

PRESIDENT'S LETTER

Spectrographic materials analysis



ESCO General Office activities



The "Sonic"

TO EMPLOYEES AND SHAREHOLDERS:

A substantial number of new and significant technical accomplishments in scientific and industrial fields made 1954 a year of further building for growth and diversification by the TI family of companies, despite a decline in 1954 sales to \$24,387,334 from the 1953 record of \$27,007,957. The reduction resulted principally from military contract stretch-outs and sharp cutbacks in Canadian and United States exploration activities. Consolidated 1954 earnings were \$1,200,995, or 40ϕ per share in comparison with \$1,270,125, or 42ϕ per share in 1953. By year-end, however, substantial new military contracts had been secured and December geophysical billings were at an all-time high. Increased geophysical activity has continued and present levels are well above any previously attained, with the upward trend still evident.

The Company maintained a very satisfactory financial position during the year. Outstanding notes of \$250,000 were paid in February. In June, together with the regular \$250,000 Sinking Fund payment required on our long-term debt, an additional principal payment of \$250,000 was also made.

In January, 1954, Texas Instruments decentralized (in new divisions) production of semiconductor products; electronic apparatus, especially for the military; components for the electronic industry; and petroleum instrumentation. Decentralization provides opportunity for rapid and independent thought and action by the executives responsible for attaining the goals of each division. It also encourages self-development of executive personnel and training for top management responsibilities. Transition to the product division basis proceeded smoothly and was complete by mid-year.

Stockholders may well be proud of the 1954 performance of the Research and Semiconductor Products Divisions. Through their efforts TI achieved two significant "firsts" in the rapidly expanding semiconductor field. In May commercial production of silicon transistors was announced. These devices operate well at temperatures up to 300° F, compared to an approximate 150° F limit for germanium units. Thus, silicon is expected to have wide commercial and military applications wherever high temperature operation is required. As this report is written, no other transistor manufacturer has announced production of silicon transistors in other than laboratory quantities.

Another "first" was won with volume production of a high frequency germanium transistor for an all-transistor portable radio, compact enough for pocket use. Excluding the more limited hearing aid field, this is the first large-scale consumer product application of transistors. Your management believes that production of these radio transistors has accelerated the introduction of other transistor applications to the market by some 12 or 18 months. The corollary development of mass markets for transistors with attendant product improvement should occur within a comparably shortened period.

With the combined assistance of the Research and Apparatus Divisions and GSI, Houston Technical Laboratories produced the *magneDISC*, a versatile new instrument for recording and processing seismic exploration data. It has basic advantages over other recording methods and may have application to other fields. HTL also put in production several new and redesigned geophysical instruments. These have had wide acceptance by major oil companies.

In the GSI group, new companies were launched in England, the Bahamas and Holland to serve expanding markets. Single-ship exploration of water areas was continued by the 158-foot, 405-ton vessel "Sonic," which began new work in the Persian Gulf in the last quarter. Several long-term contracts for foreign seismic and gravity exploration were obtained late in 1954 and early in 1955.

A further plant addition for research and semiconductor manufacture is under construction in Dallas. Work will also begin this spring on a plant for Houston Technical Laboratories.

Our twenty-fifth anniversary, 1955, is expected to be the best year in our history. Continued substantial investment in research and development programs and improved plant and facilities will place us in a favorable competitive position. Improved performance over 1954 is expected, with particular strength shown by Semiconductor Products and GSI. Military levels are expected to continue about the same as 1954's with a present backlog of approximately \$13,000,000. Expansion and strengthening of marketing staff and methods throughout the organization should improve sales volume. Further progress in cost reduction is expected to show steadily improved values for our customers and better profits.

Once again we should like to express appreciation on behalf of the company to all our employees for their splendid performance during the year. We wish also to welcome the many new stockholders who have invested in stock of the Company in 1954. We will do our best to merit their confidence.



Truck-mounted magneDisc

Yours sincerely,

J. E. Jonsson *President*

	1954	1953
Consolidated sales	\$24,387,334	\$27,007,957
Net income before taxes and other charges	2,380,718	3,219,162
Net income per share before taxes and other charges*	0.80	1.08
Net income	1,200,995	1,270,125
Net income per share*	0.40	0.42
Current assets	10,089,414	10,389,407
Current liabilities	5,140,041	5,567,724
Working capital	4,949,373	4,821,683
Property, plant and equipment (less accumulated depreciation and amortization)	4,389,910	3,905,452
Long term debt	1,825,000	2,375,000
Stockholders equity (net worth)	8,158,295	6,957,300
Book value per share*	2.73	2.32
Number of employees at end of year	2293	2136
Number of stockholders at end of year	2630	1460
*Based on 2,987,013 shares outstanding at December 31.		

CONSOLIDATED FINANCIAL SUMMARY

1955-OUR TWENTY-FIFTH YEAR



TEXAS INSTRUMENTS