

**Librascope Acquires New Divisional Status; Board Members Named**

**FAA Data Processor Shipped to NAFEC; New Tests Begin**

**Murray, Smith Inspect Librascope Facilities; Tour Sunnyvale, Burbank, Glendale Plants**

**Libratol-500 Sold to Army for Missile Checkout**

**Maninger Tells Steps that Led to Development of Exploding Bridge Wire**

**Imm Forecasts Gradual Move Of Airborne To San Diego Area, Special Devices To Sunnyvale**

**Shipboard Delivers ASROC Computers**

**SAC-5 Shipped to U. S. Navy**

**Sunnyvale Lab To Test Missile Components**

**Divisional Plants Now Designated As Branches**

**Airborne Computer Group Moves to Solana Beach**

**New Airborne Computer Guides, Launches, Long Range Missiles**

**Navy Unveils ASROC As "Deadliest Weapon"; Librascope Role Told**

**Military Sales Forms New L. A. District Office**

**Plans for San Marcos Facility Near Completion**

**Librascope System Plays Big Role in Polaris Launchings**

**Librascope Awarded New Contracts Amounting to \$25 Million Plus**

**New Telephone System Installed**

**Sunnyvale Branch Wins Space Aeronautics Award**

**L. W. Imm Resigns; W. E. Bratton His Successor**

**Double Honors at Wescon Show For Librascope Designed Products**

**Biggest FAA Shipment Leaves Librascope**

**New Division Structure Explained by Bratton**

**Annual Cost Reduction May Reach \$695,000**

**\$4 Million FAA Contract Awarded**

**Sunnyvale, Special Devices Merge; New Growth Seen**

**Division Adds Staff Positions; Aerospace Changes Revealed**

**Reliability: A New Dimension in Engineering**

**EBW Destined For Rapid Growth**



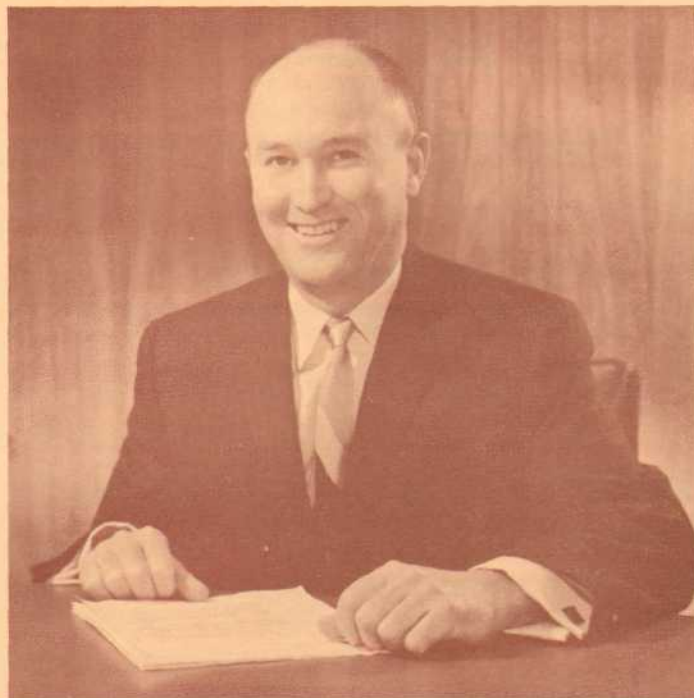
**GENERAL  
PRECISION**

**1960**

**LIBRASCOPE DIVISION | GENERAL PRECISION INC., GLENDALE 1, CALIFORNIA**

***annual report to employees***

## **Annual Report To Employees**



### **The President's Report**

#### **1960 was indeed a busy year for Librascope . . .**

There were major engineering and production achievements - and significant organizational changes aimed at providing greater efficiency of operation and necessary improvement of our profits picture.

**We continued to grow . . .** in every aspect of our resources - in creative product design, production capacity, plant facilities and manpower.

Looking at the record, I believe that the most important event of 1960 was our decision to take the next step forward in our planned five-year move toward decentralization, a major action which saw our engineering departments reorganized into virtually autonomous branches. Operating under the centralized coordination of the Division office, each branch will, in time, be an almost wholly self-contained organization, responsible for its own management in every area of operation.

**Our accomplishments . . .** as developers and producers of electronic muscles to extend the range of man's intelligence, were many and a tribute to the entire Division. We made significant deliveries of equipment, such as the Air Traffic Control data processor, the production version of the ASROC



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computer, the prototype SUBROC and Centaur computers, the first production units of the RPC 4000 and RPC 9000 data processing systems, and many critical deliveries of Polaris computer equipment.

In each one of these deliveries we were not merely turning out a modified design of a proven concept; we were in each case pioneers in the application of new computer techniques to specific environments.

We were selected for additional important business. Among the projects:

Production quantities of the SUBROC computer, production quantities of the FRAM system, additional orders for the Centaur space vehicle computer.

In addition, we were selected to develop and produce computing elements for the Advanced Polaris fire control system and were awarded contracts to provide SUBROC capabilities to other Navy vessels.

And only recently the latter contracts were further expanded.

**On the profit side of the ledger . . .** our earnings surpassed those of 1959. However, using the significant yardstick which defines profit as a percentage of sales, we fell short of our goal for the second successive year. I'll discuss this aspect of the record later on in this report.

Employment reached a new high in 1960, despite operational difficulties and external influences which had their inevitable effect upon work-schedules. At our peak period there were 4,258 Librascopers on the payroll; this was 1,034 more than at the previous high point in 1959. And, despite some layoffs, the work force was 4,116 at the end of the year.

**We made large additions to our working space . . .** with the acquisition of six more buildings in Glendale, Burbank and Sunnyvale, and in Elmsford, N. Y. Our total square footage is now 630,000, compared to 490,000 in 1959.

**Looking to the future . . .** we revamped and expanded our sales operations in all branches and at the division level, as well.

In addition, we established regional sales offices in Los Angeles and at Huntsville, Ala., increased the staffs and expanded the scope of selling operations in our offices at Dayton, O., and Washington, D. C. We also appointed additional sales representatives in other parts of the country.

We are participating with the GPI sales organization in various proposal

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efforts on large systems and are working with them in the exploitation of the all-important industrial market. During the year we further expanded our important research activities and have allocated almost 1-million dollars to projects in the research sections and to product-study efforts in the branches during 1961. Advanced Research is working in areas which could lead to the development of computers with, quite literally, a capacity to think; Applied Research is concerned with converting recently-discovered scientific knowledge into needed and marketable projects in the near future.

Both groups have made significant progress. Advanced Research recently was awarded five contracts by the Air Force in the field of automata research. Applied Research this year is expected to move several of its solid-state physics projects from the laboratory to pilot stages of development.

**Returning to the discussion of profits . . .** Our total profits and the essential rate-of-return did not match our first of the year forecast. The reasons why are important to all of us and merit full explanation, because we are all vitally involved in accomplishing the necessary corrective action. Simply stated, we did not earn what we should because our costs exceeded our estimates. We call the resultant situation an "over-run", but no matter what you call it, the result is still the same: costs are too high.

On two of our major programs last year we delivered some fine products for national defense, but a large part of our effort was spent in working for a zero return. We recovered our allowable costs, but we made no profit whatsoever on those over-runs. The same situation exists today on another important project. Our profit on this effort will be virtually wiped out by over-runs. There were other cost factors over which we had very limited control. Among these: Higher costs for the things we buy, including outside manufacturing, raw material, outside processing and services, interest rate on the money we had to borrow to finance our expanding operations.

**As you can see . . .** there are a variety of reasons why we did not earn the profit we should, and the fact that some of them are beyond our control makes it even more necessary that we watch



## Annual Report To Employees

our costs in the areas we do control.

These costs-beyond-our-control elements are part of the cost-price squeeze in which American business is now caught - a situation in which we find

our suppliers demanding higher prices for their goods and services, while, at the same time, our customers demand our products at lower prices.

We have already taken many steps to reduce costs. Typical of these, the complete reorganization of circuit-board manufacturing processes has increased our productive capacity several times, while actually reducing the cost per board. Use of a numerically-controlled turret drill in Manufacturing has reduced costs there; we plan to add more numerically-controlled machines in the near future. Work simplification studies have produced economies all along the line.

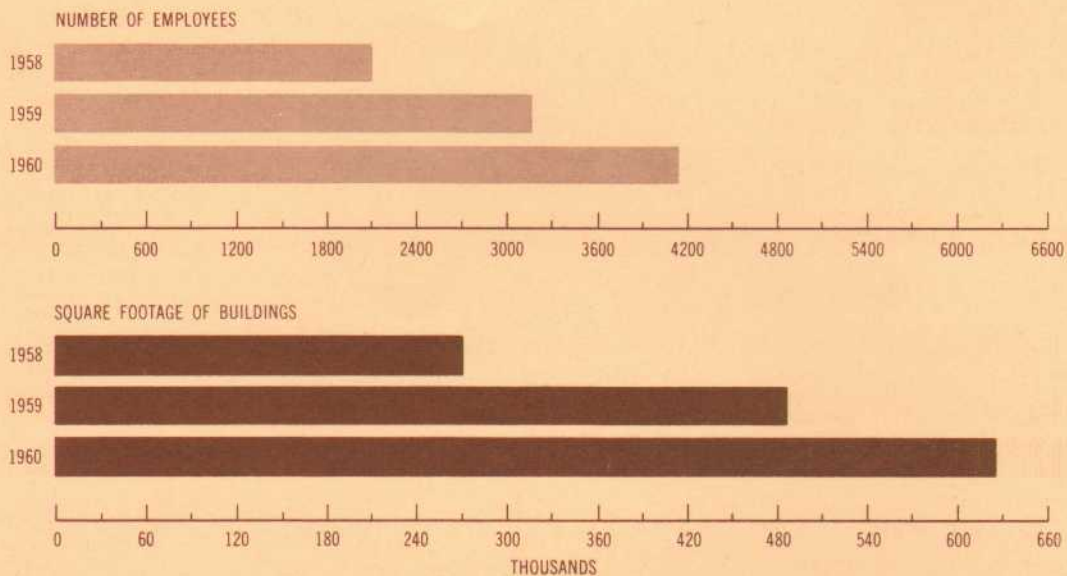
**To sum it all up . . .** Librascope has experienced difficulties in many areas. We have successfully coped with some, are working with promise of success on others. We also know that we will encounter other problems, because that's the nature of the business we are in, and because these are challenging times. I don't believe there is a technological or management problem in our own field of operations that we can't solve, if we all make the best use of our abilities. Individually, and as a working team, we are capable of great achievement. We have proved it every year for 23 years - and we shall go on proving it. We started the year 1961 with a backlog of \$66, 247, 396. As of Jan. 31, that figure had to be updated to \$72, 748, 748. This is the biggest backlog in Librascope history.

**As we move ahead in 1961 . . .** we all have a great opportunity to build a better and stronger Librascope and, in so doing, to achieve more security for ourselves as employees and while doing that we shall be building a stronger nation and a better world for everybody.



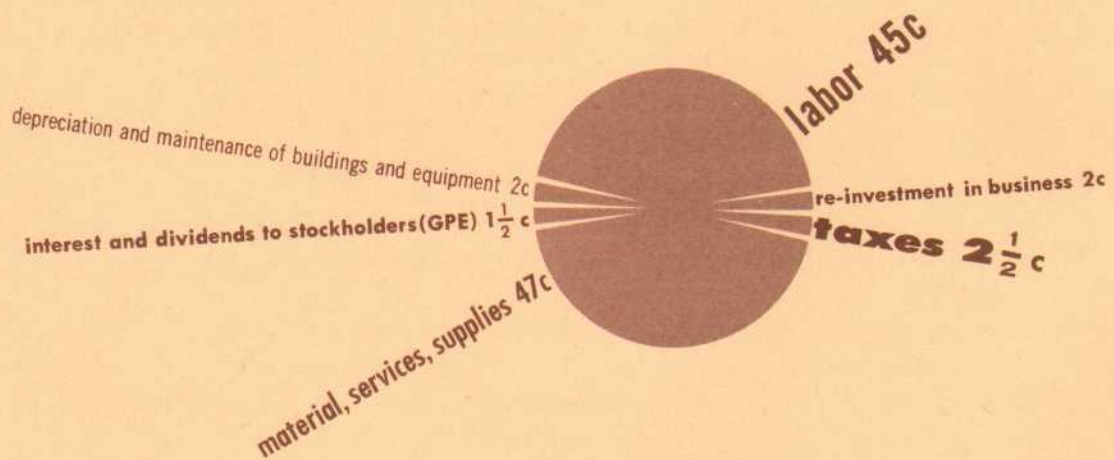
W. E. Bratton

## Librascope Growth in 1960



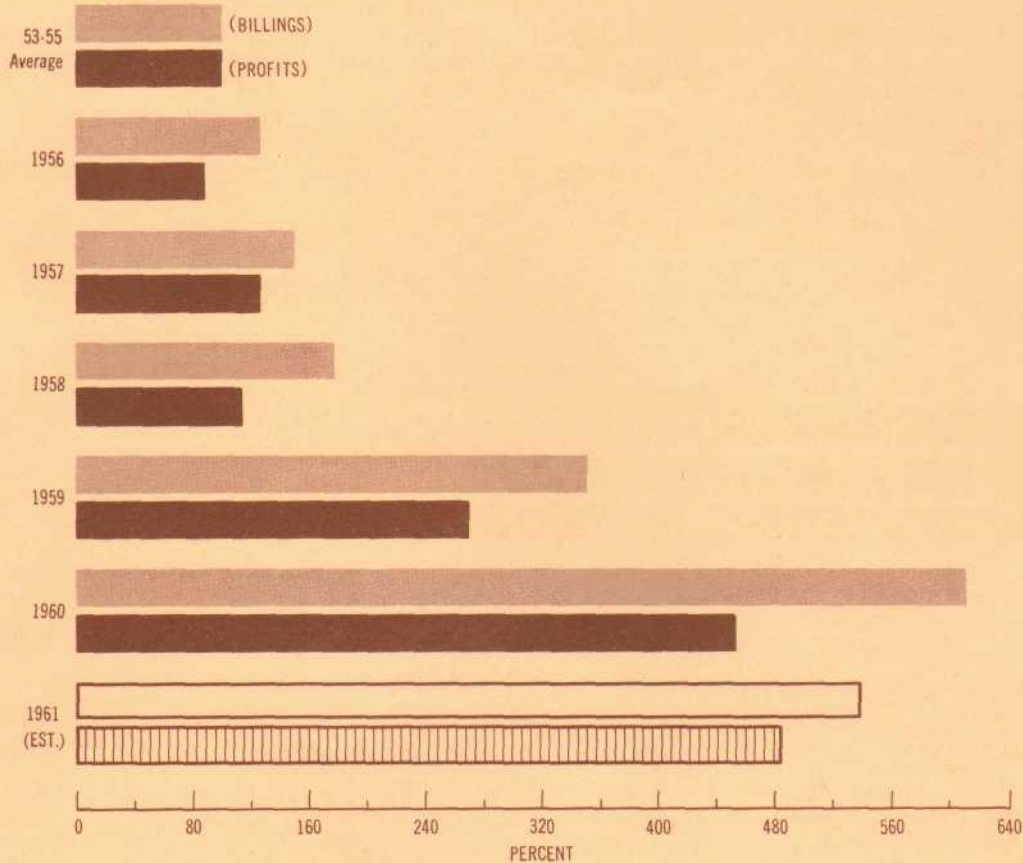
Employment reached a new high in 1960, attaining a total of 4,258 at the peak period. This was 1,034 higher than the previous record set in 1959. Our working-space also soared to new heights, reaching 630,000 square feet at year's end. The 1959 high was 490,000 square feet.

## Distribution of 1960 Sales Dollar



The Librascope sales dollar, represented symbolically above, was carved into many bits and pieces by the costs of doing business. Reflecting increased costs of things we must buy is the wedge for materials and services; at 47 cents it is 13-1/2 cents more than last year. With labor, it represents the biggest bite out of the dollar, a total of 92 cents. A vital element, reinvestment in the business, is 2 cents, down a half-cent from 1959.

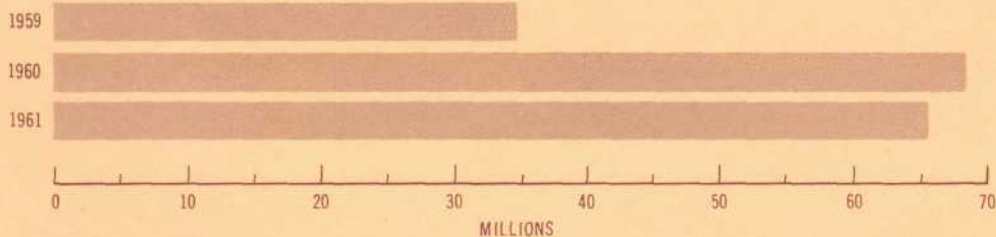
## Annual Billings vs Profit ('53-'55 average as base)



Our sales billings again took a large forward leap in 1960, but profits (before taxes) on those billings again lagged behind, as they have for the past five years.

To shorten the gap between sales and profits, Management has imposed tighter budgetary control and is instituting cost-reduction programs in every phase of operations. The prediction of greater profits in 1961, despite anticipated reduced sales, reflects the expected results of budgetary control and cost-reduction.

## Our Backlog as of January 1, 1961



The engineering and production backlog, as of Jan. 1, 1961, stood at \$66,247,396, slightly under the record of \$68-million plus for the same date in 1960. (As of Jan. 31, however, it had climbed to \$72,748,748, the largest in Librascope history.) Much of this figure embraces our work on the SUBROC, ASROC and POLARIS projects, plus advanced versions of POLARIS. Also included are the CENTAUR and FRAM projects and various missile programs using our EBW devices.





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