HEAR Receives \$2075 Gift From Christmas Card Charity

For the third year in a row, the HEAR Foundation found itself the recipient of a post-Christmas check for \$2075.11, the fiscal result of the annual Librascope Christmas Card Charity. Dr. Ciwa Griffiths, Executive Director of HEAR, was on hand earlier this month to receive the collective gift of the Librascope employees.

"We can't express our heartfelt gratitude for this wonderful gift," Dr. Griffiths said, upon presentation of the check by President W. E. Bratton. "Both the children and I thank all Librascope employees who made this possible."

A month earlier, Dr. Griffiths was the recipient of a check for \$1001 from Librascopers who had listed HEAR as one of their Aid Club charities for 1960.

Due to these and other generous gifts, Dr. Griffiths has been able to expand the scope and operation of the foundation. Over the past year, new equipment such as the auditory screening device for infants developed for HEAR by Librascope Engineer Leonard Ludvigsen, became a reality.

Because of the remarkable strides the foundation had made with hard-of-hearing children in helping them to a full and happy life, inquiries from all over the nation have been pouring in. Such interest and enthusiasm resulted in a new HEAR Foundation group established in Tulare County this past year.

Commenting on the growing success of HEAR, Dr. Griffiths said: "We are moving ahead in hearing education through auditory research, but our work is far from complete. It is only through generous donations such as those received from the employees of Librascope that we may further our work with these infants and children who are afflicted with a hearing problem."





Vol. 8, No. 7

January, 1961

Advanced Research Awarded Five New Air Force Contracts

A signal honor was accorded Librascope and its Advanced Research group last month, with the announcement of an Air Force contract for the support of four basic research projects. In addition, notification was received early this month from the Air Force Office of Scientific Research of its acceptance of a fifth basic research project to be separately funded.

"WE ARE CERTAINLY gratified by the confidence registered in our activities," H. J. Hamilton, Director of Advanced Research, told LIBRAZETTE. "It is particularly noteworthy when you realize that contracts for such research are almost exclusively awarded to universities or non-profit foundations."

Rarely in the limelight, basic research at Librascope has been underway for better than four years. Active support and encouragement of basic research places Librascope in very select company in industry. The Air Force projects, however, mark the first time that a contract has been negotiated for basic research by an outside agency.

THE FIVE NEW projects which Advanced Research will embark upon are:

1. Digital simulation study of nerve-nets based on cardiac ganglia of lobsters; (This work will be undertaken in collaboration with Dr. T. H. Bullock, Professor of Zoology at UCLA and a leading figure in neuron theory.)

2. A study of some hypothetical nerve-nets for the control of antagonistic pairs of effectors;

3. A study of the behavior and possible roles of arrays of mutually inhibiting hypothetical neurons;

4. Research on the analogical simulation of neural behavior.

5. Study of classical association psychology as it relates to data processing in digital computers.

"THESE STUDIES, which will be sponsored jointly by Librascope and the Air Force Office of Scientific Research will lead, we hope, to

(Continued on Page 6)

Income Tax Forms

State and Federal Income Tax forms will be available for all Librascopers after Feb. 1 at the Benefits and Services Office in Bldg, 3.

Also available are request applications for those employees who hired in during the past year and who may be eligible for SDI refunds, A. R. Pederson, Benefits and Services Supervisor, announced.

Deadline Draws Near For Spring Semester Enrollment

Spring semester courses at many of the universities, colleges, junior colleges, technical schools and adult classes in the Los Angeles area will begin the weeks of Jan. 30 and Feb. 6.

For employees planning to take advantage of Librascope's Educational Refund Plan, applications for spring courses should be completed prior to enrollment, according to Wayne Strong, Training Director

Wayne Strong, Training Director. COURSE CATALOGS, registration schedules and application forms for tuition refund are available at the Training Section offices in Bldg.

Under the Educational Refund Plan, the company will refund a maximum of \$200 a year to each employee enrolled in courses judged to improve present or future work assignments.

Applications must be approved by

supervisors and the education committee. Tuition costs for approved application are refunded upon completion of the course and evidence of satisfactory grades.

THE REFUND PLAN does not cover cost of text books or supplies, and does not apply to individuals receiving compensation under the

Of the many accredited schools in which an employee may enroll are UCLA, USC, L.A. State, Pierce JC, Reseda Adult School, Burbank Evening School, Valley Institute of Technology, Glendale College and Pasadena City College.

Major Proposals Announced

Branch sales organizations, in cooperation with Division Military Sales and Division Contracts Administration, currently have proposals totaling almost \$82,000,000 under submission to prime contractors. The proposals encompass both research and development and production contracts.

Among the firms and agencies involved are: Minneapolis-Honeywell, Convair, various departments of the Army and Air Force, Douglas Aircraft, General Electric, the FAA, Hughes Aircraft, the Navy's BuWeps and Bu-Ships, Autonetics, Kearfott, Martin, Boeing, Chrysler and Bell Areo. GIFT TO HEAR—President W. E. Bratton presents a check for \$2075 to Dr. Ciwa Griffiths, Executive Director of the HEAR Foundation. The check was the result of the Christmas Card Charity Fund, in which so many Librascopers participated. The Group pictured above includes H. F. Little, Precisioneer Charity Drive Director, Dr. Griffiths, President Bratton, J. F. Studdard, Precisioneer President, and L. E. Ludvigsen, Glendale branch engineer, who has spent a great deal of his spare time in developing auditory devices for HEAR.

SUBROC Integrates WithGlendaleBranch

Two engineering groups, temporarily divided to provide a separate structure for the initial phases of the SUBROC program, were reunited this month under the banner of the Glendale branch. SUBROC, which was separated from the former Shipboard Engineering group two years ago, has been reintegrated into Glendale branch engineering in a new structure designed to capitalize on its total experience and personnel.

A. D. LARSON, who was Director of SUBROC, has been appointed Chief Engineer of Glendale branch by Manager T. D. Bryant. Larson will continue to be responsible for the SUBROC program, as well.



Bryant

The joining-together of the two groups was one of many developments during January which saw the Glendale branch take into its ranks more than 350 people who previously had been part of central organization engineering and administrative groups. Except for Accouting, Auditing and Data Processing services, which will continue to be supplied by Division headquarters, Glendale is now a completely self-contained branch.

Headed by Larson, the Glendale engineering department now consists of the following sections:

ADVANCED PROJECTS — Dr. A. L. Stanly, director; ASW Systems—D. E. Roof, director; Weapons Control—R. A. Potter, project manager; Digital Data Processing—J. L. Deitz, director; Surveillance Equipment—W. L. Cloninger, director; Installation (Systems) Engineering—C. C. Buterbaugh, acting director; Technical Documentation—J. R. Pelamati, manager; Manufacturing Support—F. T. Copple, manager; Publications—F. P. Hiner, manager.

As staff to Larson, J. H. Paquin is Technical Director and H. C. Applegate is Director of Technical Planning.

IN THE MANUFACTURING area, Harlan Buseth, assistant Glendale branch manager, consolidated all phases of circuit board manufacture into one section and has named General Foreman W. A. O'Mara to head it. O'Mara, who was head of the Plating and Processing section, is succeeded by C. A. McCutchan, assistant general foreman.

Glendale Plants Twice as Safe Over Past Year

Lost-time disabling injuries among Librascope employees of all Glendale plants reached an all-time low in 1960, as twice during the year previous safety records were broken.

The final tally, according to R. W. Lee, Safety Engineer, revealed only .67 lost-time injuries per one million man-hours of working time during the year, less than half of the 1.72 recorded in 1959.

A record 2,479,362 man-hours with no disabling injuries in the 135-day period from April 6 to August 19 also set a new record, exceeding the former high of 1,294,-849 man-hours set in 1956.

The accident-free 2,479,362 manhours last year represents one man working 40 hours a week, 50 weeks a year, for 2,480 years without an accident, Lee explained.

"At the close of 1960, records showed 79 days or 1,568,159 manhours of accident-free work had again exceeded the former all-time high of 1956," Lee said.

Report Writing Course

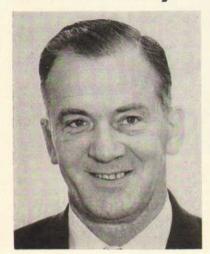
Writing, analyzed from its basis in fundamental grammar and then extended into technical report and letter writing, is the subject of a new 12-week course, starting March 1.

The course, to be held in Bldg. 3 conference room from 5:00 to 7:00, will be conducted by Quality Control Engineer W. E. Waterhouse, a former university extension instructor. Since enrollment is limited to 25, applications for the voluntary course should be in to the Training Department by Feb. 15, according to staff representative J. J. Schwarz.

Research Group at Glendale Studies New ASW Projects

In a move to broaden and diversify Glendale Engineering markets, a research and development group has been formed to investigate the surveillance and classification problems associated with the U.S. Navy's anti-submarine warfare.

Aldrich Named To EBW Study



With over 20 years experience working with sonar systems and submersibles, new Staff Engineer Gerard T. Aldrich enhances the Glendale Engineering project for applying Exploding Bridge Wire to underwater sound detection.

ALDRICH, a native New Englander, reports to W. L. Cloninger, who is directing various sonar projects at the Glendale Branch.

At one time a school teacher in Vermont and New York City, Aldrich began his engineering career in sonar systems with the Submarine Signal Company in Boston.

Later he headed research and development groups on sonar fire control and monitoring systems at the Navy's Underwater Sound Laboratory. At one time he was director of electronics engineering on Project Michael for Columbia University's Hudson Laboratories Divi-

PRIOR TO joining Librascope, Aldrich was with Sanders Association of Nashua, N. H., where he headed anti-submarine warfare activities creating, devising and later marketing new applications and improvements in sonar systems to Navy bureaus.

During a leave of absence from Sanders, Aldrich directed a project to install an acoustics impact area for Patricks Air Force Base in Florida.

ALDRICH HAS a BSEE degree equivalent, embellished with studies in many other areas. He has attended the University of Massachusetts, Boston University, University of Vermont, University of Connecticut, New York University, Cornell and Columbia.

McMullin in Washington To Recruit Engineers

A search for prospective Librascope engineers is being conducted this month in the Washington, D.C., area by F. S. McMullin, Professional Placement Representative from the Division Engineering Employment Office.

Aiding McMullin in the recruitment campaign are A. L. Stanly and C. C. Buterbaugh, directors respectively, of Glendale Branch Advance Projects and Installation Engineering, both of whom are in the nation's capital this month on Branch business.

Recruitment interviews are also scheduled by McMullin during a stop-over in Chicago.

Several openings for senior engineers and other engineering staff positions now exist at Librascope, McMullin told LIBRAZETTE. He urged all Librascopers to refer possible candidates to the Engineering Employment Office.

The R&D group, headed by W. L. Cloninger, Glendale's Director of Surveillance and Classification, is currently working on various projects relating to underwater sound

detection.

ONE PROJECT, actively under study for the Navy's Bureau of is the application of Exploding Bridge Wire as a controlled sound source for long-range underwater detection.

For the past six months Cloninger's group has worked with Librascope's Sunnyvale Branch on this study and has recently concluded a preliminary test program at the Naval Electronics Laboratory (NEL) in San Diego.

Joining Librascope for the project is Staff Engineer Gerard T. Aldrich, formerly with Sanders Association of Nashua, N. H. Other key personnel from Glendale in the R&D Group are Engineer M. D. Hankins and Physicist R. C. Vinetz.

TEAMING UP closely on the sonar study will be R. C. Maninger, Manager of the Sunnyvale Branch, and his staff engineers who have played a pre-eminent role in the research and development of EBW for modern applications.

Sunnyvale Engineers B. V. Carlson and M. J. McBeen have been among those laying the early groundwork for Glendale's EBWsonar project.

In the application of EBW as a source of sonar sound, Cloninger's group are attempting to harness certain side effects-the tremendous amount of light and shock energyproduced and released during a bridge wire explosion.

IN THE FIRST phase of testing at NEL at San Diego, Cloninger reports encouraging substantiation of early paper study on the project. A second test phase is planned at the Navy laboratory this month.

In addition to the EBW-sonar study, Cloninger also explained other surveillance and classification projects in progress at Glendale:

1. Development of a computer for sonar ray-tracing - one that com-

(Continued on Page 6)

Kliebert Enters Council Election

Paul J. Kliebert, a buyer in Glendale's Purchasing Section, has filed for candidacy in the April election for Los Angeles city councilman from the Seventh District.

The district embraces the valley area of Van Nuys and Panorama City. The seat was vacated by for-Councilman James Corman with his November election to the 22nd Congressional District.

KLIEBERT, a resident of Pano-



rama City, is a member of the Van Nuys Chamber of Commerce and political education chairman of the Northridge Republican Club. He has been

Librascope since October, 1959.

native of Milwaukee, Wis., Kliebert received his B.A. Degree from Marquette University, majoring in Business Administration.

PRIOR TO JOINING Librascope, he was at Hughes Aircraft in El Segundo and Culver City. He also worked for PCA Electronics in

In 1955 he campaigned for a seat on the Los Angeles Board of Education, but was defeated. As a member of the Van Nuys Chamber of Commerce, he has served on the Political Education, Taxation and Airport Committees.



NEW LOOK—The architects rendering above is the new engineering office building of GPL. The new million dollar structure, to be erected on GPL's 69-acre Pleasantville property, will add about 75,000 square feet to the present facilities.

The GPL Story: Creating Products in Many Fields

(The following article is the second of a three-part series, in which LIBRAZETTE takes a look at the operations of the sister divisions of Librascope within the GPI family—Kearfott, Link and GPL.—Ed.)

The GPL Division of General Precision, Inc., is an experienced and prolific team, continually generating new products in such areas as airborne navigation systems, air traffic control, communications, data processing and closed-circuit television, and motion picture projection equipment for theaters.

GPL, formerly General Precision Laboratory Inc., was the first company to design, develop and manufacture airborne Doppler navigations systems. An international leader in the field, the firm has produced more than 2,000 Doppler manufacturer in the world) for guidance of military, commercial and corporation-owned aircraft.

NEWEST MEMBER of the Doppler family is the commercial RADAN 500 navigator for military, business and corporate aircraft. With its companion TNC-50 track navigation computer, this lightweight navigator is automatically guiding the newest jet aircraft with an accuracy and reliability that provides better flight scheduling and increased fuel economies.

GPL also has the singular distinction of being the only firm in the country with a high resolution television system coming off its production line. A successful 1,000line system, it was designed and developed to meet a Navy need for data transmission aboard carriers and in shore-based operational control centers.

One of the most dramatic of current GPL projects is the joint effort with Librascope and Link in the development of an experimental data processing and display system for air traffic management for the Federal Aviation Agency.

GPL WAS FOUNDED in 1945, with a group of scientists from the Massachusetts Institute of Technology Radiation Laboratory serving as the nucleus of the organization. Since its fledgling stage, GPL has grown to a firm of more than 2,000 employees and more than 300,000 square feet of facilities for research, engineering, environmental test, flight test, manufacturing and customer services. The main headquarters is located in Pleasantville.

Navy Approves New Integrator



Librascope's new high-torque ball-and-disc integrator, an important part of many of our own analog computers and fire control devices, and one that is used by other computer manufacturers, has passed exhaustive tests by the

One immediate result of the tests is an order to modify 3,300 earlier models of the integrator now in use throughout the Navy, to bring them up to our new standard. A sizeable order for manufacture of entire units also is anticipated.

DESIGNED BY veteran Staff Engineer Willard Opocensky, the new model C integrator was rated as having all the capabilities we claimed for it, plus even higher performance, "without sacrifice of any of the earlier model's desirable features."

The 1-thousand-hour test showed "no apparent sign of damage or significant change . . . in accuracy,' the 26-page, illustrated report stated. The tests were conducted by the Navy's Underwater Ordnance Station at Newport, R. I.

The Navy's report came as no surprise to Opocensky. Before submitting the new model for Navy scrutiny he had given his design a 10-thousand-hour test - with the same results!

Lee, Hamrick In Glendale Switch

An intra-departmental shift in the Glendale Personnel Department involving the transfer of Safety Engineer R. W. Lee to Wage and Salary and W. F. Hamrick, Training Instructor for Special Courses, to the position of Safety Coordinator was announced this month by C. P. McKeague, Director of Employee Relations.

THE MOVEMENT also will switch responsibility of all Safety and Medical functions from the Training Section to the Benefits and Services Section.

Lee, head of Safety since he joined Librascope last April, will now be a Wage and Salary Analyst, reporting to H. G. Boehm.

HAMRICK'S new position will be one of coordinating all safety activities. He will report to A. R. Pederson, director of Benefits and Services. A member of the Librascope Training Section since August, 1958, Hamrick was formerly Safety Engineer and Auditor for the State Compensation Insurance Fund in Los Angeles.

St. Nick Scores Hit at Children's Christmas Fete

Clowns, cartoons and a magic act comprised the initial entertainment for the annual Librascope Children's Christmas party, but the highlight—as it is each year—was the entrance of the great Christmas gentleman, Santa Clavs.

FROM TODDLERS to teenagers, the crowd at the Hoover High School auditorium voiced its approval as Santa strode down the center aisle to the accompaniment of "Santa Claus is coming to town."

By 4:30 that afternoon, Santa and his Librascope helpers were a pretty fatigued group. They had doled out over 2,000 presents ranging from baby bells to hot rod racers.

THIS YEAR'S party, the largest yet, required the services and long hours of several Librascopers. Among those contributing to the success of the Christmas event were: Charlie McKallor of Prop-Acctg who portrayed the portly, bearded gentleman; shipping clerk Bud Ankrom, who supplied the transportation for the movement of all the gifts and Jim Manley, Glendale purchasing and Art Johnson, who donned the garb and greasepaint of circus clowns for the entertainment of the kids.

Among the many others who donated their time and energy were Pat Hansen, Al Akins, George Poppa, Howard Miller, Bob Faust, Howard Little and former Precisioneer president Bob Garrett.

IAM Members Elect Stewards

In the recent balloting for officers f IAM Precision Lodge, Local 1600, Max Mennen and George Cooke were once again named chief stewards, for the forthcoming year. The local membership also voted in 40 other stewards, 30 of which were relected(r).

IN ADDITION to Mennen, the stewards elected from Bldg. 1 include: H. J. Henderhan (r), N. J. Glance, R. W. Youniacutt (r), T. . Cherry (r), B. A. Beck (r), P. N. Shaul (r), H. J. Newbanks (r), Ruth Flynn (r), J. W. Cruz, G. E. Wood, V. L. Thompson (r), F. R. Murtha (r), Helmer Gustafson and F. A. Trott (r).

From Bldg. 2: H. H. Hanzer, A. J. Conrad, J. G. Jerina (r), John Dominguez (r), L. E. McCullough (r), A. C. Fisher (r), R. W. Bossley (r), M. D. Wandry (r), Eric Seif (r), and H. B. Pace (r).

NAMED STEWARDS from Bldgs. 10, 10A, 17, 5 and 15 are W. J. Lassly (r), A. L. Davis (r), F. B. Hancock (r), A. E. Saenz, M. M. Kurey (r), C. D. Gilbrech (r), D. M. Fein (r), Dan Hochmann (r), Barry Katz, G. J. Burg, and W. E.

In addition to chief steward Cooke, other night-siders elected include: A. L. Dapelo, C. D. Davis, Sherwood (r) and B. P. Heinmiller (r).

New Standards Section Promotes D. G. Franken

Donald G. Franken, former Standards Coordinator, has been promoted to Standards Analyst, reporting to J. R. Kay, Director of the new Standards function in the Division Operations Planning

In his new position, Franken is responsible for Librascope's Standards coordination with other GPE

Franken joined the company in July 1958 as a draftsman. Then a student at Glendale City College, he was hired as a result of his first-place entry in the Librascopesponsored drafting incentive contest held at the school.







A PACKED AUDITORIUM—A portion of the hundreds of children in attendance at the annual Librascope Children's Christmas Party gather around clowns Jim Manley (left) and Art Johnson, awaiting the entrance of Santa Claus. Following the entertainment, Santa (Charlie McKallor) arrived and the children charged en masse, hoping to gain the knee of the kindly old gent in red. One of the first to mount Santa's lap (bottom right) was Michael Christie, son of Acctg Clerk Mary Christie. Having arrived, however, young Mike was a little reluctant in discussing his Christmas needs.

1961 Aid Committee and Reps



1961 AID COMMITTEE—Pictured above are the Librascopers who will guide the Aid Club ship-of-state this year. From left to right: Evelyn Robideau, reelected secretary-treasurer; Harold Newbanks; Bill

Ryan; Dick Wilson, newly-elected chairman; and Billie Payne. Not in attendance are C. F. White, retiring chairman, and nightside committeeman Steve Jackman, re-elected at the recent election.



NEWLY ELECTED—December ballots cast by members of the Librascope Aid Club resulted in the election of the group pictured above as 1961 building representatives. Back row, left to right: Robert Hohenstein, Bldgs. 11-12; Robert Faust, Bldg. 26; Arthur Werner, Bldgs. 19, 20, 21, 22; Clarence Becker, Bldg.

17; Walter Tyler, Bldg. 5. Front row, left to right: George Sandoval, Bldg. 2; Elizabeth Palkovic and Roberta Jones, Bldg. 1; and June Erwin, Bldg. 16. Reps not pictured are Marie Sugar (3), Alberta Davis (10, 10A), Elsie Klein (15), and Carol Sample (7, 14).

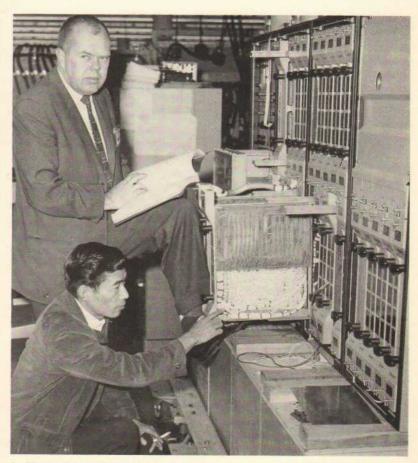


KING OF LINKS—General foreman Carl Culver (left) registers a wide grin upon presentation of clock trophy from Bob Bruce after capturing the 1960 Librascope Golf Club playoff. For the story on Culver and his four fine rounds of golf, turn to page 8.





PLACE YOUR BETS—Junior Achievement members of the Librascopesponsored Chop-A-Block Company watch versatile LGP-30 computer "wheel and deal" a game of black-jack during the JA's tour recently at the Burbank Branch. Kenneth Howard (second from right), Digital Systems Test Supervisor, puts the computer through its paces. The JA group, accompanied by their Librascope advisors, also visited the Glendale Branch and attended a luncheon presided over by Librascope President W. E. Bratton.



A SIMPLER WAY—Senior Engineer Gray Lange and Designer Peter Iwakami (kneeling) are seen inspecting a portion of the point-to-point wiring on the Micro Program unit for the Mk 130. The wiring on the fire control system was performed with tabulated wire listings, such as the one held by Lange. The new time-saving and cost-cutting method of wiring developed by Lange and Iwakami is the tabulated equivalent of a wiring diagram, accomplished entirely by data processing equipment. The work parallels a similar project undertaken by M. J. O'Neill of the Sunny-vale branch for the FAA data processor.

The Day the Bank Was Filled ...



BUSY SCENE at Librascope's second 1960 blood bank was the preliminary physical checkup prior to each donor's gift of blood. Although there were 8 rejects during the afternoon, 138 Librascopers went to the cots to replenish the Librascope blood bank supply. Since the first 1960 Bloodmobile visit in May, 88 pints have been used by Librascope employees and their families.



TWO OF the busiest people on the afternoon of Dec. 28 were Howard Little, acting chairman of the December blood bank, and Mrs. Elmer C. Thomas, blood program chairman for the Glendale chapter of the Red Cross.



RELAXED DONOR—Parts mover Edward White seems to be perfectly at ease as Nurse Gertrude Connolly makes preparations for his donation of a pint

of blood. Like many others who came to the second 1960 Blood Bank, White was a donor for the first time.

Blood Bank Roll of Honor

Fred T. Andree
Lottie R. Atwood
Charles C. Bailey
Robert C. Bailey
Robert C. Bailey
Richard L. Barton
Robert L. Barth
Bernard V. Battistessa
Don R. Baughman
Nancy L. Bernette
Stephen H. Brinkley
Donald Bradburd
Dorothy O. Brand
Crystal I. Bowhay
Bette J. Busch
John L. Cairns
George E. Carrick
Conrad N. Carter
George L. Carpenter, Jr.
Robert C. Cassell
Thomas W. Catania
Joan B. Cooney
James N. Conway
Nick D. Costantini
Earl H. Crawford
Jack W. Cruz
James C. Cusick
Aldo L. Dapelo
Alberta L. Davis
Thomas C. Davis
Donovan F. Day
Dale G. Dean
Rudolph D. Deleon
William M. Diehl
Warren Eisenberg
Jo Anne Erick
James H. Fallet
Daniel E. Fedele
Robert E. Felker
Herbert J. Frankenberg
Richard W. Goetsch
Bernard J. Goggin
David M. Goldman
Georgia L. Graves
Patricia M. Guenette
Norris C. Guy
Richard E. Guzman
Denzil N. Hall
Leo J. Heinz
Paul R. Hickey
Vera E. Hoehn
Jack L. Hough
Jack Joaquin
Sewell F. Johnson
Roberta V. Jones
Jack Jung
Fred J. Killips
Maurice Kimmel
Richard A. Korn
Carol J. Kratzer
Marguerite C. Leahy
John G. Leighton
John G. Lincoln
Howard F. Little
Judyth Y. Long
Jack D. McLear
Patrick W. McMann
Charlie E. Marcum
Norman P. Marshall
Joyce Anne Miles

Carl A. Miller
Bernard F. Muntifering
James J. Murphy
Theodore A. Nagy
Paul Nelson
Robert H. Nelson
William E. Newman
James A. Newton
Theodore R. Nichols
Daniel Novelli
Thomas J. O'Connor
Sheldon Olney
Oscar C. Orth
Richard W. Panneton
Berwyn D. Perrine
Robert G. Peterson
David D. Pharmer
Robert W. Putnam
James D. Quenemoen
Alicia M. Rayacone
Fred M. Reynolds
Franklin D. Rich
Michael H. Rifken
Richard L. Robinson
Wallace H. Robinson
Wallace H. Robinson
James A. Rogers
Thomas W. Runyan
Roger J. St. Clair
Eloi R. Salazar
James F. Searcy
Dorothy J. Shaffo
Benjamin M. Shindell
Orin H. Shoemaker
Donald A. Siebels
William D. Sifferman
Voyle H. Sipes
Harold R. Skinner
William E. Slatten
Robert C. Smith
Robert C. Smith
Robert R. Smith
George F. Snow
Jerry P. Solomon
Leonard T. Soper
Carl A. Sorensen
Thomas P. Sorenson, Jr.
Abigail E. Stoddard
William G. Stoddard
William G. Stoddard
William R. Townsend
Bill J. Tripoli
Don V. Tubbs
Peter P. Tults
Paul J. Ullo
Arthur L. Vicenti
Armando J. Viselli
James W. Walsh
Merten D. Wandrey
Arthur K. Wehl
Edward E. White
Joseph V. Williams
Ronald K. Wray
Robert C. Wyckoff
William A. Young
Carl A. Zappitelli



NEW AND OLD—First-timer Judyth Long, Production Control, and ninth-timer Fred Killips, night group leader, Material Control, Glendale, pose for the news camera in front of the Red Cross Bloodmobile. In addition to Killips, two other members of the original Librascope blood bank—Burbank Personnel Manager Morrie Kimmel and Crystal Bowhay of the Glendale Prototype Shop—continued their consecutive string of donations.

San Marcos

Drawings and specifications for the new Aerospace Branch facilities in San Marcos were put out for bid this month, according to C. E. Dahl, Division Plant Engineer.

Construction on the first unit of the 24,000-square-foot structure is expected to begin in Feb-

Librascope State-of-the-Art Presented at N.Y. Seminar

Librascope provided a special look at the state-of-the-art in the computer field for the trade and New York press last month, presenting "A Seminar on Computer Systems—Today and Tomorrow," at the Dorset Hotel in New York City.

President W. E. Bratton, with six other Librascope speakers, presented the portfolio of Librascope's present capabilities, with a special look at future computer applications.

THE SEMINAR, divided into a morning and afternoon session, was opened by Bratton, who briefly described the history of Librascope and the rise to its present position in the computer field.

The assembled newsmen then heard Project Engineer Charles Foodim, representing the Aerospace branch, discuss the airborne applications of the ASN-24, the L-407 and the CP-209.

Speaking for the Sunnyvale branch, Project Engineer Lane Wolman discussed the important role Librascope is now playing in the new Air Traffic Control System, currently in production for the FAA.

A REVIEW of recent projects undertaken by the Glendale branch was presented by Frank Matthews, former senior engineer now in Librascope's Washington office. Matthews covered Librascope's contracts for POLARIS, ASROC and SUBROC.

Representing the Burbank branch, Project Engineer James Cass outlined to the press the features of the new RPC-4000 and RPC-9000 solid state computers designed and manufactured by Librascope for marketing by Royal Mc-Bee.

The subject of process control applications for Librascope computers was handled by J. T. Ator, Manager of the newly formed Industrial Systems group, located in Palo Alto. Ator also told of new applications toward vehicle and missile check-out with the Libratrol 500

CONCLUDING SPEAKER at the special press seminar, was R. R. Williamson, Director of Military Relations. Williamson discussed some of the problems presently being worked on by the Applied and Advanced Research groups, and the breakthroughs in computer technology which may be anticipated.

Hirsh Appointed Sales Manager Burbank Branch

M. C. Hirsh has been appointed Sales Manager of the Burbank branch, R. E. Hastings, Librascope Vice-President and branch Manager announced this

onth.



Hirsh joined the Burbank branch in 1958 as an applications engineer, working on shaft positionto-digital engineer

ers, plotters and accessories. The following year, he was named senior applications engineer in charge of encoder sales.

Before coming to Librascope he was chief liaison engineer in the computer plant of Alwac Corporation. From 1952 through 1956 he was a development engineer in the Oil Exploration division of Lane-Wells Company. During World War II, Hirsh served as an electronics instructor in the Army Radar School at Fort Bliss, Texas.

Born in Shanghai, China, Hirsh is a graduate of Reed College in Portland, Ore., where he received his B.A. in Physical Science. He is a member of the Institute of Radio Engineers.

B & S Handles Classified Ads, Lost & Found



FREE to all Librascopers. Bulletin board posting of all ads on buy, sell, rent, trade or ride offers. Also headquarters for lost and found articles. Call Helen Mattison, Bldg. 3, ext. 1230.

In the good neighbor role of Librascope's Glendale classified ad department manager and keeper of the gate in lost and found is Helen Mattison of Art Pederson's Benefits and Services office.

Helen's service to Librascopers, in this capacity, is to receive, compile, publish and post the weekly bulletin of classified ads which appears each Monday on hall boards. Articles found are retained in the B&S office until claimed.

FOR MAXIMUM effect, Helen prescribes the following procedures to assist her efforts:

a. Classified items must be phoned in or personally carried to Helen by Thursday afternoon to appear in the following Monday's bulletin

b. Items appear for one week but may be renewed for additional weeks by notifying Helen by Thursday.

c. People outside of Librascope, with the exception of commercial businesses, may also request ads be placed that may be of interest here.

d. Articles found should be turned in to the B&S office or to the nearest Security Guard. All claims must be made in the B&S

"A REMINDER to all Librascopers," Helen proposes. "All posting on company bulletin boards must go through this office for approval. Personal notices will be removed."

W. K. Emery to Test Lab Group

Warren K. Emery, an engineering graduate of UCLA, has joined the Reliability section as Senior Engineer, according to Reliability Director W. J. Picker.



Emery's new post will place him in charge of the technical aspects of the environmental test lab, supervising the various vibration, shock

and temperature test programs initiated by Reliabil-

Formerly with Hughes Aircraft Co. for eight years, Emery served as a member of the technical staff of Product Assurance and Systems Installation department, where he planned and supervised environmental testing of company-manufactured products.





The Toastmaster Tradition: From Fancy Feasts to Forensic Feats

Librascope Toastmasters:

Effective Speaking the Social Way

New Class Begins

A semester class in Precision Inspection starts Jan. 31 at the Van Nuys Adult School, 6535 Cedros Ave., Van Nuys.

The tuition-free course will be held each Tuesday and Thursday evening from 7 to 9:30 p.m. and is open to persons employed in industry.

Topics to be covered include Blueprint Reading, Use and Care of Precision Inspection Tools and Instruments, and a Review of Mathematics pertinent to Inspection.

Persons wishing to attend may register the first night of class on Jan. 31.

C. K. Reh Joins Glendale Branch

Carter Keith Reh, fresh from six years in the South American tropics, has been appointed to the Glendale production engineering staff by newly-promoted Supervisor Al Leto. Reh (pronounced Ray) has been assigned to the Mk 114 project.



A native of Canton, Kans., Reh graduated from Kansas St. College in 1949. Following graduation, he joined Alcoa Aluminum as an industrial engineer; later

he was with the manufacturing division of Pacific Airmotive and the petro-chemical research division of Borg-Warner Corp.

In 1955, Reh journeyed to Venezuela and became general manager for Productora Mara, C.A., an independent oil producing firm at Maracaibo. He is a Lieutenant (jg) in the Naval Reserve and makes his home in Van Nuys with his wife and three children.

Gillespie Heads Procedures Unit

Haven L. Gillespie, formerly head of the facilities planning group with Hughes Aircraft Corp., has been named Supervisor of Procedures for Librascope division, by Pheiix Ellingson, Manager of Administrative Services.

A native of Covington, Ky., Gillespie is a graduate in business administration from famed Centre College in his home state, has done graduate



work in economics at the University of Cincinnati and UCLA. He began his business career with Wright Aeronautical Corp., Cincinnati, was head of its administrative methods section when he left to make his home in Southern California.

Gillespie is married, the father of three—Jim, 20, Carol, 14, and Jennifer, 6—and makes his home in Encino.

Glendale Appoints Price Supervisor

Richard H. Price, former Production Engineer, was recently appointed Prod-Eng Projects Supervisor for the Glendale branch. He will be in charge of the production engineering aspects for Asroc and the Mk 114 system.

A 1956 graduate of Cal Poly at San Luis Obispo, Price came to Librascope as a production engineer in 1958. He formerly was with the Electrodata Division of Burroughs Corp. and with Consolidated Electrodynamics.



FACTORY FRESH—From the Burbank Branch comes this RPC 9000 computer system, the "heart" of Librascope's Operational Control System located in Bldg. 1. The 9000 is the first of a long line of equipment that will be emplaced in the LOCS center. Here, G. J. Tait (right), Industrial Engineer in charge of equipment and programming for LOCS, talks over some installation aspects with Programmers C. L. Fuller (seated), and from left, Joseph Rue and J. K. Alexander, along with R. J. McCarthy, service engineer from Royal-McBee. This first 9000 system for LOCS, consisting of tape drives, punch and reader equipment and tape typewriter, will undergo check-outs and initial program testing for approximately two months, Tait said.

How do you rate in today's need for good vocal communication?

Do you rise to your feet and to the occasion, full of confidence, able to say what you want, capable of giving the best impression of yourself?

OR, LIKE SO MANY, do you start to tremble at the knees, sweat at the palms, quake in the voice, fail in memory and fall on your face?

If so, the remedy for this forensic frustration may lie in an organization known as Toastmasters, a kind of "do-it-yourself" speech improvement club.

In Librascope Toastmasters, part of the parent Toastmaster International, over 30 members are currently enrolled in the sociable course of learning basic speaking practices in an atmosphere of least possible embarrassment.

Starting with the raw material—the "ah", "and uh" and "uh" talker, Toastmasters' purpose is to produce in a few months a practiced and possibly polished public speaker.

"WE WANT YOU to learn to apply fundamental speech experiences experimentally in your club laboratory, and then use them in your personal affairs to your own best advantage," writes Ralph C. Smedley, founder of Toastmaster International, to new club members.

Many Librascopers, in all levels of position, have passed through the club since its organization here in 1955.

A. R. Pederson, long-time Toastmaster and former president, said. "Toastmasters can improve a person's ability to stand on his feet and talk. Anyone, regardless of position, who deals with groups of people is bound to benefit from what they learn at the club."

THE WORKSHOP or laboratory for Librascope Toastmasters is an evening meeting each first and third Wednesday of the month. A typical program includes a meal, discussion of club business and selected table topics, and prepared speeches.

From first appearance, the meeting suggests a gathering of businessmen bent on some stern mission. Once begun, the similarity ends.

Not since the late Sen. McCarthy made television history with his gravelly utterances of "Point of Order, Mr. Chairman," is one likely to see more parliamentary shenanigans than at Toastmasters.

FOR EXAMPLE, one of the traditional Toastmaster subjects of business is the policy of fines and assessments against erring members. A proposed fine of ten cents or so against a member arriving late or failing to address the chair properly often calls for such a myriad of motions, rebuttals and haggling that one would suspect the man's very financial survival to be at stake.

During the table topics discussion, members are called upon to give one- or two-minute talks on some weighty item selected by a chairman, such as offering advice to the lovelorn or presenting a sales pitch on a Mexican eggbeater.

Despite the facetious aura that persists throughout this portion of the meeting, an



ACCLAIMED—Toastmaster President G. W. Seltzer (right), presents one of the traditional club trophies to member C. C. Dracey in recognition of superior speaking performance at a meeting.

important purpose prevails. This relaxed, informal atmosphere is pointed to inducing participation and teaching parliamentary procedure.

THE SECOND PART of the meeting consists of prepared speeches by members, which are in turned judged and criticized constructively by other members.

Under the rules of Toastmaster International, each member upon joining embarks on a schedule of twelve speeches designed to indoctrinate basic principles of good public speaking.

In addition, positions in the club are rotated at every meeting so that members may take their turn at the role of Toastmaster, parliamentarian, grammarian, or table topics chairman, and thereby learn those often necessary but more often neglected rules for conducting meetings.

"MEMBERS OF Toastmasters have a recognized selfish interest in that they use the club to improve themselves," G. W. Seltzer. Toastmaster president at Librascope, said. "But the end result furthers the club's purpose which is to produce better public speakers."

"It's a sociable group that recognizes other members' problems," added R. E. Laperle. club secretary, "and also provides a way of getting to know people within the company as well."

Several special meetings are included in the Toastmasters schedule throughout the year. Among these are ladies night, barbecue meetings, and swimming pool meetings (guaranteed to excel in informality).

ACCORDING TO SELTZER, a program is currently being planned which will feature a meeting conducted by some of the original members of the Librascope club.

Nominal dues for Toastmaster membership also cover the cost of speaking guides, other club publications, and the miniature trophies awarded each night.

Current Toastmaster officers include President Seltzer; H. G. Boehm, Educational Vice-President; E. L. Considine, Administrative Vice-President; R. E. Laperle, Secretary; J. J. Ochoa, Treasurer; and C. J. Innocenti, Sergeant at Arms.

Basketballers Open Season in Burbank League

Librascope entries (two from Glendale and one from Burbank) in the Burbank industrial basketball league kicked off their seasons this month, with only one team registering a first-game win.

In a Hatfield-McCoy opener, the Glendale "B" team led by Jim Weatherill with 18 points and George Pitko with 12, downed the Librascopers from Burbank, 55-32.

In its league opener, the Glendale "A" team was nosed out in a closey, 65-62 by Weber Aircraft, last year's league champion. High scorers for the "A's" were Nelson Manzaneres (21) and Ted Masters (17).

For those interested in attending any of the games, schedules for the remainder of the season will be posted on the bulletin boards, according to basketball manager Charlie McKallor.

A Rut in the Alley

John Delle Fave, foreman in Tool Design, reached a bowling rarity recently, rolling a 194triplicate in the Monday night mixed league at Pickwick Bowl, Burbank.

Delle Fave, who carries a 165 league average, will receive an American Bowling Congress shoulder patch as a reward for the three identical scores.

New Contracts...

(Continued from Page 1)

important advances in our basic understanding of Automata," Ham-ilton explained. "Broadly speaking, automata research involves the study of highly organized and complex mechanisms and their interaction with a complex environ-

"In most of our work we have a twofold objective," Hamilton said. "Our first task is to develop suitable tools and techniques for the investigation of highly organized, complex mechanisms such as are found in the neuro-muscular systems of living organisms. Then, with the aid of these tools and techniques we hope gradually to develop a general theory which will be applicable to such mechanisms in relating their overall function to their internal structure.'

The Librazette

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New Nurse Joins Burbank Branch

The latest in ladies-in-white for Librascope is Industrial Nurse Dorothy Shaffo who has recently joined the expanding Burbank branch.

Miss Shaffo, with offices at the Verdugo St. Bldg., heads the First Aid Department for all Burbank facilities.

Prior to joining Librascope, Nurse Shaffo worked at the Atomics International Division of North American Aviation in Canoga Park.

She is a native of Pittsburgh, Pa., and completed her nurse's training at St. Vincent's Hospital in New York City.

Bowen Joins Ground Systems

Wynne Bowen has joined the Ground Systems Dept. of the Sunnyvale branch as an electronic engineering associate, according to Chief Engineer Lane Wolman. He is assigned to work on the semiautomatic test equipment (SATE), reporting to staff engineer E. R. Zuehlke.

A native of Criccieth, North Wales, Bowen served in the British Merchant Navy as a radio officer during WW II. During his five-



served on 14 different ships of the merchant marine fleet. Bowen came to the U.S. in 1946.

Before joining Librascope, Bowen worked five years with Convair Astronautics, San Diego, as an engineering research development technician on ground support equipment for the Atlas missile. He also owned and operated his own television service business in the San

Steady Shooting Nets Golf Crown For Carl Culver

Carl Culver, Glendale Assembly General Foreman, hauled in the Librascope Golf Club championship and trophy for the second year in a row, coming in with a snappy 72hole net total of 270. Walt Newcomer, Prod-Eng Associate, placed second in the playoff, 11 strokes off the winning score.

PLAYING ON three different courses for the required four rounds, Culver shot consistently fine golf in gaining the trophy. Only his first round, an 83 at the Yorba Linda course, kept him from having a uniform gross score of 78 for the four rounds of play.

The championship playoff, for-merly known as the Calcutta, had the year's top sixteen net golfers entered in the contest.

FOR CULVER, already the winner of this year's low gross trophy at the Apple Valley tourney, it marked his fifth golfing award since

joining the Librascope Golf Club. The order of finish for the top eight in the golfing finale for 1960 is as follows:

Individual Rounds

core)	
	Total
71-66-66-67	270
73-70-64-74	281
73-70-71-68	282
67-65-79-72	283
59-68-70-77	284
71-73-67-73	284
76-66-79-66	287
70-81-69-72	292
	71-66-66-67 73-70-64-74 73-70-71-68 57-65-79-72 59-68-70-77 71-73-67-73 76-66-79-66 70-81-69-72

ASW Studies...

(Continued from Page 2)

putes angles of deflection as rays enter the water. The Navy has already expressed interest in the raytracer testing recently completed by the R&D group.

2. Development of a long-life sea water battery for buoy power supply, which utilizes the reaction of sea water and magnesium. A contract appears favorable for a test buoy to be placed in operation soon.

SEVERAL PROJECTS are also underway to improve data processing aspects of sonar systems and these studies and their results have been submitted to the Navy for

"For a number of years, Librascope management has felt the need for advancing work in the sonar field to broaden the scope of activities at Glendale," Cloninger told LIBRAZETTE, "Primary interest has been from the systems appli-cations standpoint."

"Now, marketing studies would seem to predict a tremendous future potential for industry in the field of sonar systems for government " he said.

ON THE VARIOUS R&D projects, Glendale engineers have worked with the NEL in San Diego; the Navy Underwater Sound Ordnance Station, New London, Conn.; Scripps Institute of Oceanography, a division of University of California, San Diego; and the Woods Hole (Mass.) Oceanographic Insti-



LIBRAVETS—Recent additions to the growing list of men and women who have attained five years of service are the 12 Librascopers pictured above. From left to right in each row, they are Audrey Blythe, Gaylord Vance, Bob Sommerville, Dona Filkins, Harry Ewing, Al Leto, Earl Crawford, Elena Root, Roger Perraglio, Jack Pelamati, Sam Zatkin and Joe Simon.

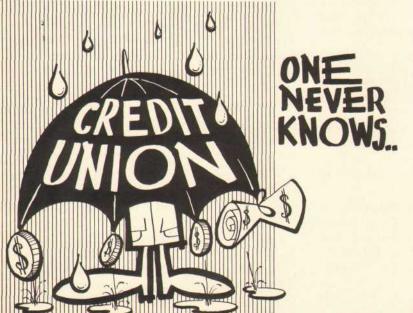
Where Would You Like to Go?

Librascope employees interested in the annual Precisioneersponsored vacation tour in September, are urged to offer their suggestions from three possibilities as to the destination of the trip in 1961. This coupon, carrying NO OBLIGATION, should be filled out and sent to Eileen Brown, at the Precisioneer Store, Bldg. 2, as soon as possible, so that charter arrangements and other plans can be completed by vacation time.

Check one: [Mexico City and Acapulco, a 14-day tour, \$359. Orient, a 20-day tour, \$895.

Scandinavian countries, a 23-day tour, \$1095. There would be people in my party should I decide to take advantage of this year's tour.

Employee's Name.... Department



Librascope Division General Precision, Inc. 808 Western Avenue Glendale 1, Calif.

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