

\$40 Million in New Contracts

\$22 Million Awarded for U. S. Army Battlefield Maneuver Control System (MCS)

Librascope has been awarded a \$22 million contract, including options, as a member of the team selected to perform systems engineering and integration for the U. S. Army Maneuver Control System (MCS).

The team, headed by TRW Defense Systems Group, will provide systems engineering and integration including coordination and review of program elements, writing of tests specifications, software testing, and communications engineering over the next five years.

Maneuver Control System (MCS) is one of five battlefield functional areas which make up the Tactical Army Command and Control System. MCS will process incoming battlefield information and provide real-time data to the Air-Land Battle Force commander as a decision-making tool.

"The Commanders of maneuver elements will be linked by a single command and control system, thereby allowing ready access to needed information for situation reports, enemy assessments, and friendly force status," said Hank Pinczower, Vice President, Army Programs. "It will also disseminate orders to the maneuver elements. The MCS must accommodate growth and changes in scope and capability, while maintaining its operational readiness status."

Librascope will define and develop the MCS communications systems engineering and integration requirements and associated software. Librascope is currently producing MCS subsystem equipment including the Tactical Computer Terminals AN/UYQ-30 and AN/UYQ-30(A), and Programmable Communications Interface Units.

The project will be managed by TRW's Defense Systems Group in Redondo Beach, California. The team also includes Nation's Incorporated, which will perform the logistics support and training functions.

\$8.3 Million Production Awarded for Contract Programmable Communications Interface Units (PCIU's)

An \$8.3 million follow-on contract has been awarded the Company by Ford Aerospace Division for Programmable Communications Interface Units (PCIU's). The contract calls for the production of 263 two-channel PCIU's and associated spares, with production quantities of up to 33 units per month. Contract deliveries are scheduled to start in May 1988. Don Barton has been named the Program Manager, under the Advanced Programs and Proprietary Products Group, headed by Carl Sorensen, Manager.

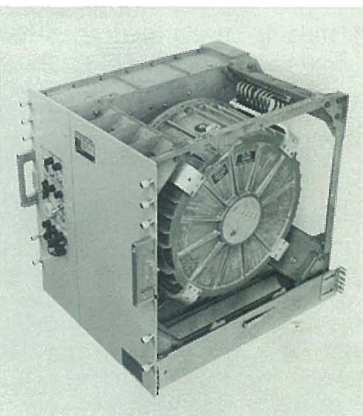


The PCIU's are designed for use with the Ford Aerospace Tactical Computer Processor (TCP) as a subsystem component of the U. S. Army's Maneuver Control System (MCS). MCS is one of five systems which make up the Army Command and Control System. It integrates the functions of Fire Support, Air Defense, Intelligence/Electronic Warfare, and Combat Service Support.

\$10 Million Contract Awarded for RD-433 Militarized Mass Memory Systems

The Company has been awarded a \$10 million contract for RD-433 Militarized Mass Memory Systems. The contract was awarded by the Space and Naval Warfare Systems Command Headquarters (SPAWAR), for the production of eighty-one RD-433 units with an incentive feature worth \$288,000 for delivery of the first twenty-four RD-433 production units six months earlier than the contract schedule. Dick Pierce has been named the Program Manager, under the Advanced Programs and Proprietary Products Group.

The Mass Memory Systems will be used in the U. S. Navy TACINTEL and NAVMACS(V) shipboard satellite communications systems. TACINTEL provides for receipt and transmission of tactical information via satellite on Fleet



Flagships and selected aircraft carriers. NAVMACS(V) is a new enhanced communications system developed by the U. S. Navy.

Similar Librascope Mass Memory Subsystems are used in the Navy's TRIDENT submarine communications systems, and on U. S. Coast Guard ships.

Smoking Policy

A smoking policy for Librascope has been announced to take effect on Thursday, October 1. In announcing the new smoking policy, Frank Yapp, Vice President, Human Resources, stated:

"The Company is committed to providing a safe and healthful work environment for all employees. A current concern relative to a healthy work environment is the issue of tobacco smoke. Significant information is available on the health hazards associated with tobacco smoke and consequently, many communities and organizations have implemented laws or policies to restrict smoking in public places, including the work place.

"Although no law currently requires Glendale employers to regulate smoking, the Company is concerned about the possible effects of smoke on the non-smoking employees and for that purpose intends to implement the smoking policy.

"It is not our intent to effect a total ban on tobacco smoking on Company premises at this time, however, we do recognize the need to

provide a work place which significantly reduces employee exposure to tobacco smoke," said Yapp.

The smoking policy which goes into effect on October 1, is outlined below.

Smoking will not be allowed in the following areas:

- Conference Rooms
- Rest Rooms
- Nurse's Office
- Hallways
- Areas marked with "No Smoking" signs
- Designated areas of the cafeteria (where posted)
- Private offices/work stations (floor to ceiling walls with a door) designated as "Non-Smoking" by occupant.
- In areas jointly shared by smokers and non-smokers, the non-smokers interest prevails.
- Credit Union
- Elevator

Smoking in any of the above prohibited areas will be a Company rule violation.

The smoking policy is applicable to all employees, job shoppers, consultants, and others who are regularly

Ralph Simon Named Vice President Quality Assurance and Systems Effectiveness

Ralph Simon has been named Vice President, Quality Assurance and Systems Effectiveness. The appointment was announced by Walter Picker, President. Simon will be responsible for Quality Assurance, Reliability/Maintainability and Test Equipment.

Simon, who joined Librascope in 1965 as an Engineer,



later served as Supervisor, Components Evaluation and as Program Manager for the SST Program.

He holds a Bachelor of Electrical Engineering degree from Ohio State University and a Masters of Business Administration from the University of Southern California.



Undersecretary of the Army Visits Librascope...Walter Picker, Librascope President, left, welcomes Undersecretary of the Army, the Honorable James R. Ambrose, on a recent visit by the Undersecretary to familiarize him with Librascope's Tactical Command, Control and Communications Systems. A demonstration of the TCT AN/UYQ-30 was held for the Undersecretary.

Coordination of Benefits Changes Birthday Rule . . .

Effective January 1, 1987, the "Birthday Rule" was made a part of the Coordination of Benefits determination procedures used by the Connecticut General Life Insurance Company, Health Net, Kaiser Permanente and the Rhode Island Group Health Association.

This rule applies only to a husband and wife who have dependent children and who are both covered under two different employer-sponsored health care plans. In the past, the insurance carrier covering a male parent would be primary for his dependent children's expenses and the female spouse's insurance carrier would be secondary.

The "Birthday Rule" changes this provision as follows: "The dependent children's expenses are now primary with the insurance carrier of the parent whose month and day of birth falls earliest in a calendar year."

In the case of divorced or separated parents, if a court decree regarding financial responsibility is issued, that decree will supersede the "Birthday Rule". Otherwise, the insurance carrier of the parent who maintains custody of the child is generally responsible for providing primary coverage.

If one of the two plans involved has not adopted the "Birthday Rule"; i.e., if one insurance company is located in a state that does not observe the "Birthday Rule", the rules of the plan without the "Birthday Rule" will determine which plan is primary and which is secondary.

Retiree /Layoff Rule . . .

In accordance with the Consolidated Omnibus Budget Reconciliation Act (COBRA), effective January 1, 1987, the Company will offer employees and their eligible dependents the right to elect continuation of health care coverage if any of the following events occur which would normally result in loss of coverage:

- You are terminated for reasons other than gross misconduct or if your hours are reduced (coverage is continued for 18 months).
- You die (coverage for dependent(s) is continued for 36 months).
- You are divorced or legally separated from your spouse (coverage for dependent(s) is continued for 36 months).
- Your child ceases to qualify as a dependent under the terms of the plan (coverage is continued for 36 months).
- You become entitled to Medicare (coverage may be continued for dependent(s) for 36 months).

Coverage will terminate if:

- The Company ceases to provide health care coverage.
- Premiums are not paid on a timely basis.
- The qualified beneficiary becomes entitled to any group health plan or entitled to Medicare benefits.
- In the case of a covered spouse, the spouse remarries and becomes covered by a group health plan.

The Company is permitted to, and will, charge anyone who elects to continue coverage 102% of the total cost of that coverage. This is the cost formerly borne by the Company and the employee.

NOTE: If you have any questions about the "Birthday Rule" or the "Retiree/Layoff Rule", call the Compensation and Benefits Department, Ext. 2132, or the Company Nurse, Ext. 1240.

Employees Take "Stock" in America

The Company-wide U. S. Savings Bonds Drive held in June resulted in 88 new participants in the payroll savings program at Librascope, making a total of 533 employees now enrolled in the program. Over ninety employees increased their weekly savings for bonds during the drive.

"U. S. Savings Bonds are one of the fastest growing investments in America," said Frank Yapp, Bond Drive Chairman. "They offer so many benefits that they almost sell themselves. They are a safe and easy way to save for the future."

Employees who want to sign up for U. S. Savings Bonds can do so any time by calling the Payroll Department, Ext. 1023.

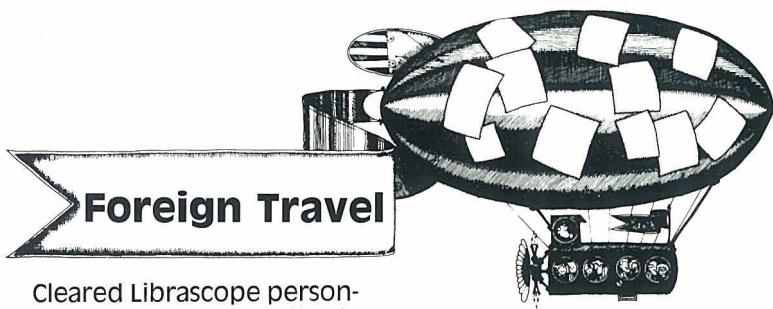
Departments with 45% or more employee participation after the bond drive are: 21-701/**Executive Office** (60%); 21-722/**Contracts** (48%); 21-724/**Systems & Procedures** (60%); 21-762/**Telecommunications** (88%); 21-105/**Technical Planning & Admin.** (50%); 21-119/**Advanced Programs** (57%); 21-120/**Systems Engineering** (63%); 21-127/**Systems Design, Displays** (50%); 21-136/**Project Support Programming** (45%); 21-148/**Electronic Design Naval Systems** (50%); 21-155/**Product Design Naval Systems** (47%); 21-158/**Product Design Printed Circuit Technology** (57%); 21-161/**Value Liaison Engineering** (50%); 21-203/**Production** (70%); 21-205/**Program Management** (50%); 21-210/**Mfg. Customer Service** (58%); 21-250/**Model Shop** (50%); 21-260/**Sub-Assembly Mechanical** (47%); 21-445/**Masking & Potting** (63%); 21-469/**Assembly, Mfg. Support** (50%); 21-382/**Photo Lab** (60%); 21-611/**Field Service** (49%); 21-623/**Field Engr.** (80%); 21-635/**Engr. Field Support** (57%); 21-171/**Reliability Assurance** (74%); 21-292/**Final Assembly & Test Inspection** (71%); 21-401/**Test Equipment** (47%).

Savings Bonds Contest Winners

A drawing for ten \$50 U. S. Savings Bonds was held after the bond drive for all employees enrolled in the program. Winners of the \$50 bonds were: **Jeff Mohan**, Logistics/Training; **Karen Peterson**, Components Engineering; **Carl Mandernacht**, Production; **Judy MacFarlane**, Systems Engineering; **Richard Korn**, Product Design; **Rick Brown**, Value Liaison Engineering; **Jerry Smith**, Purchasing; **Kim Correia**, Security; **Jack Standridge**, Maintenance Engineering; and **Phil Mayers**, Electronic Design, Naval Systems.



Representatives of the Army of India recently visited the Company for a demonstration of Librascope's Tactical Command Control and Communications equipment. A two-day hands-on demonstration of the Tactical Computer Terminal AN/UYQ-30 equipment was conducted. Indian Army attendees included, top photo, Dr. Chakravarti, seated and Hank Pinczower, Vice President, Army Programs; bottom photo, from left, Bill Stewart, Manager, Mktg., International, Lt. Gen. Singh, seated, Maj. Gen. K. J. Singh, Col. B. Kapoor, and Maj. J. M. Singh.



Cleared Librascope personnel and Type "A" Consultants are required to inform the Security Department at least 10 days prior to travel to or through a Designated country, or attendance at an international, scientific or technical meeting held outside the United States when it can be reasonably assumed that representatives of Designated countries will be in attendance.

Designated countries are: Afghanistan, Albania, Angola, Bulgaria, Republic of China, Communist China (including Tibet), Cuba, Czechoslovakia,

Ethiopia, German Democratic Republic (GDR, East Germany including the Soviet Sector of Berlin), Hungary, Iraq, Iran, Kampuchea, Communist Korea, North Korea, Laos, Libya, Mongolian Peoples Republic (Outer Mongolia), Nicaragua, Poland, Rumania, Southern Yemen, Syria, Union of Soviet Socialist Republic (USSR including Estonia, Latvia, Lithuania, and all other constituent republics), Kurile Islands and South Sakhalin (Karafuto), Vietnam and Yugoslavia.

Librascope Plays Role on Advisory Committee for the Disabled

In 1974, Mayor Tom Bradley established the Mayor's Office for the Handicapped, initially generated in recognition that the disabled community had long been denied full and equal access to public services. Adding to this challenge has been the need to serve a wide range of disabled people, including the deaf, hard of hearing, blind, physically disabled and those with "hidden" handicaps such as arthritis, asthma, and epilepsy.

Librascope began working with the Mayor's Office several years ago as a member of a private industry advisory committee. This creative partnership has worked to develop both training and placement opportunities for disabled job seekers. The goal then and now is to improve the quality of life for the disabled community.



Raul Navarro accepts a certificate of appreciation from Janet Wentworth, Project Coordinator, for Librascope's participation with the Mayor's Office for the disabled.



Pictured along with members of the Advisory Committee during a recent graduation ceremony for electronic technicians, is Raul Navarro, Librascope Personnel Representative, (to the left of Mayor Bradley).

Deadline for Filing W-4 Forms Coming Up...

The new tax law requires that each employee must fill out a revised W-4 form to adjust withholding from paychecks. The deadline for filing the new W-4 forms is October 1, 1987.

"Employees were first informed of this requirement in the February issue of the Librazette," said Valerie Klein, Supervisor, Payroll, "however, there are still approximately 300 employees who have not submitted their revised W-4 forms. Everyone is required to fill out a new W-4 form whether or not they want to make a change in their withholding."

"If you do not file by October 1, 1987, your allowances may be adjusted to "1" if single, or "2" if married, and your take home pay may be reduced," said Klein.

A new W-4A form has recently replaced the W-4 form which was introduced to taxpayers at the beginning of the year. This W-4A form is an easier way to figure your withholding than the earlier 4-page W-4 form. If you have already submitted a W-4 form this year, do not file a new form W-4A.

The new W-4A forms are available in the Payroll and Personnel offices in Building 3, or at the Reception desks in Bldg. 8. The forms must be completely filled out, signed, and returned to Payroll, M/S 903.

Tuition Reimbursement

The Company encourages employee development through supplementary college-level education in courses leading to a Certificate, an Associate, Bachelors, Masters, or Doctorate degree. The courses must be taken at either a community or four-year accredited college, and must be courses of study which are directly related to the employee's current position or which will increase the employee's potential for advancement within the Company.

Under the Company's Tuition Refund Program employees will be reimbursed for actual expenses for tuition or registration fees, required laboratory fees, and 50% of the cost for books.

The reimbursement formula is as follows:

- Certificate and Associate Degree programs which are of immediate benefit to the employee and will increase his/her effectiveness in performing current responsibilities: 100% reimbursement will be made at the end of each quarter or semester to a maximum of \$1,500 per year.
- Certificate and Associate Degree programs not directly related to the employee's present position, but which may be related to future positions with the Company, or which will increase the employee's potential for advancement: 80% reimbursement will be made at the end of each quarter or semester to a maximum of \$1,500 per year.
- Bachelors and Graduate Degree programs: 100% reimbursement at the end of each quarter or semester to a maximum of \$1,500 per year and 50% reimbursement for any expenses above \$1,500 per year to a maximum of \$500.

All courses must clearly relate to the general business area of the Company, and must be approved in advance. Reimbursements will be made upon receipt of an official grade report, with a grade of "C" or better. For further information, call the Employment Department, Ext. 1204.

Librascope Employees Donate Their Talents

Two Facilities Department employees, Harold Linnartz and Greg Fletcher, decided to put some spare time to good use by donating their carpentry skills to the Glendale Self-Aid Workshop. The workshop, sponsored by the Glendale Self-Aid Workshop for the Retarded, currently provides work, counseling and fellowship to 44 developmentally disabled adults.

With spare lumber donated by the Company, Linnartz and Fletcher have been busy building benches and shelving for the workshop, as well as for the group home, the Hamilton House in Glendale. The Hamilton House is 'home' to 10 workshop members, along with a resident manager.

"This has truly been a great experience," said Linnartz. "The workshop staff and members are so grateful for anything you do for them. Our next project is to build some lockers and a closet for the group home."

Librascope employees are invited to attend an open house at the Glendale Self-Aid Workshop's 'Hamilton House' on Wednesday, September 23, from 4 to 6 pm, at 739 West Glenoaks Blvd., Glendale. "We invite all Librascope employees to come to our open house and to see the beautiful living room furniture they so generously donated to the house through their Christmas Charity Drive donations," said Carole Jourouan, Executive Director.

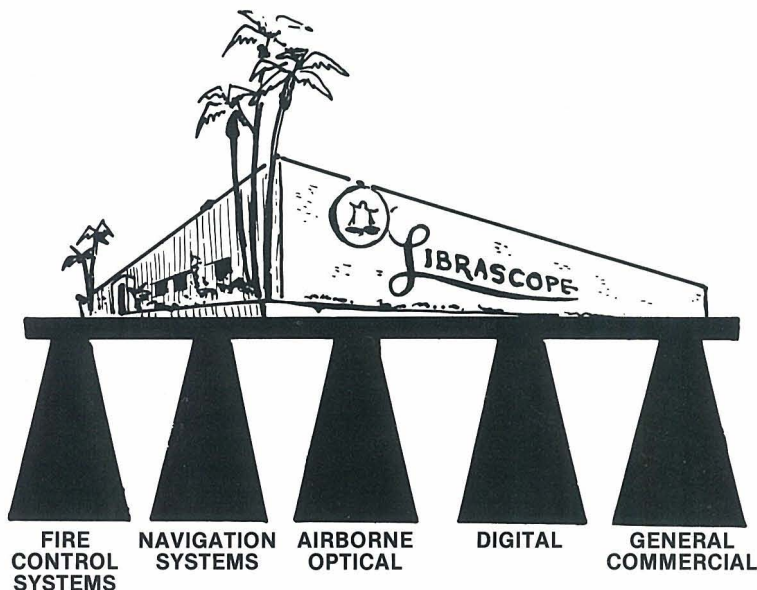


"Thanks for making these benches possible. They have added to the lives of our developmentally disabled ladies and gentlemen."...Carole Jourouan, Executive Director of the Glendale Self-Aid Workshop. Volunteer carpenters Harold Linnartz, left, and Greg Fletcher are pictured above along with workshop counsellor Becky Proctor. Seated in the photo are workshop members, from left, Grady England, Belinda Sierra and Tony Quintero.

Librascope Celebrates 50 Years Origins in Technology

(Continued from the Librazette, May, 1987)

Up to 1946, all company activity was dependent on the balance computer. From 1946 to 1950, the Mk 42 formed a somewhat stronger pillar to support the structure. In the period 1950-52, the Mk 5 program joined with the Mk 42 program to provide an even greater measure of stability.



NEW DEVELOPMENTS at Librascope, as shown in the above chart, are what President Imm termed "an ever growing number of pillars being readied for the Company."

Prior to 1954, company production and outlook was completely military. From 1954 on, the company exerted a strong effort to develop commercial products and invested large sums in a variety of commercial developments. In the course of this branching out into other fields, the area of development shifted from one involving primarily mechanical systems to electronic systems.

The fruits of careful planning under Lewis Imm, President, and the long range insight into the developments of the future paid off handsomely. Librascope became a major research, development, and production organization, manufacturing many different products. Among the list of products included more **firsts** for the company:

first digital weapon-control system for submarine use in antisubmarine warfare (the Mk 113).

first digital computing and data processing system specifically designed for air-traffic control (the L-3020).

first miniature airborne digital navigation-and-guidance computer for use in missiles (the L-600).

first digital computer installed for navigation on operational USAF cargo planes (the AN/ASN-20).

first portable, rugged fieldable computer for navigation of surface ships or tactical support of Army units (the L-2010).

first mass memories with search-by-content capabilities (the LIBRAFILE 4800).

first application of digital computer to aerial camera control.

first digital computer system designed specifically for world-wide military command and control (the L-3055).

first miniaturized integrator (the L-10-1).

first display screen with long image persistence (LIBRACOAT).

Beginning in World War II, Librascope has been the largest supplier of Fire Control Systems for use in solving the Navy's antisubmarine warfare (ASW) problems. Today, the majority of destroyers, submarines, and other vessels employing ASW weapons are equipped with Librascope computer-based fire control systems.



Assembly, 1950-60

GPE, The Parent Company

Librascope became a subsidiary of the General Precision Equipment Corporation in 1941, and remained a part of that corporation until 1968, when GPE merged with The Singer Company, becoming Singer-General Precision Systems, Inc. (GPE was the parent company of General Precision, Inc., formed in 1960, and included General Precision Laboratory, Librascope, Kearfott and Link Divisions. Librascope presidents, Lewis Imm and William Bratton both served on the GPI Board of Directors.)

GPE was but one year older than Librascope when it was founded. It began in June, 1936 as a holding company for a group of theater equipment firms. GPE also had substantial stock interest in the 20th Century Fox Film Corporation. Sound management and a thriving motion picture industry resulted in sales averaging almost \$9 million annually through 1940.

World War II, with its insatiable demands for American industrial products opened the doors for firms with capital to invest. Quick to sense an opportunity to expand the horizons of its business, GPE purchased a number of companies including Librascope in 1941. Since GPI's goal was diversification, not absorption, the companies GPE acquired retained virtual autonomy. GPE furnished the capital for essential war time expansion and offered its new acquisitions centralized accounting services and a sound corporate management.

Ever alert for firms with growth potential, GPE continued its diversification program following the war. In 1952, it acquired Kearfott, Inc. and Kearfott Manufacturing Corp., and in 1954, Link Aviation. (Kearfott and Link remain as Librascope's sister companies as part of the Defense Electronics Group of The Singer Company.)

Along with its growth, GPE had undergone a rather startling metamorphosis. Once identified primarily as a supplier of theater equipment, the corporation emerged in the late 50's as a major factor in the fields of electronics and precision instrumentation. In 1956, GPE had 21 member companies employing nearly 12,000 people, with \$130 million in sales.

When GPE merged with The Singer Company in 1968, it had become a major manufacturer and distributor of technologically advanced systems and equipment for government military and space programs, control and metering devices for industrial and consumer goods, and products for the educational field, and had sales of over \$461 million.

In 1971, Singer-General Precision Systems, Inc. was dissolved and became The Singer Company.

GPL — the 'Lab'

The General Precision Laboratory was founded in late 1945 by GPE to undertake advanced projects for the Armed Forces, and to serve other GPE companies, including Librascope, as a centralized research and development facility. By 1956, GPL had designed, developed and produced the only automatic self-contained air navigation system in operation at that time.

Librascope, along with other GPE companies, participated in the development and manufacture of elements and assemblies for that air navigation system (the AN/APN). These systems have flown millions of operational miles in Air Force and Navy bombers and transports, and have demonstrated the best system accuracies ever achieved by global navigators.

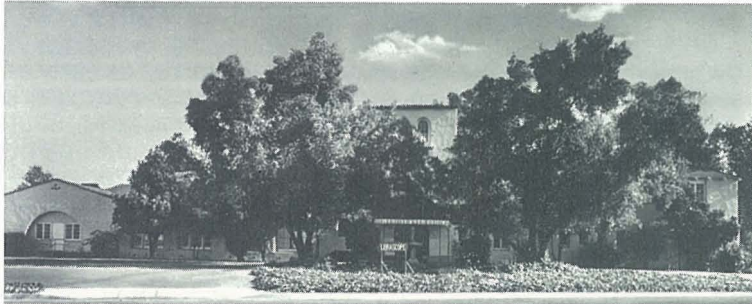
Richard W. Lee, Librascope president from 1963 to 1968, was president of GPL before coming to Librascope.



Building 3 - 1954. "Everyone's Happy in New Quarters" The new building, named "Plant Three", was described as the "fashionable new edifice on Western Avenue; a stone's throw for a file clerk with a good arm from other Librascope buildings." The new plant housed the administration offices, reception lobby, engineering and drafting departments, finance department, legal department, sales and engineering services, blueprinting, blueprint files, and publications. The structure was described as, "one of the finest office buildings in Southern California in the 50's".

Rapid Growth

In the 50's and 60's the growth of Librascope was rapid. The company continued to design and build fire control instruments for the military forces, and branched more and more into non-military industrial production. Government contracts were awarded the company for attack directors, position keepers, angle solvers, and many other instruments. The Company began working toward achieving leadership in the design and production of industrial computers and controls as the nation's industries adopted more automatic machinery.



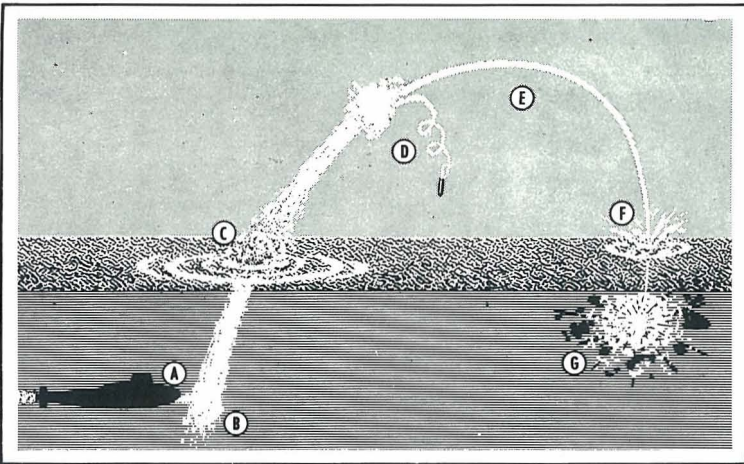
The Clubhouse - 1958. "Its relative isolation, its tree-shaded grounds, its ample parking facilities, and its attractive, air-conditioned interior," made the Clubhouse, Bldg. 7, a popular place to work. The building on Rodier Drive in Glendale was occupied by Engineering and Publications personnel.

SUBROC Biggest Single Project

In the late 50's the company launched the biggest single project in the history of the company at that time. The design, development and production of the SUBROC fire control system was awarded the company by the U. S. Navy Bureau of Weapons. Design staff and production facilities were engaged in the project from 1958 through 1967.

Installed on Attack Class submarines, SUBROC controls the firing of a rocket-assisted missile that can be launched underwater and directed at deep running enemy submarines many miles away.

The missile is fired through the Attack submarine's torpedo tubes, surfaces and becomes airborne, then follows a ballistic arc to the target. The system was revealed in December, 1963, to be the Navy's, "long-awaited breakthrough in antisubmarine weaponry."



SUBROC missile is fired from submarine (A), its rocket motor ignites (B), and leaves the water (C). At (D) rocket motor separates from nuclear depth bomb which continues on path (E) under automatic control; it reenters water (F), explodes and destroys enemy submarine (G).



Building 17 - March, 1960. Open for Business! The new 85,000 square foot structure was used for the SUBROC program and other ship-board units, and housed an assembly unit, methods, purchasing, production control, quality control, electrical inspection, material & tool control, and telecommunications. The new building included a roof top parking area for 240 cars.

Population Explosion

The impact of SUBROC and other contracts on the Librascope organization was felt in many areas. As the company staffed-up to meet the engineering and production requirements, total personnel went from less than 2,000 employees to a peak of 4,258 between 1959-60.

The population explosion also created a need for more physical facilities. This brought about the construction of Building 17, the leasing of buildings throughout the area, and an almost constant program of reconstruction in older buildings to meet ever-changing needs. New equipment of all kinds, ranging from office equipment to huge numerically-controlled production machinery also had to be purchased.

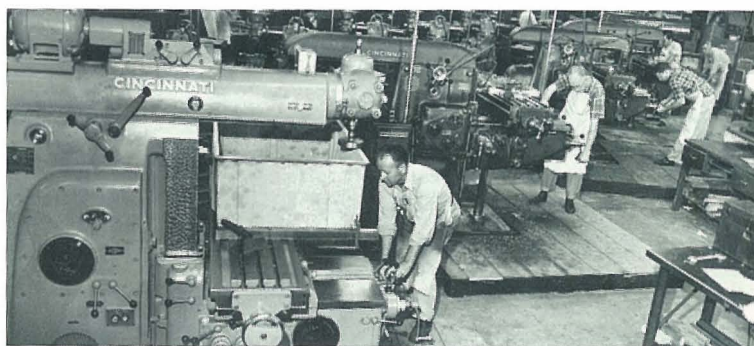


Mk 48 Torpedo Simulator

As the company grew and expanded, it began to decentralize and separate branches were formed within the company, with each branch gearing its respective program to the specialty product line. Physical shifting of functions from Division offices to the branches, and internal restructuring within the company brought considerable change to Librascope. It required a large amount of reorganization for the Company. Contracts awarded the company during this time included \$20 million for the manufacture of fire control systems for various Navy projects, and a \$4 million Navy contract for engineering design and development and prototype manufacture.

Librascope's Burbank Branch had hired its 500th employee during the first week of July, 1960, an increase of 400 employees from 1958. The Burbank Branch consisted of six buildings within its complex. Also, in 1960 the company installed a new telephone system, "large enough to serve the communication needs of a small city." The new system located in Bldg. 17, was the largest ever installed by Pacific Telephone for one company in the Glendale area.

Continued on page 6



Machine Shop, 1960



Drafting, 1960

Lewis Imm Retires

In September, 1960, Lewis Imm announced his plans to resign. In a letter to the company's 4,200 employees, Imm expressed plans to enter a new field of endeavor with a small organization, "where I can be active in all phases of operation." From the founding of the company in 1937, up to just a few years before he retired, Imm had taken an active part in the complete spectrum of company operations, from the design and delivery of a new product, development of new production equipment to employment interviewing. In the few years preceding his resignation, the presidency occupied more and more of his time in policy making demands.

Throughout his career at Librascope, Imm had put his personal philosophy into action. His philosophy, which places the greatest importance on the employee as an individual, is now a hallmark in the industry. On his retirement, Imm stated, "The men and women who work at Librascope are among the prime assets of the company."

"I feel rather like a father bidding farewell to a son who is leaving home," Imm observed about his departure from the firm he founded 23 years ago, but, he said, he felt that any 23-year old son should be able to get along on his own without father!"



Lewis Imm to Attend Open House. "Lewis", as he likes to be called, will be the honored guest at the company's Open House on October 17. Lewis is pictured, second from left, during his last visit to the company a few years ago. He is surrounded by friends and fellow workers, from left, Trent Albizati, Cliff Dahl, Sol Elkins, and Galen Mannan.

Bratton Named President

Succeeding Imm was William E. Bratton who had been the company's Executive Vice President. According to Imm, Bratton was, "the man he considered as his possible successor when he 'induced' him to join Librascope in 1947." Bratton had been named Assistant to the President in 1950, appointed Vice President in charge of engineering, manufacturing and sales in 1954, and became Executive Vice President in 1959.

Decentralization of the company, which had begun under Imm, continued. Bratton, in explaining the branch-concept, stated: "Under this new method of operation we can expect greater diversity and opportunity for the company, and certainly, greater opportunity for the individual. A healthy organization is a dynamic one, which means that it must both foresee and react to necessary change."

In 1961, Bratton was selected as "Man of the Week" by *Space Age News*, a leading publication in the aerospace and electronics industries for his views on the state of the computer industry and its future, and to his philosophy of small, integrated branch operation as opposed to large-size companies with central control.

Under Bratton the company continued to expand and diversify. Overseas operations which had started as early as 1955, continued for the sales and service for the company's full line of military and commercial computers throughout Western Europe, and Librascope's display of its Air Traffic Control computer system built for the Federal Aviation Agency, was second only to the Astronaut capsule in visitor interest at the Paris Air Show held at le Bourget Airfield in 1961.

Design engineering was an expanding operation at Librascope, and the company continued to receive major awards for fire control systems by the U. S. Navy Bureau of Weapons. Work on the SUBROC program continued, as well as on the Mk 80 system for the Navy's Polaris missile system. One of the 250 contractors taking part in the Polaris project,

"A Letter from Lewis"
by
Jerry Deitz
Vice President, Engineering

Lewis Imm, our company's founder, recently sent me a letter regarding Librascope's 50th anniversary this year. I would like to share some excerpts from that letter with all Librascope employees and retirees:

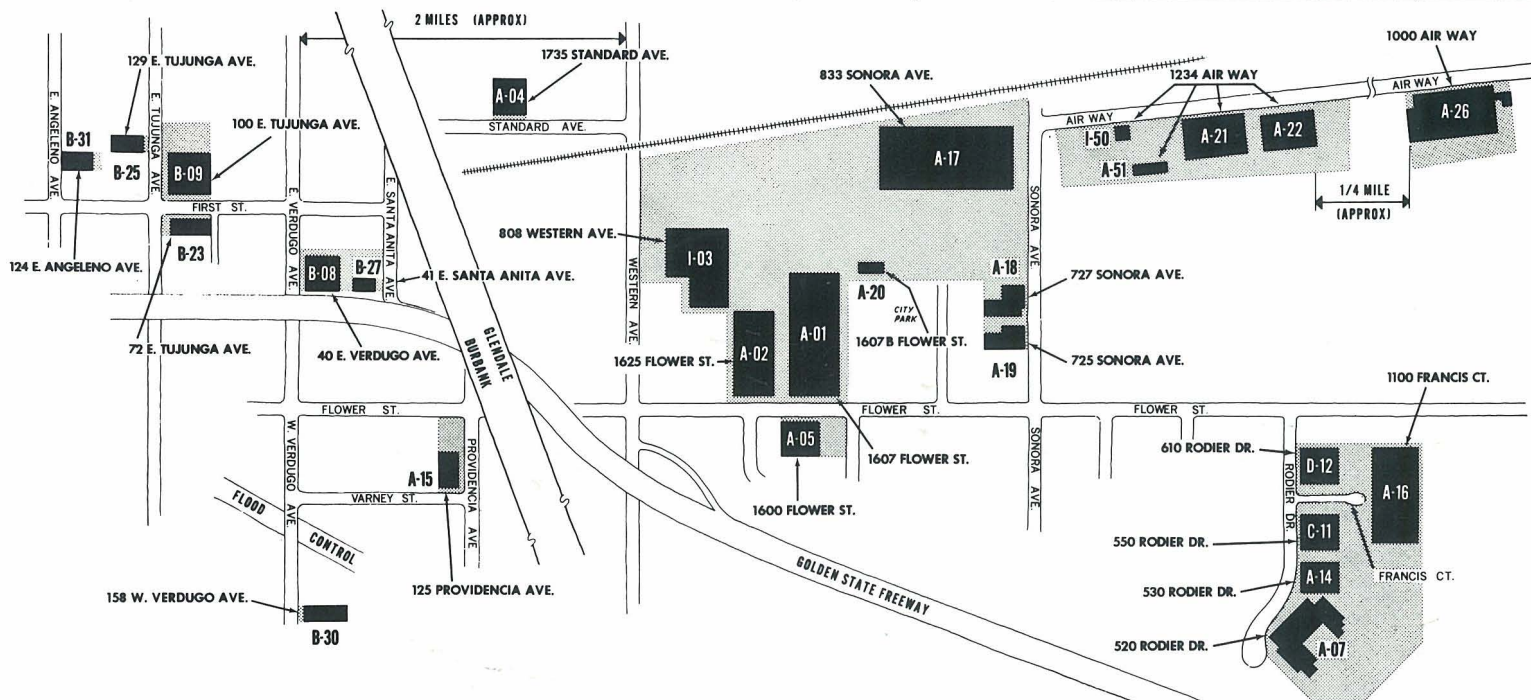
"The company's 50th anniversary brings with it a very warm emotion to all Librascope employees. The 50th birthday remembrance shows the pride extended to the name and the strong mutual feeling for each other.

"To have the name of an organization typify the character of the people, or the converse, may be novel. Yet, through the years, those joining Librascope seem to possess, or soon acquire those qualities of character associated for centuries with 'Libra'.

"Many projects have been successful only because of the harmony, integrity, mutual respect, and brotherly love between the participants. The long list of Librascope's 'first' listed in the May issue of the *Librazette* is evidence.

"Each of you have individual strength and ability. The unqualified support of your fellow workers gives that extra initiative and energy to extend your efforts. In the same way, the separate meaning of the two words, 'Libra' and 'scope' apply. The attributes of 'Libra' furnish the 'capacity for achievement' - scope." Sincerely and affectionately, Lewis

In those few words, Lewis Imm has captured the very feeling within Librascope that remains strong today -- that it is the 'people' that makes Librascope what it is -- a great company to work for.



Librascope - 1961. The above building location map was generated in 1961 to show all buildings and offices used by Librascope at that time. The "initial" preceding the building number showed the "branch" to which the building belonged; i.e., "I" Division; "A" Glendale Branch; "B" Burbank Branch, "C" Sunnyvale Branch. In addition

to the buildings shown above, the Company had division regional offices in Los Angeles; Dayton, Ohio; Washington, D.C.; Huntsville, Alabama; and a facility in Puerto Rico for the design, development and production of optics.

Librascope was the largest contributor to the analog portion of the weapon's fire control system.

In 1961 it was announced that Librascope had developed one of the fastest and most powerful computer systems in the world. Completely transistorized, the L-3060 was specifically designed to meet the complex problem of processing the enormous flow of information needed to effect command control of a rocket launching, a satellite tracking net or a central military command post. President Bratton, in announcing the L-3060 to the scientific, technological and military journals, said that a typical configuration of the system, "will perform 2,480,000 operations per second and will retrieve information from memory in less than a millionth of a second."

Company Celebrates 25th Anniversary

1962 was a milestone year for Librascope, being in business in an industry still considered to be in its infancy. Librascope was one of a scant handful of firms in fire control and data processing systems operations that could look back over 25 years of doing business. This was the kind of longevity produced through creative and capable employees turning out quality products, under the guidance of sound, imaginative management.

The company entered 1962 with a backlog of \$70.5 million,

The Librascope LGP-30



New engineers at Librascope are shown the Company's latest product, the LGP-30. Introduced in December, 1955, the LGP-30 was described in early sales brochures as, "Only the size of an office desk, competitive with room-sized computers, and much lower in price".

the highest in the company's 25-year history. SUBROC and FRAM were Librascope's major "bread and butter" items. The FRAM system consisted of the Mk 53 Attack Console, the Mk 134, the Mk 78 Position Indicator and associated hardware. In the aerospace field CENTAUR figured predominantly, and likewise, encoders and other components were the company's "bread and butter" items in commercial areas.

"But brains and quality are not enough. The companies that survive open competition are those which produce the better product, and earn an honest profit on the money and

Continued from page 8



ASROC Computer Attack Console, Mk 38 - 1960 (with significant information readout devices obscured). Control center of the ASROC fire control system, the console was designed to detect a submarine at long ranges, quickly compute its course and speed, and fire its missile from a 'pepper-box' launcher. The fire control system marked the first shipboard use of a digital computer by the U. S. Navy. In an official Navy announcement on June 21, 1960, the Navy took the security wraps off the ASROC program and publicly revealed it as its "newest and deadliest anti-submarine missile system." In describing the Librascope fire control system the Navy declared: "The essential value of the digital computer, in addition to its speed in processing combat information, is the readiness with which it can be



modified to accept new data. Freed of the necessity to perform mathematical calculations, combat personnel can devote full attention to the making of sound military decisions. Librascope had been working on the project since 1957.



Librascope Shipboard Fire Control Systems. The company holds a unique record in ASW and other shipboard fire control including systems designed and developed in the 50's and 60's:

FOR SUBMARINES...Underwater Fire Control System (UFCS) Mk 113, the Navy's first submarine-installed ASW fire control system to use electronic digital computing equipment.

FOR POLARIS...analog computing modules for Fire Control Systems Mk 80 and Mk 84 installed aboard Polaris-carrying U.S. Navy nuclear submarines.

FOR ASROC...Underwater Fire Control Group (UFCG) Mk 111 incorporating the first electronic digital computer developed specifically for shipboard ASW fire control.

FOR FRAM...Underwater Fire Control System Mk 114 shipboard weapon-control system, capable of computing attack solutions for eight different ASW weapons; was a major element in the Navy's Fleet Rehabilitation and Modernization program.

FOR AASW...Study program for air-borne ASW computer system; in-being hardware capable of directing ASW operations from aloft.



Lewis Imm



William E. Bratton



Donald C. Webster



Richard W. Lee



Maurice Center

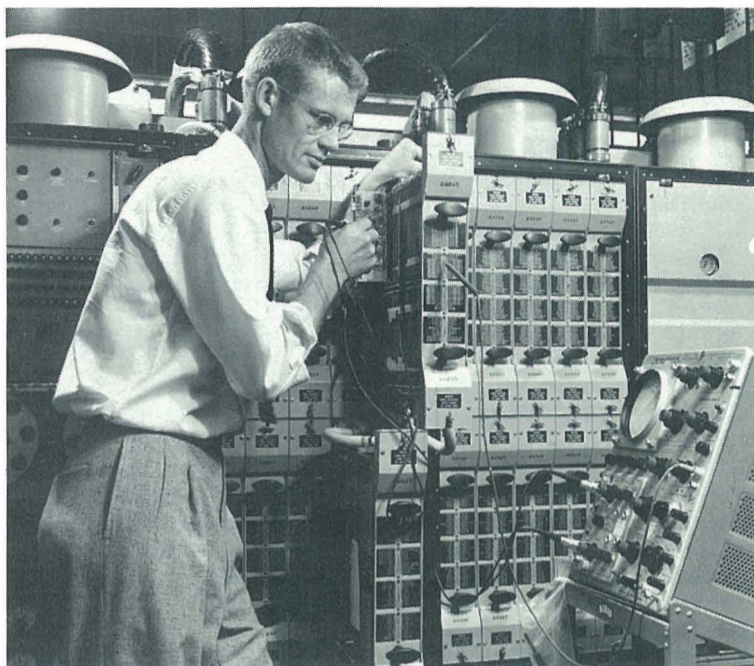
effort needed to produce the product. Profit provides the brawn to back up the brains, the purse to pay the bills and the impetus to move into uncharted areas of research. In this, our Silver Anniversary Year, we have much to recount with pride and a great deal to look forward to in the years to come. Librascope's growth has not been accidental -- our tenure has proven that." (Editorial, Librascope, January, 1962.)

Information Systems Group Formed

In December, 1962, the company, in a move to "develop complete data-processing systems, command and control systems, shipborne fire control systems, digital computer systems, and computer components in new and broader markets entered into a new and challenging phase of its 25-year existence when it became the Information Systems Group of General Precision, Inc.

Bratton was named President of the new group by the General Precision Board of Directors. The new Information Systems Group included the Legal Department, Finance, Advanced Market Planning, and Administration. The Librascope Division included the Glendale, Sunnyvale and San Marcos branches, headed by Donald C. Webster as President. The Commercial Computer Division included the Data Processing Systems branch, the Components and Special Devices branch, and Commercial Computer Sales, under Richard E. Hastings as President. The ISG Research Center included the Plans and Analysis Section, the Advanced Research and Systems Technology departments headed by Robert Dietrich, Director.

In the formation of the Information Systems group out of what had been the Burbank units of the Librascope Division, the Commercial Computer Division moved to Burbank, and the marketing unit became Commercial Computer Sales.



Mk 130 Digital Computer Checkout - 1960

ISG President, William Bratton, in commenting on the restructuring which established the two Divisions and brought Commercial Computer Sales into the ISG family, said: "I consider the blending of the Commercial Computer organization and Librascope as achieving an objective we have had for years. Tying the two together will create a better balance between our military and commercial business."

In 1963 the Commercial Computer Division of the ISG introduced the LGP-21 computer, a compact scientific and business computer which sold for less than \$20,000. The company was also actively promoting its L-90 lightweight airborne digital computer and the L-3000 large scale computer system. In the same year, the U. S. Navy Bureau of Weapons awarded follow-on production contracts totalling \$23 million for fire control systems.

The company's electro-optics capabilities were called upon for the design and production of pilot sights and viewfinders for two of the nation's biggest defense contractors. (Hughes Aircraft commissioned the company to design and produce a prototype lead computing sight for a Swiss Air Force fighter-bomber, and Kollsman Instrument Corporation turned to Librascope for the design and production of viewfinders for the navigator and photographer of a RC-135 geodetic photo mapping and survey plane.)

Bratton Resigns Post

In October, 1963, William Bratton announced his resignation. He had joined the company in 1947 and been president since September 15, 1960.

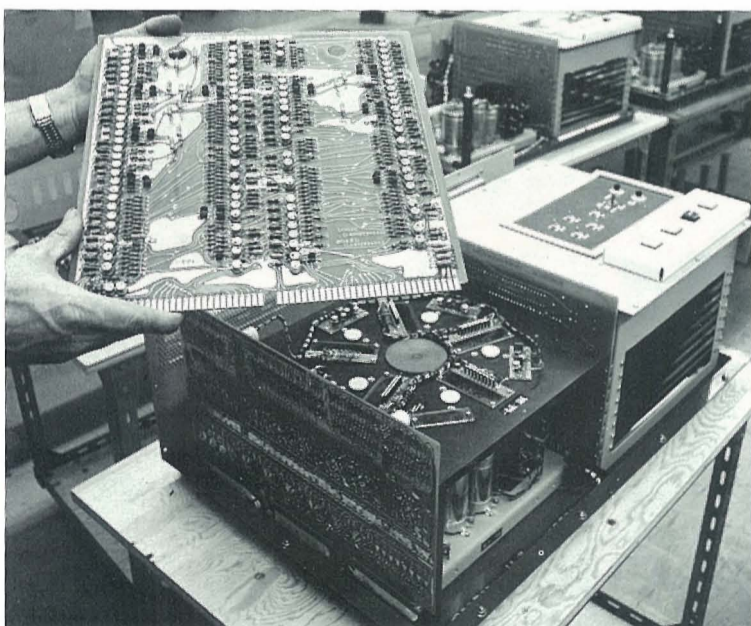
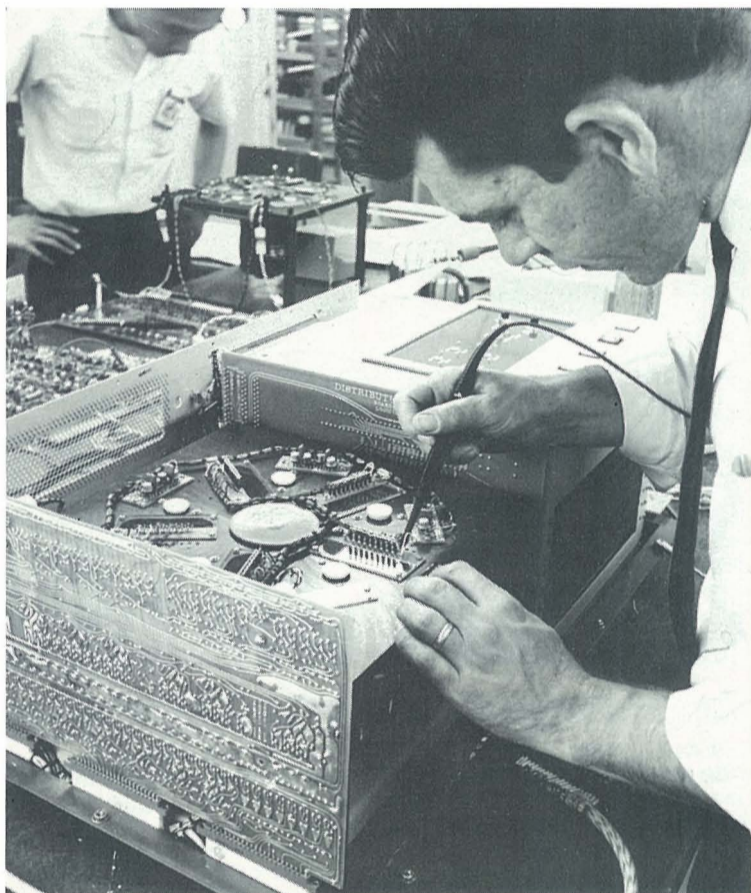
Richard W. Lee, Executive Vice President and General Manager since March 1, 1963, assumed the presidency of the Information Systems Group. Two other major changes in the ISG management structure took place at that time. They were the appointment of Don Webster, who had been president of Librascope Division to ISG Vice President, Engineering and Production, (Lee assumed the presidency of the Librascope Division), and Francis Alterman was named president of the Commercial Computer Division of the Information Systems Group.

Under Richard Lee the company thrived as a part of the modern cycle of computer development. One of the major requirements and trends facing the company in the computer field was miniaturization. Computers that once occupied entire rooms were now being compressed into desk-size configurations.

As a result, the company designed and developed a miniaturized computer, the L-2010. Occupying only two cubic feet, this computer was designed to operate in the most severe conditions aboard ship, on the battlefield, or in other difficult environments. In addition, the company produced a line of components and peripheral products for use in its own computers and data processing systems, and for marketing to other computer manufacturers, to the government, and to industry. These products included: magnetic-disc memory systems; woven thin-film memory planes, encoders, integrators and differentials.

From the design and application work in computers sprung numerous related disciplines and capabilities. Librascope's manufacturing facilities were developed specifically to implement the leadership created by the products developed in the company's research laboratories and its engineering centers.

Under Lee, the company name was changed from Information Systems Group back to Librascope. The change was made, said Lee, "to make full use of the name we have so firmly established in the quarter-century of our existence."



LGP-21 Production - 1963

In 1964, more structural changes took place within the company aimed at making the organization more competitive in the marketplace. Related functions were grouped in such a way that lines of communications were drastically reduced; thus speeding-up the company's ability to 'respond quickly' to customer needs.

In October, 1964 the company received a contract in the area of reliability, from NASA (National Aeronautics and Space Administration), to make a first-phase reliability study of delicate microelectronic devices used in ground-based equipment for space-probe vehicles.

The Big Move

By the end of 1964, every day seemed to be 'moving day' as the company continued its move toward concentration of all activities to the Western Avenue-Sonora Street complex. This was a further step to reduce the costs of doing business and strengthen the company's ability to bid competitively for new business. President Lee explained: "The nature of our business is undergoing tremendous change. Large scale programs requiring large areas of engineering and production space are things of the past. Our business today and in the foreseeable future, is of the short-term variety, requiring intense effort and quick response to the customer's requirements."

The company was faced with fulfilling military commitments in the late 60's at a pace comparable to the accelerated National Defense programs at that time, and the company's work force which was at 1,700 employees in 1966 began to build back up again.

Zero Defects, a 'roadblock removal' program, was introduced under company President Lee, in July, 1965. Zero Defects asked each employee to make a conscious effort to perform each job without error, on schedule, and within cost. It stressed the prevention rather than the detection of defects, and offered employees a challenge -- "to do the job, every job, right the first time." Through employee awards and recognition, the Zero Defects program attacked complacency and indifference, emphasizing a sense of pride in performance on the part of each employee. During the first two years of Zero Defects, over \$600,000 in cost savings resulted. (An off shoot of the Zero Defects program, the 'Employee Suggestion Program' continues today at Librascope.)

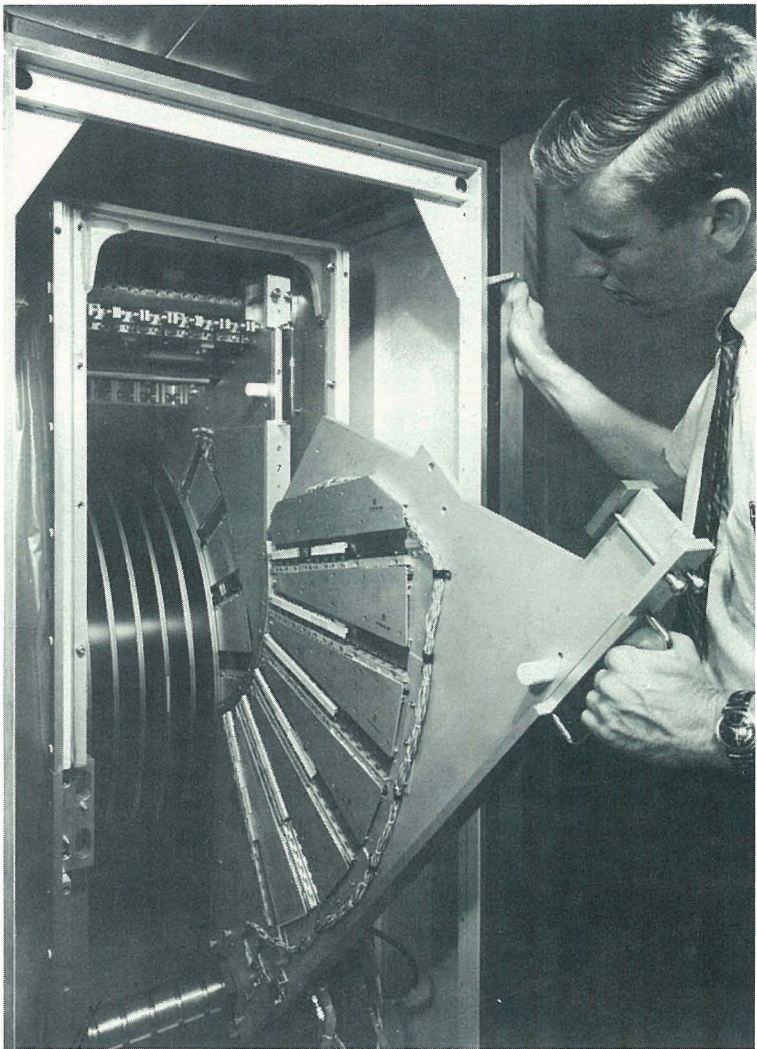
In 1965, the smallest (size 11) altitude encoder ever developed for use in aircraft altitude-reporting systems was being produced by Librascope. The encoder was the newest member of Librascope's long-established line of shaft-position-to-digital encoders. The new encoder was designed specifically for use with airborne transponders that comply with regulations governing altitude-reporting systems to be installed on both military and commercial aircraft. The transponders automatically report altitude and aircraft identification to flight control centers via ground radar stations.

The LIBRAFILE 4800, the largest head-per-track disc file system in the world, was one of a series of large capacity, high speed head-per-track mass memories being developed by Librascope in the late 60's. The memories were being used in time sharing (running several programs simultaneously) and in multiprocessing computer operations.

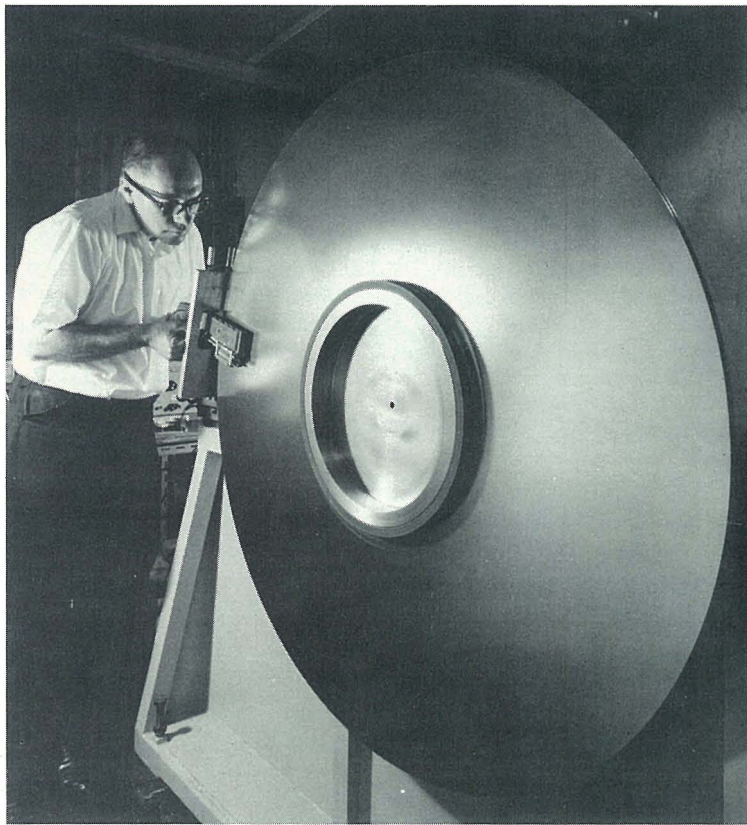
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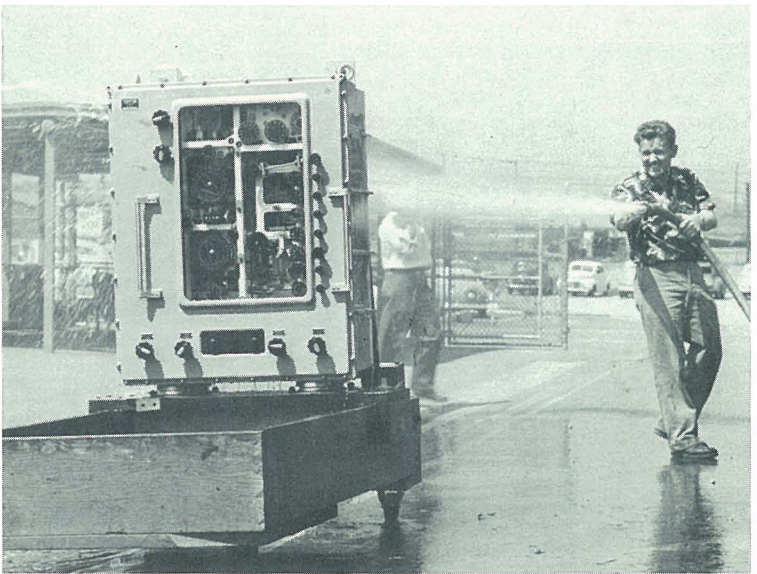
The 'New Look' — Bldg. 3 in 1964



LGP-21 Production, 1963



Giant Disc - 1960. A technician tests a device built for commercial use, a read-write head. The device could record and withdraw information from the magnetically coated surface of a giant, 48-inch magnetic memory disc. The huge disc formed part of a six-disc memory system that could store up to 153 million bits of information and could retrieve information on the basis of content alone (rather than location of information) in 33 thousandths of a second. The memory system could serve as "slave" unit to a computer or data-processing system.



Attack Director Mk 5 Mod 0 Undergoes Waterproof Test - 1952.

Librascope - 1968

Librascope won its first significant contract in the area of acoustic instrumentation in 1968, which marked a major entry into the area of acoustic instrumentation for the company. The contract was for Oceanographic Data Acquisition Systems for the Navy. The systems were designed to measure the temperature, pressure (depth), sound velocity and salinity of the underwater ranges used by the U. S. Navy.

The company continued its development and testing of the Sound Velocity Profiler and underwater positioning tracking concepts, and made technological advances in the application of laser-scanning techniques for navigation plotters and displays.

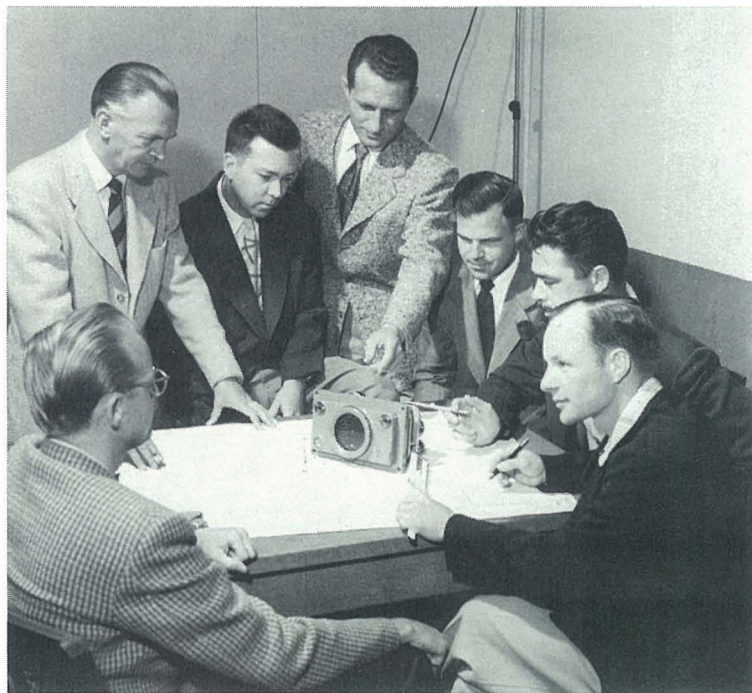
In addition, the company strengthened its position as a supplier of electro-optical devices for application in Viet Nam. This area included pilot sights and other systems such as special cameras and low-light-level surveillance devices.

Another area of success for the company in the late 60's was the utilization of Librascope's automated design technique (LADS). Both the Air Force and the Navy selected Librascope to provide devices which involved the application of this unique design technique.

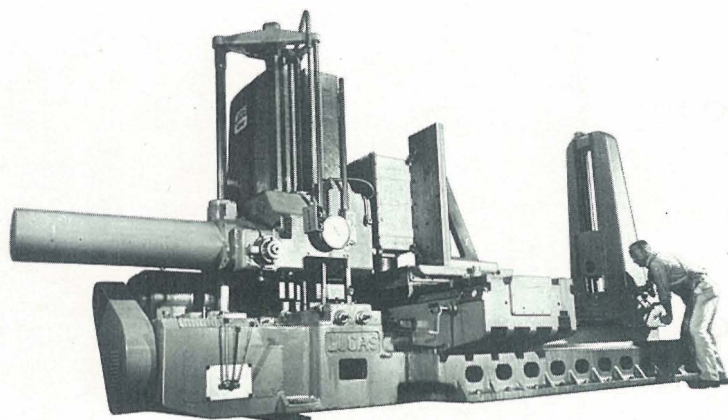
Toward New Horizons

In June, 1968, Maurice Center became president of Librascope, succeeding Richard Lee who was promoted to Vice President-Special Assistant to the President of General Precision Systems, Inc., in New York. In July, 1968, General Precision Equipment Corporation merged with The Singer Company. In an announcement from Donald Smith, Chairman of the Executive Committee, GPE, the merger constituted a positive step that would lead to substantial benefits for both companies: "Singer will be able to draw upon advanced scientific technology to enable it to diversify its worldwide business activities," said Smith.

Donald P. Kircher, the late Chairman of the Board, President and Chief Executive Officer of The Singer Company stated: "Both of the constituent companies have established enviable positions and reputations in the varied markets they serve, both in this country and abroad. Our combined task is now to enhance our ability to serve these markets and the new markets of the future with increasing effectiveness." **More of The Librascope Story in the next issue of the Librazette.**



What is it? If you can identify this early Librascope product call the Librazette office for a special award.



Giant Lucas Boring Mill, 1960

Radio Program Sells Company

In the late 50's, the 'personal' side of the Librascope story was being presented every morning at 6:55 am, on radio station KABC, by Gene Clark, a noted authority on counseling.

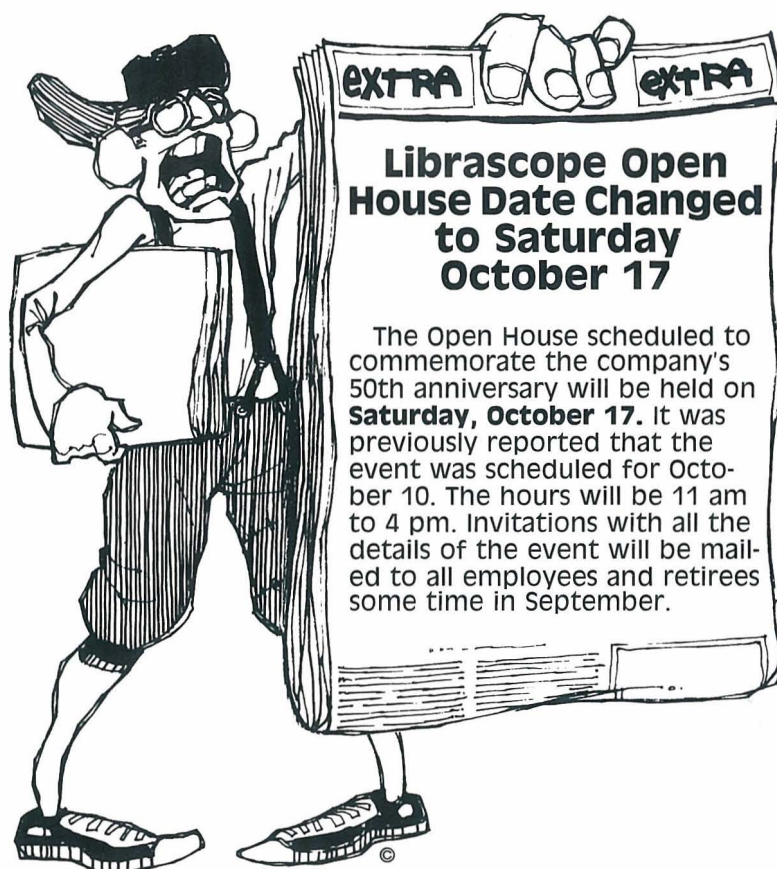
Dr. Clark would use this 5-minute segment of his program to tell his Los Angeles area listeners about the many aspects of being a part of the Librascope 'team'.

The purpose of the program, called, "You and Your Future," was to talk about a company (Librascope) that was a little different in its principles, attitude toward employees, and opportunities. Clark would tell listeners about Librascope employees themselves, the contributions they were making to the community, and their mutual interests. This was information that would have been impossible to relate in a want ad.

In turn, the show paid back rich returns by attracting the kinds of people who would appreciate a company like Librascope.

During one of his broadcasts Clark gave the following advice to listeners using the company name:

- L**ove one another; nothing else is half so important.
- I**magine yourself as you want to be; then act the part!
- B**e interested in others and you will be interesting.
- R**emember there is a right answer to every seeming problem.
- A**lways put what is right before what is expedient.
- S**omething within you is superior to every circumstance.
- C**ontrol your thoughts, for they control your life.
- O**nly the self-centered are lonely or unhappy.
- P**rejudice is being down on something you are not up on.
- E**xpect the best; give thanks for it, and watch what happens!



To Your Good Health . . .

A new 'low impact' aerobic class is scheduled to begin at Librascope on Monday, September 14. The class is coed and will be held every Monday and Wednesday, from 4:15 to 5 pm, in the California Room.

The class is conducted by the Glendale YMCA and the fee is only \$2 per class. You pay as you go and you can join at any time.

The exercises are designed for beginners as well as for the more advanced. You go at your own pace. All you need for the class is a pair of tennis shoes, shorts, t-shirt, or any other loose fitting clothing, and \$2 per class. Exercise mats are provided or you can bring your own.

As a special introductory offer, the first two classes, Monday Sept. 14, and Wednesday, Sept. 16, will be free to all participants.

The human body was designed to move. When it does not receive adequate exercise the following health problems may result: OBESITY, leading to diabetes and hypertension; CARDIOVASCULAR DISEASES, the #1 killer, including hypertension, heart disease and stroke; and OSTEOPOROSIS, fragile bones break easily!

Never make exercise a chore...ENJOY!

Smoking Policy *Continued from page 1*

assigned to the Glendale facility.

If a conflict arises between smokers and non-smokers, an effort will be made to accommodate the interest of both parties. Conflicts arising in specific work locations should be discussed with the immediate supervisor.

"The announcement of the smoking policy is being made in advance of its implementation to provide adequate time for planning separation of smokers and non-smokers where possible, and for the offering of smoking cessation classes to those who may want to break the smoking habit," said Yapp.

"The success of this policy will depend upon the thoughtfulness and consideration of all employees. We are asking for everyone's cooperation in making this policy work. Voluntary compliance will ensure its success."

A smoking cessation class has been scheduled to begin on Tuesday, September 1, from 4 to 6 pm in Bldg. 8, Conf. Rm. 4. The seven week program is only \$12 per person, with the \$12 fee refunded to those who are still not smoking two weeks after the class ends. For class registration, call the Company Nurse, Anita Hagan, on Ext. 1240.

In Memoriam

Melva Matthews
June 29

Edward Douke
July 13

Charlie Cole
July 24

Skip Case
August 10

Scholarships Available For 1989 Graduates



Sons or daughters of Librascope employees who will be completing high school and entering college in **1989** are eligible to compete for scholarships under the annual Singer Company Merit Scholarship Program. The award of each Singer Merit Scholarship is determined individually and can range from \$500 to a maximum of \$2,500 per year for up to four years of college. Scholarship winners will be selected on a competitive basis and without regard to family financial circumstances.

How to Enter . . .

To enter the competition for The Singer Company Merit Scholarships to be awarded in 1989, students who will complete high school requirements and enter college in 1989 should make arrangements with their high school counselors immediately after the beginning of the 1987 school year to take the PSAT/NMSQT test. The test will be given **only** in October 1987 on a date selected by each individual school.

Participation requirements established by the National Merit Scholarship Corporation (NMSC) for entering the competition are explained in the **1987 PSAT/NMSQT Student Bulletin** which will be distributed to students through their schools prior to the qualifying test in October 1987.

How Winners Are Selected . . .

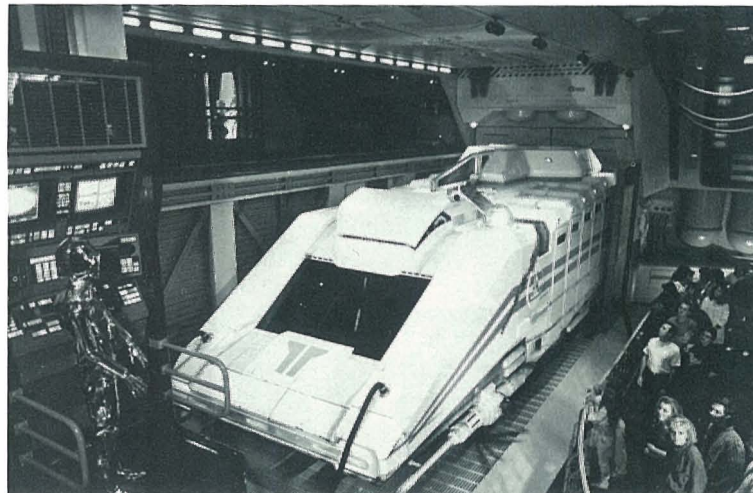
All 1989 Singer Merit Scholarship winners will be chosen by NMSC from among children of Singer employees who qualify as semifinalists and then advance to finalist standing in the 1989 Merit Program. Semifinalists who are designated on the basis of high performance on the PSAT/NMSQT will be notified of their standing through their schools in September 1989, and each will receive a scholarship application to be completed and returned to NMSC. Parental employment information is requested in the application form and the student should enter The Singer Company. This will identify the student to NMSC and assure consideration in the competition for 1989 Singer Merit Scholarships. No other entry form is needed. Semifinalists must meet additional requirements specified by NMSC and must advance to finalist standing in order to be considered for Merit Scholarships. Semifinalists who qualify as finalists will be informed in February 1989.

For complete information on The Singer Company Merit Scholarship Program, contact the Compensation and Benefits Department, Ext. 2132.

Librascope Employees Invited to AUSA Party at Disneyland

Librascope employees, their families and their friends, are invited to attend the annual AUSA (Assoc. of the U. S. Army) special event days at Disneyland at the reduced admission price of only \$12.50 for adults (regular \$20) and \$9.50 for children, ages 3 to 11 (regular \$15), from noon to midnight for any day you select on the following weekends: November 7 & 8; 14 & 15; 21 & 22; and Sunday, Nov. 29.

The ticket price includes free parking and unlimited use of the Magic Kingdom's more than 50 attractions. Tickets are on sale in the Employee Services Office, X-1210.



"Star Tours," Disneyland's latest addition, uses an all-new mode of transportation which will allow guests of the U. S. Army party to live the adventure of a tour of the galaxy, fraught with misadventures. Upon entering this new Tomorrowland attraction, guests will be greeted by the popular "Star Wars" character C-3PO and R2-D2, before they board their starspeeder. "Star Tours" is a joint presentation between The Walt Disney Company and George Lucas.

Security Brief... Wear Your Badge Proudly "In Plain Sight"

According to the Singer Security Manual, Paragraph 1030b, "Badges will be worn in plain sight while employees or visitors are in the Singer facility."

"Complying with the Company badge requirement is mandatory on the part of each employee," said Herb Bock, Security Manager.

"Your badge is your Librascope identification card. The badge quickly identifies you to the person you are talking to and identifies your security clearance at a glance by color coding; e.g., Orange (Secret), Green (Confidential), or Red (No Clearance)."



Plastic Badge Necklaces

For female employees who may have difficulty clipping badges to blouses or dresses, clear plastic necklaces are available. If your hair arrangement prevents slipping the necklace over it, merely open the snap fastener. These necklaces are available at Guard Stations in Bldgs. 3, 8 and 17, or at the Main Guard Station next to the California Room.

Security inspections held by the Government at Librascope every six months include the question, "Are badges properly worn?" An unsatisfactory security rating by the Government can result in the loss and/or cancellation of Government contracts.

With the issuance of the new Company badges, employees are reminded that pursuant to Company security regulations, you may not affix any device, label, pin or other object to your badge.

Magnetic and clear badge holders to fit the new badges are on sale in the Employee Services Office at \$1.25 and 75¢ respectively.



Badges Should Be Worn Above The Waist

Male employees who wear their badges inside a shirt pocket with only the clip on the back showing, defeat the purpose of ready identification. Also badges attached to belts have a tendency to break or warp and thus require replacement.

Libravets



Robert Nielsen
35 Years
Electronic Design
Mass Memories



Tony Noriega
35 Years
Program
Management



Robert Chambers
30 Years
Engineering
Administration



Earl Valdez
25 Years
Contracts



Clay Newell
25 Years
Systems/Design
Displays

NOT PICTURED: 25 Years - Carol Goldthwaite

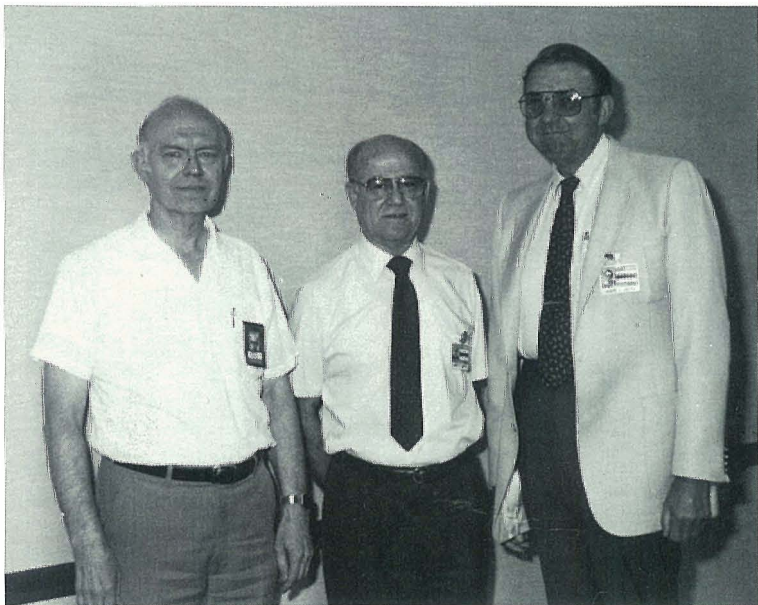
MORE LIBRAVETS:

20 Years — Ronald Davidson, Peter Malinowicz, George Anderson

15 Years — Douglas Hunter, Philip Eklund

10 Years — Arthur Olson, Margaret Grimes, Ronald Hoover, Doreen Hollensteiner, JoAnn Ruzicka, Robert White, Leon Bennett, Diana Rayborne, Helen Ferrari, Abramo Sbicca, John Pekara, Jeffrey Gross, Dave Newcomer, Bertha Martinez, Harold Linnartz, Perry Christensen

retirements

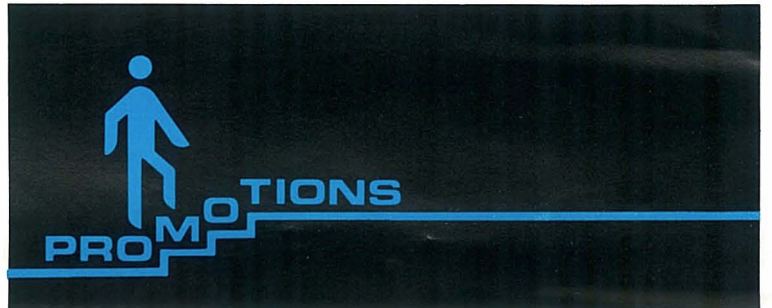


From left, Malcolm Scharer, 28 years, Systems Development, and Lawrey Chapin, 22 years, Systems Engineering, with Jerry Deitz, Vice President, Engineering.

500 Years of Service...



Libravets honored at a recent service award presentation for employees with 25, 30, 35 and 40 years of service are pictured above. The group contributed a total of 500 years of service this year to the Company. Pictured from left, standing, Wesley Thomas, 25 yrs; Bob Chambers, 30 yrs; Bob Megee, 30 yrs; Ken Burton, 30 yrs; Earl Valdez, 25 yrs; Joe Schlegel, 30 yrs; Helen Perez, 35 yrs; Bob McFarlin, 40 yrs; Tony Noriega, 35 yrs; Herb Jacks, 25 yrs; John Alden, 25 yrs; Clay Newell, 25 yrs; and seated, from left, Tony Butyrin, 30 yrs; Marjorie Kelleher, 30 yrs; Helen Esposito, 25 yrs; Nancy Laughlin, 25 yrs; and Bob Nielsen, 35 yrs.



Mark Seamands, from Sr. Electronic Engineering Associate to Engineer; **Victor Cruz**, from Engineer to Packaging Design Engineer; **William Seelig**, from Methods Analyst, Mechanical to Manufacturing Engineer; **Franklin Van Lingen**, from Senior QC Engineer to Manager, Test; **Denise Escobar**, from Department Clerk to Secretary; **Patricia Klohoker**, from Secretary to Tool Follow-Up; **Craig Clark**, from Combat Systems Analyst Associate to Combat Systems Analyst; **Diane Howe**, from Drafter, Engineering to Technician, Computer Aided Manufacturing; **Robert Jashinsky**, from Sr. QC Engineer to Supervisor, Quality Engineering; **Adele Ramirez**, from Department Clerk to Engineering Aide; **Wendy Collins**, from Assistant Technical Programmer to Quality Assurance Analyst, Software; **Elizabeth Misas**, from Mail & Records Clerk to Department Clerk.



Ed Ritts, 14 years, Final Assembly.



Betty Rock, Credit Union, with Helen Ferrari, Manager/Treasurer, Credit Union.



Les Bentley, 42 years, Systems Engineering, with wife Dorothy.