

annual report 1958

MOTOROLA, INC.

MOTOROLA, INC.

now embracing these five product divisions

Consumer Products Division

Television; Table, Clock and Portable Radios; High Fidelity and Stereo Phonographs; Car Radios

Communications and Industrial Electronics Division

Mobile, Portable and Pocket Two-Way Radio Communication Systems, Microwave Relay Systems, Paging Systems, Selective Calling Devices, Power Voice Speakers and Megaphones, Closed Circuit Television

Automotive Products Division

Supplier of Original Equipment Car Radios to Ford Motor Company, Chrysler Corporation, American Motors Company and International Harvester Company

Military Electronics Division

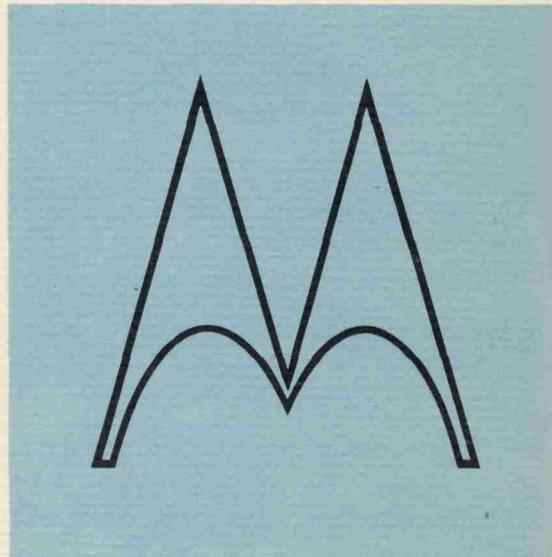
Research, Development and Production in Fields Including Radar and Other Electronic Sensing Devices; Missile Electronics; Communications; Data Transmission, Processing and Display; Navigation; Solid State Materials and Devices; Electronic Sub-system Management

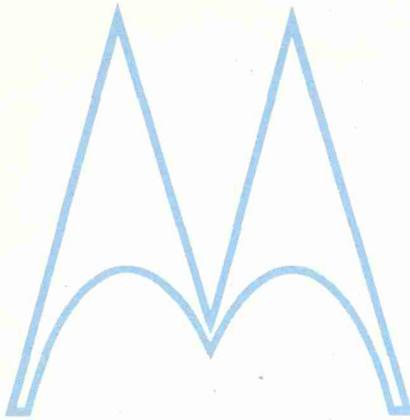
Semi-Conductor Product Division

Research and Production of High and Medium Power Transistors, Silicon Power Rectifiers, Mesa Transistors, General Purpose Transistors and Zener Diodes

GENERAL OFFICES:

4545 AUGUSTA BOULEVARD • CHICAGO 51, ILLINIOS





directors and officers of **MOTOROLA**

Paul V. Galvin
Chairman of the Board of Directors

Robert W. Galvin
Director, President

Daniel E. Noble
Director
Executive Vice President
Industrial, Semi-Conductor
and Military Electronics Divisions

Edward R. Taylor
Director
Executive Vice President
Consumer Products Division

Elmer H. Wavering
Director
Executive Vice President
Automotive Products Division

Matthew J. Hickey, Jr.
Director

Frank J. O'Brien
Director
Vice President, Purchasing

Walter B. Scott
Director
Vice President, Consumer
and Automotive Production

Edwin P. Vanderwicken
Director
Vice President, Finance,
Treasurer and Secretary

Joseph A. Chambers
Vice President, Western Area
Military Electronics Center

John I. Davis
Vice President
Consumer Products Engineering

Sylvester R. Herkes
Vice President
Consumer Products Marketing

Arthur L. Reese
Vice President, Communications
and Industrial Electronics

Alex Arnold
Controller

TRANSFER AGENTS

Chemical Corn Exchange Bank
30 Broad Street, New York 15, New York

Harris Trust and Savings Bank
115 West Monroe Street, Chicago 90, Illinois

REGISTRARS

Irving Trust Company
One Wall Street, New York 15, New York

**Continental Illinois National Bank
and Trust Company of Chicago**
231 South La Salle Street, Chicago 90, Illinois

*The annual meeting will be held on Monday, May 4, 1959.
A notice of the meeting, together with a form of proxy and a proxy
statement, will be mailed to shareholders on or about April 10, 1959,
at which time proxies will be solicited by the management.*

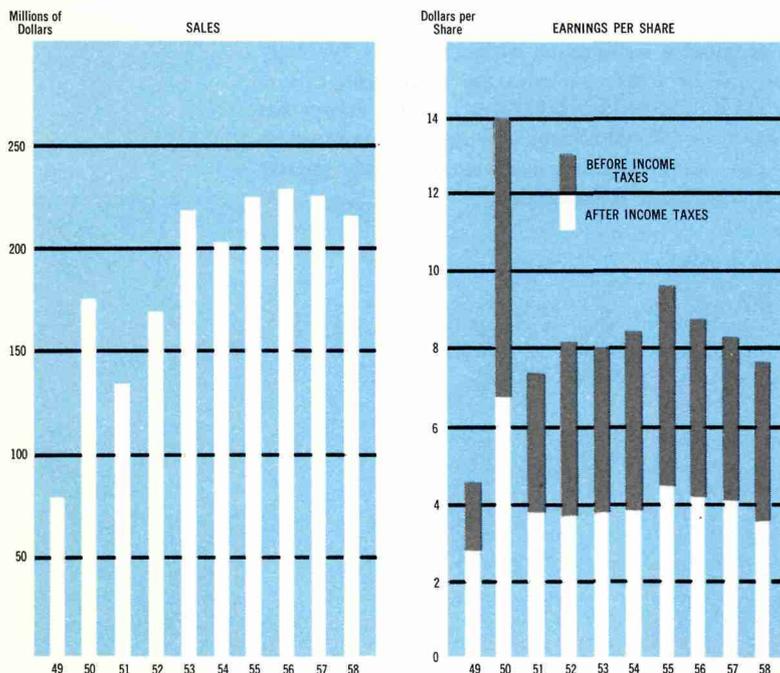
10 year financial summary

YEAR	NET SALES	EARNINGS BEFORE TAXES ON INCOME	NET EARNINGS	NET EARNINGS PER SHARE	WORKING CAPITAL	NET INVESTMENT IN PLANT AND EQUIPMENT	SHAREHOLDERS' EQUITY
1949	\$81,803,358	\$8,585,696	\$5,280,196	\$2.73	\$14,558,505	\$4,071,987	\$17,165,391
1950	177,104,669	27,368,061	13,130,246	6.78	20,731,871	5,794,309	26,895,638
1951	135,285,086	14,020,739	7,240,452	3.74	29,851,003	9,005,880	31,920,882
1952	168,734,653	15,576,165	7,012,700	3.62	38,007,247	11,429,532	41,755,780
1953	217,964,074	15,512,489	7,076,335	3.66	38,222,001	14,301,004	45,929,419
1954	205,226,077	16,523,889	7,572,024	3.91	38,308,612	16,579,531	50,598,747
1955	226,653,953	18,740,426	8,490,539	4.39	42,892,165	19,179,992	56,186,590
1956	227,562,168	16,887,834	7,966,817	4.12	50,882,200	25,388,866	61,305,080
1957	226,361,190	15,597,031	7,824,431	4.04	52,215,832	27,167,597	66,172,446
1958	216,590,325	14,931,213	7,356,213	3.80	54,644,439	27,615,287	71,533,020
Earnings per share of common stock based upon the 1,935,131 shares outstanding at December 31, 1958.							

sales and earnings

Sales and earnings declined from the previous year in the first three quarters, but in the fourth quarter sales set a new high record for the company. Fourth quarter earnings were well in excess of total earnings for the first three quarters and were surpassed only by the fabulous fourth quarter of 1950 when television reached the peak of its introductory period.

Consolidated sales for the full year of 1958 were \$216,590,000 which compares with \$226,361,000 in 1957.



Sales of our communications and industrial electronics division continued to increase, military sales were about the same, and sales of car radios to the automobile manufacturers declined. Consumer products sales in the fourth quarter nearly overcame a previous decline, aided by the leading position Motorola attained in the new product line of stereophonic high fidelity phonographs and a substantially improved proportion of industry sales of television sets.

Consolidated earnings in 1958, before provision for income taxes, were \$14,931,000 compared with \$15,597,000 in 1957. After taxes we earned \$7,356,000 or \$3.80 per share of common stock in 1958 compared with \$7,824,000 or \$4.04 per share in 1957. Fourth quarter earnings of \$2.14 per share compare with \$1.28 for the fourth quarter of 1957.

The decline in auto radio sales, and the effect of this decline on our semi-conductor operation, combined with lower production of consumer products in the first half of the year and some non-recurring losses on several military production contracts, are the principal reasons for reduced earnings. However, a major expense reduction program had an important offsetting effect as it became fully operative during the year, and the resurgence in consumer products sales and earnings in the last half also aided.

television

Motorola's new line of television sets, introduced in June, enabled us to gain an increasing proportion of industry sales. It confirmed a regeneration in our consumer products division and provided new and higher standards of performance, reliability, styling and value. As a measure of reliability, the company now provides a year's warranty on tubes and parts in contrast to the 90-day warranty customary in the industry.

Many new activities have been introduced into the planning, designing, engineering, production and testing of Motorola television to assure a product quality that sets the pace in the industry. Just one instance may be illustrative. Motorola, after exhaustive study, developed much improved specifications for vacuum tubes for use in television sets. To assure that the quality of tubes for Motorola sets reaches these unusual specifications, we purposely damage monthly, in our inspection department, more tubes, and spend more money for those tubes,

than the number of tubes that fail within the warranty period in the sets we sell.

Motorola is providing style leadership in television and in 1958 the finest of furniture was added in cooperation with Drexel Furniture Co. who supply cabinets in their superb furniture styles and quality for the top end of the Motorola line.

radios and phonographs

The dramatic story of the year is of the quick rise to a high rate of sales of stereophonic high fidelity phonographs. Motorola introduced its initial line in June. It extended from a fine performing, portable unit to the superbly styled units in Drexel cabinets. Industry figures indicate that more than one out of every four stereo units sold last fall was a Motorola. And, at that, our sales were limited by inability to secure additional materials and components to satisfy the demand.

Industry sales of table, clock and portable radios declined 6% as compared with 1957, and transistorized, portable sets increased their proportion of the total. A notable preference developed for FM radios as another evidence of the public appetite for quality performance and classical music. The importation of large numbers of transistorized radios from Japan had an important effect on price competition in portable radios. With major attention on television and stereo, our participation in the radio business suffered but due attention is being focused on this important segment.

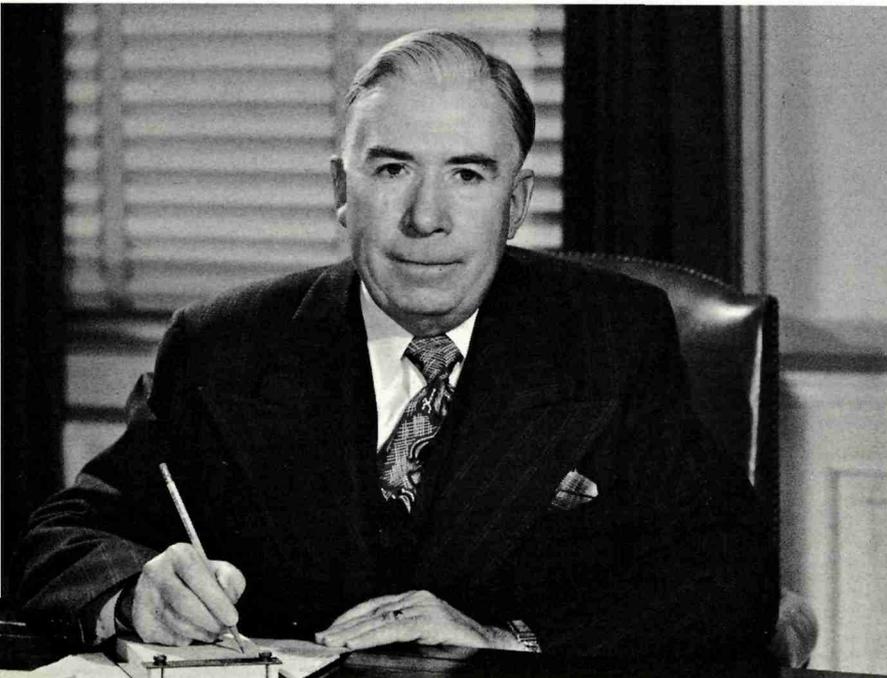
automotive division

Sales of car radios to Ford, Chrysler and American Motors naturally declined in the aggregate along with reduced industry production of automobiles. However, sales recovered rapidly in the last half of the year. We continue to cooperate closely with our principal customers in the developments that are occurring in the readaptation of car radio to coming automobile designs. At the same time there is constant progress in the technical design of car radios in themselves.

communications and industrial electronics

Again in 1958 this division of our business reported new records in sales and earnings. It also announced important new products to maintain its pioneering and leading position in the field of mobile and portable two-way radio communications.

The MOTRAC line of two-way radio systems is the first complete mobile equipment with fully transistorized receiver and power supply. These units are completely new and improved in design and appearance, are smaller and lighter and have the outstanding feature of using only 15% of the power required by standard equipment. For mobile equipment which depends typically on car or truck batteries for operation, this is a major advantage. MOTRAC, which stands for Motorola Transistorized Advanced Communications, found market acceptance which greatly surpassed our expectations.



Paul V. Galvin, Chairman of the Board of Directors and founder of Motorola, Inc.

Robert W. Galvin, President, shown with (left) Edward R. Taylor, Executive Vice President, Consumer Products Division and (right) Elmer H. Wavering, Executive Vice President, Automotive Products Division. Photograph taken at the modern Franklin Park, Illinois facilities which are devoted to the manufacture of television receivers and stereophonic phonographs.



MOTOROLA



A completely new line of products was introduced with the miniaturized, pocket VHF receiver and companion transmitter. These are compact radio receiving and transmitting sets that can be carried by authorized persons requiring immediate radio communication and can be used in conjunction with a two-way mobile radio system. For example, a foot policeman patrolling his beat can be in constant, two-way radio communication with squad cars or police headquarters. Firemen or civilian defense workers, construction workers and many others can greatly increase their effectiveness by having immediate, direct communication available on their person.

Further advances were made in the field of radio traffic light control and the Handie-Talkie Pager for use in hospitals, hotels and factories. Other recent new products in the fields of portable two-way radio, selective calling devices (now being used in aircraft as well as land mobile units), power voice speakers and megaphones, have gained wider acceptance. Common carrier mobile radio, which is two-way radio in vehicles, fully interconnected into land telephone systems, has taken on increasing importance with the introduction of our push-button dialing mobile radio-telephone system for use with automatic, unattended telephone exchange service.

Many less dramatic developments are also regular fare for the communications division. For example, it has developed a mechanical frequency filter system as an important component, and it has always been one of the largest manufacturers of high precision quartz crystals and of instrument quality tone reeds.

The division has also developed a closed circuit television system having applications in industry, government and schools.

The microwave department has continued to mature its program and awaits liberalized FCC licensing procedures to make available the advantages of microwave communication to many users who need it. Important applications to date include oil pipeline companies, television broadcasting, electric power companies, railroads and telephone systems.

semiconductor products

A redirection and intensification of efforts occurred in Motorola's approach to semi-conductors which includes transistors. Large development costs continued in 1958, leading to important advances in mesa transistors, rectifiers

and zener diodes. New devices with improved materials, together with advances in circuitry and components, push the horizon in this revolutionary art still further.

The marketing effort has been increased, and in mid-year 1959 the semi-conductor division will occupy a new three-story addition to its present facilities.

military electronics

While sales volume in military electronics was about the same as the previous year, profits declined primarily as a result of difficulties encountered in the development of advanced equipment under three particular contracts which are now in process of completion.

Motorola's policy has been to develop and maintain a diversified interest in the research, development and production of electronic products for the government rather than to concentrate on very large contracts on particular pieces of equipment. Our interest has been in the advanced fields of electronics, with particular emphasis on communications; radar; guidance, navigation and surveillance systems; telemetry; data processing and display.

An important contribution to the air defense capability of the Navy was made in the form of a complex data processing and display system for large ships. Important advances in anti-submarine warfare were also made. Tracking and control systems for missiles and drones, and identifying systems using radar were develop-

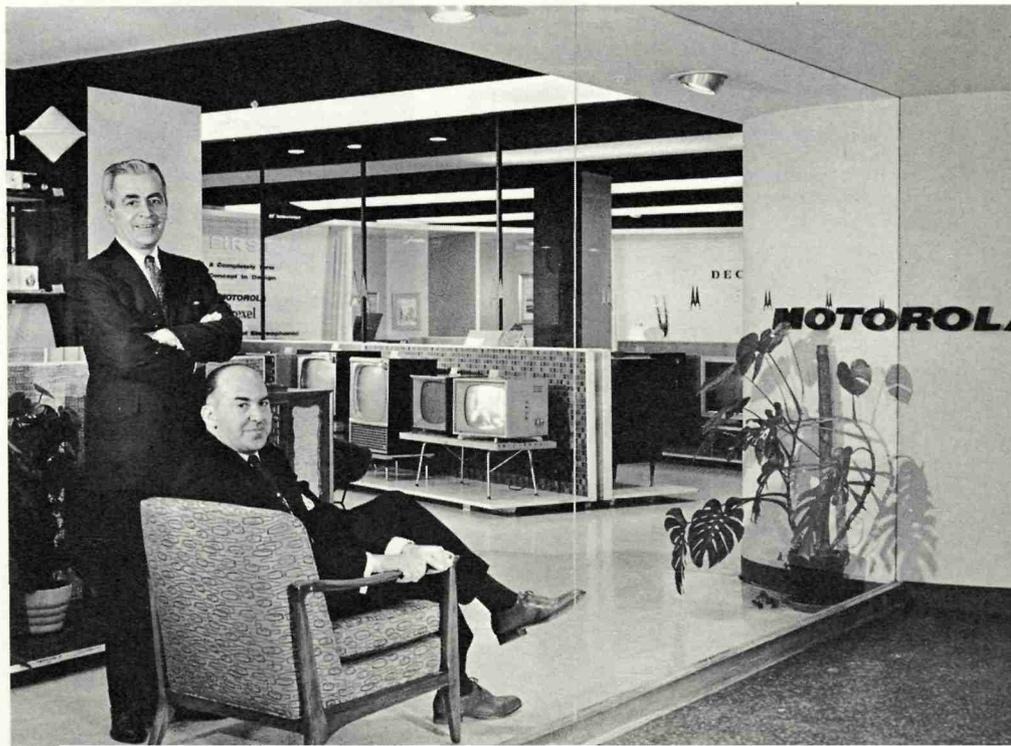




Seated at the Console unit for Programmed Automatic Test Equipment (PATE) at Motorola's Western Military Electronics Center, Phoenix, Arizona, Daniel E. Noble, Executive Vice President, Industrial, Semi-Conductor and Military Electronics Divisions. At rear, left to right, Joseph A. Chambers, Vice President and General Manager, Western Military Electronics Center; C. Lester Hogan, General Manager, Semi-Conductor Products Division; H. William Welch, Jr., Assistant Manager, and Director of Research and Development, Military Electronics Division.

At the Company's Merchandise Mart salon, Sylvester R. Herkes, Vice President, Consumer Products Marketing with (seated) John I. Davis, Vice President, Consumer Products Engineering.

Frank J. O'Brien, Vice President, Purchasing and (right) Walter B. Scott, Vice President, Consumer and Automotive Production. In the background, one of six final assembly lines, each capable of producing 600 television sets per day, at Franklin Park, Illinois.



ments, among many, on which we made important contributions in 1958.

About 60% of our military sales in 1958 were under prime contracts.

finances

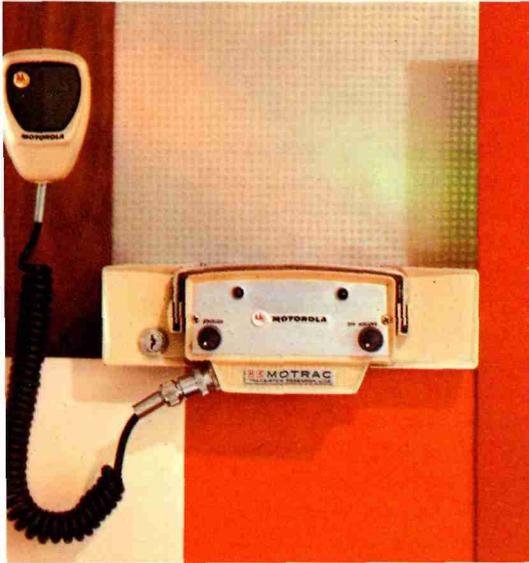
At the end of 1958 consolidated working capital was \$54,644,000 compared with \$52,215,000 at the 1957 year-end. The current ratio was 2.4 to 1. Net worth was \$71,533,000 compared with \$66,172,000 a year ago.

The increase of \$7,700,000 in trade receivables reflects a nearly \$12,000,000 increase in December sales over the previous year. This coincided with deferred shipments under three large government contracts beyond the year-end which accounted for about \$7 million more working capital requirements than was intended. Bank loans of \$9,500,000 were therefore in use at the year-end, but at the end of February were down to \$1.5 million. Particular attention is being given in each division to improving the turnover of working capital.

The addition of 86,000 square feet to our semiconductor plant in Phoenix is in process; another building in our long term plan for developing our Franklin Park, Illinois, location is planned; and, we have exercised an option to purchase some facilities now under lease on Cicero Avenue in Chicago. It is not contemplated that these facilities will require additional financing.

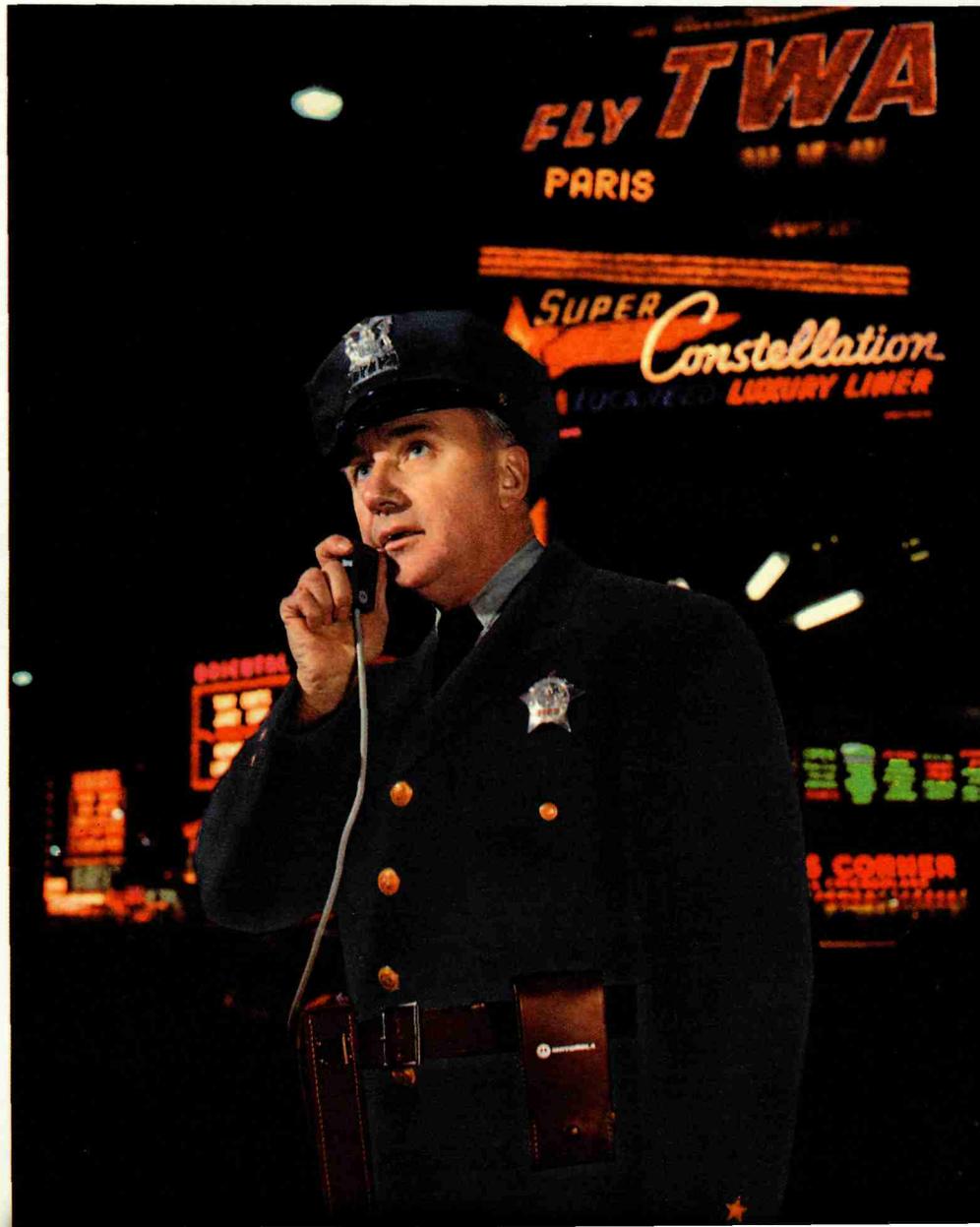
A conservative dividend policy was continued in 1958 in light of the economic adjustment

Arthur L. Reese, Vice President, Communications and Industrial Electronics Division and (left) William S. Wheeler, General Manager, Chicago Military Electronics Center, in one of the new design engineering laboratories at the communications division's headquarters in Chicago.



Shown above is the new Motrac two-way radio that has ushered in a new era in mobile communications. Newest and most dramatic member of Motorola's "Transistor Research" Line, this unit has a fully transistorized receiver and power supply. It reaches a new peak in reliability and economy of installation and operation for public safety, public utility, transportation and industrial organizations.

This policeman is using new Motorola two-way pocket radio. His efficiency is greatly increased because he is in constant contact with headquarters or nearby patrol cars. These new units are so light and small they can be carried easily on a belt or in a pocket. Their advantages are by no means confined to law enforcement. They are useful in industry, too, for providing personal radio contact wherever needed.



Left to right, Edwin P. Vanderwicken, Vice President for Finance, Treasurer and Secretary; Edison J. McGowan, Vice President and General Manager Motorola Finance Corporation; Alex Arnold, Controller; Lewis D. Spencer, General Attorney and Assistant Secretary.

under way and the continued capital needs of the company. Dividends totalling \$1.50 per common share were paid in 1958.

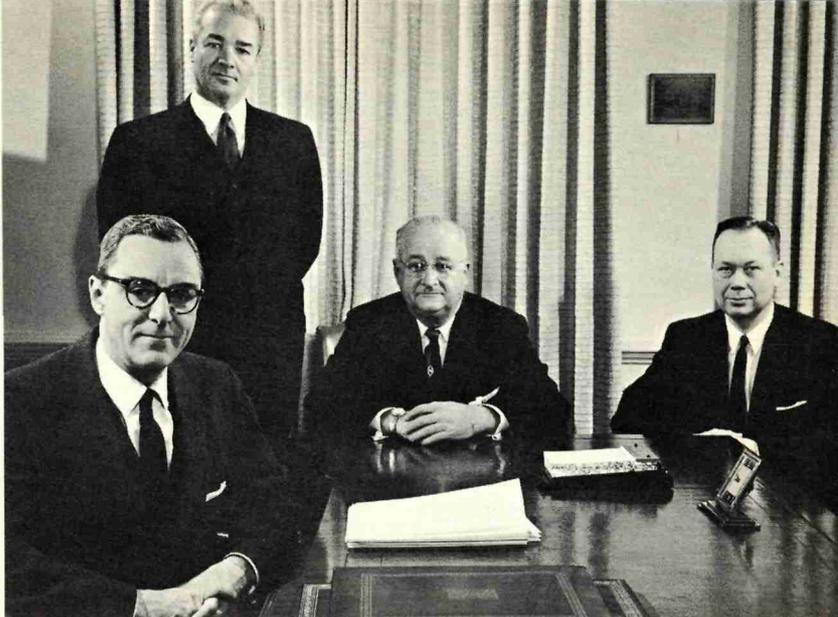
At the close of the year there were 4,343 Motorola stockholders. Directors, officers and their relatives owned, directly or beneficially, 706,349 shares of Motorola stock.

future

The prospects for the year 1959 appear favorable. It seems likely that the company will enjoy a minimum of a 10% increase in sales volume, for a new record, and a profit increase of greater proportions. Each division of the corporation will contribute to this improvement.

Our studied projections of the next few years suggest growth opportunities in every division of the corporation. This will result from (1) expanding markets for present products such as television, stereophonic-high fidelity and two-way radio, (2) new products that are expected to reach the market, such as transistors, solid states devices, new applications of electronics to automobiles, and new weapons systems, (3) expansion in our international operations, and (4) the possible addition of new electronic divisions by acquisition.

One of the major outside influences on our long-range growth is government regulations. The first and most important of these is the availability of frequency spectrum in which our electronic gear can operate. This is under the jurisdiction of the Federal Communications Commission, which agency is engaged in major



studies of frequency reallocations. We are participating actively in these proceedings and believe that the logic of circumstances will result in a disposition by the Commission to act favorably on many of the recommendations which we support.

In another area, the government attitude toward allowable costs and profit margins in military electronics is under review. In this area we are also actively advocating the proper interest of the electronics industry in hopes that a more enlightened attitude will prevail in the future to permit adequate rewards and incentives that the industry deserves and that would, in the long run, benefit the country.

* * *

The problems of adjusting to the recession that found its low point in early 1958 required an unusual contribution by all Motorolans. We are happy to acknowledge the fine spirit and intelligent action with which the problems were met and are grateful for the loyalty of all employees to our company.

For the Board of Directors,

March 12, 1959

P. V. Galvin
Chairman
Robert W. Galvin
President

MOTOROLA, INC. AND CONSOLIDATED SUBSIDIARIES

balance sheets as of December 31, 1958 and 1957

ASSETS	December 31,	
	1958	1957
Cash	\$ 6,659,888	\$ 6,656,337
Accounts and notes receivable:		
United States Government	11,962,424	12,240,018
Other trade receivables (less reserve for bad debts— 1958, \$823,000; 1957, \$753,000)	35,031,700	27,332,457
Other current receivables	558,052	1,106,828
Costs recoverable under United States Government contracts, less progress billings	11,660,723	14,403,634
Inventories—(Note D)	26,666,528	25,323,676
Prepaid expenses	423,890	558,259
TOTAL CURRENT ASSETS	<u>\$ 92,963,205</u>	<u>\$ 87,621,209</u>
Investment in Motorola Finance Corporation, subsidiary not consolidated—at cost plus undistributed earnings (see accompanying balance sheet)	4,941,391	4,209,528
Other assets	2,196,979	2,635,640
Plant, equipment and leasehold improvements—less reserves for depreciation (Note C)	27,615,287	27,167,597
Patents and trademarks—less amortization	184,924	245,323
	<u>\$127,901,786</u>	<u>\$121,879,297</u>

notes to financial statements

A—The companies' business under United States Government contracts is subject to price renegotiation. The renegotiation status has been reviewed by the Government for years to and including 1954, and no refund was required. It is believed that no excessive profits were realized in subsequent years which would be required to be refunded under general price renegotiation.

B—In connection with the financing of sales of products to consumers, Motorola, Inc. and consolidated subsidiaries are obligated under repurchase and other agreements with Motorola Finance Corporation and other financing agencies. It is believed that these obligations will have no material effect on the business of the companies.

December 31,

LIABILITIES

	1958	1957
Notes payable, banks—short term	\$ 9,500,000	\$ 9,000,000
Current maturities of long-term debt	1,004,756	1,005,647
Accounts payable—trade	10,034,733	5,793,250
Accrued taxes	6,597,591	7,683,304
Reserves for product and service warranties	678,853	927,166
Other current liabilities	10,502,833	10,996,010
TOTAL CURRENT LIABILITIES	\$ 38,318,766	\$ 35,405,377
Long-term debt, less current maturities above:		
Notes payable:		
Due November 1, 1966, 3¾%, with annual prepayment requirements of \$500,000	4,000,000	4,500,000
Due July 1, 1972, 3¾%, with annual prepayment requirements of \$500,000	6,500,000	7,000,000
Due November 1, 1976, 4⅜%, with annual prepayment requirements of \$500,000 commencing November 1, 1963	7,000,000	7,000,000
Real estate mortgages, principally maturing after 1965	550,000	554,756
Total liabilities	\$ 56,368,766	\$ 54,460,133
DEFERRED INCOME		\$ 1,246,718
SHAREHOLDERS' EQUITY		
Capital stock, \$3.00 par value—authorized, 3,000,000 shares; issued and outstanding, 1,935,131 shares	\$ 5,805,393	\$ 5,805,393
Capital surplus	9,018,506	9,018,506
Retained earnings	56,709,121	51,348,547
Total shareholders' equity	\$ 71,533,020	\$ 66,172,446
	\$127,901,786	\$121,879,297

C—The companies' investment in plant, equipment and leasehold improvements on December 31, 1958 and 1957 was as follows:

	December 31,	
	1958	1957
Land—at cost	\$ 2,531,231	\$ 2,472,582
Buildings, machinery and equipment—at cost (less reserves for depreciation—1958, \$10,986,241; 1957, \$8,842,253)	23,108,113	22,596,005
Dies, tools, and leasehold improvements—at cost, less amortization	1,975,943	2,099,010
Total	<u>\$27,615,287</u>	<u>\$27,167,597</u>

D—At prior year-ends the companies have consistently valued their inventories at the lower of prime cost (materials and labor) or market value. As of December 31, 1958 the inventory valuation was increased \$907,057 to include certain elements of manufacturing overhead; net worth was increased by the same amount by a credit to Retained Earnings, without entering into income determination for the year. If the results of operations for 1958 had been determined on a basis which included manufacturing overhead in the opening and closing inventories, the effect on earnings would have been immaterial.

E—Under terms of restrictive covenants contained in long-term debt agreements, approximately \$7,900,000 of Retained Earnings on December 31, 1958 was available for the payment of cash dividends or acquisitions of the company's stock.

MOTOROLA, INC. AND CONSOLIDATED SUBSIDIARIES

statement of consolidated income and retained earnings

	Year Ended December 31,	
	1958	1957
Sales	\$216,590,325	\$226,361,190
Net income of Motorola Finance Corporation—subsidiary not consolidated.....	231,863	209,528
Other income	1,273,014	1,326,201
Total income	<u>\$218,095,202</u>	<u>\$227,896,919</u>
Manufacturing and other costs of sales.....	\$167,839,009	\$178,403,747
Selling, service and administrative expenses.....	28,173,818	26,177,101
Depreciation and amortization of leasehold improvements... .	3,101,868	2,809,715
Contribution to employees' profit-sharing fund.....	2,401,376	2,333,463
Interest and other expenses.....	1,647,918	2,575,862
Total costs and other expenses.....	<u>\$203,163,989</u>	<u>\$212,299,888</u>
Net income before provision for taxes on income.....	\$ 14,931,213	\$ 15,597,031
Provision for federal income taxes.....	7,575,000	7,772,600
Earnings (per common share—1958, \$3.80; 1957, \$4.04) . .	\$ 7,356,213	\$ 7,824,431
Retained earnings, beginning of year.....	51,348,547	46,426,812
Credit for adjustment of inventory valuation (Note D).....	907,057	
Total	<u>\$ 59,611,817</u>	<u>\$ 54,251,243</u>
Deduct dividends—\$1.50 per share.....	2,902,696	2,902,696
Retained earnings, end of year.....	<u>\$ 56,709,121</u>	<u>\$ 51,348,547</u>

See the accompanying notes to financial statements.

auditors' report

MOTOROLA FINANCE CORPORATION

balance sheets as of December 31, 1958 and 1957

	DECEMBER 31,	
ASSETS	1958	1957
Cash	\$ 4,273,186	\$ 1,782,395
Receivables:		
Lease and conditional sales contracts (including instal- ments maturing beyond one year—1958, \$10,636,000; 1957, \$8,932,000)	\$16,082,874	\$ 13,021,557
Notes receivable, distributors—maturing within one year. .	5,454,179	3,921,399
Total	<u>\$21,537,053</u>	<u>\$ 16,942,956</u>
Less unearned income on lease and conditional sales contracts	3,023,405	2,315,824
Net	<u>\$18,513,648</u>	<u>\$ 14,627,132</u>
Other assets	\$ 403,907	\$ 137,947
	<u>\$23,190,741</u>	<u>\$ 16,547,474</u>
 LIABILITIES		
Notes payable, banks—short term	\$18,000,000	\$ 12,000,000
Accrued taxes	200,067	144,763
Other current liabilities	49,283	193,183
Total current liabilities	<u>\$18,249,350</u>	<u>\$ 12,337,946</u>
 SUBORDINATED DEBT AND NET WORTH		
Subordinated notes payable to Motorola, Inc.—due 1961 . . .	\$ 2,500,000	\$ 2,000,000
Capital stock, \$1.00 par value—authorized and issued, 20,000 shares	20,000	20,000
Paid in surplus	1,980,000	1,980,000
Retained earnings (net income since inception, March 7, 1956)	441,391	209,528
Total subordinated debt and net worth	<u>\$ 4,941,391</u>	<u>\$ 4,209,528</u>
	<u>\$23,190,741</u>	<u>\$ 16,547,474</u>

Note—All receivables of Motorola Finance Corporation are covered by the repurchase and other agreements discussed in Note "B" of Notes to Financial Statements.

To the Board of Directors and
Stockholders of Motorola, Inc.:

We have examined the balance sheet of Motorola, Inc. and consolidated subsidiaries as of December 31, 1958 and the related statement of income and retained earnings for the year then ended, and the balance sheet of Motorola Finance Corporation as of December 31, 1958.

Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. It was not practicable to attempt to obtain confirmations of certain receivables from the United States Government, but we satisfied ourselves as to their substantial accuracy by means of other auditing procedures.

In our opinion, the accompanying financial statements present fairly (a) the financial condition of Motorola, Inc. and consolidated subsidiaries as of December 31, 1958 and the results of their operations for the year then ended, and (b) the financial condition of Motorola Finance Corporation as of December 31, 1958, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year, except for the change (which we approve) in the basis of valuing the December 31, 1958 inventories, as explained in Note D of Notes to Financial Statements.

BAUMANN, FINNEY & Co.
Certified Public Accountants

Chicago, Illinois
February 20, 1959



CONSUMER PRODUCTS DIVISION

progress that quality built

Significant gains were registered in 1958 by the Consumer Products Division, which produces and markets Motorola television receivers, stereo and other high fidelity phonographs, portable, clock and table radios, and Motorola brand car radios.

While industry sales were down sharply in 1958 compared with the preceding year, the Division materially improved its position with the major gains coming in television and stereo high fidelity.

Needless to say all this did not come about through happenstance. The increased prestige and acceptance which Motorola has achieved with consumers and trade alike is the result of a continuing, long-range program of planned improvement. However, as gratifying as the

Consumer Products Division's progress has been to date, prospects for the future look even brighter.

what's behind the division's growth?

Motorola's position in consumer products is due in great measure to a fresh marketing concept, backed by a completely integrated engineering and marketing program developed within the Consumer Products Division.

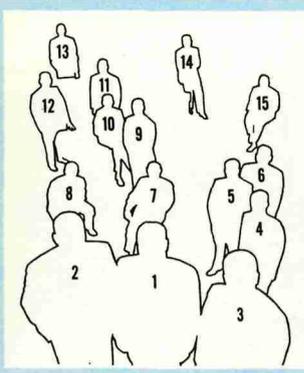
Basic changes in the demands of the consumer were recognized early at Motorola. The New Consumer is more quality minded. He puts quality and value above mere price. He is willing to pay more to get more.

From this there evolved a marketing philosophy which may be summed up in the words: Sell quality . . . not price. All planning, engineering, design and manufacturing are concentrated on one objective: improving performance, reliability, styling and value.

Responsibility for achieving this goal rests with many different individuals and groups performing an astonishing variety of functions within the Consumer Products Division. Let's take a look at some of them now and see how they work and what the results of their closely coordinated operations have been.

the product planning group

Exercising broad responsibility for everything from the original product idea to the ultimate sale to the consumer, the Product Planning Group is made up of all the key people in the Division including Marketing Research, Prod-



In past years, a special section of the Annual Report has been set aside to report on significant Company undertakings or to describe the functioning of one of Motorola's five divisions. The purpose has been to acquaint you with important aspects of the Company's operations. This year's special section is devoted to the Consumer Products Division. Shown at left are some of the people responsible for this Division's management.

1. Edward R. Taylor, Executive Vice President
2. John I. Davis, Vice President for Engineering
3. Sylvester R. Herkes, Vice President for Marketing
4. Herbert J. Zeller, Director of Styling
5. Garth J. Heisig, Director of Television Engineering
6. Wilbur C. Jackson, Director of Engineering Services
7. C. Fred Parsons, Merchandising Manager
8. C. J. Gentry, Car Radio Sales Manager
9. David H. Kutner, Manager of Distribution
10. K. Warren Snider, Manager of Product Planning
11. Virden E. Scranton, Manager of Product Services
12. William J. Blazek, Manager of Business Services
13. Charles P. Lloyd, Television Sales Manager
14. William E. Laswell, Radio and Phonograph Sales Manager
15. Fred B. Williams, Director of Radio Engineering

uct Service, Product Planning, Merchandising, Distribution and Sales.

This group plans lines for each of the Division's product categories. It decides on such matters as design, styling, pricing, introductory dates for new models and the establishment of schedules for meeting those dates. Once these schedules are established, the group coordinates the efforts of engineering, production and marketing to insure that each new product is ready for delivery to the Sales Department as specified.

The Product Planning Group works closely with engineering on product ideas, combining the findings of market and consumer research with actual experiences that develop in the field. Out of this partnership have come many accomplishments that have set new standards for the industry. For example:

TUBE SENTRY

Developed and perfected by Motorola, this device eliminates three out of four TV service calls. It does this by protecting tubes from the sudden heavy surge of current that occurs when the set is first turned on. Tube Sentry has enabled Motorola TV to offer a full year warranty on all parts instead of the usual industry ninety day warranty.

STEREO HIGH FIDELITY

Moving decisively at the strategic moment, Motorola was able to capture solid leadership in this increasingly important field in just a few months. This swift, large-scale move into a new field was possible only because of the smooth cooperation and aggressive action of many dif-

Typical of the division's product planning meetings is this shirtsleeves marketing session of the radio group. Representatives of all groups in the division's engineering and marketing structure participate in such meetings in which free exchange and analysis of ideas is the rule.



ferent groups within the Consumer Products Division. Reliable industry figures now place Motorola first in stereo high fidelity sales by a wide margin.

4-WAFER CASCODE TUNER

More sensitive than tuners customarily used, Motorola's 4-wafer tuner brings in pictures with life-like sharpness, even in fringe areas. It picks up signals at greater distances and also has greater selectivity which reduces interference and "snow."



Motorola model SK13 Stereophonic Console. This unit, with dual-channel amplifier and six Motorola Golden Voice speakers, epitomizes the quality engineering and craftsmanship that have made Motorola the leader in stereophonic sales.

VOLUMATIC CAR RADIO

A major advance in car radio engineering, this exclusive Motorola feature eliminates the need to reset the volume level when changing stations and also keeps volume constant wherever there is a signal, even among tall buildings and under viaducts.

product service

Another important factor in the growth of the Consumer Products Division is the Product Service Group.

In a sense, it can be described as the watchdog of Motorola quality, reliability and performance. This group's responsibilities begin in the initial "idea" stage of product development.

It works to insure that every product is designed for the easiest, most inexpensive servicing possible. It provides factory training and technical bulletins for distributor and dealer service personnel. It has instituted a replacement parts and accessories program to make genuine Motorola components available everywhere.

Product Service carries on a constant check of all consumer products at every stage. For

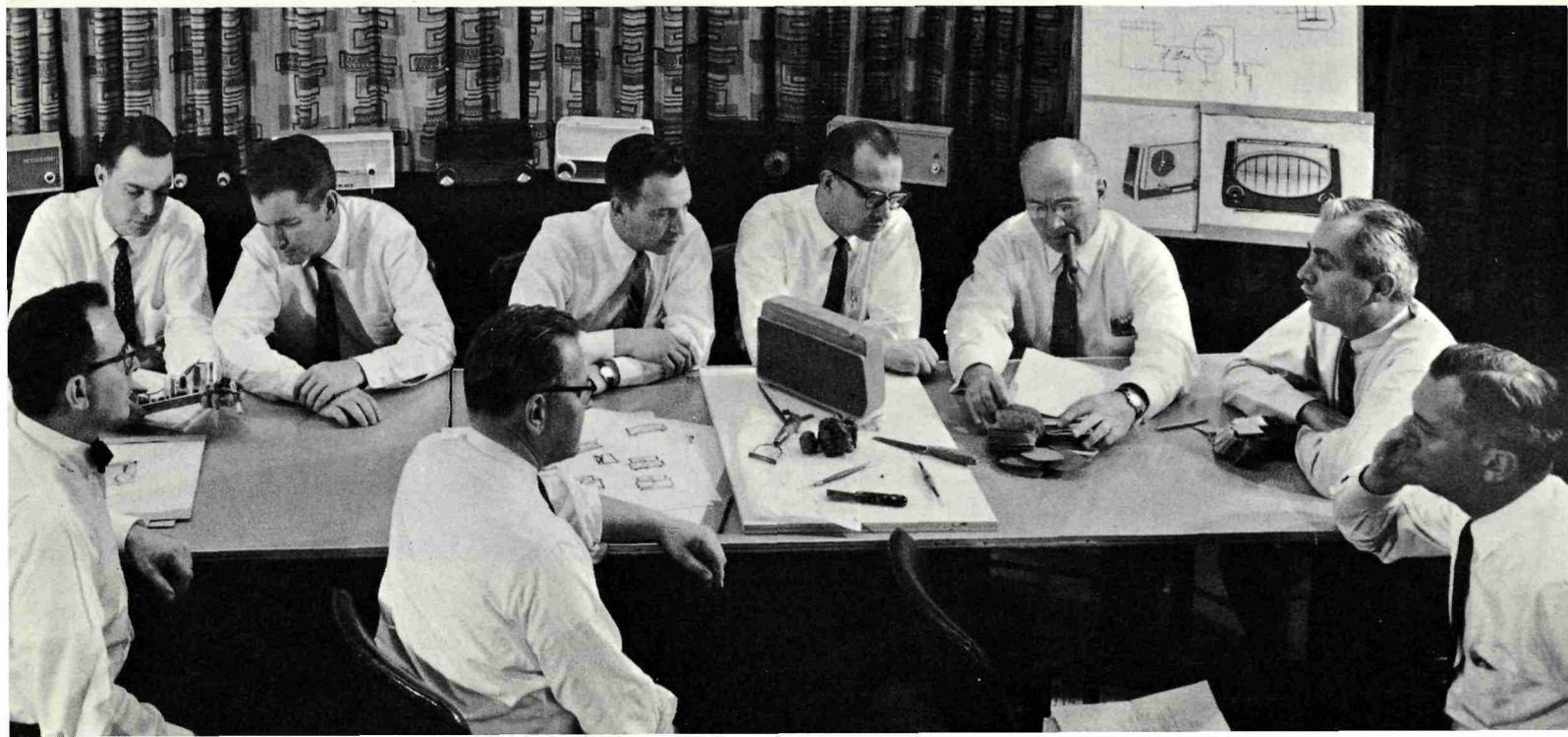
example, its Product Quality Committee meets weekly to review, analyze and recommend action on product experiences and problems reported from the field.

Its Consumer Acceptance Group daily takes products at random from the shipping docks and inspects them from the customers' point of view. Any flaws or defects, any objections the customer could possibly have, are studied and evaluated. This group has authority to stop production on any line if it deems such action necessary.

The programs and activities conducted by Product Service to safeguard Motorola quality have led to many important developments including:

GOLDEN M TUBES

Not satisfied with the standard tubes customarily used in television sets, Motorola engineered and developed the most exacting specifications known in the industry. These exclusive Motorola Golden M Tubes have greatly reduced service calls and increased customer satisfaction. Actual dealer service records show Motorola TV is the most trouble-free line they handle. Warranty costs have been sharply cut.



HIGH VOLTAGE TRANSFORMER

The extremely high voltages required for clear, bright TV pictures created many service problems in transformers. To help end these problems, Motorola developed a new layer-wound transformer that has longer life and reliability.

GOLDEN M CHASSIS

Embodying Tube Sentry, Golden M Tubes, High Voltage Transformer and other advanced features, this Motorola horizontal, hand-wired chassis is today recognized as the best performing, most reliable television chassis on the market. It delivers 20,000 volts of picture power, is easy to service, and assures longer component life through cooler operation.

merchandising

In the Consumer Products Division, direct responsibility for Advertising, Sales Promotion, Sales Training and Customer Relations lies with the Merchandising Group.

A number of policies and programs in effect during the past year contributed to the success of the Division's concept of sales through emphasis on quality.

For example, in local market advertising, effectiveness was improved through greater use of completely integrated promotions. In each market, newspaper advertisements, window and in-store displays were all closely coordinated for maximum impact.

Every possible precaution is taken to assure customers the utmost in quality and reliability at Motorola. Here undergoing rigorous inspection by the Consumer Acceptance Group are representative models taken from the assembly lines.

Motorola achieved another important "first" with the introduction of television cabinets by Drexel Furniture Co. Shown at right, Motorola television model 21K108 with companion stereophonic phonograph. Both units feature superb contemporary cabinetry styled to match Drexel's distinctive Declaration group.

The year also saw an extension of Motorola's Local Impact program in which individual markets are saturated with newspaper, billboard and television advertising for results in depth. Concentrated in periods when Motorola does 80% of its volume in consumer products, this program has attracted a high level of dealer tie-in activities.

National brand-building advertising was increased substantially, too, with a dominant schedule of advertisements in the Saturday Evening Post supported by schedules in other leading consumer magazines.

Noteworthy among the selling ideas and tools that were sparked by the Merchandising Group is the exclusive Merchandising Mart. Nearest thing to an automatic vending machine, the Merchandising Mart makes it simple for dealers to put up effective mass displays of all Motorola consumer products.

The Merchandising Group was also responsible for a strategic product move with important long-term possibilities: use of Drexel cabinets for television and stereo.





This union of Motorola quality and Drexel styling has already produced results beyond our fondest expectations. One has been to substantially increase the average selling price of television and stereo sets. Another, to place Motorola products in a larger number of prestige furniture and department stores in all parts of the country.

distribution

The perpetual mission of the Distribution Group is to study and strengthen the Consumer Products Division's channels of distribution.

Founded on the belief that the independent distributor is the key to effective operation in

today's market, this group carries on a continuing sales improvement program for distributors.

Administered through 21 Regional Managers, this program provides specific plans and methods for every phase of the distributor's business: buying, selling, financing, advertising, merchandising and personnel.

In addition, the Distribution Group also maintains a program for testing and evaluating new channels for getting the Division's products to market.

Also operating within the Distribution Group is Market Research. This organization gathers and evaluates the facts which guide the making of the Division's basic marketing decisions.

It develops short and long range sales projections and inventory forecasts for every model

in Motorola's consumer lines. Some of the results of its work have been the smoothing out of production and the minimizing of inventory and liquidations, with consequent important economies.

national sales managers

The Consumer Products Division has three National Sales Managers, one each for television, stereo high fidelity and radio, and Motorola brand car radios.

Broadly speaking, their function is to execute the Division's sales and merchandising programs in the field. This they do by working closely with distributor personnel and the Division's 21 regional men.

Actually, that is only one of their responsibilities. Each of these men is responsible for coordinating all internal and external factors that have a bearing on the development of the programs supporting their products.

These factors are legion and demand constant attention.

To name just a few . . . product development, pricing, product availability, promotions, competitive practices, inventory controls, sales forecasting and sales analysis . . . all essential to

success in today's sharply competitive market.

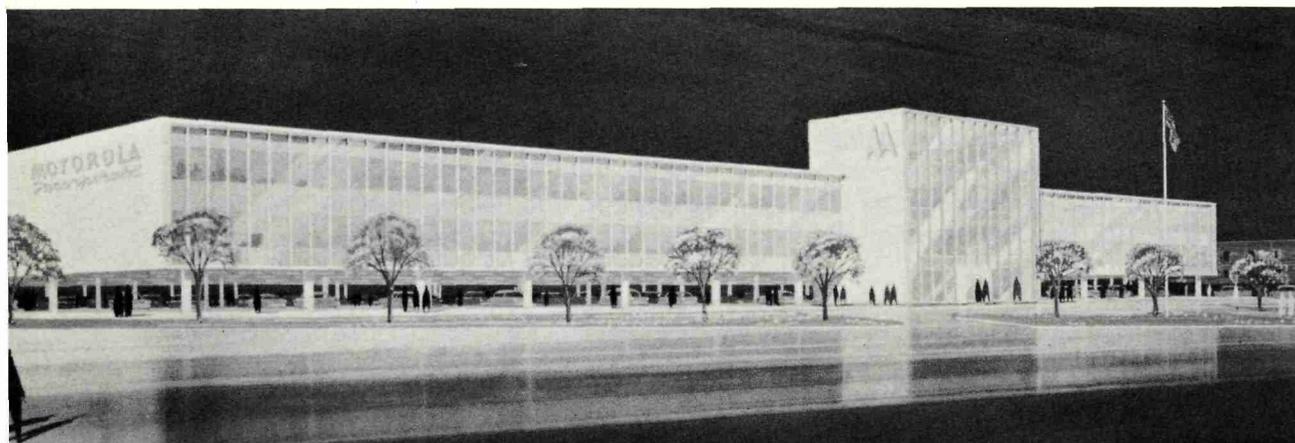
The success of their programs may be measured by the fact that the Consumer Products Division has just had its greatest final quarter in four years! Sales projections for the first quarter of 1959 indicate new peaks in several product lines.

a look forward

With today's consumer upgrading his tastes and attaching more importance to value, Motorola's Consumer Products Division finds itself in a very desirable and strategic position. Never before has the outlook for growth been brighter.

Motorola's recognition as the leader in the field of stereo high fidelity is indicative of things to come. The public has rediscovered the importance and beauty of sound. The Division has in the offing a series of new developments that hold great promise for maintaining and extending Motorola's leadership in this field as well as in others.

With people, products and programs dedicated to quality and reliability, the Division is on the move at a pace difficult to match.



An architectural sketch of the Company's new multi-floor administration building scheduled for completion during 1960 in Franklin Park, Illinois.

Plants and Laboratories

CHICAGO, ILLINOIS

FRANKLIN PARK, ILLINOIS

QUINCY, ILLINOIS

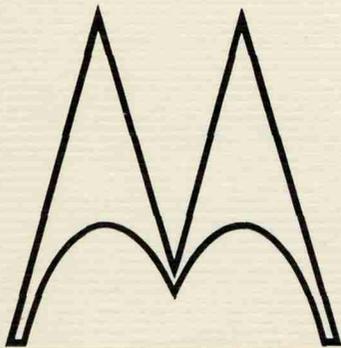
ARCADE, NEW YORK

PHOENIX, ARIZONA

RIVERSIDE, CALIFORNIA



*reliability is engineered into
every Motorola product*



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