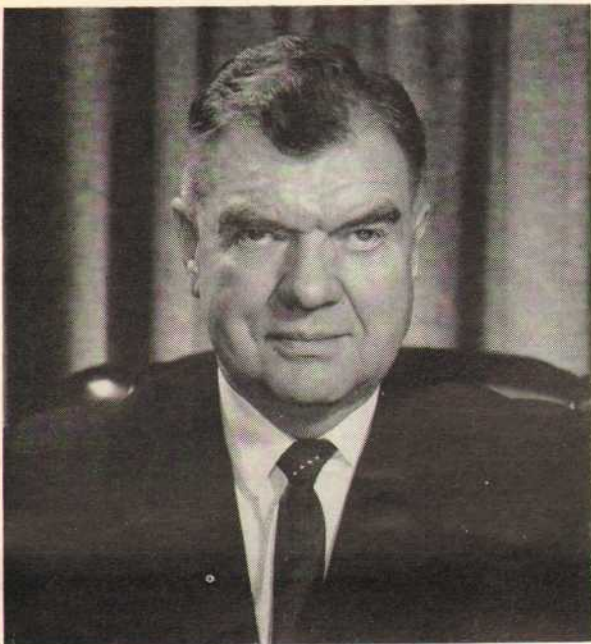
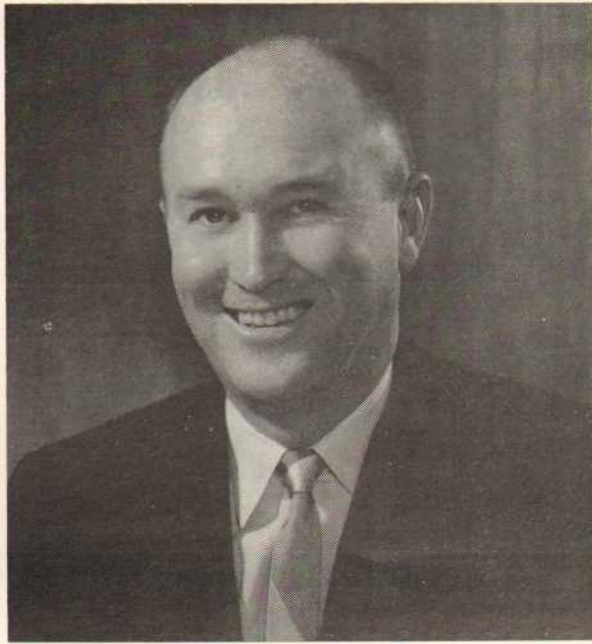


# L. W. Imm Resigns; W. E. Bratton His Successor



Lewis W. Imm



William E. Bratton

## New President Takes Office September 15

Lewis W. Imm, whose "garage-built" invention in 1937 resulted in the founding of a company that has grown into a multi-million dollar producer of sophisticated electronics equipment, has announced his resignation as President of Librascope, effective Sept. 15.

He will be succeeded by William E. Bratton, the company's Executive Vice President, and a man whom Imm considered as his possible successor when he induced him to join Librascope 13 years ago.

Imm announced his resignation plans to employees late last month. In a letter to the company's 4200 employees, he expressed plans to enter a new field of endeavor with a small organization "where I can be active in all phases of operation."

Imm has been retained by General Precision, Inc., as a consultant and will continue to work on Librascope problems.

In his letter to employees, Imm expressed a complete vote of confidence in his successor. He said Bratton "is intimately acquainted with our present and future plans and the type of company we want to continue to be. There is no one in whom I have more confidence."

In the true Horatio Alger tradition, Librascope was founded in 1937 in the garage of Lewis W. Imm.

A young aeronautical engineer, Nebraska-born Imm had conceived an idea to solve the critical problem of balance in aircraft loading. As an aeronautical inspector with the Bureau of Air Commerce (now the Federal Aviation Agency) from 1935 to 1937, he had become aware of the unsolved problem.

Utilizing materials and techniques crude by today's standards, he labored in his garage at Inglewood, Calif., in his spare time, and transformed his idea into an invention—a unique computing device.

The computer, called a Librascope, reduced aircraft loading calculations to simple knob-turning and dial-reading, and pioneered the use of linkage mechanisms in computing.

The original computer, fashioned from wire, paper clips and other "at hand" materials, was an immediate success, and Imm left his government post to set up production.

(Continued on Page 2)

## W. E. Bratton With Company For 13 Years

William E. Bratton, who will succeed Lewis W. Imm as President of Librascope on September 15, has played a major and continuous role for the past 13 years in the growth and development of the company to its present size and stature.

He came to Librascope in 1947, and was named Assistant to the President in 1950. In that capacity, he handled general corporation problems.

BRATTON WAS appointed Vice President in charge of engineering, manufacturing and sales in 1954, and became Executive Vice President in 1959, assuming responsibility for company operations.

When General Precision, Inc., was formed by GPE in January of this year, Bratton, along with President Imm, was elected to the GPI board of directors.

Bratton was born in Dallas, Texas, in 1919, attended grade school there, and moved to California with his parents at the age of 12.

He attended Woodrow Wilson Junior High School in Glendale, Glendale High School and Glendale College. He completed his last two years of undergraduate studies at Stanford University, Palo Alto, graduating with a B.A. degree in economics in 1940.

AFTER GRADUATION, Bratton joined Lockheed Aircraft as an engineering planner, and advanced to the position of department manager.

During World War II, he was a lieutenant in the U.S. Navy, serving as a supply officer on a seaplane tender. He also was assigned to study at the Harvard University Graduate School of Business.

Military service completed, he rejoined Lockheed, and in 1947, came to Librascope.

IN 1942, he married Miss Betty Thume of Glendale. They now reside in La Canada with their three children, Dale, Janet and Donna.

Bratton is a member of the Glendale Chamber of Commerce and the American Ordnance Association. His favorite recreational past-time is golf, and his principal off-the-job business interest is the study of stocks and bonds.

**CREDIT UNION HOURS**  
11:30 a.m. to 12:30 p.m.  
4:00 p.m. to 4:45 p.m.  
Tuesday through Friday



Vol. 8, No. 3

September, 1960

## Double Honors at Wescon Show For Librascope Designed Products

Two products developed by the company's Burbank Branch won top design awards at the 1960 Western Electronics Show and Convention, held at the Los Angeles Memorial Sports Arena last month.

The RPC-4000 general-purpose digital computer was singled out for an award of excellence by Wescon's Industrial Design Award Committee, and the Model 210 X-Y Plotter, a precision data-recording instrument, was honored with an award of merit.

BOTH PRODUCTS were prominently displayed in a special awards booth at the convention. They were among several new electronics products chosen for design awards from well over 100 submitted.

It was the second straight award-winning year for Librascope at Wescon. Last year, the Libratrol-500 process control digital computer, also developed by the Burbank Branch, received an award of merit for excellence in design.

The presentation of the design awards was one of the many highlights of Librascope's participation in the 4-day 1960 convention.

Two Librascopers presented papers in the 41-session technical program.

LANE WOLMAN, Director of Systems Engineering in the Special Devices Department, presented a paper entitled "Central Data Processor of the Air Traffic Control System" in a session on Air Traffic Control. Wolman discussed various features of the Central Data Processor designed by Special Devices for the Federal Aviation Agency.

The second Librascope paper was presented by Emory A. Coil, Senior Engineer in Special Devices. Coil's paper, entitled "A Multi-Addressable Random Access File System,"

was given at a session on Computer Circuits and Devices.

COIL DESCRIBED the file system developed by Special Devices for the Air Traffic Control Data Processor. The system, called the Librafile, is unique in that it is capable of retrieving information on the basis of content alone, Coil said.

Librascope's booth at the convention proved to be an eye-catcher.

Products ranging from encoders to a general purpose missile computer were on display, and many Librascope staffers were on hand to greet visitors, answer questions and pass out literature. Librascope shared an 80-foot booth with the three other GPI divisions—Link, Kearfott and GPL.

AS ONE OF the official host companies of the convention, Librascope conducted a tour of its Burbank (Continued on Page 7)



BUSY BOOTH—Librascope's booth at the 1960 Wescon show bustled with activity throughout the four-day show. Typical scene shows Ken Slee, Director of PR and Advertising, in deep discussion with Phil Shipp,

Burbank Branch Application Engineer, while other Librascopers and visitors busily engage themselves in conversation and sight-seeing. Librascope, Kearfott, Link and GPL shared a General Precision, Inc., booth.





Westburg



Quilter



McKenzie



Castillo



Mills



Flores



Walker

## Military Sales Expands Staff; Gears for Entry into New Fields

A greatly expanded and considerably reorganized sales operation, with a heavy accent on staff technical capabilities, was announced this month by Bob Williamson, Librascope's newly-appointed Director of Military Sales.

The sales effort, Williamson said, is designed to assure that Librascope's activities will be in tune with the current and future requirements of its potential customers. It is a "customer-oriented" effort, Williamson declared, geared to fit the special needs of the largest, or smallest military buyer.

As it has been in the past, major responsibility for sales rests with the Engineering departments and Branches, but Military Sales has been charged with coordinating and approving all sales effort, as well as initiating and monitoring the implementation of sales policies and programs. Military Sales also has been given functional supervision of military market analysis.

**EXPLORATION OF** new fields of endeavor, determination of opportunities and requirements for new products and for existing products, also has been handed to Military Sales.

To handle its continuing functions and the new responsibilities, Military Sales has been organized in three separate groups: Staff Operations, Branch Operations and Field Operations.

Under Staff Operations are general administration, sales planning, market analysis and customer liaison. Under Branch Operations are the Military Sales representatives assigned to work with staff military sales representatives of Shipboard, Airborne and Special Devices. Under Field Operations are the Washington, Dayton, Huntsville and Los Angeles Regional military sales offices.

**COINCIDENT WITH** the reorganization announcement, Williamson also announced the names of those who have been assigned to the new staff functions. They are:

### Arnold Sorenson To Public Relations

Arnold Sorenson, Senior Engineering Writer in Publications since joining Librascope last September, has transferred to Public Relations and Advertising to fill the newly created position of Senior Public Relations Writer-Editor.

Sorenson, in his new position, will write brochures and technical articles on the company's capabilities and new products, and will aid engineers in preparing papers for technical publications.

Before joining Librascope, Sorenson was free lance technical writer in Phoenix, Ariz., and held technical writing positions with Minneapolis-Honeywell, Engineering Research Associates, and Northern Ordnance, Inc., in Minneapolis.

He graduated from the U.S. Naval Academy, Annapolis, in 1944, and served for three years on active duty with the Navy.

Art Westburg, formerly Manager of the Washington office, has been named to the post of Special Assistant to the Director.

Westburg has had the responsibility of supervising the reorganization of the department and the acquisition of new personnel to man the operation.

Because of his extensive experience with military customers in the Washington Office, Westburg will be available for assignment to special projects, as well as representing Williamson in his absence. He will also be responsible for reporting and monitoring the overall performance of the Military Sales group.

**ED QUILTER**, Manager of the Glendale military sales office until it was merged with L.A. district sales, has been appointed Special Representative. He has the assignment of exploring entirely new areas of potential company activity.

J. B. McKenzie, until recently executive officer of the Electronics Systems Division of Air Force Headquarters, Washington, has been named Manager of Staff Administration. A retired Lieut-Col, McKenzie also has served with the Air Force's Research and Development Command. He is a BSEE from Texas A&M, also has done graduate work at the University of Michigan.

R. W. Meade (subject of a LIBRAZETTE story in June) has been named Supervisor of Staff Administration. He is responsible for internal administrative functions of the division sales office and in charge of its personnel.

J. E. EDWARDS (subject of a June LIBRAZETTE story) has been appointed Supervisor of Sales Plan-

ning. Reporting to McKenzie, he has responsibility for coordinating division-wide sales planning, fiscal matters, sales presentations and technical proposal preparation and submission.

Lanier S. Castillo has been named Supervisor of Market Analysis. Formerly head of a special intelligence analysis group of the Army Coordination Center at Arlington, Va., Castillo will apply the study and evaluation techniques of military intelligence to the task of assembling the information necessary to determine the scope and direction of Librascope's future sales activities. He is an engineering graduate from the University of Kentucky.

**ALSO ON** the market analysis staff are Scott A. Mills and Richard A. Flores. An ex-Navy officer, Mills holds a BA from Grinnell College and an MA in international relations from Johns Hopkins University. A former civilian expert with Army intelligence, Mills worked on military logistics intelligence studies, and a project utilizing computers to produce intelligence on foreign guided missiles and space technology.

Flores, an ex-Air Force meteorologist, is a BSEE from the University of New Mexico. As a civilian, he was part of an Army Signal Corps operation in which computers were utilized to correlate and evaluate weather data.

Bill Walker, formerly a customer relations staffer in Military Relations, has been named Supervisor of Customer Liaison. He has responsibility for coordinating all customer service effort requiring division sales office participation.

### Personnel Moves

The Personnel Dept. has found a new home in building 3.

During the last week-end in August, the whole group, with the exception of Labor Relations Representative Tom Flaherty, was moved—lock, stock and records—from building 2 to the recently remodeled quarters in building 3.

A second exodus—this one from building 5—was achieved by the Credit Union. They, too, have relocated in building 3. The schedule of office hours in their new location will remain the same: 11:30 to 12:30 and 4:00 to 4:45, Tuesday through Friday.

A third move involves the Precisioner Store. It will be transferred in early September into building 2, in the area which formerly housed the Insurance and Records Section.

### Williams Named To Special Post

William S. Williams has joined Librascope in the newly created position of Assistant to Vice President and Treasurer M. L. Lindahl.



Williams' initial assignment is Controller of the Shipboard Department, Lindahl said. In this position, he reports operationally to Tom Bryant, Chief Engineer of Shipboard, and Arnold Larson, SUBROC Program Manager.

Williams comes to Librascope from the Bureau of Naval Weapons, Washington, D.C., where he was Deputy Controller. Prior to the merger of BuOrd and BuAer into BuWeps, Williams was Controller of BuOrd for five years.

His extensive background with the Department of the Navy also included 5½ years as Personnel Director and Business Manager at the Naval Ordnance Laboratory, White Oak, Md. He also spent 10 years with the Department of Agriculture.

During World War II, Williams served as a lieutenant colonel in the U.S. Army Signal Corps.

He holds an A.B. degree in chemistry from the University of Utah, and a masters degree in business administration from George Washington University. He did graduate work in chemistry at George Washington University, and attended the advanced management program at Harvard.

Williams and his wife Afton have three children, Cheryl Ann, 13, Robert, 10, and Craig, 7.

### Reynolds Joins Burbank Personnel

Keeping pace with its rapid growth, Burbank Personnel recently added interviewer Fred Reynolds to its staff.



In this capacity, he will handle all applicants for employment at the Burbank Branch, advising and recommending to supervisors on the qualifications of each applicant.

A scholarship student from Colorado U., Reynolds majored in Personnel Management. He worked as a cost accountant for Ryder Systems Co. in Denver before moving west.

He will be working for Burbank Personnel Manager Morrie Kimmel.

## Librascope President Imm Resigns

(Continued from Page 1)

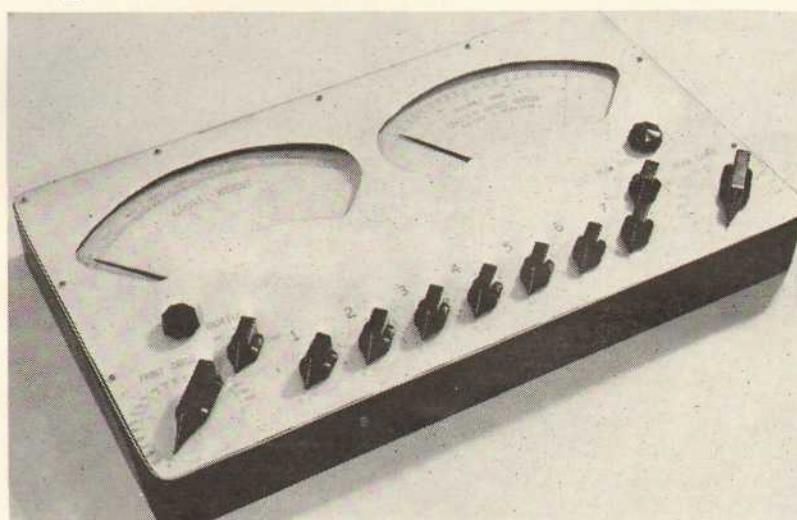
tion operations—in his Inglewood garage. His computer was used by Lockheed, all major airlines and by Howard Hughes in his first around-the-world flight.

Today, inventor Imm's first computer (see photo) is prominently displayed in the Mural Room in Building 3, and receives constant recognition as a prime example of pioneering mechanical ingenuity.

Expansion-minded, Imm moved his fledgling company—named Librascope after his original computer—to Burbank. In 1941, Librascope became a subsidiary of General Precision Equipment Corporation of New York. During World War II, Librascope worked, at the Navy's request, on automatic computers, on submarine problems, and antisubmarine devices. The company's war efforts earned an "E" award with four stars for efficiency.

When Librascope joined GPE in 1941, Imm became Director of Engineering, holding that position for six years. He was named Vice President of Engineering in 1947, and became President in 1949.

The year 1949 marked the establishment of the Glendale plant (now Building 1), and the beginning of the company's greatest period of expansion. Through continuous emphasis on research and development, several key acquisitions and forward-looking management



policies, Librascope, under Imm's guidance, grew from a small company employing some 200 to the company we know today—a firm with an employment roster of 4200, business and backlog at record highs, and plant facilities of more than 610,000 square feet.

In December 1958, Imm was elected a Vice President of General Precision Equipment, and in 1960, was named to the GPI Board of Directors.

Imm was born in Milford, Nebraska, in 1905, and spent his early years on his father's cattle ranch in South Dakota.

He attended the University of

Minnesota for two years, majoring in mechanical engineering, and completed his college studies at the University of Nebraska, graduating in 1927 with a degree in aeronautical engineering.

His first engineering position was with a Nebraska aeronautical firm. Then followed employment with several small aircraft companies, highlighted by a typical Imm display of ingenuity. He was one of the first to convert an automobile engine into an aircraft engine. In 1935, he accepted the Bureau of Air Commerce post in Washington, D.C., and soon transferred to California.

Throughout his career at Librascope, Imm put his personnel philosophy into action. His philosophy—which places the greatest importance on the employee as an individual—is now a hallmark in the industry.

Imm's great drive and devotion to his company has also been manifested by participation in practically every phase of operation. Until recent years, when the administrative and policy-making demands of the presidency occupied more and more of his time, he took an active part in the complete spectrum of company operations—from design and delivery of a new product to employment interviewing and development of new production equipment.

His interest in civic and youth activities has never flagged. Memberships in the Glendale Chamber of Commerce, the Future Engineers of America, and five consecutive terms as Los Angeles secretary of the Junior Achievement organization are typical of these interests.

In recognition of his personal contributions in the fields of fire control techniques and naval ordnance engineering, Imm in 1957 received the highest Navy civilian citation—"The Navy Distinguished Public Service Award."

The father of two sons, Imm resides in Encino with his wife, Helen.





**MOVIE TIME**—The stage is readied for a sequence of the Navy's movie on the PERT program. Seated at the table are, left to right, Tom O'Connor, Phil Oster and Carl Plath, all of Shipboard. At rear, from left, are Jack Miller and Pat Corbit, cameramen, Al Smith, of Shipboard, and Barney Petty, holding a model of the Polaris. Miller, Corbit and Petty are from Merit Productions of California, producer of the film.

## Cameras and Klieg Lights Move Into Librascope Oak Room for Navy Filming

To the glare of bright lights and the soft whirring of a motion picture camera, seven Shipboard Department staffers, for a few moments one day last month, took up a new occupation—acting.

The scene was the Oak Room in Bldg. 21. The action filmed was one sequence of a movie of the actual operation of the Navy's Program Evaluation and Review Technique program (PERT) at Librascope. PERT, a management control program, is used by more than 50 contractors participating in the Polaris program, directed by the Navy's Special Projects Office.

In the Librascope sequence, the movie camera caught Al Smith, Engineering Planner, standing at the end of a conference table.

Smith deftly unrolled a huge chart down the length of the table and passed out literature to six Shipboard staffers seated around the table. The chart and the literature, Smith explained, described the PERT reporting system as it applies to a segment of the fire control system produced by Librascope for the Polaris program.

As the camera ground out the footage, Smith stepped over to a blackboard and continued his ex-

planation of PERT's operations.

The sequence came to an end, and off went the lights. The camera stopped rolling, and the seven actors left the Oak Room, their brief moments of movie-making now completed.

The six Shipboard staffers who manned the conference table in the celluloid venture were: Tom O'Connor, Engineering Planner; Carl Plath, Staff Assistant; Phil Oster, Administrative Assistant; Charlie Buterbaugh, Acting Director of Systems Engineering; John Batten, Personnel Representative; and Bob Simpson, Project Manager of Systems Engineering.

The black-and-white movie, filmed by Merit Productions of California for the U.S. Navy, captured PERT-in-action sequences at several other

### New Badges

New identification badges, different in shape and using new color-coding to identify the degree of security clearance, will be issued next month. The new badge was designed by Security Chief Don Knox, will be standard throughout GPI and will be acceptable at any GPI or GPE plant.



**NEW MANUAL**—Charley Meyers (1), Assistant Security Officer, presents Librascope's new guard manual to guard Ezra Perkins. A compilation of company rules and military security regulations, the new manual will insure uniformity of our security operation. An addendum to the operation of the fire brigade is also included in the back of the book.

## Dr. A. L. Stanley Joins Shipboard

Dr. Albert L. Stanley, well-known scientist-engineer, has joined Shipboard Engineering as a Staff Engineer and currently is conducting operational research studies in ASW systems.

A native of Chicago, Dr. Stanley holds a B/S degree in Mechanical engineering from Cal-Berkeley and a Ph.D in Engineering from UCLA. He comes to Librascope from Hughes Aircraft, where he was a Senior Staff Engineer for 10 years in weapons system analysis.

A native of Chicago, Dr. Stanley holds a B/S degree in Mechanical Engineering from Cal-Berkeley and a Ph.D in Engineering from UCLA. He comes to Librascope from Hughes Aircraft, where he was a Senior Staff Engineer for 10 years in weapons system analysis.

Prior to joining Hughes, Dr. Stanley was on the engineering staffs of North American Aviation, Bendix Aviation and Shell Oil. He also has been Assistant Professor of Engineering in UCLA's college of engineering, has taught supervision and management courses at both UCLA and USC.



**SMILE** — Training stenographer Bonnie Godfrey chats with friend during break, using new booth installed alongside building 16.



**VAN AND MACHINE**—Roy W. Van Holm, Prototype Shop Foreman, aligns a CP-209 memory drum on the new precision turning machine he developed. The device, called Van's Drum Machine, is capable of machining drums to tolerances of 0.000050 inch and less. After Van Holm aligns the CP-209 drum to take out its taper, he will check for runout.

## Accuracy Up, Costs Down With Van's Drum Machine

A new precision turning device developed in the Prototype Shop is enabling Librascope to produce in quantity computer memory drums of greater accuracy and at less cost than ever before possible.

The device was developed by Roy W. Van Holm, Prototype Shop Foreman, and designed by Tool Design.

It is capable of machining memory drums to tolerances of 0.000050 inch and less. A tolerance of 0.000025 inch has been recorded several times, Van Holm said.

**NICKNAMED** "Van's Drum Machine," the device is used to turn the final diameter of memory drums, one of the most exacting and important operations in the entire computer manufacturing process.

The machine replaces a precision lathe and saddle combination, a complicated device that hampered quantity production of extremely accurate drums, and made changing from one type drum to another difficult and time consuming.

**CHARLIE COLE**, Assistant Production Superintendent in charge of the Prototype Shop, said the prototype of the new machine, including the power system, cost less to build than the replaced fixture.

Van's Drum Machine turned out

to be a finished product from the very start—there have been no modifications to date and none are foreseen. It is capable of finishing all sizes of drums currently produced at Librascope, and has the capacity to finish even larger drums.

**THE VERY** first production orders machined by the new device proved its capabilities. In a test at the Naval Ordnance Test Station, China Lake, it was found that bearing bore alignments of drums for incremental type computers were in tolerance and concentric to within 0.000050 inch over an 11 inch span.

Van Holm, a Librascope since 1947, said the idea for the new machine developed over a period of time, and was prompted by the urgent need for extremely accurate memory drums.

**THE MACHINE** was designed in Tool Design and fabricated to the final adjustment stage in the Tool Room. Final adjustments and set ups were made by Van Holm in the Prototype Shop.

Van Holm joined Librascope as an experimental machinist in the Prototype Shop, and steadily advanced to his present position as foreman. He resides in Burbank with his wife and three children.

## Williamson Returns To Burbank Branch

Dick Williamson, formerly Quality Control Manager for the Burbank Branch, recently returned to



Librascope following an overseas assignment with International Telephone and Telegraph Corp. He will serve as staff engineer to Burbank Plant Manager Charles Krill.

Williamson first joined Librascope in 1957, as Senior Engineer on production of the LGP-30. Subsequently, he was appointed Supervisor of Quality Control and later became Manager of the group for the Burbank branch.

Because of previous experience with IT&T, Williamson was invited to rejoin the company for service in Tokyo, providing technical liaison between IT&T and the Nippon Electric Co. and the Sumitomo Electric Industries.

Williamson, his wife, Eva, and their sons Richard and Charles, now make their home in Tujunga.

### Dependent Insurance

Librascopers with dependent children were reminded this month by Art Pederson, supervisor of Employee Benefits and Services, that our group insurance coverage for children expires when they reach the age of 19. However, protection for them can be arranged through the EBS office, through writing of a separate policy, at additional premium.





**SHOP TALK**—Production Test Equipment Engineers Chuck Bailey (l), and Carl Sorensen (r), confer with group Supervisor Howard Hill on a proposed piece of test equipment to be used by Quality Control.



**DRAFTING ROOM**—Test Equipment has their own team of draftsmen who handle all drawings for test equipment from the earliest design stages up to final

fabrication. Test Equipment Eng. Earl Weinstein (center) discusses with Marguerite Mazur some last minute revisions that will have to be incorporated.

# Production Test Equipment: Big Business

In recent years, the term "custom-built" has fallen into a state of disrepute. In this golden era of high-pressure salesmanship it has been tacked on to everything from auto seat covers to bargain basement furniture.

Like so many other fine old phrases, it seems to be losing its original meaning. Or has it?

The Production Test Equipment Group of Engineering Services however, takes exception to this. "Custom-built", they will quickly tell you, is their very reason for existence.

**WITH EACH PRODUCTION** contract that comes into Librascope, a sizeable budgetary portion—usually in the vicinity of 10 per cent—is allotted for production test equipment. In one recent \$5,000,000 contract for instance, the projected test equipment needs called for a \$500,000 expenditure.

If it is found in the early stages of a contract that commercial test equipment is available to do the precise work required, then it will be purchased. But in our industry where each project presents totally new challenges and complexities, there is usually a need for specially designed test equipment.

It is at this juncture that Supervisor Howard Hill and his 43 custom-builders in Production Test Equipment come into the picture.

Working in conjunction with members of Engineering Design, Production Engineering, Quality Control and Industrial Engineering, a Test Equipment Engineer assigned to the project gathers the data pertinent to the test equipment needed.

**FROM THE DESIGN** engineer comes the information on test specifications and a tentative list of the kind of test equipment that will be needed to "check out" the finished product.

From Production Engineering the PTEG Engineer gathers information on the anticipated production and check-out problems that might arise, along with the overall mechanical features of the project which might affect the design of the test equipment.

Quality Control, a major user of the test equipment, relays its data concerning the requirements of the contract. And from Industrial Engineering comes the decision on the quantity and placement of the test units, along with the establishment of the test equipment schedule and budget.

**IN EVERY CASE**, the Production Test Equipment Group must have a clear and uncluttered line of communication with each of the interested groups. The smallest revisions and modifications on any portion of a project must be known by the test equipment design people.



**FINAL CHECK**—Test Equipment Technician Dick Goetsch (r), discusses operation of the Tachometer Generator Test Station with Archie Darezzo, Incoming Inspection. The "tach stand" is the final test for high accuracy induction tachometers and servomotors.



**POLARIS CHECKOUT**—Eng. Associate Howard Little is seen with the Factory Acceptance Test Set (FATS) for Polaris, another of the special pieces designed by the Test Equipment Group.

"What might constitute a minor change for a Project Design Engineer could mean considerable rework for us," states PTEG Supervisor Howard Hill. "Since the test equipment schedule is so closely geared to the project itself, it is paramount that we be right on top of any design changes that might occur."

Like so many other Librascope operations, the Production Test Equipment Group works within a framework provided by the job specification and Engineering Standards. In addition, however, the test group has its own Standards committee, chaired by Senior Engineer Bob Wright, and including Senior Engineer Chuck Bailey, Engineer Carl Sorensen and Drafting Group Leader Ray Steinhoff.

Once the early groundwork on a project is completed, the group Standards committee establishes uniformity of test equipment design, physical placement of controls and standardization of components used. For their own purposes, the test equipment group aims for a standard 10 times the accuracy of the unit being tested.

**AFTER COMPLETION** of equipment design and procurement of parts, the job is sent to the Prototype Shop for fabrication.

While it is being readied, the Test Equipment Engineer, often in conjunction with Publications, prepares the Specification on the test equipment, describing its theory of operation, the scope and purpose of the equipment and its calibration requirements.

Following fabrication, the test equipment is taken to the Secondary Standards Lab for calibration. It is then delivered to its appropriate test station, ready for use.

For the Production Test Equipment Group, the job is far from over. Although design and fabrication are completed, there still remains the very important phase of equipment maintenance.

"We have an exceptionally capable staff of technicians whose job it is to trouble-shoot and maintain all of our production test equipment," states Supervisor Hill. "They are assigned to particular test gear and remain with it until the last unit of a contract is out the door. Then, and only then, is our job complete."

But while the Production Test Equipment Group is aware of the importance of their role in the reliability and high performance of the Librascope product, they also realize that they are by no means alone.

**EVEN WITHIN** the test equipment area of operation, the list of supporting groups and sections responsible for the exacting, final performance reads like the Company roster. And, indeed, it is almost that.

The final result of the effort of Production Test Equipment and its many support groups is, in a word, Quality. . . . a further statement of the continuing Librascope theme.



**ASROC ADJUSTMENT**—Instrument technician John Goad, Final Adjustment, is shown zeroing a converter on the Mk-38 during final test.



**BLDG 26**—Senior Engineer Bob Wright and Technician Alan Sensui, part of Test Equipment Group devoted exclusively to SUBROC.



**TESTING CP-209**—Instrument Technician Bob Holcomb is seen checking and certifying the CP-209 computer, using the FATS checkout book.



# Record Enrollment Seen for 1960 Educational Refund Plan

Registration for the 1960 Fall Semester at a host of colleges, junior colleges, trade and technical schools begins this month. And for Librascope's it means another opportunity to avail themselves of the benefits of the Educational Refund Plan.

Because of the growing participation in the program, LIBRAZETTE, in conjunction with the Training Department, presents a listing of courses from most of the local schools and universities attended by employees. The following lists, though representative, are by no means complete. For further information on a particular class or school, contact the Training Department, ext. 1231.

**GLENDALE**  
**Glendale High School**  
146 South Verdugo Road CI 2-0318  
Registration date—Week of Sept. 12

|                    |            |              |               |
|--------------------|------------|--------------|---------------|
| <b>Business</b>    |            |              |               |
| Business English   | Mon        | 6:30-9:30 pm |               |
| Shorthand I—Gregg  | Mon-Wed    | 7-9:30 pm    |               |
|                    | Tues-Thurs | 7-9:30 pm    |               |
| Shorthand II—Gregg | Tues-Thurs | 7-9:30 pm    |               |
| Typing I           | Mon-Wed    | 7-9:30 pm    |               |
|                    | Tues-Thurs | 7-9:30 pm    |               |
|                    | Mon-Wed    | 7-9:30 pm    |               |
|                    |            |              | (Hoover High) |
| Typing II          | Tues-Thurs | 7-9:30 pm    |               |
|                    | Mon-Wed    | 7-9:30 pm    |               |
| Correct English    | Mon        | 7-9:30 pm    |               |

|                    |            |              |  |
|--------------------|------------|--------------|--|
| <b>Mathematics</b> |            |              |  |
| Algebra I-IV       |            |              |  |
| Plane Geom         | Tues-Thurs | 6:30-9:30 pm |  |
| Solid Geom         |            |              |  |
| Trig               |            |              |  |

|                    |     |           |               |
|--------------------|-----|-----------|---------------|
| <b>Photography</b> |     |           |               |
| Photo I            | Wed | 7-9:30 pm |               |
|                    |     |           | (Hoover High) |

|                                |      |           |  |
|--------------------------------|------|-----------|--|
| <b>FCC License Preparation</b> |      |           |  |
| Amateur                        | Tues | 7-9:30 pm |  |

**Glendale College**  
1500 North Verdugo CF 2-6861  
Registration date—Week of Sept. 12  
Counseling—6:00-9:00 pm by Appt.

|                 |     |              |  |
|-----------------|-----|--------------|--|
| <b>Business</b> |     |              |  |
| Business Math   | Wed | 6:30-9:30 pm |  |
| Office Practice |     |              |  |
| (Bus Machines)  | Mon | 7-10 pm      |  |
|                 | Wed | 7-10 pm      |  |

|                      |            |         |  |
|----------------------|------------|---------|--|
| <b>Engineering</b>   |            |         |  |
| Desc Geometry        | Tues-Thurs | 7-9 pm  |  |
| Eng'g Drawing I & II | Tues-Thurs | 7-10 pm |  |

|                             |            |           |  |
|-----------------------------|------------|-----------|--|
| <b>English &amp; Speech</b> |            |           |  |
| Freshman English            | Mon        | 7-10 pm   |  |
| Public Speaking             | Thurs      | 7-10 pm   |  |
| Speed Reading               | Tues-Thurs | 7-9:30 pm |  |

|                      |            |              |  |
|----------------------|------------|--------------|--|
| <b>Mathematics</b>   |            |              |  |
| Basic Algebra        | Tues-Thurs | 6:30-9:30 pm |  |
| Analytic Geom & Calc | Tues-Thurs | 6:30-9:30 pm |  |
| Desc Geometry        | Tues-Thurs | 7-9 pm       |  |
| Plane Geometry       | Tues-Thurs | 6:30-9:30 pm |  |
| Trigonometry         | Mon        | 7-10 pm      |  |
| Elem Physics         | Wed        | 6:30-9:30 pm |  |

|                   |         |              |  |
|-------------------|---------|--------------|--|
| <b>Technical</b>  |         |              |  |
| Blueprint Reading | Tues    | 6:30-9:30 pm |  |
| Tech Drafting     | Mon-Wed | 7-10 pm      |  |
| Machine Shop      | Mon-Wed | 7-10 pm      |  |

|                        |            |         |  |
|------------------------|------------|---------|--|
| <b>Electronics</b>     |            |         |  |
| Electronics I          | Mon-Wed    | 7-10 pm |  |
|                        | Tues-Thurs | 7-10 pm |  |
| Electronics II         | Mon-Wed    | 7-10 pm |  |
|                        | Tues-Thurs | 7-10 pm |  |
| Electronics III, IV, V |            |         |  |
| and VI also offered    |            |         |  |

|                             |      |              |  |
|-----------------------------|------|--------------|--|
| <b>Supervisory Training</b> |      |              |  |
| Elem Supervision            | Mon  | 7:30-9:30 pm |  |
|                             | Tues | 7:30-9:30 pm |  |
| Basic Psychology            | Mon  | 7:30-9:30 pm |  |
| Labor-Mngmt Rels            | Wed  | 7-9:30 pm    |  |
| Written Comm's              | Tues | 7-10 pm      |  |

**SUN VALLEY**  
**Sun Valley Junior High**  
7330 Bakman Avenue  
English, High School Thurs 7-10 pm  
Typewriting Tues-Thurs 7-10 pm

**SAN FERNANDO**  
**San Fernando Valley State College**  
Etiwanda at Nordhoff Avenues  
Extended Day office—4th floor of Library—  
Mon-Thurs, 4:00-8:00 pm  
Registration—4:30-8:00 pm—See Training  
Section—Last date Sept. 22  
Classes begin Sept. 19

|                       |     |         |  |
|-----------------------|-----|---------|--|
| <b>Business</b>       |     |         |  |
| Business Machines     | Mon | 7-10 pm |  |
| Accounting Principles | Wed | 7-10 pm |  |
| Production Principles | Mon | 7-10 pm |  |
| Auditing              | Wed | 7-10 pm |  |
| Personnel Mngmt       | Wed | 7-10 pm |  |
| 'tronic Data Proc     | Wed | 7-10 pm |  |
| 'tronic Programming   | Mon | 7-10 pm |  |
| Human Relations       | Mon | 7-9 pm  |  |

|                      |      |         |  |
|----------------------|------|---------|--|
| <b>Economics</b>     |      |         |  |
| Principles of Econ I | Tues | 7-10 pm |  |

|                      |       |         |  |
|----------------------|-------|---------|--|
| <b>Engineering</b>   |       |         |  |
| Electronics I        | Mon   | 7-10 pm |  |
| Feedback Control Sys | Thurs | 7-10 pm |  |
| Adv Thermodynamics   | Wed   | 7-10 pm |  |
| Nuclear Engineering  | Tues  | 7-10 pm |  |

|                      |       |           |  |
|----------------------|-------|-----------|--|
| <b>English</b>       |       |           |  |
| Structural Grammar   | Wed   | 4:20-7 pm |  |
| Diff Equations       | Wed   | 7-10 pm   |  |
| Intro to Adv Algebra | Mon   | 7-10 pm   |  |
| Numerical Analysis   | Thurs | 7-10 pm   |  |

|                |      |        |  |
|----------------|------|--------|--|
| <b>Physics</b> |      |        |  |
| Mechanics      | Mon  | 5-7 pm |  |
| Lab            | Tues | 5-7 pm |  |

|                              |     |         |  |
|------------------------------|-----|---------|--|
| <b>Psychology</b>            |     |         |  |
| Counseling &<br>Interviewing | Mon | 7-10 pm |  |

|                 |       |           |  |
|-----------------|-------|-----------|--|
| <b>Speech</b>   |       |           |  |
| Oral Expression | Mon   | 4:20-7 pm |  |
|                 | Thurs | 7-10 pm   |  |



**FORMS READY**—Pictured above is the Librascope Training Section, the focal point for employees interested in the Educational Refund Plan. Seated, left to right, is Training Coordinator Lloyd Considine, Training Director Wayne Strong, and Training Specialist Joe Schwarz. The top row includes Safety Engineer Bob Lee, Stenographer Nancy Nido, Special Course Instructor Bill Hamrick, Stenographer Bonnie Godfrey, and Special Course Instructor Harold Compton.

**LOS ANGELES**  
**Los Angeles State College**  
5151 State College Drive  
Los Angeles 32, California  
Registration date—September 12, 1960  
Classes begin—September 19, 1960

|                                |            |              |  |
|--------------------------------|------------|--------------|--|
| <b>Business</b>                |            |              |  |
| Production Management          | Mon        | 7-10 pm      |  |
| Manpower Relations             | Thurs      | 7-10 pm      |  |
| Industrial Purchasing          | Fri        | 7-10 pm      |  |
| Cost Accounting                | Fri        | 7-10 pm      |  |
| Supervision                    | Tues       | 7-10 pm      |  |
| Electronic Systems—Equip       | Tues       | 7-10 pm      |  |
| Data Processing                | Wed        | 7-10 pm      |  |
| Operations Research            | Tues       | 7-10 pm      |  |
| <b>Economics</b>               |            |              |  |
| Business Firm Econ             | Mon        | 7-10 pm      |  |
| Labor Legislation              | Fri        | 7-10 pm      |  |
| <b>Engineering</b>             |            |              |  |
| Elec Circ Principles           | Mon        | 7-10 pm      |  |
| Elec Systems Principles        | Tues-Thurs | 7-10 pm      |  |
| Electronic Devices Lab         | Tues       | 7-10 pm      |  |
| Semiconductor 'tronics         | Thurs      | 7-10 pm      |  |
| Electronics                    | Wed        | 7-10 pm      |  |
| Non-linear 'tronics            | Tues       | 7-10 pm      |  |
| Electronics Lab                | Mon        | 7-10 pm      |  |
| Dig-Comp Applications          | Tues       | 7-10 pm      |  |
| <b>English</b>                 |            |              |  |
| Written Expression             | Mon        | 4:20-7 pm    |  |
|                                | Thurs      | 7-10 pm      |  |
| Tech Report Writing            | Mon        | 7-10 pm      |  |
| Idea Communications            | Mon        | 4:20-7 pm    |  |
| <b>Mathematics</b>             |            |              |  |
| College Arith                  | Mon-Wed    | 5:30-6:45 pm |  |
| Analytic Geom-Calc             | Mon-Wed    | 8:20-10 pm   |  |
| Dig-Comp Programs              | Tues       | 7:30-10 pm   |  |
| Differential Equas             | Mon-Wed    | 7-8:15 pm    |  |
| Laplace Transform              | Tues-Thurs | 5:30-6:45 pm |  |
| Functions of Complex Variables | Mon-Wed    | 5:30-6:45 pm |  |
| <b>Speech</b>                  |            |              |  |
| Oral Expression                | Mon        | 7-10 pm      |  |
| Public Speaking                | Tues       | 7-10 pm      |  |
| Group Discussions              | Tues       | 7-10 pm      |  |

|                                |            |              |  |
|--------------------------------|------------|--------------|--|
| <b>English</b>                 |            |              |  |
| Written Expression             | Mon        | 4:20-7 pm    |  |
|                                | Thurs      | 7-10 pm      |  |
| Tech Report Writing            | Mon        | 7-10 pm      |  |
| Idea Communications            | Mon        | 4:20-7 pm    |  |
| <b>Mathematics</b>             |            |              |  |
| College Arith                  | Mon-Wed    | 5:30-6:45 pm |  |
| Analytic Geom-Calc             | Mon-Wed    | 8:20-10 pm   |  |
| Dig-Comp Programs              | Tues       | 7:30-10 pm   |  |
| Differential Equas             | Mon-Wed    | 7-8:15 pm    |  |
| Laplace Transform              | Tues-Thurs | 5:30-6:45 pm |  |
| Functions of Complex Variables | Mon-Wed    | 5:30-6:45 pm |  |
| <b>Speech</b>                  |            |              |  |
| Oral Expression                | Mon        | 7-10 pm      |  |
| Public Speaking                | Tues       | 7-10 pm      |  |
| Group Discussions              | Tues       | 7-10 pm      |  |

**BURBANK**  
**Burbank Evening School**  
220 East Grinnel Drive TH 6-4194 Eves.  
Registration opening day in class—  
Week of Sept. 12

**Business**

|                     |            |              |
|---------------------|------------|--------------|
| Bookkeeping & Acctg | Tues-Thurs | 6:30-9:30 pm |
| Shorthand (Gregg)   | Tues-Thurs | 6:30-8 pm    |
| Typing (Beginning)  | Mon-Wed    | 6:30-8 pm    |
|                     | Tues-Thurs | 8-9:30 pm    |
| Typing (Brush-up)   | Mon-Wed    | 8-9:30 pm    |
|                     | Tues-Thurs | 6:30-8 pm    |
| Arithmetic          | Tues-Thurs | 6:30-9:30 pm |



**ASSEMBLER**—Walter Dalawrak, Polaris final assembly, is presently enrolled in a 22-month, electronics technology course, a portion of which is being paid through the Refund Plan. "The Librascope program is as fine an educational plan as you'll find," says Dalawrak. "It has been a big help to me."

**BURBANK**  
**John Burroughs Evening School**  
1920 Clark Avenue TH 6-6401  
Counseling service—nights 7:30-9:30  
Registration—1st class—beginning Sept. 12

|                                    |            |              |  |
|------------------------------------|------------|--------------|--|
| <b>Business</b>                    |            |              |  |
| Bookkeeping & Acctg                | Tues       | 6:30-9:30 pm |  |
| Basic Mach Oper                    | Tues-Thurs | 6:30-9:30 pm |  |
| Calculators                        | Tues-Thurs | 6:30-9:30 pm |  |
| Data Processing                    | Tues-Thurs | 6:45-9:45 pm |  |
| Acctg Mach Wiring                  | Tues-Thurs | 6:30-9:30 pm |  |
| IBM Dept Mngmt                     | Mon-Wed    | 6:30-9:30 pm |  |
| Shorthand I                        | Tues       | 7-9:30 pm    |  |
| Shorthand Refresher                | Tues       | 6:45-9:15 pm |  |
| Typing, Beginning                  | Mon        | 6:30-9:30 pm |  |
| Typing, Advanced                   | Wed        | 7-9 pm       |  |
| <b>Consumer Education</b>          |            |              |  |
| Money Management                   | Wed        | 7-10 pm      |  |
| <b>General Adult</b>               |            |              |  |
| Color Photography                  | Mon        | 6:45-9:45 pm |  |
| <b>Math</b>                        |            |              |  |
| Shop Math                          | Mon        | 6:30-9:30 pm |  |
| Trigonometry                       | Thurs      | 6:30-9:30 pm |  |
| Public Speaking                    | Mon        | 7-9 pm       |  |
| Speed Reading                      | Tues       | 7-9:30 pm    |  |
| Understanding Human Behavior       | Tues       | 7-9:30 pm    |  |
| <b>Burroughs</b>                   |            |              |  |
| Basic Electronics I                | Mon-Wed    | 6:30-9:30 pm |  |
| Basic Electronics II               | Mon-Wed    | 6:30-9:30 pm |  |
| B'print Rdn, Elect & Mech Assembly | Tues       | 6:30-9:30 pm |  |
| Descriptive Geometry               | Tues-Thurs | 6:30-9:30 pm |  |
| Shop Mathematics                   | Mon        | 6:30-9:30 pm |  |
| Wire Soldering I                   | Tues       | 6:30-9:30 pm |  |
| Wire Soldering II                  | Thurs      | 6:30-9:30 pm |  |

**LOS ANGELES**  
**Los Angeles Trade Technical College**  
400 West Washington Blvd.  
RI 9-7021, Ext. 125-1—9:00 pm

|                                   |            |              |  |
|-----------------------------------|------------|--------------|--|
| <b>Speech</b>                     |            |              |  |
| Public Speaking I                 |            | 6:30-9:30 pm |  |
| <b>Technical Illustration</b>     |            |              |  |
| I or II                           | Mon-Wed    | 6:30-9:30 pm |  |
| <b>Air Conditioning</b>           |            |              |  |
| Refrig & Air Cond                 | Mon        | 7-10 pm      |  |
| <b>Drafting</b>                   |            |              |  |
| Gen Drafting                      | Wed        | 7-10 pm      |  |
| Mech Drafting                     | Tues-Thurs | 6:30-9:30 pm |  |
| <b>Electrical</b>                 |            |              |  |
| Elec Power Generation & Dist      | Mon        | 6:30-9:30 pm |  |
| <b>Electronics</b>                |            |              |  |
| Industrial Electronics            | Tues       | 6:30-9:30 pm |  |
| Basic Electronics                 | Tues       | 7-10 pm      |  |
| Automation 'tronics I, II, III    | Mon        | 7-10 pm      |  |
| Basic 'tronics Lab                | Thurs      | 7-10 pm      |  |
| Applied Transistor Circuits       | Tues       | 7-10 pm      |  |
| Radiation Safety                  | Mon        | 6:30-9:30 pm |  |
| <b>Supervision</b>                |            |              |  |
| Elements of Super Personnel Mngmt | Tues       | 7-10 pm      |  |
|                                   | Thurs      | 7-10 pm      |  |
| <b>Machine Shop</b>               |            |              |  |
| Mach Shop I or II                 | Mon-Wed    | 6:30-9:30 pm |  |
| Mach Shop Math I or II            | Wed-Fri    | 6:30-9:30 pm |  |
| Tool and Die making               | Mon-Fri    | 6:30-9:30 pm |  |
| Blueprint Reading                 | Wed        | 6:30-9:30 pm |  |
| Applied Metallurgy                | Wed        | 6:30-9:30 pm |  |

**LOS ANGELES**  
**University of Southern California**  
University Park—Los Angeles 7  
Registration—begins Sept. 14  
Classes begin Sept. 19

For full schedule of extended day courses, call Training Department, Ext. 1231  
Some of the more popular courses for our employees are listed here:

|   |            |           |  |
|---|------------|-----------|--|
| <b>Accounting</b>   |            |           |  |
| Cost Accounting   | Tues       | 7-9:40 pm |  |
| Auditing  | Tues       | 7-9:40 pm |  |
| <b>Business</b>   |            |           |  |
| Secretarial Admin   | Tues-Thurs | 7-9:05 pm |  |
| Current Mngmt Practices   | Tues       | 7-9:40 pm |  |
| <b>Finance</b>  |            |           |  |
| Corp Finance  | Tues       | 7-9:40 pm |  |
| Investments   | Thurs      | 7-9:40 pm |  |
| <b>Electrical Engineering</b>   |            |           |  |
| Elements of Elec Engr   | Wed        | 7-9:40 pm |  |
| Electronics I   | Wed        | 7-9:40 pm |  |
| Magnetic Amplifiers   | Tues       | 7-9:40 pm |  |
| For other Engineering or Mathematics courses, call Training Department, Extension 1231. |            |           |  |

**Most Popular Plan**  
"The Educational Refund Plan has proven to be one of the most popular and valuable of Librascope's employee benefit programs," states Sid Briggs, Assistant to the President.

The refund program, Briggs said, can be likened to a two-way street. "The employee gains by increasing his present job effectiveness, and Librascope gains by being able to draw from within our own ranks the man qualified for advancement."

Each year, since the inception of the program in 1953, it has increased both in numbers of employees participating and in monies refunded.

In 1959, Librascope refunded \$6,375.50 to 80 employees for successfully completing 101 courses. Although a record high, it is expected to be exceeded this year.

For new employees or for those who haven't participated in the program, here is how it works. Secure an Educational Refund application from the Training Section. After completing the form, submit it to your supervisor for approval. Then, following successful completion of the course (a passing grade), tuition costs will be refunded.

**LOS ANGELES**  
**University of California at Los Angeles**  
405 Hilgard Street—Los Angeles 24  
813 South Hill Street—Los Angeles 14  
Registration and advance enrollment accepted for Fall Term after August 15th  
Certificate courses are offered at UCLA in the following subjects:

Business  
Industrial Relations  
Numerical Analysis  
Some courses of interest are:

|                                  |                  |           |  |
|----------------------------------|------------------|-----------|--|
| <b>Accounting</b>                |                  |           |  |
| Elem Accounting                  | Mon Wed or Thurs | 7-9:30 pm |  |
| Cost Accounting                  | Thurs            | 7-9:30 pm |  |
| Budgetary & Budgetary Control    | Thurs            | 7-9:30 pm |  |
| <b>Business Law</b>              |                  |           |  |
| Govt Contract Admin              | Mon              | 7-9:30 pm |  |
| <b>Business Management</b>       |                  |           |  |
| Intro to Bus Mngmt               | Mon-Tues         | 7-9:30 pm |  |
| Prin of Supervision              | Tues             | 7-9:30 pm |  |
| <b>Data Processing</b>           |                  |           |  |
| Electronic Computers in Business | Wed              | 7-9:30 pm |  |
| Computer Economics               | Mon              | 7-9:30 pm |  |
| Business Data-Proc               | Thurs            | 7-9:30 pm |  |
| <b>Production Management</b>     |                  |           |  |
| Elements of Prod-Mngmt           | Tues             | 7-9:30 pm |  |
| Production Control               | Mon              | 7-9:30 pm |  |
| Industrial Purchasing            | Wed              | 7-9:30 pm |  |
| <b>Personnel Management</b>      |                  |           |  |
| Elements of Pers Mngmt           | Tues             | 7-9:30 pm |  |

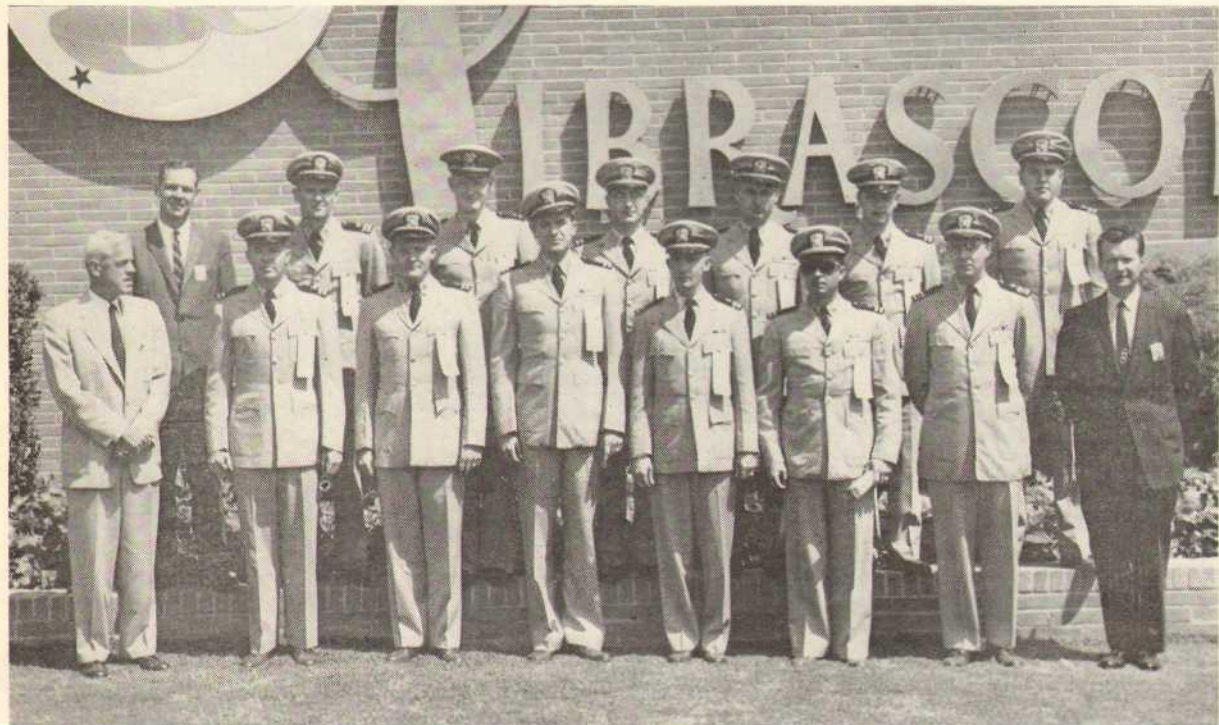
**Engineering and Mathematics Courses**  
(See Training Department)

**PASADENA**  
**Pasadena City College**  
1570 East Colorado Blvd. SY 5-6961  
Counseling—SY 5-6961, Ext 251  
Registration date—At once—  
Call above number

|                    |            |           |  |
|--------------------|------------|-----------|--|
| <b>Accounting</b>  |            |           |  |
| Bookkeeping I      | Mon-Wed    | 7-9:30 pm |  |
|                    | Tues-Thurs | 7-9:30 pm |  |
| <b>Secretarial</b> |            |           |  |
| Typewriting        | Mon-Wed    | 7-9:30 pm |  |
| Shorthand          | Mon-Wed    | 7-9:30 pm |  |
|                    | Tues-Thurs | 7-9:30 pm |  |

|                     |      |         |  |
|---------------------|------|---------|--|
| <b>Drafting</b>     |      |         |  |
| Blueprint Reading   | Tues | 7-10 pm |  |
| Electronic Drafting | Wed  | 6-10 pm |  |





**NAVY VISITORS**—One of four groups of Ordnance Engineering Students from the USN Postgraduate School at Monterey, Calif., who toured Librascope facilities recently, are pictured above. Back Row (L-R): Jim Snell, Military Sales; Lt. W. E. Olson, Lt. (j.g.) J. H. Kinert, Lt. C. D. Hamm, Lt. H. J. Burrows, Lt.

R. E. Riffitt and Lt. W. G. A. Sympton Front Row: Rear Admiral S. E. Burroughs, Jr., USN (Ret), Lt. R. E. Hatcher, Lt. A. R. Barke, Lt. L. H. Bibby, Lt. A. J. Personette, Lt. F. Hahn, Jr., Lt. Cdr. E. A. Pelton and Robert W. Meade, Military Sales.



**WELCOME BACK**—Airborne Chief Engineer Hank Norris (r), greets Art Davis on his return from Japan to Librascope. Formerly general foreman in the prototype model shop, Davis returns as Airborne Liaison Engineer, reporting to Norris. In his new position, Davis will coordinate production and fabrication work for Airborne. A familiar face to most Librascopers, Davis spent eleven years with the company before his two-year break in service.

## Date Set for Libravet Party

The biggest turnout in the division's history is expected at the 9th Annual Libravet party to be held Saturday, Oct. 1, at Sportsmen's Lodge, according to Charlie Cole, chairman of the event.

Invitations to attend are going out to all employees who will attain five years of service with Librascope this year and to all others who have been with the organization for 10 or more years. The guest list numbers 240, of which 164 are 10-year-and-over veterans, and 76 are new five-year Libravets.

Service pins will be presented to 44 new 10-year Libravets, to nine 15-year and to three 20-year veterans.

A 30-year pin will be presented to M. L. Lindahl, vice president and treasurer. Lindy's years of service, which exceed Librascope's total 23-year history, stem from his career with parent GPE before joining the division.

Plans for the party are in the hands of a committee composed of Chairman Cole, Virginia Kelly, Mary Barnes, Keith Kinnaird, Les Blanchard, Paul Kane, George Poppa and Bill Bietsch.

Libravet Jim Manley and his orchestra will provide the music for dancing. Refreshments will be served shortly before midnight.

## Airborne Renamed Aerospace

The Airborne Equipment Engineering Department was renamed the Aerospace Engineering Department, effective Sept. 1.

Management's decision to change the name stems from the department's expanding interests and areas of operations. The new name more accurately reflects the applications of the department's lightweight computers and control equipment to missile and space vehicle systems, as well as to airborne craft.

The department is scheduled to achieve branch status when it moves to new headquarters in San Marcos. When the relocation takes place next year, the department will be renamed the Aerospace Branch.

Meanwhile, plans for the San Marcos facility are moving rapidly ahead. A 30-acre site fronting on Encinitas Road in the city was selected last month, and architects will soon be invited to submit proposals for a 25,000 square foot building, according to Cliff Dahl, Plant Engineer.

## Airborne Adds Engineer Smith

Chief Engineer Hank Norris of Airborne last month announced the addition of Keith L. Smith as a Staff Engineer.

Holder of a BA in Mathematics from Indiana University and an MA in International Relations from Harvard, Smith also has taken graduate work in the Engineering School of George Washington University. He is a veteran of World War II and holds a reserve commission as Major in the Air Force.

Smith comes to Librascope from civilian service with an intelligence unit of the Army, in which he served as a mathematician and operations research analyst. He is married and the father of a son.



## Expansion Continues At Burbank Branch

The Burbank Branch of Librascope continued its building expansion with the mid-August acquisition of a 5,000-square-foot facility, located at 41 E. Santa Anita St.

The newly leased building will house the computer sub-assembly section, headed by Supervisor Leonard Szudajski. The group will assemble circuit cards and boards, printed logic cards and boards and computer memory drums.

The Burbank maintenance group, headed by maintenance Supervisor Ted Meyer, has also been transferred to the new facility.

The added space gained by the Verdugo Ave. Building will be used in expanding the facilities for the production of the X-Y Plotter, along with increasing the space for the machine shop and mechanical inspection.

In addition to the increased footage, the personnel roster continued to climb. By August 15, the employment figure at the Burbank Branch reached a new high of 554.

## The Librazette

Copyright 1960 by Librascope Division, General Precision, Inc. 808 Western Avenue, Glendale

Editor Bill Keith  
Associate Editors Al Erickson  
Terry Ryan  
Art Editor Keith Kinnaird  
Assistant Art Editor Paul Kane  
Photographers Earl Crawford  
Fred Beindorf, Jim Avera  
Photo Layout Andy Cook  
Jim Norwood

## Librascope Participates in 7th Junior Achievement Program

For the seventh consecutive year, Librascope will participate as a counseling firm in the nationwide Junior Achievement program.

Six company employees will serve as advisors for a new JA company to be formed in October by high school students from San Fernando Valley.

**THE SIX** Librascopers and their counseling positions are:

Business advisor: Paul Kennedy, Engineering Employment Supervisor; alternate: Shelby Drucker, Supervisor of Methods Improvement Group.

Production advisor: Ralph Woodward, Production Foreman; alternate: Chuck Blake, Production Foreman.

Sales advisor: Joe Fido, Bldg-Eng Administrative Assistant; Champ Vance, Eng-Adm Administrative Assistant.

**THE JUNIOR** Achievement movement is dedicated to acquainting students with the American free enterprise system.

With the assistance of companies such as Librascope, the students establish a company, select a name and product, elect officers, arrange for financing through sale of shares at 50 cents each, then produce and sell the product. In May, the company is liquidated and the profits—if any—are distributed.

The advisors guide the students through the organizational phase, then step out of the picture except for requests for assistance from the students.

## Wyckoff Joins Special Devices

Robert C. Wyckoff, who holds bachelor's and master's degrees in Physics from the University of Iowa, has joined Special Devices as a staff engineer.

A former Navy intelligence officer, Wyckoff also has served with an intelligence group of the Army Signal Corps, as head of a section supplying technical and scientific support to an intelligence evaluation program.

Prior to military and government service Wyckoff was an instructor in Physics at the University of Oklahoma and head of the Physics department at Buena Vista College. He is married and lives in North Hollywood.



## Double Mishap Brings AID to Librascope Family

An emergency gall-bladder operation in Montana and a head-on auto collision in Sunland were the combining factors that brought about an emergency meeting of the AID Club Committee on the afternoon of August 3.

Five days earlier, Jim Gaines, Tool Design, was stricken with an acute gall bladder attack while vacationing in Montana. Rushed to a neighboring hospital, he was scheduled for surgery the following morning.

The same night, Terry Gaines, recently discharged from the service and one of eight Gaines children, was involved in a serious car accident while riding with a friend in Sunland.

Taken to Sun Valley receiving hospital in critical condition, Terry was found to be suffering from a cerebral concussion, broken hip and

### Heartfelt Thanks

"With deepest appreciation and gratitude, we wish to express our fondest thanks to all concerned for the extreme kindness you have extended to my husband and son."

Sincerely,  
(signed) Dee Gaines

multiple facial fractures. The seriousness of his accident required special, round-the-clock nursing and treatment.

In a matter of hours, two near-fatal misfortunes confronted the Gaines family along with burgeoning medical expenses.

News of the double-mishap was presented to the AID Club Committee by Harold Newbanks, AID representative for building 1. The Committee voted unanimously to take immediate action.

That afternoon, a check for \$500 was presented to Gaines' son-in-law Frank Murtha, bldg-maintenance, acting as agent for the family. It was the first maximum donation issued by the club this year.

As LIBRAZETTE goes to press, we are happy to report that both Jim and Terry Gaines are now off the critical list.



**PHONE TIME**—Quality Control clerks Robbie Poland (left) and Marilyn Bohn (right) make lunch-time calls at the two new phone booths installed between buildings 1 and 2. In both cases, the conversations are apparently pleasant ones, as evidenced by the pretty smiles.





ENGLISH VISITOR—Sir John Baker (r), Chairman of General Precision Systems, Ltd., views the Librascope lobby display after arriving for a one-day visit recently. Bud Silvertooth, Military Sales, greeted Sir John and conducted him on a tour of the company's industrial and air traffic control computed facilities. GPS, a subsidiary of GPE, produces analog computers for chemical process controls at Aylesbury, England.

### Net Earnings Up

General Precision Equipment Corporation announced recently an increase of 19.5 percent in net earnings for the first six months of 1960.

Earnings were \$1.57 per common share as compared with \$1.35 for the same period a year ago. This was achieved primarily on an 18 per cent increase of sales over the first six months of 1959.

J. W. Murray, GPE Chairman of the Board, announced that earnings for the second half of 1960 are expected to exceed the earnings of the first half of this year.

### D. H. Bergis Added to Burbank Sales Staff

D. H. Bergis has been added to the staff of Burbank Sales Manager Jack Walker as sales engineer, specializing in the supervision of customer service.



A veteran of sales engineering in the electronics field, Bergis spent nine years with Hughes Aircraft Co., Consolidated Electrodynamics and Trans-Sonics, Inc., where he was engaged in electronic instrument marketing and sales and systems engineering liaison.

Bergis received his BSEE degree from Massachusetts Institute of Technology. A native of Seattle, Washington, he presently makes his home in Altadena.



Don Law

Don Law, material order processor, was promoted last month to receiving foreman in Material Control. He will report to Ed Ellenhorn, Material Control supervisor.

Law came to Librascope last July as production control follow-up man. He was formerly with Norair Division of Northrop and prior to that served four years in the Marine Corps.

Working toward a degree in business administration, Law has completed his studies at LACC and is now enrolled at USC.

### The Eyes Have It In New Safety Program

The Librascope Safety Program was expanded this month in an effort to lessen the incidence of one of industry's most recurrent safety problems—eye injuries.

On August 31, a visual screening unit from the Rocket Optical Co. moved into Trailer 1 for a week-long eye-screening examination for all Production employees and other groups working in areas where safety glasses are required.

THE TEST, requiring approximately six minutes, determines whether or not the individual's eyes meet minimum standards of sight, color, and depth perception. In addition, the optician checks presently used safety glasses for proper fit and maximum safety.

Upon completion of the examinations at Bldgs. 1 and 2 the screening unit will move on to other Librascope facilities, eventually checking all employees of Production and allied support groups.

ACCORDING TO Safety Engineer Bob Lee, safety glasses will continue to be furnished for those requiring them. And in cases where there is a need for prescription lenses in the safety glasses, an employee may purchase them through the Company at a special discount price.

Charge for prescription lenses varies from \$6 for single vision to approximately \$11.50 for bifocals. In each case, Librascope will continue to pay \$3 towards the prescription of safety glasses.



Bill Woolston

Bill Woolston recently was appointed as second-shift Foreman in Plating and Processing in Bldg 10. He will report to General Foreman Bill O'Mara.

A native of Camden, N. J., Woolston worked with Consolidated Electrodynamics Corp. for 20 months, starting as a plater helper and working up to plater leadman. He also spent some time with Kelman Electric Co.

An Air Force vet of WW II, Woolston and family now make their home in Pasadena.

## Biggest FAA Shipment Leaves Librascope

The second and largest segment of Special Devices' FAA Air Traffic Control Data Processor was shipped late last month to the National Aviation Facility Experimental Center at Atlantic City, N.J.

The equipment, shipped in a large moving van, included a buffer console, an automatic test console, a computer, two file consoles, a program console and a real-time clock.

UPON ARRIVAL at NAFEC, the prototype units will be integrated with the first segment, shipped earlier this year. The combined equipment will provide, for the first time, a completely integrated data processor system, Marv Ettinghoff, Project Manager, said. The buffer shipped "closes the loop" in the system.

The new equipment, which passed final FAA inspections just prior to shipment, will undergo extensive check-out and evaluation tests at NAFEC, Ettinghoff said.

Then will come a series of simulation tests, in which actual air traffic conditions in real operational air traffic control centers will be simulated, he explained.

EVENTUALLY, the entire Data Processor—consisting of four computers, seven file drum consoles, and three buffers—will control all aircraft operations in the New York-New Jersey area.

With the shipment of the second segment, approximately one half of the Data Processor has been delivered to the FAA, Ettinghoff said.



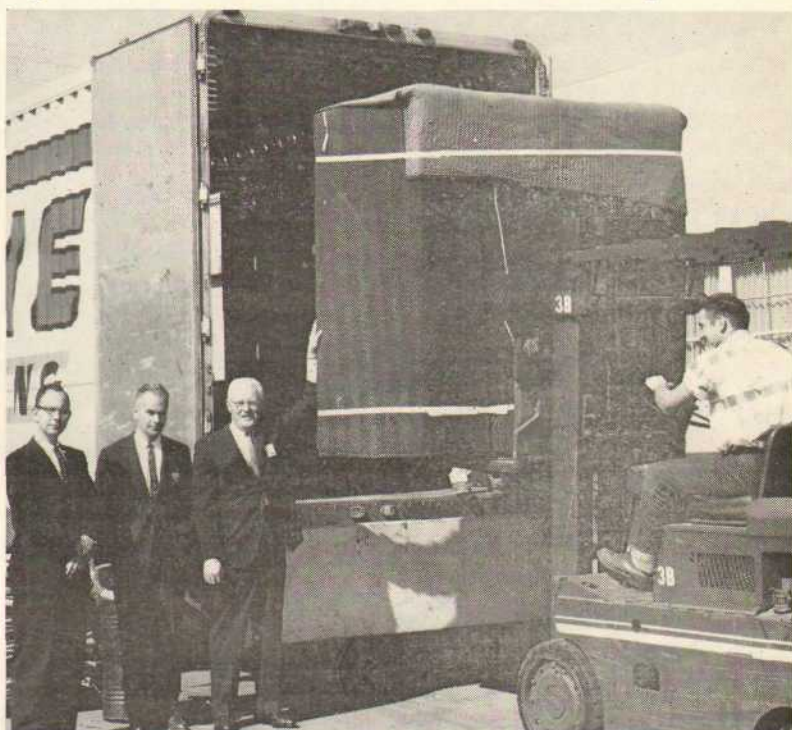
INTERIOR—General clerk Sue Sturdyvin tries out the new phone booth located inside building 17. It is one of seven booths installed for outside calls by employees.



Don Sillars

Don Sillars, milling machine operator, was recently promoted to machine shop foreman. He will report to Lloyd Somerfield, General Foreman.

Sillars first joined Librascope in 1951 and was a leadman in the machine shop for six years before moving to Methods as an analyst. He left the company for six months to set up his own business returning in January. Before coming to Librascope he was with Adel in Burbank. Sillars is married and makes his home in San Fernando.



READY TO GO—Heavily padded for protection, a unit of Special Devices' FAA Data Processor is hoisted into position for loading on a moving van. Taking a last check are, from left, Lane Wolman, Director of Systems Engineering; Marv Ettinghoff, Project Manager; and Bob Clark, Assistant to the Chief Engineer of Special Devices. Jim Kostecky mans the fork lift. In all, seven units were shipped to NAFEC.

### Three Promoted In Materiel Dept.

Along with the move of Purchasing from Building 1 to 26, Marsh Cowan, Manager of the Material Department, announced the promotion of three members of his staff; one to a newly created position.

C. M. "Red" Brown, assistant purchasing agent, was named Purchasing Agent, a function previously performed by Cowan. He will be responsible for supervision and administration of all procurement and follow-up functions and activities. Brown has been with Librascope since 1946 when he joined the company as an engineering draftsman. He was with Methods, Estimating and Planning and Production Services before moving to Purchasing five years ago.



Bob Wright, previously a staff assistant to Cowan on subcontracts, was named Supervisor, Subcontracts Administration. He assumes responsibility for supervising all functions and activities of subcontracts administration. Wright joined the company a year ago from General Dynamics Corp's Convair-Astronautics division in San Diego, where he was subcontracts administrator for the engineering projects office.

Dorothy Brand, formerly department secretary, was appointed Supervisor of the newly formed Purchasing Services group. She will be responsible for the coordination and supervision of purchase order typing, department mail distribution, record retention and filing. She came to Librascope in 1953 as a secretary in the Purchasing Dept.



### Winter Bowling

The Winter Bowling League opens competition Sept. 15 at the Grand Central Bowl in Glendale. League President Wally Winstead advises all interested in playing to get their entries in early. There will be two leagues, each composed of 12 teams.

### Wescon Show

(Continued from Page 1)

facilities. More than 100 Wescon attendees took the opportunity to view the company's expanding commercial operations and meet top officials of the Burbank Branch.

Hosting the Burbank tour were John English, division publicity manager, and three Burbank staffers—John Stevens, Quality Control Manager; Fred Thiele, Chief Designer; and Jim Roth, Sales Engineer.

Special chauffeur-driven tours to Librascope were also offered to the conventioners. Librascope set up a special trailer adjacent to the arena as the starting point for the tours.

The tours, conducted several times a day in a station wagon, included visits to the Glendale facilities and talks with top Librascope officials. Paul Kennedy and Fred McMullin of Personnel, aided by Adele West, Personnel Secretary, coordinated the highly popular tours and manned the trailer.

In all, some 800 companies exhibited at the 1960 Wescon convention. More than 35,000 attended, a record for the annual show.



THREE MINUTES—Public Relations secretary Marilyn Bellamy makes personal call at one of two new booths adjacent to main gate.



# Scores Match Temperature at Apple Valley Tourney

The first foursome stepped up to the tee at 7:15 on Sunday, August 28, officially kicking off the 12th Annual Librascope Golf Club Tournament, held at the Apple Valley Inn and Country Club.

Many of the 106 golfers spent the week-end at the renowned desert spa, while the rest motored up that morning by car or on one of two Precisioneer-chartered busses.

BY 11:30, several of the early foursomes had circled the course, and even by then the full gamut of golfer's laments had been sounded.

"The greens were too slow," muttered one golfer, unhappy over his score. "Those greens were slick as glass," said another. "What greens?" queried a third. "All I ever saw was the sand traps!"

The desert temperature reached the low nineties, a shade under the average score turned in. But by day's end, ever, one seemed to have regained his composure, particularly after viewing the many elegant trophies and prizes to be handed out at the Annual Awards Banquet.

**TOP HONORS** for the day went to Carl Culver, winner of the Precisioneers Trophy for low gross score, and to Roland Whiting, winner of the President's Trophy for low net score.

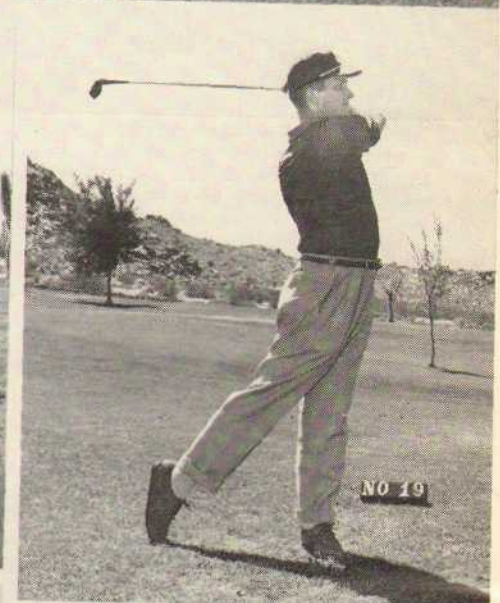
The Ed Sullivan Memorial Trophy was presented to Chuck Norcutt, as the club's most improved golfer. The Blind Bogey Trophy was awarded to John Ryden, while the distinction of taking home the Duffer's trophy went to Joe Zajac.

In the women's division, the low gross trophy was given to club secretary Virginia Martin. Low net honors went to Edith Wrobel, while Rose Marie Copple walked away with the ladies' version of the Duffer's Trophy.

**OTTO GELOMINI**, club president, who presided over the Awards Banquet, also presented trophies to the year's top golfers in the various squad groupings. They include:

Group 1: Jim Drugan, squad A; Bob Summerville, squad B. Group 2: Porter Davis, squad A; Ed Lyneis, squad B. Group 3: Jim Locklin, squad A; Walt Tono-lonis, squad B. Group 4: Don Day, squad A; Joe Fido, squad B. Group 5: Jim Conway, squad A; Walt New-comer, squad B. Group 6: Barney LeLong, squad A; Bernie Myers, squad B. Group 7: Chuck Norcutt, squad A; and Ernie Wilson, squad B.

Trophy for the best woman golfer of the year went to Charlotte Webberson.



## Ten Teams Entered in New Intramural League

by Charlie McKallor

Maybe this story should have a black border around it.

The Precisioneer softball team went into the Shaughnessy Playoffs last month and were bumped off in the first game of the first round of play.

Passing on to the brighter side of the sports scene, the new Librascope intramural softball league is under way. There are currently ten teams in action with the games being held at the Olive Recreation Center in Burbank.

Because of the enthusiastic response to the new intramural sports program, the Precisioneers are now considering doing away with the one-team idea and replace it with a company inter-department league.

At present writing, Airborne and Shipboard look like the teams to beat. They are both sporting perfect 3-0 records, but the other eight teams will have something to say about that before the league comes to a close in October.

The teams making a run for this year's intramural championship are: Environmental Lab; Accounting; Timekeeping; Airborne; Shipboard; Engineering Administration; Production Engineering; Production Control; and Material Control.

**f-o-u-r!**

(Photos by Beindorf)

I JUST  
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**CREDIT  
UNION...**

\* WITH APLOGIES TO BURGIE

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