

Motorola
annual
report
1970

Most of our products and services are generic to the world's rapidly expanding needs. Our long-term success is importantly dependent on establishing ourselves in the world market. If we do not earn a major share of our gross revenues from non-U.S. markets within this decade, we will have forfeited the responsibility to serve our transnational customers and we may fail to maintain viable economics of size compared to world-oriented competitors here and abroad.

Robert W. Galvin



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directors and officers (inside back cover)

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Cover

In selecting the cover photograph, which relates youth of the world to the seas and what lies beyond in the future, we found symbolism with the aspirations of Motorola worldwide and the ultimate use of our products in satisfying diverse human needs everywhere.

financial highlights

	1970	1969
	(dollar amounts in thousands except per share data)	
Sales and Other Revenues	\$ 796,419	\$ 873,224
Income Before Taxes and 1970 Non-Recurring Charge	51,813	71,843
% to Sales	6.51%	8.23%
Federal Income Taxes Excluding 1970 Non-Recurring Charge	26,150	38,050
Earnings from Operations	25,663	33,793
Per Share of Capital Stock from Operations	1.93	2.74
Non-Recurring Charge Net of Taxes	1,422	—
Capital Expenditures	41,724	43,294
Depreciation	24,508	22,531
Working Capital	221,411	235,377
Current Ratio	2.38	2.47
Shareholders' Equity	344,085	326,134
Average Shares Outstanding	13,324,759	12,328,168
Book Value Per Share	25.79	24.51
Yearend Employment	36,000	45,000

International Supplement

To better accommodate our international shareholders, associates and customers, a supplement to this annual report has been prepared for distribution with copies sent abroad. The supplement contains German, French and Spanish translations of financial statements and highlights and the letter to the shareholders. Copies of the supplement can be obtained from the public relations department at the address shown on the back cover.

Annual Meeting

The annual meeting will be held on Monday, May 3, 1971. A notice of the meeting, together with a form of proxy and a proxy statement, will be mailed to shareholders on or about April 5, 1971, at which time proxies will be solicited by management.

Transfer Agents

Harris Trust and Savings Bank,
111 W. Monroe St., Chicago, Illinois 60690

First National City Bank, 111 Wall St.,
New York, New York 10015

Registrars

Continental Illinois National Bank and
Trust Company of Chicago, 231 S. LaSalle St.,
Chicago, Illinois 60690

Irving Trust Company, 1 Wall St.,
New York, New York 10015

to our shareholders and friends

Our businesses were variously affected in 1970 by the impact of governmental restraints, consumer apathy, strikes in related industries and softening in certain overseas markets. However, our diversification in the electronics industry was again a sustaining benefit.

While total sales declined 9% to \$796,418,521, our communications division achieved record revenues with a 10% increase over 1969 and for the first time was the company's largest contributor to both sales and earnings. This achievement does not reflect the results of the control systems division which was merged into the communications division late in the year. Sales of the automotive division held about even, while a decline of less than 10% was experienced in the semiconductor division. Revenues of the government and consumer divisions also declined.

Earnings from operations were off 24% to \$25,662,905, \$1.93 per share versus \$2.74 in 1969. Discontinuation of color picture tube production in the second quarter resulted in an extraordinary non-recurring expense of \$1,422,465, or 11 cents per share.

The communications and government divisions enjoyed increased earnings, the semiconductor and automotive divisions showed decreases, and the consumer division incurred a loss. The government division turned in an especially commendable performance by achieving record earnings despite substantially reduced government contracting.

Financial Condition

The financial condition of the company is strong as exemplified by a current ratio \$2.38 of current assets

to \$1 of current liabilities and long-term debt at 16% of long-term debt plus equity. A \$20 million Eurodollar revolving credit was established to aid us with our overseas expansion, but is not expected to be used until midyear. In early 1971, the company terminated its domestic revolving bank credit as a result of its strong current position.

Capital Expenditures

Capital expenditures in 1970 totaled \$42 million. The major share of this was used to expand communications and semiconductor facilities in the United States and abroad. The communications division's Fort Lauderdale, Florida facility and Schaumburg, Illinois addition are nearing completion, and additional monies were spent to expand Wiesbaden, Germany operations. The semiconductor division expanded its integrated circuit facility in Mesa, Arizona as well as certain overseas facilities. The consumer division's Taiwan facility became operational in the fourth quarter.

In 1971, capital expenditures may approximate \$30 million. While we are indeed concerned with today's problems, our continued attention to and provision for long-range opportunities — foreign and domestic — are vital for growth and survival.

Research and Development

Our investment for research, product engineering and development programs last year remained constant with 1969 levels. Increased expenditures are planned for these activities in 1971.

Share Distribution and Dividends

The company made a share-for-share distribution of its common stock last May after shareholders approved an increase of authorized shares at the annual meeting. Starting at midyear, the annual dividend rate was increased 20% to 60 cents per share on the newly increased outstanding shares.



Robert W. Galvin, chairman and chief executive officer; Elmer H. Wavering, vice chairman and chief operating officer; William J. Weisz, president and assistant chief operating officer.

Management Changes

Depth in management continued to be emphasized. During the year, and as previously programmed, Elmer H. Wavering was elected vice chairman of the board, remaining chief operating officer. William J. Weisz, assistant chief operating officer, was elected president.

Daniel E. Noble resigned his active officership and became chairman of the science advisory board, thus assuring the company of his continued technical counsel.

Edwin P. Vanderwicken also resigned his active officership, becoming chairman of the finance committee of the board of directors and was succeeded by John T. Hickey as vice president for finance and secretary.

Fred P. Hill was elected vice president and director of entertainment product operations and international operations in the automotive products division.

Outlook

We expect continued softness through the first quarter of 1971, with improving results as the year progresses. Our current estimates are for increased sales and increased earnings for the full year, with the main

uncertainties being the timing and pace of recovery in the domestic economy and economic trends in transnational markets.

The difficult year of 1970 resulted in increasingly efficient operations, demonstrated ability to shift quickly to alternate operating plans, and improved cost controls and financial strength. With an experienced management team, enterprising marketing and distribution, sound technical developments and new products, the company is ready to pursue immediate and long-range opportunities, both domestic and international.

For the Board of Directors,

CHAIRMAN OF THE BOARD

VICE CHAIRMAN OF THE BOARD

PRESIDENT

March 18, 1971

communications division

The division's diversity of markets played an important role in the achievement of record sales and earnings for 1970.

A line of new products in tune with shifting market emphasis, improvements in operating efficiencies and maintenance of product costs through creative engineering design, enabled the division to retain its leading position domestically and to enhance its international posture.

In 1970, sales volume again reached a new high — a trend that has continued for more than three decades. By effectively penetrating markets with the greatest needs, the division maintained its steady growth. New order input also ran ahead of last year, but somewhat below the level projected.

Earnings continued on an upward trend, setting new highs. Margin improvement continued despite start-up costs for expanding manufacturing and distribution facilities.

Heavy emphasis was placed on cost reduction programs to effect economies in operations. Competitive purchasing and manufacturing cost reduction groups searched out or developed new methods and materials for improved cost effectiveness. Special engineering groups modified product designs to utilize new manufacturing processes. A motivational TEAM program stimulated employees to attain higher goals in quality, attendance and productivity. In addition, a new indirect labor cost evaluation technique was initiated.

In preparing for opportunities offered by the potential of world markets, the division broadened its operations overseas and placed additional senior managers on the international scene. Motorola increased its share of ownership in the successful joint venture in Israel. New international offices were opened in Sweden, Denmark, Portugal, Switzerland, France, England, Puerto Rico, Australia, Hong Kong and Venezuela. In Canada, Israel and Germany, product development is underway to respond to particular customer needs in those markets and for worldwide sale. The division will continue to build its international distribution and manufacturing capabilities.

Ground was broken and construction started on a 240,000 foot Florida manufacturing facility, with completion scheduled for spring 1971. At the Schaumburg, Illinois headquarters, a 317,000 foot addition is nearing completion with full operational capability expected by the second quarter of 1971. A 30,000 foot eastern area sales headquarters building was completed in Glen Rock, New Jersey.

In 1970 the Federal Communications Commission (FCC) took steps intended to ease frequency congestion for land mobile communications users. The commission provided

for use of a maximum of two of the lower seven UHF channels (14 to 20), on a geographic shared basis with television broadcasting, by private land mobile stations within 50 miles of the center of the ten largest urbanized areas under restrictive technical standards. It also allocated 115 MHz of spectrum at the high end of the UHF band for land mobile use and proposed that 75 MHz of this 115 MHz be designated for use by wireline carriers and 40 MHz be designated for use by private land mobile radio users.

Sizable growth occurred in government markets during the year, primarily in the police market. The need for better communications is increasingly vital as a rising crime rate, more civil disturbances and other anxieties facing the nation, compound the problems for police, fire and other governmental agencies. Increased penetration of these markets was achieved by a complete systems capability and competent backup support.

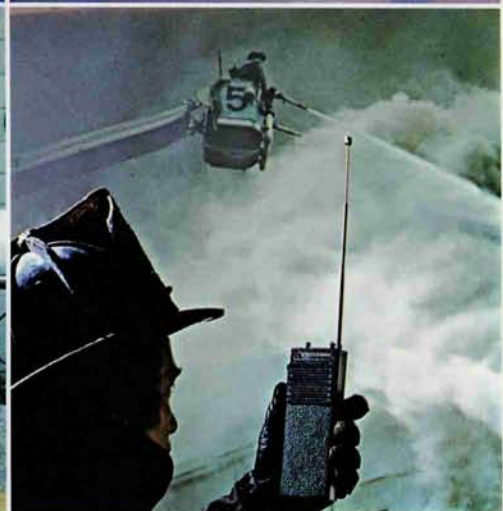
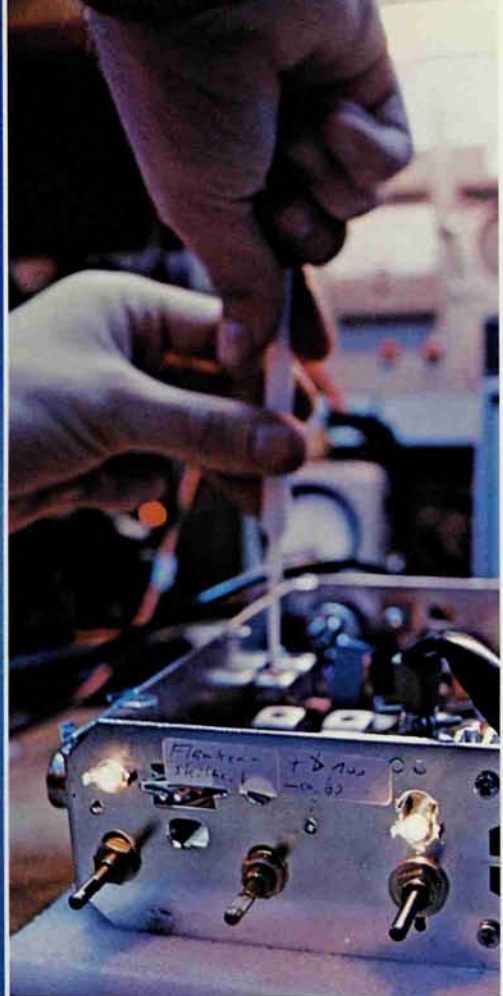
Across the country, law enforcement agencies installed modern communications facilities. For example, sophisticated Motorola systems were installed in Miami, Omaha, Sacramento, Seattle, Milwaukee, and Providence. A five-city, two-county system was installed in the Winston-Salem, North Carolina area for coordinated wide-area communications.

Contracts in the government market also included additional radio equipment for the New York Transit Authority, and improved communications and security systems for the University of Illinois and the St. Louis Housing Authority.

The industrial and general business market was mixed. However, communications systems became increasingly important to help stem rising labor costs in this broad marketplace. Radio paging, two-way portable and mobile radios, and remote signalling and control systems increase effectiveness and reduce costs. Closed circuit television systems (CCTV) monitor automated production processes and also provide area surveillance and security. Historically, the industrial and general business market has maintained a moderate yearly growth rate. Continuation of this growth is expected.

As is well known the transportation industry faced serious economic problems during the year. While communications systems to achieve efficiency and safety were critically needed and desired, the industry's problems dampened sales. An overall upward trend is expected for the coming year.

The telephone and common carrier market experienced moderate growth during the year, but did not reach its potential due to delay in resolution of frequency availability by the FCC and a slowdown in capital spending by the telephone industry for radio equipment. As the



MICOR mobile radio, an outstanding technical achievement

Wiesbaden, product development for world markets

Hospital Emergency Administrative Radio system, reliable communications during disasters

Versatile "Handie-Talkie" radio, effective communications in diverse circumstances

general economy recovers, this market will show marked improvement.

Significant new products and concepts were introduced in 1970. The new "MICOR" radio was the most outstanding technical achievement during the year. It represented the first dramatic design change in mobile radio in over a decade. Proprietary monolithic integrated circuits and crystal filters substantially reduce the number of components and circuits, greatly increasing reliability. Single layer, modular construction, encapsulated reed switches and plug-in glass epoxy circuit boards simplify maintenance. Intercabling wires are virtually eliminated. Higher rf power outputs are achieved with up to 110 watts in the high band VHF models.

A new, all solid state, "MOCOM 35" mobile radio filled out the high band VHF mobile line at the lower end of the price range. This dash-mounted unit provides up to 15 watts rf power output, weighs less than eight pounds and is easily removed for servicing. With the "MOCOM 10, 30, and 70" units introduced earlier, a full line of mobile radios is available for customers requiring economical yet reliable communications.

New high-power "Handie-Talkie" portable radios in the UHF band also stimulated sales since most of the general business frequencies are in this band. Use of mobile printers for hard copy readout in vehicles is expected to gain in popularity since the FCC has approved its use in police, fire and railroad markets.

The trend towards personal communications continues. Accordingly, the division developed a system called TAC, for total area coverage. This system enables a man on foot carrying a portable radio to maintain good communications with his headquarters from anywhere in a city.

Two new CCTV systems were introduced during the year. An important technology breakthrough enabled the design of a single CCTV camera capable of both day and night operation, with an automatic iris adjusting to compensate for light changes from bright sunlight to moonlight. This modular constructed, solid state camera features a standard 10 to 1 zoom lens.

An economical yet reliable CCTV system was introduced which offers comparable quality to Motorola's industrial units. A solid state camera incorporates the latest technology, with nearly all components mounted on a single snap-out circuit board for ease of servicing.

New solid state microwave systems were built to achieve desired density of voice and data communications in the 960, 2000, and 6000 MHz bands. During the year, the Indiana State Police installed a microwave system for toll road coverage. These new point-to-point products also gener-

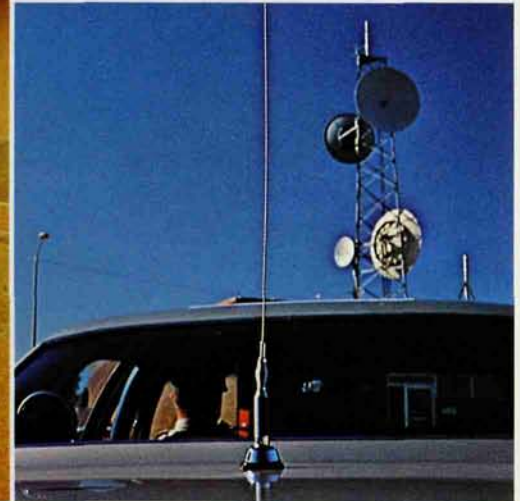
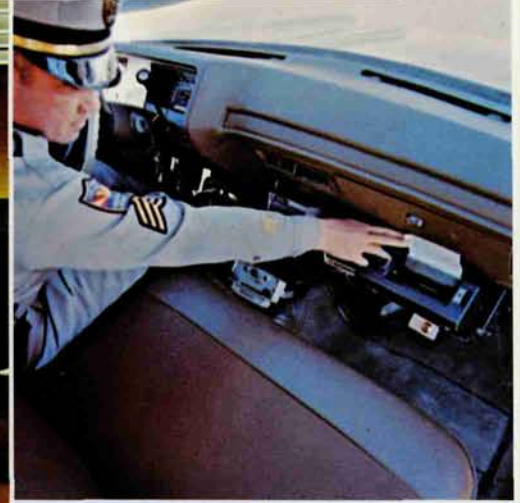
ated interest in other markets, such as pipelines, railroads, utilities, relay services and telephone companies.

New communications control center designs, which feature modular construction in the electronics as well as in the basic units, provide maximum flexibility with potential for economic expansion. Modular design also improves reliability and substantially increases channel control capability.

Radio is often the only means of reliable communications during national disasters such as the Texas hurricane in early 1970. At yearend 43 states were using the Hospital Emergency Administrative Radio (HEAR) system which ties together various hospitals, ambulances, and other public safety officials during emergencies. On routine work days, the system operates to coordinate each hospital's daily activities.

At yearend, the division assumed responsibility for manufacturing and marketing the industrial process control and information systems previously designated as the control systems division. Often used by the same customers served by the communications division, these systems complement the division's major product lines.

With a posture oriented toward the growing domestic markets, introduction of new products which are setting standards for the industry, and the influence of Motorola's quality name in world markets, further increases in sales and earnings are expected for 1971.



Communications control center, customized for law enforcement agencies

Mobile printer, hard copy readout for ready reference

Fort Lauderdale facility, ready in spring

Microwave, extended coverage of voice and data communications

Canadian facility, increased capability for serving international markets

semiconductor products division

Total U.S. factory dollar sales of semiconductors declined about nine per cent from the 1969 level, reflecting general softness in the domestic economy. As a result, sales and earnings of Motorola's semiconductor products division were down from the record highs established in 1969. The fact that Motorola exceeded its sales objectives in both Europe and the Far East was a prime factor in offsetting decreased domestic demand for semiconductors. Total international sales increased nearly 40 per cent over the previous year.

To meet additional challenges which developed in the traditionally competitive semiconductor industry, the division placed heavy emphasis, throughout the year, on reducing product costs. Alternate operating budgets were established at the outset of the year, and reduced budgets were put into effect without significant time loss as the market continued its downward trend. Employment was reduced as required to keep in line with current and projected sales. These adjustments were made without weakening the division's ability to respond to a later turnaround in the economy.

The division also took several steps to further improve efficiency in marketing, manufacturing, and product development.

In the marketing organization, product planning functions for consumer, computer, industrial and federal markets were moved to the highest practical level. This change provides greater sensitivity to customers' needs for increasingly complex semiconductors. In addition, the field sales force was restructured along geographic, rather than "major market," lines.

The integrated circuit group was reorganized to concentrate talent in product areas with significant growth potential. Standard and advanced integrated circuit activities were unified under single management, and the marketing, manufacturing and product development functions were realigned within the group.

The division also introduced the Motorola MOS Polycell LSI system, which offers a unique solution to the customer/supplier interface problems inherent in designing and producing complex, custom integrated circuits. Through this system, customers are able to use the division's Computer Aided Design (CAD) facility, with its extensive library of basic logic designs, or "building blocks," which have been designed and stored over the past several years. By working closely with Motorola's skilled logic designers, customers can reduce their custom circuit design costs by as

much as 50 per cent, and also significantly reduce required design time.

In manufacturing, the division maintained its industry leadership position through addition of newly developed production equipment and expanded processing capabilities, such as:

- Installation of the industry's first production line laser scribe, used to separate individual chips from silicon wafers.

- Application of beam lead technology, which eliminates the critical wire bonding step, to standard integrated circuits.

- Continued investment in high-quality ceramic material processing.

- Development of capability to produce compound semiconductor materials necessary for production of optoelectronic semiconductors.

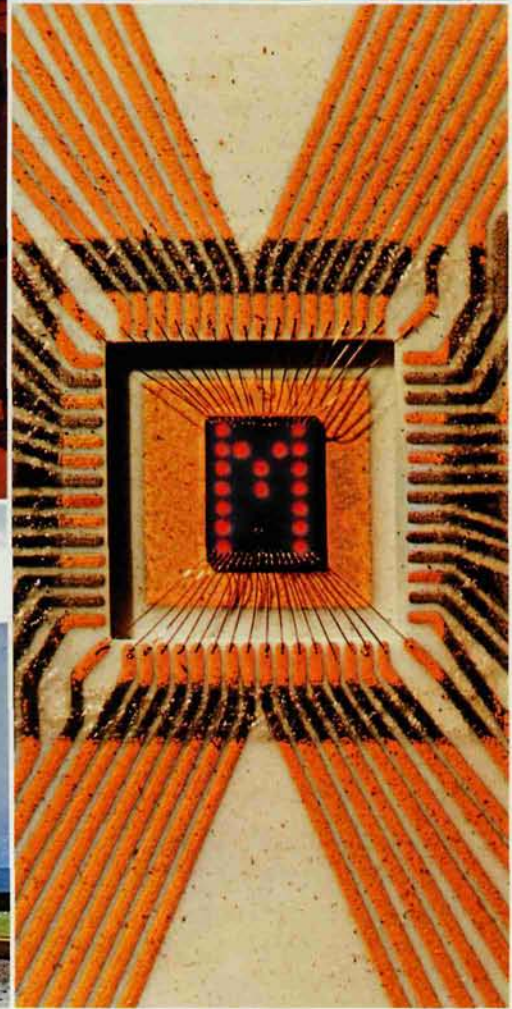
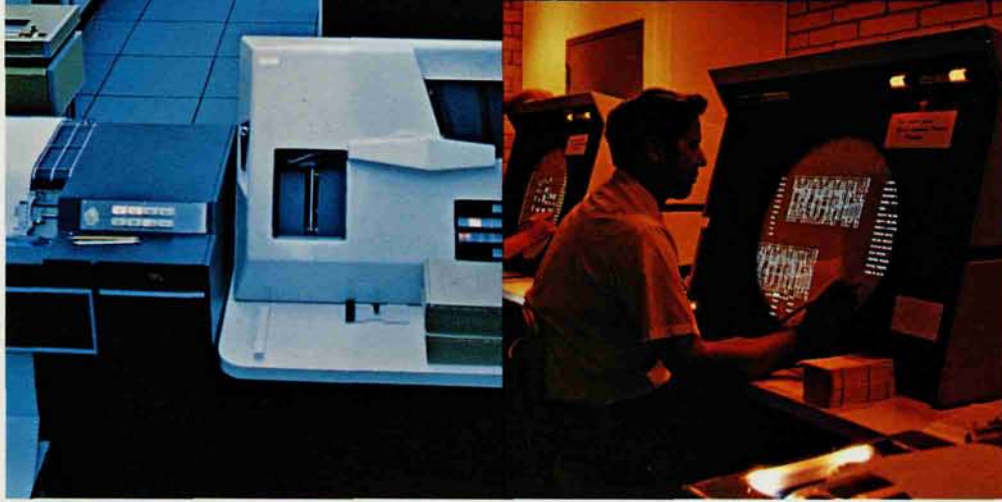
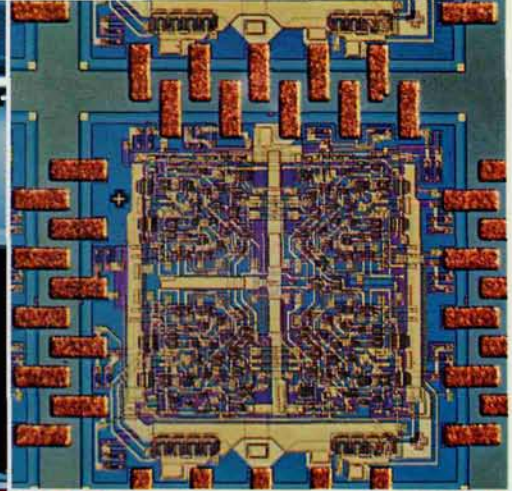
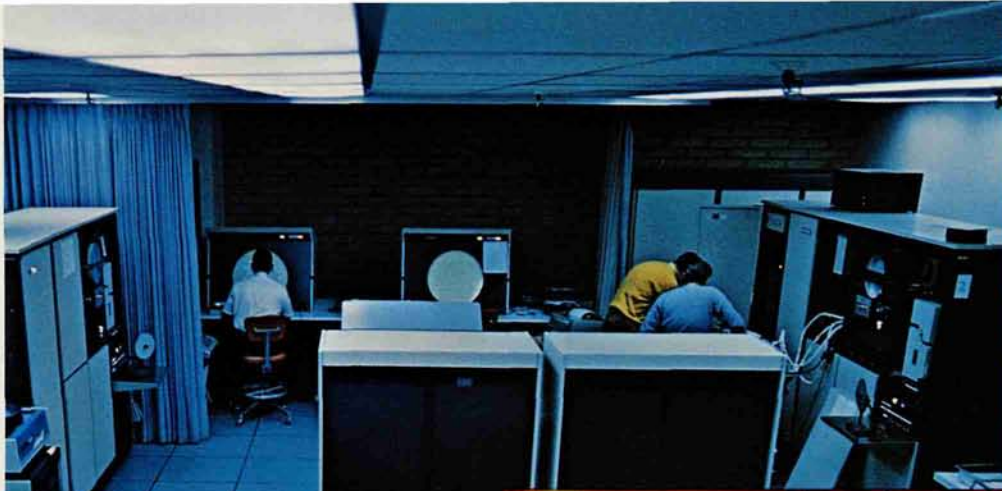
In new product development, major emphasis continued to be placed on integrated circuits.

A wide variety of linear circuits was introduced for consumer products and data transmission applications. Stereo multiplex demodulator circuits were put into production, further strengthening the division's position in the consumer marketplace. The first linear circuits commercially available for systems using the standard telephone for the transmission of digital information were introduced. These MODEM (Modulation/Demodulation) quad line drivers and receivers provide the interface between data equipment and transmission lines.

Digital integrated circuits continued to account for the major share of IC sales during 1970. Through the addition of 21 complex TTL circuits, and the acquisition of 15 complex SUHL functions from Sylvania, the division ended the year with the broadest line of complex TTL devices available in the industry. Introduction of the MECL-III product line was also completed. These ultra-high-speed logic circuits are presently being designed into the newest generation of computers.

The division broadened its line of LSI single-chip, bipolar memories for main frame and mini-computers with the introduction of a 1024-bit read-only memory, a 64-bit random-access memory and a 512-bit electrically programmable memory. In addition, several highly complex custom MOS circuits were put into production for several major customers. Standard MOS circuits introduced during the year included two 1024-bit random-access memories and four 2000-bit read-only memories.

Additional technical developments resulted in the introduction of six complementary MOS (CMOS) circuits. This logic adapts itself well to portable electronic products



Integrated circuit design center, customers reduce custom circuit design costs by as much as 50 per cent

Integrated circuit memory, ultra-high-speed logic for newest generation of computers

Guadalajara facility, completed at midyear

Alphanumeric readout, one of many new products

such as desk calculators, electronic wristwatches, mobile communications equipment and airborne electronics gear because of its low power requirement. CMOS circuits are expected to become a major product line for the division.

Discrete device sales for the industry declined by some 15 per cent during 1970. The decline reflects not only general economic conditions, but also the shift towards integrated circuits. The division continued to be the major supplier in this large market by introducing many new or improved discrete components.

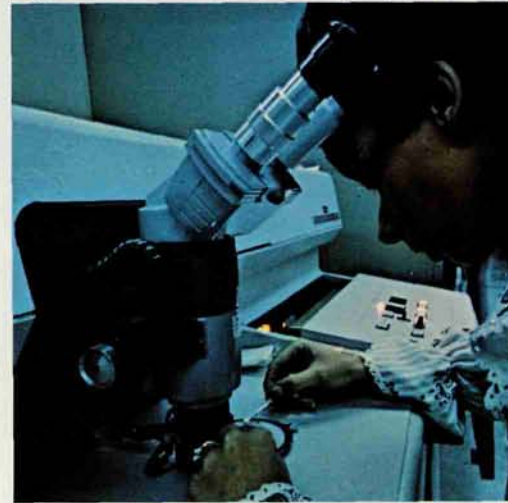
A major line of twenty low-cost "functional circuits," which lie in complexity between a discrete device and an integrated circuit, was introduced. Also, five new series of complementary power Darlington transistors, used as output devices in a variety of amplifier applications, were industry-first additions to the discrete product line. Hundreds of other improved discrete devices were introduced for both standard and new product applications.

The optoelectronic semiconductor market, slowed temporarily by adverse economic conditions, continues to hold potential for significant growth during the next decade. The division's approach to this looming market is to add to its line only low-cost, high-volume devices. Twenty-four optoelectronic devices were introduced during the year.

While no new facility programs were initiated during 1970, work on additional production capacity already under construction was continued. The division's 40,000 foot plant in Guadalajara, Mexico was completed by midyear, while a 100,000 foot addition to the Motorola integrated circuit center in Mesa, Arizona was brought close to completion by the end of the year. In Toulouse, France a 30,000 foot addition was completed and equipped for silicon wafer diffusion, giving this facility an important added capability.

In looking to 1971, the division's plans assume recovery in domestic and European economies. Semiconductor devices should increasingly penetrate consumer durable products. The data processing industry should soon complete its digestion of excess inventories caused in part by recent new product offerings. The division is now conservatively projecting that semiconductor industry sales in 1971 will approximate 1970 results, assuming overall market demand improves substantially from the relatively low level of the winter of 1970-71. Integrated circuits will account for a growing share of the total sales dollar.

The cost reducing, process improving and product development activities of the past year are expected to strengthen the division's worldwide market position and profit performance during 1971.



Electronic microscope, analysis for improving manufacturing techniques and product development

Laser scribe, improves yields and lowers costs

Toulouse facility, production for European markets

consumer products division

Widespread reluctance of the buying public to spend for "postponable purchases" such as color television was reflected in the general sales decline experienced by the industry and the division in 1970.

Early in the year, the division correctly sensed the economic outlook and embarked upon a major cost reduction program which substantially lowered its "break-even" point. Conservative planning improved the accuracy of forecasts. As a result, factory and field finished goods inventories were lowered to well below 1969 levels. These achievements place the division in position to take advantage of an up-swing in consumer spending.

The division's performance was hampered by the fact that in the unfavorable economic climate, the deluxe Quasar solid state color television line, which commands a premium price, did not sell at the same levels as in 1969.

Inventory liquidation of tube type sets by certain competitors at attractive prices also had an adverse impact on sales since Motorola had previously balanced its factory and field inventories.

Two important moves at yearend should enhance Motorola's competitive posture. Reinforcing the "layering-on" marketing strategy, in December the division introduced several Quasar II and Quasar portable color television receivers some of which have the lowest manufacturer's suggested retail prices ever placed on plug-in, plug-out modular sets. For example, in the portable color TV market, a 16-inch Quasar portable at \$299.95 was introduced, a new low suggested retail price for this type of color receiver. Additional color portable models were introduced in a move to further strengthen Motorola's position in the growing color portable market.

Also in December Motorola announced another major consumer benefit — Insta-Matic tuning. By pushing one button, the user automatically balances color, hue, intensity, contrast and even activates automatic fine tuning. This simplified tuning system, which helps eliminate "green faces" and "washed out" color, was favorably accepted by the division's distributors and their dealers.

Supporting the latest product developments, a first quarter 1971 network television advertising campaign carries the Motorola product story to twice the number of markets reached with local TV spots in 1970. A newspaper program in key cities supports the television ads.

The lower prices on some Quasar color television products and the simplicity of Insta-Matic tuning are expected to aid

Motorola distributors in recruiting additional retail outlets in 1971.

A consulting organization was engaged to study the distribution system and investigate innovative methods which could improve its effectiveness.

Apart from its important operations in the U.S. market, the division has been gradually expanding its international marketing since it first ventured abroad about 15 years ago. Motorola now has manufacturing licensees using its brand name in Argentina, Chile, Colombia, Peru, Uruguay and Venezuela in South America, as well as Mexico, Italy and the Philippines. Motorola has emerged as a major brand name in many Latin American nations, being particularly strong in black and white television and stereo products. Future activities will make the Motorola brand available in additional international markets.

An important event in the international market was the December introduction of a convertible color set for use by Armed Forces personnel. This unit will accept color signals of both the European and United States color TV systems, a decided advantage to buyers who expect to move from one continent to the other.

Increased competition in the United States from overseas manufacturers was experienced in 1970, and the division joined the ranks of other domestic manufacturers who have started offshore assembly operations. In late November, the Taiwan plant was activated, where personal electronic products are produced.

Plans were started for an assembly plant in Canada to better serve that market.

During 1970, the division embarked upon a major consumer service and satisfaction program which is founded on the principle that successful businesses must listen and respond to the consumers' desires. This program represents an extension of the division's service oriented business philosophy, which starts with the design of the product.

Considerable consumer goodwill has been earned through expansion of the phone follow-up to ascertain that purchasers of Quasar color TV sets are fully satisfied with their products. In 1970, the phone campaign was augmented with a sampling of visits to the homes of Quasar color TV owners. Division management researched the consumer movement in England, Sweden and Denmark and returned with a number of suggestions on how some overseas approaches to consumerism could be adopted domestically.

Dialogues with faculties and students on college campuses were undertaken by the division in an effort to seek the ideas of young adults on how business can be more effective in the onrushing consumer movement. Consumer

panels were employed as another system of feedback to business of how its ultimate buyers view today's changing life styles.

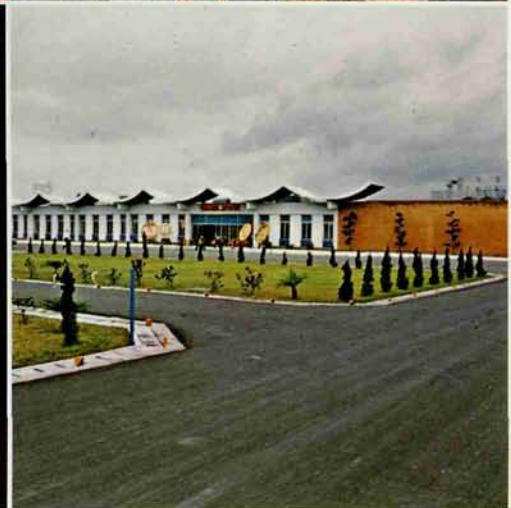
The division introduced an easily understandable and simply stated guarantee on the Quasar sets unveiled in December. An office of consumer affairs was activated, addressing itself to matters of customer communications, product safety and service.

Looking to 1971, the consumer products division's plans assume continued cautious consumer spending on durables, particularly during the first part of the year. Once the ingredient of greater consumer confidence is restored, a gradual upturn in business will occur. The division expects improvement in sales of all product lines by late 1971. When this occurs, the recession-born programs of 1970 which lowered the "break-even" point, controlled inventories, introduced additional attractive product features and prices, should favorably affect operating results.



Insta-Matic, one button balances color, hue, intensity, contrast and fine tuning

Converts stereo to play new 8-track cartridges which reproduce 4-channel sound



Quasar portable, first modular color set to sell under \$300

Taiwan facility, production of personal electronics products began in November

Component stereo systems and personal electronic products

government electronics division

Sales in 1970 were down approximately 15 per cent from 1969, due to closing the division's Chicago operations and the declining government contract market. Division earnings, however, were up nearly 15 per cent and set a new high, reflecting improved performance resulting from consolidating operations in Scottsdale, Arizona, and from discontinuing certain marginal businesses previously engaged in by the Chicago facility.

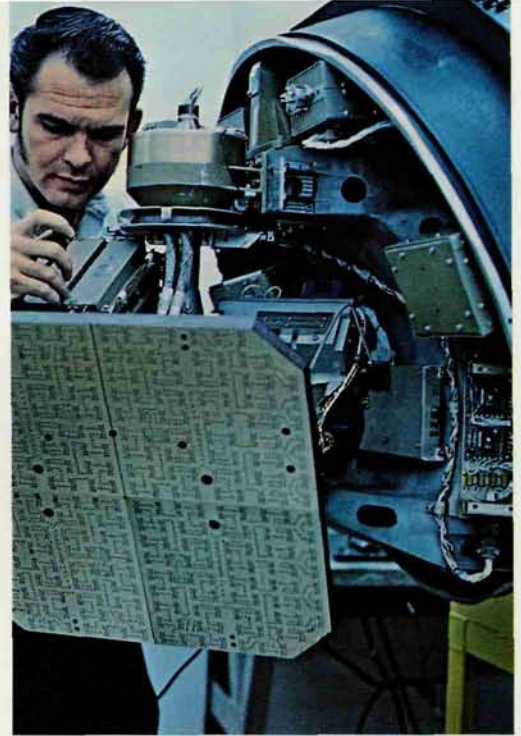
International operations began to make significant contributions to overall division operations in 1970 and, through licensing agreements with foreign companies, are expected to begin to produce additional earnings through royalty income in 1971. International bookings for products to be manufactured either at Scottsdale or under licensing agreements more than tripled as compared to 1969.

One operating license agreement is with Motorola-Israel, a Motorola joint venture, under which a military UHF ground-to-air communications set is being manufactured against orders from both the Israeli ministry of defense and the government of Iran. A second operating license is for another UHF ground-to-air communications product for sale to the Swedish Air Force which will be manufactured by a Swedish licensee.

Key U.S. contracts received in 1970 include: the integrated target control system contract received from the Navy but which includes Army, Navy and Air Force requirements for ground and airborne equipment used in drone target control systems; both airborne and shipborne equipment to enhance the capability of the Navy's all-weather carrier landing system; and a new contract from the Army for a long range position determining system for locating the position of forward observers in battlefield situations. All of these represent new contracts with attractive follow-on potential.

The division received several significant awards for spaceborne subsystems, continuing its longstanding high level of effort in support of the nation's space program. In addition, the division continues to be in a favorable position to receive several missile guidance contracts and has delivered flight test hardware employing sophisticated electronic countermeasure techniques for improving the capability of the B-52 strategic bomber.

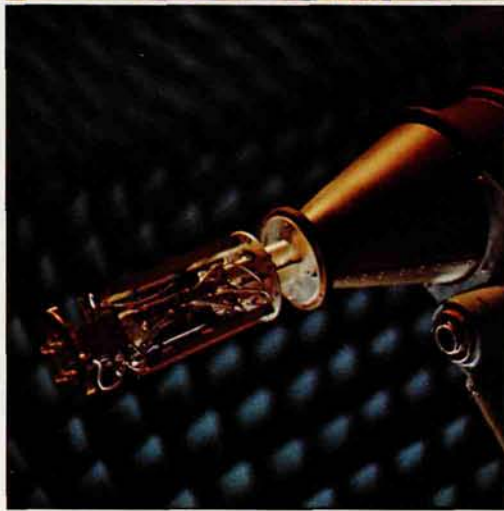
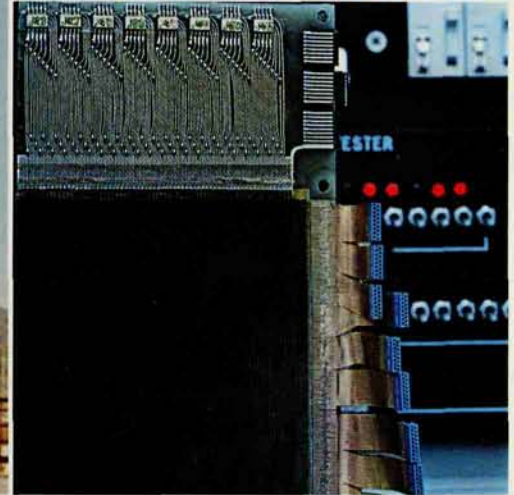
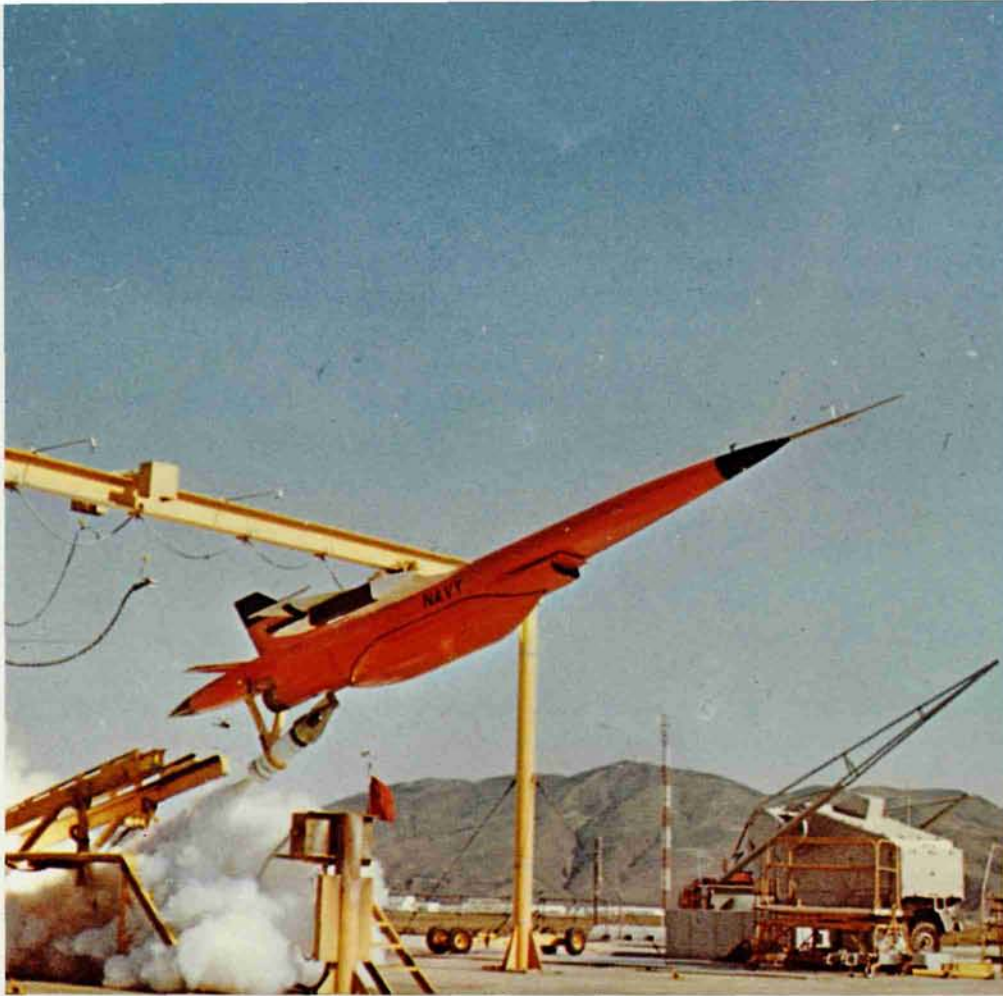
The successful Apollo 14 mission extended Motorola's record for space communications equipment which has never failed or malfunctioned during a manned or unmanned mission. The division's employees are justifiably proud of this record, and also the record achieved by



Beacon tracking radar, close support fire control system for *Flying Boxcar* and *Hercules* aircraft

their equipment on the Mariner IV unmanned mission to the planet Mars. The Motorola unit satisfactorily transmitted usable data more than 213 million miles, and continued to operate effectively in space for over three years.

Although the defense and space markets continue to decline, the division maintains a favorable position due to its policy of emphasizing research and development contracts in selected areas and of maintaining a leadership position in a diversity of technologies. New order bookings in 1970 were up slightly over 1969, representing exceptional performance and resulting in increased market penetration. Consequently, the forecast for 1971 is for slightly increased sales, earnings and bookings.



Firebee, unmanned jet-powered target drone . . . remotely controlled from the ground, drones simulate enemy aircraft or missile attacks on U.S. planes and ships

Broad-band antenna, increased capability for electronic countermeasure systems

Infrared view of Salton Sea and Imperial Valley, spacecraft studies Earth's surface and resources

Electronic ordnance, combines advanced electronic and production techniques

Plated wire memory, highly reliable for NASA spacecraft and Air Force applications

Swedish aircraft, ground-to-air communications manufactured by Swedish licensee

automotive products division

Division sales about equalled the 1969 level despite major softening in the automotive and some related markets. Earnings declined due to international startup costs and reduced volume in certain product lines.

The division realigned into three major operational businesses — entertainment products, automotive electrical, and international operations, each activity with its own engineering, sales and marketing staff. This structure will encourage maximum growth with clearly defined profit responsibilities.

Car radio continues to be the major product line. Significant contracts received include 100 per cent of the 1971 radio requirements for Volkswagen and American Motors in the United States and Canada, the Ford Capri, and the AM/FM radios sold through the Autolite-Ford Parts Division for Ford's new subcompact Pinto. The division was awarded a substantial share of Chrysler's 1971 radio requirements, and during the 1972 model year, Motorola will phase in as sole outside supplier to Chrysler for all car radio and tape player products for both the 1972 and 1973 model years. This represents approximately a threefold increase in the level of business with Chrysler.

The tape player market continues to grow rapidly. Pre-recorded tape sales are expected to account for about one-third of all U.S. recorded music sales during 1971. Retail sales of pre-recorded 8-track cartridges are expected to increase 25 per cent in 1971. Equipment sales for the industry continued strong. However, Motorola's original equipment sales were adversely affected by the decline in new car sales during 1970. In 1971, Motorola will continue as sole supplier of tape players to Ford, American Motors, Volkswagen, and Volvo. The division is also active in other tape player markets including sale of tape decks to other equipment manufacturers.

Motorola-branded automotive entertainment products, previously marketed through the consumer products division, were shifted to the automotive division. The combined talents and resources of the new organizational arrangement will further strengthen Motorola's position in this market.

The division launched a four-channel sound system which is fully compatible with existing 8-track cartridges. This technique provides the capability of reproducing sound from four discrete sources, and further approaches the ultimate in sound reproduction.

Sale of solid state ignition systems increased in the marine market. Motorola now supplies 100 per cent of the require-

ments for Chrysler Outboard Corporation's 2-, 3-, and 4-cylinder engines and 80 per cent for Johnson and Evinrude engines.

The division continued to widen its product-customer-industry base for alternator charging systems. American Motors awarded Motorola a contract for 100 per cent of its charging system requirements through the 1973 model year. A proprietary brushless alternator, which will considerably reduce maintenance cost, is now in production.

A new service network was established and distribution was expanded to assure better customer coverage and service for the underhood product lines.

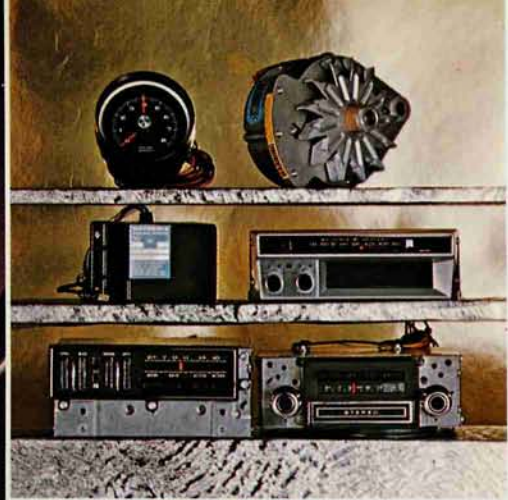
International operations were expanded during the year. Car radios and tape players are being manufactured by Motorola Automotive Products, Ltd., in England. Sales are increasing steadily. In addition to aftermarket sales, major orders were received from Chrysler and Volkswagen in the United Kingdom.

A joint venture company in Japan, Alps-Motorola, manufactures car radios, tape players, and tape decks for sale in the United States, Japan, and other world markets. A new, modern facility was dedicated in November. This association enables the division to effectively meet competition from other offshore manufacturers.

Sales and establishment of distribution outlets are progressing well in Canada. Although still in the early stages of development, Canadian sales are expected to increase significantly.

Industry estimates for 1971 indicate a significant upturn for domestic and import car and truck sales. The outlook also appears favorable for other division markets such as marine, agricultural, and industrial machinery. The relative shares of market of our major customers is expected to hold steady.

Expanded international activity is planned for 1971 in all major free-world markets through subsidiaries, joint ventures, or licensee arrangements.



Auto tape player, 4-channel sound for new dimensions in music

Midland facility, producing automotive entertainment products for Canadian and U.S. markets

Automotive entertainment products, electronic charging systems and instrumentation

Volkswagen radio/tape player

Japanese joint venture company, manufacturing car radios, tape players and tape decks for free-world markets.

corporate marketing units

Education and Training Products The year was highlighted by introduction of a color electronic video recording (EVR) TELEPLAYER unit well ahead of schedule, at the same price as originally planned for a black and white version. Production started in late 1970 in Quincy, Illinois.

The first marketing efforts are directed to training, with early units going into such fields as insurance, hospital and medical, industrial and police training. The next emphasis will be on the educational field, then the consumer market.

Anticipating the potential in software as well as EVR hardware, Motorola is developing its own extensive library of programming for EVR cassettes through the MOTOROLA TELEPROGRAM Center.

Last year this center began to acquire rights to existing program materials and enter into agreements for new program production. A prestigious film agreement was concluded when Motorola acquired exclusive EVR distribution rights to the vast library of the National Film Board of Canada. Existing cassettes contain many training, education, self-enrichment and entertainment programs. New program development is in process for education, training, cultural enrichment and management development. With over 1000 titles already in its library, the MOTOROLA TELEPROGRAM Center will continue acquisition of program materials.

As CBS licenses other manufacturers of EVR players and they enter the market in 1972 and thereafter, new demands for Motorola cassettes will be created.

Motorola has taken a leadership position by bringing to the market the first complete cassette TV system.

Electronic video recording (EVR), complete training and entertainment systems including players, receivers and cassette programs.



Institutional Electronics In the hotel/motel market, the unit further increased its penetration by selling approximately 150 per cent more television receivers than in 1969. Established accounts include many national chains, such as Holiday Inn, Hyatt, Marriott and Western International. Contact has been made with many others. With this base, the unit expects that 1971 efforts will result in additionally increased sales of television products in this market.

The first real impact for Motorola educational television sets was made in Dade County, Florida; numerous counties in West Virginia and Illinois, including Jacksonville, Illinois; the Norfolk, Virginia school district; the University of Texas, and several school districts in Austin, Texas. With the television line and associated products such as EVR systems, the unit plans for accelerated penetration in the educational field during 1971.

Sales in the health care market increased over 1969, despite significantly reduced construction activity in this marketplace. With a technological lead in unique products for this market and with improvement in the domestic economy, sales performance is expected to be substantially better in 1971.

Applied Systems Unit Activities during 1970 were directed primarily at establishing Motorola in three major electronic systems areas: environmental, security, and urban.

In the environmental category, Motorola systems are addressed to major problems, including monitoring, analyzing, and controlling air, water, petroleum and power. Significant contracts were received from the Bureau of Reclamation for water resource management systems for use on the Colorado River.

The unit's security systems focus on surveillance and law enforcement.

In the urban category, emphasis is placed on transportation and integrated communications systems, including airport facilities management, communications systems for urban mass transit, and complex communications systems for other urban needs.

In all three categories, there is significant similarity in the types of systems and technology required, the similarity being the need for information input or sensing, communication to a central point and processing of the information for display, decision-making and control.

The unit maintains close coordination with the product divisions to utilize Motorola's total capabilities and to achieve a "one-face" relationship with systems customers.

ten year financial summary

Motorola, Inc. and Subsidiaries

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Sales and Other Revenues	\$298,219,845	345,311,820	377,852,809	419,066,694	516,973,065	682,374,719	629,975,344	775,124,336	873,224,220	796,418,521
Operating Income Before Income Taxes	\$ 19,900,308	25,258,547	27,126,526	38,926,724	57,838,678	60,012,843	34,571,147	57,376,196	71,842,573	51,812,905
Earnings From Operations	\$ 9,517,308	12,192,862	12,926,526	20,666,724	31,838,678	32,952,843	18,816,147	28,261,196	33,792,573	25,662,905
Earnings Per Share*	\$.79	1.01	1.07	1.71	2.62	2.70	1.54	2.30	2.74	1.93
Working Capital	\$ 95,078,616	96,804,189	92,358,852	107,625,939	118,014,680	128,158,542	131,208,227	176,314,671	235,377,101	221,410,517
Net Investment in Plant & Equipment	\$ 48,427,446	54,783,818	67,283,543	67,836,835	81,082,588	127,219,219	136,962,787	145,581,706	167,499,524	174,530,015
Shareholders' Equity	\$102,655,506	111,835,713	120,735,367	137,533,422	165,002,282	192,598,273	206,286,381	238,778,071	326,134,470	344,085,266

* Earnings per share are based on average shares outstanding during the respective years, adjusted for share distributions.

The conversion of 4½% debentures and the exercise of outstanding stock options would not result in a significant dilution of earnings per share.

Earnings per share shown above do not include 8¢ of non-recurring gain from sale of finance subsidiary in 1962 and 11¢ of non-recurring charge from discontinuance of color TV picture tube manufacturing operation in 1970.

consolidated balance sheet

as of December 31 Motorola, Inc. and Subsidiaries

ASSETS	1970	1969
Current Assets		
Cash	\$ 21,223,399	\$ 20,847,431
Short-term investments, at cost (approximating market)	6,070,269	19,704,128
Accounts receivable	173,200,309	167,399,676
Allowance for doubtful accounts	(5,070,000)	(4,400,000)
Costs recoverable under United States government contracts, less progress billings	5,695,960	7,304,837
Inventories, at the lower of cost (first-in, first-out) or market	146,263,834	154,104,247
Future income tax benefits (note 2)	18,647,412	18,666,697
Other current assets	15,498,680	11,818,896
TOTAL CURRENT ASSETS	381,529,863	395,445,912
Plant and Equipment, at Cost		
Land	10,684,954	10,707,899
Buildings	136,481,392	125,275,424
Machinery and equipment	136,357,239	131,707,531
Accumulated depreciation (note 3)	(108,993,570)	(100,191,330)
NET PLANT AND EQUIPMENT	174,530,015	167,499,524
Sundry assets, net	13,492,239	13,563,935
	\$569,552,117	\$576,509,371

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

LIABILITIES AND SHAREHOLDERS' EQUITY

1970

1969

Current Liabilities

Notes payable	\$ 9,642,273	\$ 6,336,816
Current maturities of long-term debt (note 4)	23,860,360	1,411,950
Accounts payable	55,746,278	62,181,753
Accrued compensation	14,401,348	19,352,735
Federal income taxes	9,107,289	14,819,039
Other (including withheld) taxes	10,520,406	8,146,323
Contribution to employees' profit sharing funds	6,497,968	14,149,215
Product and service warranties	6,701,451	6,611,075
Accrued expenses and other	23,641,973	27,059,905
TOTAL CURRENT LIABILITIES	160,119,346	160,068,811

Long-Term Debt (note 4)

65,347,505

90,306,090

Shareholders' Equity

Capital stock, \$3.00 par value (notes 5 and 9) Authorized: 1970, 20,000,000 shares; 1969, 10,000,000 shares Outstanding: 1970, 13,342,666 shares; 1969, 6,651,953 shares	40,027,998	19,955,859
Additional paid-in capital	87,643,617	86,336,418
Retained earnings (notes 1 and 4)	216,413,651	219,842,193
TOTAL SHAREHOLDERS' EQUITY	344,085,266	326,134,470

\$569,552,117**\$576,509,371**

consolidated earnings and retained earnings

Motorola, Inc. and Subsidiaries

Years Ended December 31	1970	1969
Sales and other revenues	\$796,418,521	\$873,224,220
Manufacturing and other costs of sales	544,873,333	591,598,814
Selling, service and administrative expense (note 7)	165,724,699	176,036,613
Depreciation of plant and equipment (note 3)	24,508,353	22,530,618
Interest and amortization of debenture expense	9,499,231	11,215,602
TOTAL COSTS AND OTHER EXPENSES	744,605,616	801,381,647
Income before federal income taxes and non-recurring charge	51,812,905	71,842,573
Federal income taxes, net of investment credit of \$757,000 in 1970; \$1,065,000 in 1969	26,150,000	38,050,000
Earnings from operations	25,662,905	33,792,573
Non-recurring charge from discontinuance of color TV picture tube manufacturing operation, including investment credit, \$491,000, less federal income taxes, \$872,000, and other credits	1,422,465	—
Net earnings	24,240,440	33,792,573
Retained earnings at beginning of year	219,842,193	192,330,354
Less:		
Share for share distribution — par value of 6,666,933 shares transferred to capital stock	(20,000,799)	—
Cash dividends declared (per share: 1970, \$.575; 1969, \$.50 adjusted for share distribution)	(7,668,183)	(6,280,734)
Retained earnings at end of year (notes 1 and 4)	\$216,413,651	\$219,842,193
Earnings per average share outstanding during the year (1969 adjusted for share distribution):		
From operations	\$1.93	\$2.74
Less non-recurring charge	(.11)	—
Net earnings	1.82	2.74

consolidated additional paid-in capital

	1970	1969
Balance at beginning of year	\$ 86,336,418	\$ 28,002,604
Excess of proceeds over the par value of shares issued under share option plans (note 5)	1,307,199	2,048,679
Excess of net proceeds over the par value of shares issued under rights offering	—	56,285,135
Balance at end of year	\$ 87,643,617	\$ 86,336,418

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

consolidated source and use of funds

Motorola, Inc. and Subsidiaries

Years Ended December 31

1970

1969

Source of Funds

Net earnings	\$ 24,240,440	\$ 33,792,573
Depreciation (including \$252,645 in non-recurring charge in 1970)	24,760,998	22,530,618
Disposals of plant and equipment	9,932,022	746,124
Proceeds from issuance of capital stock	1,378,539	59,844,560
Decrease in working capital	13,966,584	—
	74,278,583	116,913,875

Use of Funds

Additions to plant and equipment	41,723,511	45,194,560
Cash dividends	7,668,183	6,280,734
Decrease in long-term debt	24,958,585	6,295,204
Increase (decrease) in sundry assets	(71,696)	80,947
Increase in working capital	—	59,062,430
	\$ 74,278,583	\$116,913,875

SEE ACCOMPANYING NOTES TO FINANCIAL STATEMENTS

Peat, Marwick, Mitchell & Co.
Certified Public Accountants
111 West Monroe Street
Chicago, Illinois 60603

The Board of Directors and Shareholders of Motorola, Inc.:

We have examined the consolidated balance sheet of Motorola, Inc. and subsidiaries as of December 31, 1970 and the related statements of earnings and retained earnings and additional paid-in capital and the statement of source and use of funds for the year then ended. 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.

In our opinion, the aforementioned financial statements present fairly the financial position of Motorola, Inc. and subsidiaries at December 31, 1970 and the results of their operations and source and use of funds for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Peat, Marwick, Mitchell & Co.
February 16, 1971

notes to financial statements

as of December 31, Motorola, Inc. and Subsidiaries

1 The consolidated financial statements include the accounts of the Company and all subsidiaries. All significant intercompany accounts have been eliminated in consolidation. The Company's equity in the net assets of consolidated operations outside of the United States and Canada, translated at appropriate rates of exchange, is summarized as follows:

	1970	1969
Current assets	\$39,969,000	\$37,450,000
Plant, equipment and sundry assets	56,187,000	51,187,000
Total assets	96,156,000	88,637,000
Current liabilities	(20,480,000)	(11,118,000)
Long-term debt (including \$30,000,000 of 4½% convertible debentures guaranteed by Motorola, Inc.)	(34,848,000)	(34,505,000)
Equity in net assets	<u>\$40,828,000</u>	<u>\$43,014,000</u>

Export sales of domestic companies and sales and other revenues of operations outside of the United States and Canada were 13% and 10%, respectively, of 1970 and 1969 consolidated amounts.

2 Future income tax benefits should result from the deduction from taxable income of reserves which have been provided on the books of the companies but are not yet allowable as deductions in determining income taxes currently payable.

3 Depreciation of plant and equipment is provided on the basis of the estimated useful lives generally by the declining balance method for items acquired subsequent to December 31, 1953 and by the straight-line method for items acquired prior to that date.

4 Long-term debt at December 31 consisted of the following:

	1970	1969
4½% convertible guaranteed debentures due July 1, 1983	\$30,000,000	\$30,000,000
4¾% debentures due April 1, 1986 (less \$500,000 debentures held in treasury for sinking fund payment)	27,500,000	28,000,000
Revolving credit notes (prevailing prime rate plus ¼%)	22,500,000	22,500,000
3¾% and 4¾% notes due in annual installments to 1976	4,000,000	5,000,000
Notes payable (foreign, generally at prevailing prime rates) due in installments to 1978	5,207,865	6,177,970
Other	—	40,070
	<u>89,207,865</u>	<u>91,718,040</u>
Less current maturities, included in current liabilities	23,860,360	1,411,950
Net long-term debt	<u>\$65,347,505</u>	<u>\$90,306,090</u>

The 4½% convertible guaranteed debentures (issued by Motorola International Development Corporation) are convertible into capital stock of Motorola, Inc. at the rate of 12.6 shares for each \$1,000 principal amount, subject to adjustment in certain events, and are guaranteed as to the payment of principal and interest by Motorola, Inc. The debentures are redeemable at various dates at redemption prices reducing from 104½% to 100% of the principal amount thereof.

On January 25, 1971, the revolving credit notes were paid and therefore are included in current liabilities at December 31, 1970. At December 31, 1970, \$123,000,000 of retained earnings was not restricted as to dividend payments.

5 At December 31, 1970, there were 700,860 shares of capital stock reserved for granting of employee stock options. Options may be granted at not less than market value, are exercisable one year from date of grant, and expire at the end of five years.

During 1970 options on 18,160 shares were terminated, and options on 38,760 shares were exercised. The excess (\$1,307,199) of the option price over the par value of shares issued was credited to additional paid-in capital. At year end 508,170 shares were under option at an aggregate price of \$28,486,291, of which 507,170 shares were currently exercisable in the amount of \$28,422,384.

The exercise of outstanding options and conversion of 4½% debentures would not result in a significant dilution of earnings per share.

6 An Executive Incentive Plan provides that the Company may reserve up to 4% of its annual consolidated net earnings (as defined) for the payment of cash incentive awards. Awards are payable generally in equal annual installments over a period of five years and are generally subject to the recipients' continued employment. Reserves of \$1,292,151 (4.00% of defined earnings) were provided in 1970 for such awards (\$2,375,738 (3.33%) in 1969). Awards of \$1,970,820 were made in 1970 (\$1,079,900 in 1969) and \$2,506,228 was available for awards at December 31, 1970.

7 The Company and certain subsidiaries have contributory profit sharing plans in which all eligible employees participate. The companies' contributions to the funds, based upon a percent of pre-tax earnings, were \$6,497,968 in 1970 and \$14,149,215 in 1969.

The Company and certain subsidiaries have a voluntary, contributory pension plan. The Company's policy is to fund pension costs accrued, 1970, \$2,120,185; 1969, \$2,270,000. At December 31, 1969, date of the latest actuarial determination, vested benefits were fully funded.

In 1970, the interest rate assumed in the actuarial determination of pension costs was adjusted to more closely reflect the experience of the pension fund. This change had no material effect on net earnings.

8 The companies are obligated under repurchase and other agreements principally in connection with the financing of sales of products to consumers, and are defendants in suits and claims, which it is believed will have no material effect on the business of the companies.

9 During the year, the Board of Directors and the shareholders approved an increase in the authorized shares of the Company from 10,000,000 shares to 20,000,000 shares and a share for share distribution. Comparative per share data for 1969 has been restated to give effect to this distribution.

directors and officers

Board of Directors

Robert W. Galvin
Oscar P. Kusisto
Stephen L. Levy
Homer L. Marrs
Arthur C. Nielsen, Jr.
Daniel E. Noble
Chairman, Science Advisory Board
Arthur L. Reese
Elmer H. Schulz
Walter B. Scott
Edwin P. Vanderwicken
Chairman, Finance Committee
Elmer H. Wavering
William J. Weisz
Kenneth V. Zwiener

Officers

Robert W. Galvin
Chairman of the Board and Chief Executive Officer
Elmer H. Wavering
Vice Chairman and Chief Operating Officer
William J. Weisz
President and Assistant Chief Operating Officer
Communications Division
Homer L. Marrs
Vice President and General Manager
John F. Mitchell
Vice President and Assistant General Manager
Martin Cooper
Vice President and Director of Product Operations
Carl E. Lindholm
Vice President and Director of Product Operations
Robert N. Swift
Vice President and Director of International Operations

Semiconductor Products Division

Stephen L. Levy
Vice President and General Manager
John R. Welty
Vice President and Assistant General Manager
Christian J. Goodman, Jr.
Vice President and Director of Marketing
Jack C. Haenichen
Vice President and Director of Operations, Services and Engineering
Patrick D. Lynch
Vice President and Director of Discrete Products Operations

Consumer Products Division

Edward P. Reavey, Jr.
Vice President and General Manager
Herbert D. DeBorde
Vice President and Manager, Operations and Engineering Support

Government Electronics Division

J. Paul Jones
Vice President and General Manager
Ralph W. Elsner
Vice President and Assistant General Manager

Automotive Products Division

Oscar P. Kusisto
Vice President and General Manager
Fred P. Hill
Vice President and Director of
Entertainment Products and International Operations
James A. Torrence
Vice President and Assistant Director of Entertainment Products

Corporate

Allen H. Center
Vice President, Public Relations
Thomas J. Connors
Vice President, Marketing
John T. Hickey
Vice President for Finance and Secretary
John A. Hubeny
Vice President and Controller
Kenneth M. Piper
Vice President, Human Relations
Walter B. Scott
Vice President, Assistant to the President
Roger C. Smith
Vice President and Treasurer
Lewis D. Spencer
Vice President and General Attorney

Major Product Lines

Communications Division

Mobile and portable FM two-way radio communications systems
Radio paging systems
Communications control centers
Visual communications systems
Signaling and remote control systems
Car telephone systems
Microwave communications systems
Process control and information systems
Precision instruments
Component products

Semiconductor Products Division

Digital integrated circuits (Bipolar and MOS)
Linear integrated circuits
MSI/LSI integrated circuits (Bipolar and MOS)
Silicon and germanium power and small signal transistors
Silicon rectifiers and annular transistors
Field effect transistors
RF small signal and power transistors
Thyristors, varactors, hybrid devices
Zener and tuning diodes
Functional circuits, optoelectronics

Consumer Products Division

Quasar color television
Monochrome television
Home and portable radios
Portable tape players
Stereophonic high fidelity phonographs

Government Electronics Division

Aerospace communications systems
Tactical radio and microwave communications systems
Radar systems, data links, and display systems
Intrusion and security systems
Range positioning and navigation systems
ASW tracking systems
Instrumentation products
Countermeasures systems
Missile guidance and drone systems
Electronic ordnance devices

Automotive Products Division

Car radios
Tape players
Alternator charging systems
Electronic instrumentation
Solid state ignition systems

Corporate Marketing Units

Electronic video recording (EVR) players and program material
Institutional electronic management and entertainment systems
Environmental, supervisory control, security and urban communications systems

Major Facilities

Chicago, Franklin Park, Quincy, Elk Grove, Pontiac, and Schaumburg, Illinois
Phoenix, Scottsdale, Mesa and Tempe, Arizona
Fort Lauderdale, Florida
Arcade, New York
Midland and Toronto, Canada
Stotfold, England
Toulouse, France
Wiesbaden, Germany
Kowloon, Hong Kong
Tel-Aviv, Israel
Seoul, Korea
Guadalajara and Nogales, Mexico
East Kilbride, Scotland
Geneva, Switzerland
Taipei, Taiwan



MOTOROLA

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