	30	3	405	7
1969-----	337	36	4	369	10
1970-----	<u>1/</u> 330	45	3	<u>2/</u> 370	12

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

2/ Derived partly from rounded figures.

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

Note.--Shipments include units with built-in tape recorders and tape players, whereas imports do not because such data is not separately available.

Table 4.--Tape players and recorders: U.S. shipments, imports for consumption, and apparent consumption, 1966-70

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

Year	Shipments	Imports <sup>1/</sup>	Apparent consumption	Ratio (percent) of imports to consumption
Quantity				
1966-----	608	<u>2/</u>	<u>2/</u>	<u>2/</u>
1967-----	846	<u>2/</u>	<u>2/</u>	<u>2/</u>
1968-----	679	7,737	8,416	92
1969-----	650	11,493	12,143	95
1970-----	<u>3/</u> 620	13,211	13,831	96
Value				
1966-----	52	75	127	59
1967-----	50	105	155	68
1968-----	47	180	227	79
1969-----	37	273	310	88
1970-----	<u>3/</u> 35	335	370	91

<sup>1/</sup> Includes combinations containing tape players.

<sup>2/</sup> Not available.

<sup>3/</sup> Estimated by the staff of the U.S. Tariff Commission.

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

Note.--Data on exports are not shown here, as they apparently are not comparable with those on shipments and imports; exports are believed to have been nil or negligible during 1966-70.



Table 5.--Radio Receivers: U.S. rates of duty and imports for consumption, 1930-70

Year	Rate of duty	Imports	Year	Rate of duty	Imports
	: Percent	:		: Percent	:
	: <u>ad</u>	: <u>1,000</u>		: <u>ad</u>	: <u>1,000</u>
	: <u>valorem</u>	: <u>dollars</u>		: <u>valorem</u>	: <u>dollars</u>
1930--:	35	: 1/	::1951--:	12.5	: 5,042
1931--:	35	: 1/	::1952--:	12.5	: 6,035
1932--:	35	: 1/	::1953--:	12.5	: 3,208
1933--:	35	: 1/	::1954--:	12.5	: 2,562
1934--:	35	: 1/	::1955--:	12.5	: 3,351
1935--:	35	: 1/	::1956--:	12.5	: 8,492
1936--:	35	: 1/	::1957--:	12.5	: 15,394
1937--:	35	: 1/	::1958--:	12.5	: 28,171
1938--:	35	: 1/	::1959--:	12.5	: 72,798
1939--:	25	: 4	::1960--:	12.5	: 2/ 67,663
1940--:	25	: 4	::1961--:	12.5	: 81,564
1941--:	25	: 3	::1962--:	12.5	: 88,462
1942--:	25	: 2,459	::1963--:	12.5	: 86,438
1943--:	25	: 4,421	::1964--:	12.5	: 92,964
1944--:	25	: 1/	::1965--:	12.5	: 3/ 107,107: 4/ 17,909
1945--:	25	: 35	::1966--:	12.5	: 3/ 126,517: 4/ 17,590
1946--:	25	: 986	::1967--:	12.5	: 3/ 149,135: 4/ 23,000
1947--:	25	: 295	::1968--:	3/ 12 : 4/ 11	: 3/ 229,454: 4/ 7,563
1948--:	15	: 638	::1969--:	3/ 11.5: 4/ 10	: 3/ 316,208: 4/ 2,559
1949--:	15	: 771	::1970--:	3/ 11 : 4/ 8.5	: 3/ 324,233: 4/ 1,951
1950--:	15	: 2,897	::	:	:
:	:	:	::	:	:

1/ Not available.

2/ In 1946-59, data for imports of radio receivers were combined with data for radio tubes and other radio apparatus and parts. In 1960, imports of such articles (other than radio receivers) were valued at about \$25 million, thus an import figure for 1960 comparable with the 1959 coverage above would be 92,656 thousand dollars, representing a marked increase over 1959.

3/ Solid state.

4/ Other than solid state.

Source: Compiled from official publications of the U.S. Department of Commerce and the U.S. Tariff Commission.

Table 6.--Phonographs: U.S. rates of duty and imports for consumption, 1930-70

Year	Rate of duty	Imports	Year	Rate of duty	Imports
	<u>Percent</u> <u>ad</u> <u>Valorem</u>	<u>1,000</u> <u>dollars</u>		<u>Percent</u> <u>ad</u> <u>valorem</u>	<u>1,000</u> <u>dollars</u>
1930-----	30	9	1951-----	15	9
1931-----	30	5	1952-----	15	26
1932-----	30	4	1953-----	15	96
1933-----	30	7	1954-----	15	39
1934-----	30	11	1955-----	15	153
1935-----	30	19	1956-----	15	101
1936-----	30	26	1957-----	15	187
1937-----	30	34	1958-----	15	138
1938-----	30	18	1959-----	15	1,813
1939-----	30	17	1960-----	15	1,321
1940-----	30	329	1961-----	15	616
1941-----	30	2	1962-----	13.5	281
1942-----	30	1/	1963-----	2/ 12.0	492
1943-----	30	1/		3/ 11.5	
1944-----	30	126	1964-----	11.5	2,064
1945-----	30	106	1965-----	11.5	4,436
1946-----	30	224	1966-----	11.5	8,243
1947-----	30	160	1967-----	11.5	8,257
1948-----	15	4	1968-----	10	7,744
1949-----	15	10	1969-----	9	8,088
1950-----	15	20	1970-----	8	7,770

1/ Less than \$500.

2/ Effective July 1, 1963.

3/ Effective Aug. 31, 1963, with the adoption of the TSUS.

Source: Compiled from official publications of the U.S. Department of Commerce and the U.S. Tariff Commission.

Note.--Sudden changes in the magnitude of imports may at times be caused by Customs Bureau interpretations of changes in the wording of import classifications, as well as by the separate provision for certain articles formerly included with phonographs.

Table 7.--Record changers and turntables: <sup>1/</sup> U.S. rates of duty and imports for consumption, 1960-70

Year	Rate of duty	Imports
	Percent ad valorem	1,000 dollars
1960-----	13.75	9,787
1961-----	13.75	14,266
1962-----	12.5	16,040
1963-----	11.5	18,502
1964-----	11.5	22,211
1965-----	11.5	31,643
1966-----	11.5	46,210
1967-----	11.5	29,538
1968-----	10	41,341
1969-----	9	46,161
1970-----	8	47,879

<sup>1/</sup> Includes parts of phonographs, record changers, and turntables.

Source: Compiled from official publications of the U.S. Department of Commerce and the U.S. Tariff Commission.

Note.--Statistics for imports prior to 1960 were omitted because they include so many other electrical items along with record changers and turntables as to be meaningless for the purposes of this table.

Table 8.--Radio-phonograph combinations: U.S. rates of duty and imports for consumption, 1960-70

Year	Rate of duty	Imports
	<u>Percent ad valorem</u>	<u>1,000 dollars</u>
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-----	12.00	29,712
1969-----	11.00	36,313
1970-----	9.5	44,686

Source: Compiled from official publications of the U.S. Department of Commerce and the U.S. Tariff Commission.

Note.--Statistics for imports prior to 1960 were omitted because they include so many other electrical items along with radio-phonograph combinations as to be meaningless for the purposes of this table.



