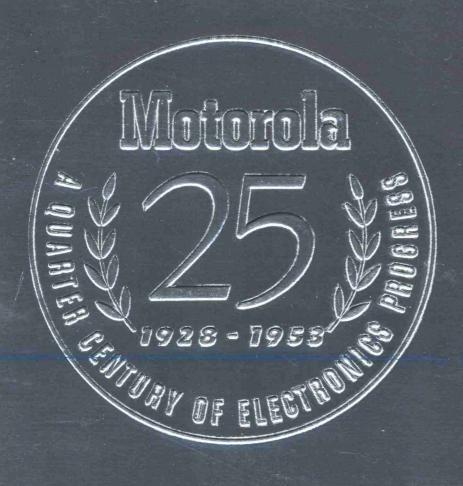
annual report - 1952



Motorola

TELEVISION

CAR RADIOS

HOME and PORTABLE RADIOS

TWO-WAY COMMUNICATIONS

MILITARY ELECTRONICS



Motorola, Inc.

4545 AUGUSTA BOULEVARD, CHICAGO 51, ILLINOIS

On September 25, 1928, Galvin Manufacturing Company, whose name was later changed to Motorola, Inc., was organized. We therefore look upon 1953 as our 25th Anniversary year and take this opportunity to review the record for the quarter-century 1928-1953.

# Table of Contents

Tribute to Paul V. Galvin 2	
25 Years of Electronic Progress 3	
Financial Summary 4	
President's Report to Shareholders. 5 to 13	
Financial Statements 14, 15	
Notes to Financial Statements 16	
Auditors' Report 17	
Television Chassis Production 18	
Television Assembly 19	
Communications and Electronics 20	)
Home, Portable and Car Radio 21	
Military Electronics 22	
Engineering and Research 23	
Merchandising Activities 23	
Employee Activities 24	
Directors and Officers 25	

The annual meeting will be held on Monday, May 4, 1953. A notice of the meeting, together with a form of proxy and a proxy statement, will be mailed to stockholders on or about April 14, 1953, at which time proxies will be solicited by the management.



## A Tribute to Paul V. Galvin

By the Directors and Officers

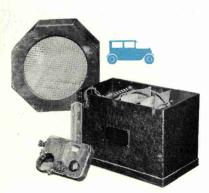
Paul Vincent Galvin founded Motorola nearly twenty-five years ago with little beyond those invaluable personal qualities which under the American system flourish and grow into leadership and achievement of the highest order. We who share management responsibility with him speak for the entire Motorola family in expressing our esteem and affection for him.

For his intellect, for his integrity, for his courage, for his fairness, he has earned the highest measure of our respect and loyalty.

He is truly loved for his human warmth, his generous and sincere friendliness. And for his wisdom, which has been a constant inspiration and help to us all.

Paul Galvin's method of operating is to challenge men to do the difficult and to give them scope and authority to achieve in their own way. He says he likes to "see men in action." But we also remember that other quote: "It's human to be dumb; but don't be numb." We suspect there is relatively little pointless or ineffective "action" around our shop.

It is probably true that every successful organization is infused with the spirit of one particular person. But that inspiration can be a fleeting thing if it shades into dominance. In this sense we believe Paul Galvin has not only led the Company well from the day it was founded; more important, he is building a future into Motorola.



First Motorola Car Radio



1953 Model Car Radio

## 25 Years of Electronic Progress

In the fall of 1928 Galvin Manufacturing Company was organized to manufacture a device that eliminated the need for certain batteries used in early model radios. The Company began with \$565 and six employees; it earned \$3,641 in 1929. Then came the economic depression.

But in 1930 the first radio for convenient installation in an automobile was introduced by the Company, with the controls on the steering column.

The Company grew despite the depression and in 1937 the name Motorola appeared prominently in the home radio field. About the same time a two-way radio system was devised for police cars and thus a third division of the Company was inaugurated.

Foreseeing World War II, the Handie-Talkie and Walkie-Talkie mobile radios were developed by Motorola and, later, a variety of other military electronic equipment. Military development and production continues to constitute an important division of the Company.

Motorola was developing television receivers as early as 1941 and was therefore well prepared, after the termination of the war, to take a leading position in this new business of design and manufacture of television sets. Superior quality had long been a tradition and the Company was well schooled in efficient design and production for low cost.

The Company's plants grew from a humble loft operation into an aggregate of 1,500,000 square feet of space in Chicago, Quincy, Phoenix, New York, Philadelphia, Detroit, and Toronto.

Its sales grew from \$63,000 in 1928 to \$168,730,000 in 1952.

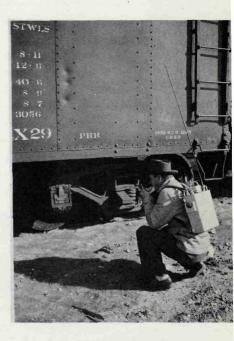
Its financial strength increased from a net worth of \$565 in 1928 to \$41,750,000 in 1953. The original six employees have expanded to 10,000 in 1953.

Its research and development staffs have produced a long list of "firsts."

Employees and stockholders have shared in this phenomenal growth in a most satisfactory way.

And the amazing conclusion to this story is that the field of electronics is probably only in its infancy. What marvels shall we be recounting in our fiftieth anniversary report? Where will an insatiable scientific curiosity, a passion for quality engineering and production and a zest for competition take the Company by then?







## 10 Year

## Financial

## Summary

Year	Net Sales	Earnings before taxes on income	Net Earnings	Net Earnings Per Share <sup>1</sup>	Working Capital	Investment in Plant and Equipment <sup>2</sup>	Shareholders' Equity
1943	\$ 78,454,461	\$ 4,572,799	\$ 1,259,302	\$ .65	\$ 2,854,250	\$ 1,345,746	\$ 4,405,889
1944	86,946,631	5,281,095	1,448,351	.75	3,133,942	1,913,486	5,672,512
1945	67,896,597	3,133,647	851,882	.44	4,671,851	1,273,523	6,311,719
1946	23,201,107	993,786	656,286	.34	5,862,933	2,464,598	8,733,345
1947	46,679,148	4,179,110	2,510,410	1.30	7,028,844	2,811,211	10,635,345
19483	61,981,442	5,755,347	3,550,347	1.83	11,088,342	3,148,206	13,085,196
19494	81,803,358	8,585,696	5,280,196	2.73	14,558,505	4,071,987	17,165,391
19504	177,104,669	27,368,061	13,130,246	6.78	20,731,871	5,794,309	26,895,638
19514	135,285,086	14,020,739	7,240,452	3.74	29,851,003	9,005,880	31,920,882
19524	168,734,653	15,576,165	7,012,700	3.62	38,007,247	11,429,532	41,755,780

<sup>&</sup>lt;sup>1</sup> Earnings per share of common stock based upon the 1,935,131 shares outstanding at December 31, 1952.

<sup>&</sup>lt;sup>2</sup> Net investment after deduction of depreciation reserves.

<sup>&</sup>lt;sup>3</sup> Thirteen month period ended December 31, 1948.

<sup>4</sup> Consolidated information including financial data of whollyowned subsidiaries.

## To the Shareholders of Motorola

t is a pleasure to report that in many respects 1952 was the best year in Motorola's history. Consolidated net sales of \$168,734,653 were 25% greater than in 1951 and approached the record year of 1950. Industry figures indicate that the Company sold a higher proportion of all radio and television sets sold than in 1951. Fourth quarter sales of over \$61,700,000 were the largest for any quarter-year in the history of the Company and this strength continues into the early part of 1953.

Consolidated earnings before provision for federal taxes were \$15,576,165 in 1952 and \$14,020,739 in 1951. Net earnings of \$7,012,700 in 1952 compared with \$7,240,452 in 1951. Per share earnings declined from \$3.74 to \$3.62 on the 1,935,131 shares outstanding at the 1952 year-end and, with respect to the parent company, exceeded the excess profits tax base credit per share. Earnings in excess of that base credit were subject to federal tax at the rate of 82%.

Television

Television sets were, of course, the largest segment of sales. The political conventions and elections and the improving quality and variety of programs resulted in a strong demand for sets. The year 1952 reconfirmed that television has earned perhaps the leading position in the scale of economic values for Americans. Television now has a claim on consumer budgets which is likely to provide a relatively strong market even in adverse periods.

In July the Federal Communications Commission lifted the ban on construction of new television transmitting stations. From 108 stations prior to July 1952, it is expected that the number of stations will grow to some 250 by the end of 1953.

Most of the new stations will transmit on "Ultra High Frequency" bands in contrast to "Very High Frequency" used heretofore. This was necessary because the number of channels in the VHF band proved far too limited for the prospective number of telecasting stations.

All this requires new tuners in television sets to receive UHF telecasts. Motorola developed its own all-channel UHF tuner which gives maximum channel coverage and top performance and therefore provides an additional competitive advantage. UHF adaptors are available for older sets and a UHF tuner can be installed easily in all Motorola sets made since August 1951.

#### Car Radio

Auto radio was the only division of the business to experience a sales decline in 1952 and this was in part associated with the steel strike and its effect on auto production. This business was running at a substantially stronger rate in the last quarter-year than a year previously.

## Communications and Electronics Division

Sales of both the military and civilian departments of the communications and electronics division increased.

Military business, which includes renegotiable civilian-type products sold to the federal government, some of which would be sold even if the defense program were not urgent, comprised about 18% of total sales. A substantial backlog of government contracts, running into 1955, is in hand. The Company's research and development laboratory, with some 500 engineers and other employees, in Phoenix, Arizona, is continuing the development of new and advanced electronic equipment for military purposes.

A wholly-owned subsidiary, Motorola Communications and Electronics, Inc., was formed late in 1952 to carry on the sales and service functions for the civilian end of the business. The purpose was primarily to simplify the administrative problems of multi-state operations, particularly in respect to improving service to customers.

## GROWTH OF EARNINGS AND DIVIDENDS

Earnings before provision for income taxes

Earnings after provision for income taxes

Cash dividends

Plus 150% stock dividend 1

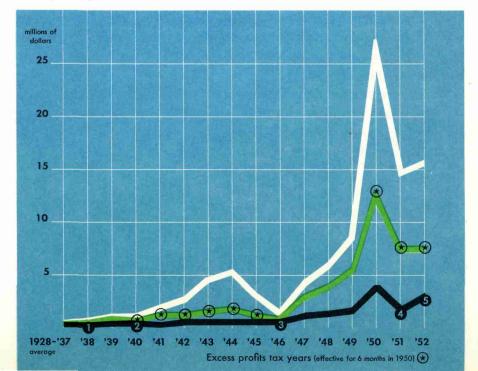
Plus 65% stock dividend 2

Plus 100% stock dividend 3

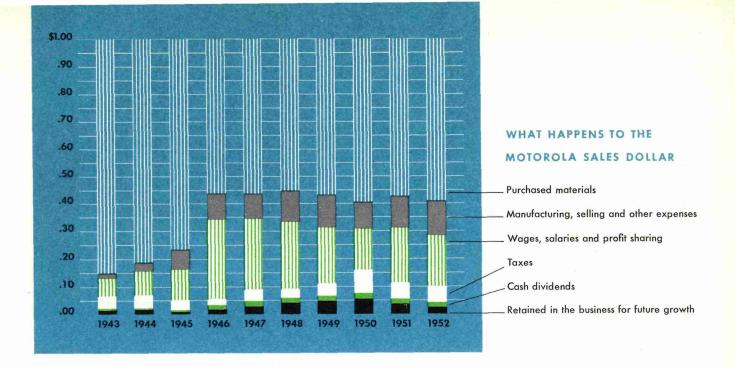
.

Plus 10% stock dividend 4

Plus 100% stock dividend 6



6

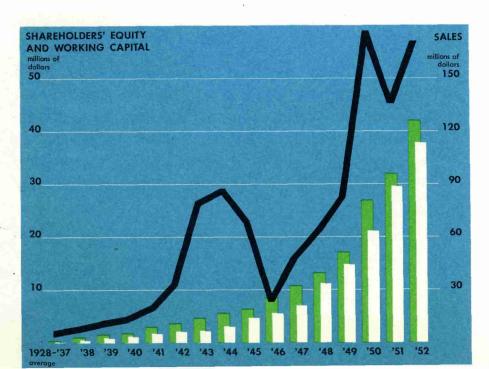


A new line of 450 megacycle band mobile equipment was introduced during the year which extends the number of channels available for private, two-way radio communication systems and opens new applications for such users as large taxicab fleets and inter-city delivery systems.

The installations of microwave communications systems providing means for private, long-distance radio communication and control, have proved to be not only economical in first cost but also in terms of low maintenance cost and high reliability. Advances in the art of electronic supervisory control systems were made in 1952 and the limits and possibilities of this as well as the microwave business remain unmeasurable.

#### Home and Portable Radios

It may be surprising to you to know that notwithstanding the phenomenal growth of television, radio sales continue at high levels. There is, of course, a large and growing replacement demand as well as a natural growth as new homes are established. In addition, new types of sets serve to increase the



## GROWTH OF SHAREHOLDERS' EQUITY AND WORKING CAPITAL Shareholders' equity (what the shareholders own) Working capital (excess of current assets over current liabilities) Net sales

7

number of radios per household. In 1952 Motorola introduced a colorful line of "pin-up" clock radios which combine a large kitchen-type electric clock and radio. Its use is, of course, not limited to kitchens. Portable radios continue to be important in our sales volume.

#### Financial Condition

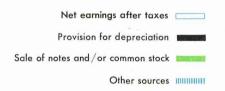
At December 31, 1952 the consolidated working capital of the Company was \$38,007,247, an increase of \$8,156,244 over the year. Current assets were 223% of current liabilities. The shareholders' equity increased to \$41,755,780, an increase of \$9,834,898 or 31% for the year.

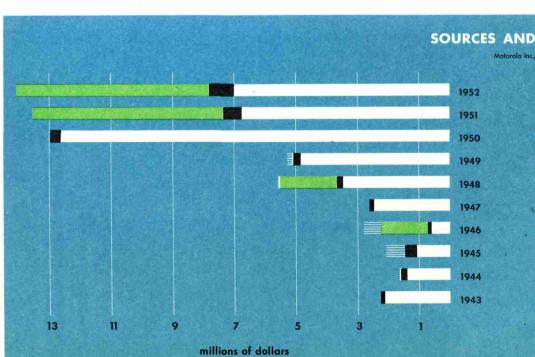
Analysis of the financial position of the Company must take into account the large amount of dollars required to finance government contracts in process. The balance sheet on page 14 indicates that \$15,153,351 were so employed at the year-end. These dollars turn over at a much slower rate than dollars employed in the consumer products operations. Since their use is relatively risk-free they represent a considerable element of flexibilty in respect to future financing requirements.

Year-end trade accounts receivable were in good order. The increase in their dollar value reflects primarily the very substantial increase in sales volume in December, 1952 over December, 1951.

In July 1952 the shareholders received one new share of common stock for each share held and were then given rights to purchase one additional share for each ten shares held, at the subscription price of \$31.50 per share. This financing was successful and added \$5,373,052 to the shareholders' equity in the Company, which further strengthened the capital structure as a base for sound growth of the Company's facilities and sales.

#### WHERE DID THE DOLLARS COME FROM?





During 1952 the Company formed a wholly-owned Canadian subsidiary, Motorola Canada, Ltd., to manufacture and sell radios and television sets in Canada. At the year-end the capital and indebtedness to the parent company amounted to \$481,000.

During the year the Company contracted for the purchase of about nineteen acres of land and the construction of 278,000 square feet of building space in Franklin Park, Illinois. The land and building, together with equipment, will require about \$3,000,000 which is to be paid over a five year period.

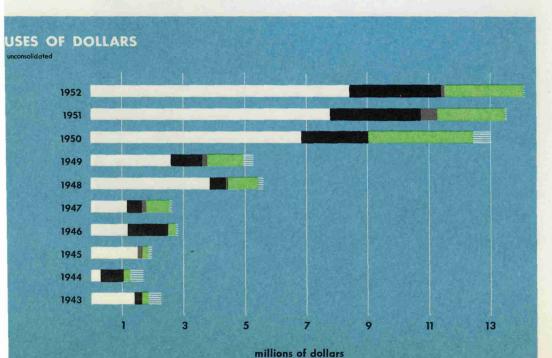
#### Dividends

In January 1952 a regular dividend of 62½c and an extra dividend of 37½c, making a total of \$1.00, were paid with respect to shares outstanding at that time. Similarly, in April and July dividends of 62½c per share were paid. On the basis of the shares outstanding after the share-for-share distribution in July these amounts were equivalent to \$1.12½. The dividend paid in October of 37½c per share brought the rate of dividend payments for the year to \$1.50 per share on the basis of shares outstanding at the year-end. The January 1953 dividend was also at the rate of 37½c per share.

At the close of the year there were 4,414 Motorola shareholders. Directors, officers and their immediate families owned directly or beneficially 578,804 shares of Motorola stock.

#### Profit Sharing

The Company's contribution to the savings and profit sharing fund amounted to \$2,984,268 for 1952 and the total market value, accumulated from 1947 through 1952, was in excess of \$14 million. This was in part paid into the



#### WHERE DID THE DOLLARS GO?



fund by employee members who thus accumulate savings. Through this means employees participate somewhat as partners with the shareholders of the business, particularly with respect to that part of the fund's assets which is invested in 22,385 shares of Motorola stock. The fortunes of Motorola employees are thus tied in a significant way to the future of the Company. The plan also serves to build up funds for retirement, disability or death benefits. In the event the member leaves the Company, he is entitled to all or part of his share in the fund, depending on his years of service.

We believe this kind of plan could be the answer to socialism and other schemes which are based on a mere shifting of wealth. By participating directly in the enterprise and taking responsibility for its economical operation we all become enterprisers or capitalists and we free, rather than dampen, the enterprise spirit.

#### Distribution

We are constantly alert and concerned about our distribution being at the highest possible state of efficiency. I am happy to say at this time that at the close of 1952 it is my opinion that the field distribution organization supporting Motorola both in the consumer durable and communications and electronics divisions has never been stronger. Even so, those within our executive group charged with the responsibility of distribution will not be complacent and satisfied. This matter of distribution to us is, and will continue to be, most important.

Showroom of Allied Appliance Co., Boston, Mass.



We expect 1953 to be the biggest year in sales volume so far in the history of our business. Unless we meet with some unexpected experiences it looks to me as though our sales volume may well exceed a total of \$225,000,000 for the year. We also look to 1953 to be a good profit year but, of course, we are going to be subject to the excess profits tax for at least six months and possibly for the entire year. This means that earnings over our tax base may be taxed at 67% or, possibly, 82% and thus does not permit us to retain any great quantity of profit over our excess profits tax base.

In 1953 we are going to be doing quite a bit of physical shifting of operations among our plants in order to get lower cost operations. Some of these moves will be out of old facilities into new, more adequate facilities which are necessary to handle properly our increased volume of business. Larger facilities are already required to handle efficiently the television business in its present state. With the increase in viewing size of television pictures it is necessary to provide larger storage, manufacturing and shipping facilities for the larger cabinets, the larger picture tubes and the larger chassis. This is the principal reason for our new \$3,000,000 plant expansion proceeding now in Franklin Park, which we expect to have in operation at least by September of this year.

The year 1952 was the first in which Motorola commercially produced and sold plated circuit radio sets. This unique process exclusively developed by Motorola engineers over a seven year period, has proved itself commercially in over 60,000 radio sets in which it was used in 1952. They have withstood in a most satisfactory way all the rigors of field test and environmental conditions to which they were subjected and it is our intention to adapt the principle to more and more models in our line.

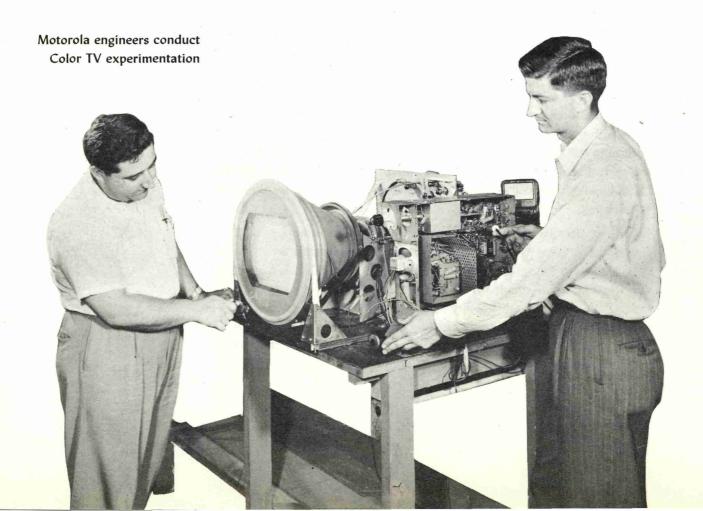
There has been a trend in the marketing of television receivers towards the introduction of one line per year. If this continues it will be highly desirable both from our standpoint as the manufacturer and that of the distributor and dealer. It is less costly and it also facilitates better inventory control. We hope to continue this practice unless for some unexpected reason competition forces us to change.

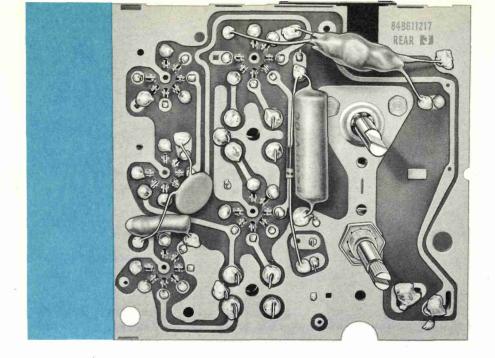
In our opinion development and production of military electronic equipment is going to be an essential activity for Motorola for as long as we can see into the future, whether we do or do not get into a more serious war situation. This country must remain progressive in the evolution and preparation of electronic military equipment. Therefore, we see ourselves as a permanent manufacturer of military electronic equipment although we do not expect it to become a substantially greater segment of the business, unless conditions change drastically.

Many people inquiring into the prospects for the electronic industry are interested in knowing about transistors and color television.

Transistors are small components which will eventually take the place of most receiver tubes in radios and television sets. There have been many extreme claims made about the importance of transistors and the effect they will have in replacing tubes, but it is our opinion that this development will necessarily and properly be a gradual one. Transistors have a great future but they have to be tried and tested under widely varying conditions to be sure they will perform to the customer's complete satisfaction. This will take some time.

Color television is an eventual prospect but it is the development of a satisfactory cathode ray picture tube which, in my opinion, will determine when color television will be practical. The industry as a whole is working very diligently in developing a compatible color television system and it is much closer than it was a year ago. There will be extensive field tests of color throughout 1953, but I do not see the arrival of color television overnight.





A Motorola First the PLAcir Chassis

It is some years into the future in my opinion and, even when it does arrive, there will be a continued large market for black-and-white television because it will be more seasoned and less costly. Our research and development engineering groups are well attuned to all the color television activities and will be thoroughly prepared with a Motorola color television set for the market when color television arrives.

It is rather interesting to me as we approach Motorola's twenty-fifth anniversary to look back over the years and see our first little team of six people grouped together in a small loft in 1928, and to compare it to our far flung, dynamic, international organization of today, involving thousands of people and tremendous facilities.

It is my earnest hope that the growth of Motorola over the next twenty-five years will be equally as dynamic and exciting. The prospects are there. The challenge is interesting and I am quite sure it will be accomplished.

President

For the Board of Directors

## MOTOROLA, INC.

		DECEME	BER 31,
	ASSETS	1952	1951
CONSOLIDATED	Current assets:		
DALANCE	Cash	\$ 7,094,304	\$ 8,527,985
BALANCE	United States Government obligations—short term, at cost	7,489,933	5,976,180
SHEET	Accounts receivable:		
	United States Government	4,455,802	998,419
	Other trade accounts (less reserve for bad debts—1952,		
	\$295,000; 1951, \$215,000)	19,220,045	10,543,194
	Other current receivables	531,1 <i>57</i>	1,431,242
	Costs recoverable under Government contracts	10,697,549	8,261,342
	Inventories	18,892,581	15,893,971
	Prepaid expenses	411,924	366,555
	TOTAL CURRENT ASSETS	\$68,793,295	\$51,998,888
	Sundry assets	174,869	276,396
	Equipment leased to others—less depreciation	656,840	444,762
	Plant, equipment and leasehold improvements—less depreciation	11 400 500	0.005.000
	and amortization	11,429,532	9,005,880
	Patents and trademarks—less amortization	108,311	92,841
		\$81,162,847	\$61,818,767

CONSOLIDATED		Years Ended I	December 31,
STATEMENT OF		1952	1951
EARNINGS	Sales	\$168,734,653	\$135,285,086
	Other income	456,394	559,443
	Total income	\$169,191,047	\$135,844,529
	Manufacturing and other costs of sales	\$128,694,042	\$102,157,371
	Selling, service and administrative expenses	21,417,912	16,473,028
	Contribution to employees' profit-sharing fund	2,984,268	2,938,449
	Interest and other expenses	518,660	254,942
	Total costs and expenses	\$153,614,882	\$121,823,790
	Earnings before provision for taxes on income	\$ 15,576,165	\$ 14,020,739
	Provision for income and excess profits taxes	8,563,465	6,780,287
	Earnings	\$ 7,012,700	\$ 7,240,452

## AND SUBSIDIARIES

	DECEMBER 31,			
LIABILITIES	1952	1951		
Current liabilities:			CONSOLIDATED	
Current maturities of long-term debt, and notes payable by subsidiaries  Accounts payable—trade  Sundry current liabilities  Accrued taxes  Reserves for service and product warranties  TOTAL CURRENT LIABILITIES  Long-term debt  Total liabilities	\$ 1,692,116 12,023,030 6,183,424 9,795,887 1,091,591 \$30,786,048 8,621,019 \$39,407,067	\$ 485,226 7,195,572 5,501,814 8,076,322 888,951 \$22,147,885 7,750,000 \$29,897,885	BALANCE SHEET	
SHAREHOLDERS' EQUITY  Capital stock, \$3.00 par value—1952: authorized, 3,000,000 shares; issued and outstanding, 1,935,131 shares	\$ 5,805,393 9,018,506 26,931,881 \$41,755,780 \$81,162,847	\$ 2,638,815 4,173,217 25,108,850 \$31,920,882 \$61,818,767		

	Years Ended December 31,				CONSOLIDATED	
	1952		1951			
	Capital Surplus	Retained Earnings	Capital Surplus	Retained Earnings	STATEMENT OF SURPLUS	
Balances, beginning of year	\$4,173,217	\$25,108,850	\$1,227,832	\$23,267,806	JUNITUS	
Earnings for the year		7,012,700	*	7,240,452		
Excess of net proceeds over the par value of 175,921 shares of stock sold	4,845,289				±	
Total	\$9,018,506	\$32,121,550	\$1,227,832	\$30,508,258		
Cash dividends		\$ 2,550,854		\$ 2,199,013		
Stock dividend—10%: 79,605 shares at \$40 per share (fractional shares paid in cash,						
\$16,195)				3,200,395		
Excess of value fixed by the directors over par value			\$2,945,385			
Share-for-share distribution—par value of 879,605 shares of stock issued	0	2,638,815		<del></del>		
Total		\$ 5,189,669	\$2,945,385	\$ 5,399,408		
Balances, end of year	\$9,018,506	\$26,931,881	\$4,173,217	\$25,108,850		

to financial statements)

#### Notes to Financial Statements

A The inventories on December 31, 1952 and 1951—valued at the lower of cost or market, on a first-in first-out basis—are summarized as follows:

+ 35	1952	1951
Finished products	\$ 5,322,731	\$ 3,402,244
Work in process	476,783	563,560
Materials and supplies.	13,093,067	11,928,167
Total	\$18,892,581	\$15,893,971

- B At December 31, 1951 certain equipment acquired under Government facilities contracts (net book value on that date, \$554,803) was included with plant, and equipment. In this report it has been reclassified, and is included as a part of costs recoverable under Government contracts.
- Plant and equipment, leasehold improvements, and equipment leased to others, are summarized as follows:

	1952	1951
Buildings and equipment  Less depreciation	\$10,088,405	\$9,210,589
reserves	2,261,511	1,663,535
Cost less depreciation	\$ 7,826,894	\$7,547,054
Dies—less amortization	492,999	464,575
Contract to purchase land	593,203	593,056
and building (see Note F)	2,234,020	
Leasehold improvements less amortization	282,416	401,195
Cost less depreciation and amortization		\$9,005,880
Equipment leased to others	\$ 813,084	\$ 549,556
Less depreciation reserve	156,244	104,794
Cost less depreciation	\$ 656,840	\$ 444,762

- Depreciation (including amortization of emergency facilities) included in costs and expenses for the year ended December 31, 1952 totaled \$884,174.
- E The 1951 income statement and the December 31, 1950 and 1951 retained earnings balances have been restated from those previously reported to reflect an

adjustment of the December 31, 1950 inventory and related adjustments of taxes on income. The net effect is an increase of \$321,000 in retained earnings as of December 31, 1950, a decrease of \$48,650 in 1951 income, and an increase of \$272,350 in retained earnings as of December 31, 1951.

F On December 31, 1952 the portion of long-term debt not maturing within one year consisted of the following:

3¾% promissory note, due November 1, 1966	\$7,000,000
Note issued under contract to purchase improved real estate—3%	1,340,400
Real estate mortgages of subsidiaries	280,619
Total	\$8,621,019

The 3¾% promissory note has annual prepayment requirements of \$500,000, commencing January 1, 1953. Under terms of the loan agreement, retained earnings of the parent company in the amount of approximately \$4,900,000 were available on December 31, 1952 for the payment of cash dividends or acquisition of the company's stock.

The company has entered into a contract to purchase land and a factory building to be erected thereon, at a total cost of approximately \$2,234,000. An initial payment of \$223,400 was made in December, 1952 and the company issued its note for the remainder, \$2,010,600. Of this amount, \$670,200 was due March 1, 1953; additional amounts are due on March 1 of each of the succeeding three years, subject to provisions for postponement of payment in the event of delays in construction. The total contract price is included as a part of Plant and Equipment on December 31, 1952.

- G The company is defendant in a lawsuit brought by a former distributor, in which the plaintiff alleges damages of \$1,320,000, with a request for trebling. In the opinion of company counsel, there is only a remote, if any, possibility that the company will be held liable in any amount.
- H The company's business under Government contracts is subject to price renegotiation, in accordance with federal statute. The company's renegotiation status has been reviewed by the Government for the year 1950, and no refund was required. It is believed that no excessive profits were realized in 1951 and 1952 which would be required to be refunded.



#### BAUMANN, FINNEY & CO.

Certified Public Accountants
208 SOUTH LA SALLE STREET
CHICAGO 4, ILLINOIS

Board of Directors, Motorola, Inc.

We have made examinations, for the year ended December 31, 1952, of the accounts of MOTOROLA, INC. (an Illinois corporation) and its subsidiaries, all wholly owned.

Our examinations were 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 accompanying balance sheet and related statements of earnings and surplus, as footnoted, present fairly the consolidated financial condition of Motorola, Inc. and its subsidiaries on December 31, 1952 and the results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Chicago, Illinois

March 4, 1953.

#### TRANSFER AGENTS

Chemical Bank and Trust Co. 165 Broadway, 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 LaSalle St., Chicago 90, Illinois

Baumann, Luney & Co.

# Television Chassis Production



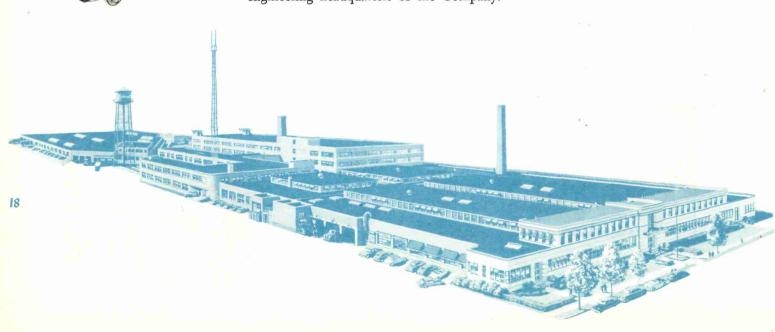
#### CHICAGO

The new line of television receivers introduced in August 1952 was received with great enthusiasm by distributors, dealers and their customers. Featuring a new approach in cabinet styling, it incorporated the STANDOUT PICTURE in the sense of both superior picture quality and up-front mounting of the picture tube. Other features included life-time focus of the picture, full year warranty, and optional UHF tuning.

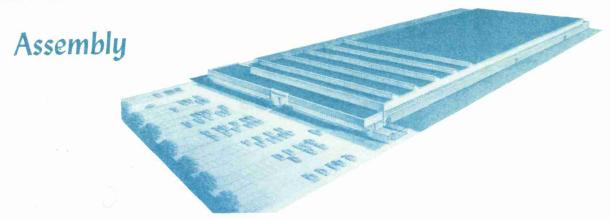
In competition with other UHF tuners, in the first UHF markets to open up, Motorola's tuner proved to be superior and won a resounding vote of confidence from dealers and the public. The Motorola Super Strata Tuner is able to receive all 70 UHF channels without any adjustments as new stations come on the air.

In 1952 the principal output of the Augusta Boulevard manufacturing plant pictured on this page was television sets. During 1953 it will become principally a television chassis plant. It also houses the administration and engineering headquarters of the Company.





#### Television



Motorola is building a large modern television assembly plant in Franklin Park near Chicago and completion is expected by autumn. This plant will have 278,000 square feet of usable factory space.

FRANKLIN PARK

Television chassis produced at the Chicago plant, picture tubes and cabinets will enter the front of the Franklin Park building, be assembled, tested, inspected, packed, emerge at the other end, and be loaded for shipment. Located on a large belt line railroad system, the new Franklin Park plant will have indoor dockage facilities for 20 freight cars and 16 trucks, and will provide substantial advantages for economical handling and shipping.

The growth of television, both in physical size of sets and in volume of production, has been so great that facilities have been taxed beyond their most economical use. It is anticipated that more adequate facilities will result in increased efficiency as well as provide greater capacity.





## Communications

#### and

### Electronics

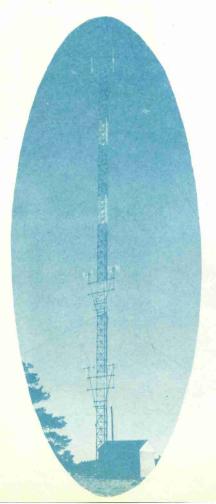


CHICAGO

Adjoining the Augusta Boulevard television plant is a similar building which houses civilian operations of the communications and electronics division. Engineering, production and divisional administrative activities are centered in this location.

Principal products of this division are two-way mobile FM radio systems, long distance microwave radio relay systems, and carrier and control systems. Users include police and fire departments, taxis, trucking companies, railroads, utilities, lumber and mining industries, newspapers, manufacturing companies and others.

New applications of two-way radio equipment are under development at all times, and Motorola sales in this field now account for well over half the industry's total.





## Home, Portable and Car Radío



A modest beginning in a one-plant factory operation in Quincy, Illinois, in 1946 has now expanded to three locations and the initial personnel roster of 50 has grown to more than 900. These growing activities in Quincy are concerned with home and portable radios and car radios.

Motorola improved its position in the home and portable radio field with new styling approaches and important engineering advances. The appearance of the Motorola Placir circuit chassis in one model of home radio sets heralded a new and revolutionary advance in the art of circuit design and production. In place of a maze of wires, the circuit is copper plated on a piece of bakelite.

During 1952 a new concept in radios was developed by Motorola with the introduction of the "Pin-Up," a new kind of clock radio that hangs on any wall and is available in many attractive colors. New portable models featuring fresh and attractive designs and long-life quality performance were added to the line. Clock radios and table sets in new designs and with improved performance rounded out a winning line of radios.

QUINCY, ILLINOIS









## Military

#### Electronics





PHOENIX and CHICAGO

During 1952, research and experimental activities were carried forward on many fronts at the Motorola research laboratory in Phoenix, Arizona. With a large staff of electronic scientists and engineers, this laboratory conducts many engineering and experimental projects for military use but with important implications for civilian purposes. The type of advance development work that is carried on at Phoenix is one of the major factors in placing our country in a position of technological leadership should an "electronic" war occur.

Military production is carried on in a separate plant in Chicago which produces many products that have been developed in the Phoenix laboratory. The activities of this plant, as well as the research activities at Phoenix, are limited to the electronic field. The rate of growth in military production is expected to level off during 1953 and operations should be at a more economical production level than heretofore.





## Merchandising

#### Activities

Merchandising activities were intensified during 1952. The Company's sales training staff was enlarged and held 2,500 meetings with 26,000 dealers attending.

The Company continued to encourage the use of Motorola signs, both outdoor and indoor, to identify its 30,000 dealers. The number of such signs was increased by 3,600 during 1952.

With the advent of additional television stations, a new merchandising program was developed to introduce television in these new areas. This encompasses sales meetings, service education, and both newspaper and radio advertising. A series of sales training meetings was begun, keyed to new merchandising methods for the distributor salesman.

## Engineering

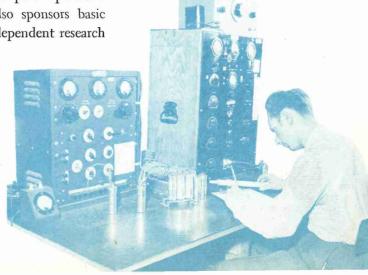
#### and Research

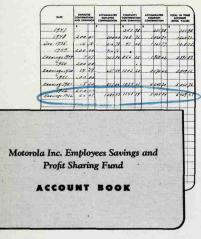
Motorola has always followed an aggressive policy in engineering and research. Three large engineering departments specialize in their respective fields of consumer products, commercial and industrial radio communications and controls, and military electronics. They carry on basic research, applied research and product development. Co-ordination of activity is maintained through established liaison channels.

This advanced engineering work keeps your company well abreast of the rapidly moving electronics art and has resulted in a substantial patent portfolio in the television and electronics field. The Company also sponsors basic research and applied research projects in university and independent research laboratories.



National Magazine Advertising







#### Members of the Advisory Council to the Board of Directors

### Employee

#### Activities

Motorola has a basic philosophy of human relations built on the principle that "people are important." It is important that Motorola people have opportunity and job satisfaction in hundreds of professional, office and clerical, supervisory, skilled and unskilled jobs.

It is also good that Motorola people realize their talents and skills in the highest degree. The Advisory Council to the Board of Directors, pictured on this page, was created as a means of extending the horizons and participation in general problems on the part of men in management positions from foremen up. This group considers and submits reports to the Directors on a wide variety of Company problems. Similarly, the suggestion system encourages people to use imagination to devise new and better ways of doing things.

Wages and salary rates which are tied to a cost-of-living adjustment plan are equal to the highest in the industry. Motorola's liberal health and welfare program plus its profit sharing plan have also helped to attract employees in a tight Chicago labor market at a time when the total of employees has reached an all-time high.

The Company has extended its employee benefit and profit sharing program to its new Canadian subsidiary in Toronto.

The turnover in Motorola plants in Chicago, Phoenix, Quincy and Toronto is low compared to the prevailing turnover rates for these areas. The Company has never had any work stoppage at any of its locations. At the year-end there were more than 10,000 employees on the payroll.



# Directors and Officers of Motorola



Paul V. Galvin
Director,
President



Robert W. Galvin
Director,
Executive Vice President



Charles E. Green



Matthew J. Hickey, Jr.



William H. Kelley
Vice President for Sales
Consumer Products



George R. MacDonald



Daniel E. Noble
Director, Vice President in Charge
of Communications and Electronics Div.



Frank J. O'Brien
Director, Vice President
for Purchasing



Walter B. Scott
Vice President for Manufacturing
Consumer Products and Military



John F. Silver Vice President for Operations Communications and Electronics



Edward R. Taylor
Vice President and
Assistant to the President



Edwin P. Vanderwicken

Director, Vice President
for Finance and Treasurer



Elmer H. Wavering
Director, Vice President for Engineering
Consumer Products

