NEW MK 48 CONTRACTS TOP \$11 MILLION

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VOL. 12, NO. 5

Housekeeping Awards to **4 Supervisors**

The Housekeeping Committee made its rounds again early in April, and new Chairman Trent Albizati says they'll be visiting throughout the Glendale plant facilities regularly.

On the housekeeping tour each month a "Guest of the Month" will be invited to ac-company the committee members, Albizati said.

Management Guest

"This month Ray McDonald, Industrial Relations Manager for Librascope Group, was our guest," he added.

Awards for the month of April went to:

"Best Office Area" - Bob Mothersbaugh, supervisor of Spares Provisioning & Packaging Engineering, Logistics, Bldg.

Best Office Area - Manufacturing" - Bill Singleton, super-visor of Scheduling & Records Control, Bldg. 17.

"Best Shop Area" Goldstein, foreman of Model Shop & Tool Room, Bldg. 1.

"Best Assembly Area" - Bob Peterson, assembly foreman, Final Inspection Area, Bldg. 17.

Demerit List

The Committee publishes a list of housekeeping demerits each month, noting areas that need improvement.
"We distribute these to the

supervisors involved together with our announcement of the award-winners," Albizati said.



VIEW MK 48 CHECKOUT — During a recent visit to Librascope, representatives of the U.S. Naval Underwater Weapons Research and Engineering Station, Newport, R. I., toured the Mk 48 Program checkout area. Here, NUWS Technical Director L. F. Risko, left, and Assistant Director G. H. Allen, examine the front panel of a Mk 22 Weapon Simulator. Accompanying the visitors is Mk 48 Program Manager Roy D. Bartlome, center.

Advanced Technology Center

New Contracts Include 1st for Spaceborne Plated Wire Memory

The Advanced Technology Center (ATC), Glendale, has received R & D contracts this year totaling more than \$200,000, Dr. John M. Salzer, ATC Director, announced.

pulsion Laboratory (JPL) - is the first for a low power spaceborne plated wire memory and will include work by the Systems Division, Components Division and the Advanced Technology Center.

Initial Funding

"This contract now in house is the initial funding on this program with additional fund-

One contract - from Jet Pro- ing anticipated during the second half of this year," Salzer said.

A second significant contract received by ATC includes a LIBRACOAT panel develop-ment to be used in the Systems Division OrdAlt (Ordnance Alteration) for the Mk 53.

Other contracts include a passive element thin film study for NASA, a neural analog investigation for the Air Force Office of Scientific Research, a solar cell coating study for EOS (Electro-Optical Services, Inc.), which, in turn, is supported for this work by NASA/Ames, and a critical survey of ceramic thin film devices for the Air Force.

Fire Control Development Speeded Up

The Systems Division has been awarded new and follow-on fire control system contracts in excess of \$11 million by the U.S. Navy Bureau of Weapons, it was announced by Richard W. Lee, Librascope President.

The contracts - associated with the Mk 48 Program - call for additional Mk 48 Prototype Fire Control equipment, systems engineering services and the design and fabrication of support equipment for the Navy's expanding weapon system program.

Because of the importance of this weapon system to the national defense effort, the Navy has accelerated the program's plans and schedules, according to Roy D. Bartlome, Mk 48 Program Manager.

New Emphasis

Recent statements by Navy Department officials indicated increased emphasis on performance requirements of the entire underwater weapon system. The fire control requirements call for extensive design modification of

Continued on Page 5

News Flash:

GPI Names Kelly as Executive Vice Pres.

Tarrytown, N. Y. - Lloyd L. elly, president of Link Group Kelly, president of Link Group since 1963, was elected Executive Vice President and General Manof General Precision, Inc.

(GPI). This is a new position. During the three years in which Kelly headed Link Group, the company experienced major growth. He started with Link in 1945 and advanced from Educa-tion Director to General Sales Manager, Vice Pres. of Sales and Executive Vice President.

GPI also announced the election of Robert J. Campbell to President of Link Group and James M. McGowan to Vice Pres. & General Mgr. of Link's Systems Division. Campbell formerly was Vice Pres. of Marketing. Mc-Gowan was Vice Pres., Program Management.

Donors Give 107 Pints to Blood Bank

The American Red Cross Bloodmobile visited Librascope April 22, seeking donors to replenish the Librascope Blood Bank. They weren't disappointed.

Some 134 employees rolled up their sleeves and walked to the Bloodmobile in Griffith

Manor Park to volunteer.

In a short 4½-hour period, employees donated 107 pints of blood, four pints less than when the Bloodmobile visited here last October, but 32 more than

a year ago.
"Unfortunately, 27 prospec-

tive donors were rejected due to said Steve Jackman, illness." Blood Bank Chairman for the Precisioneers. "But, for the second straight time, we went over the 100-pint mark."

The American Red Cross acts as the collection agency and depository for the blood. Every pint donated by employees is credited for use by Librascope

A special Blood Bank pictorial, featuring photographs of some of the donors, will appear in next month's Librazette.



DONORS SIGN-IN - Employees turned out 134-strong in answer to the plea for blood donations to replenish the Librascope Blood Bank. Here, some of the donors line up to register. The drive netted 107 pints of blood. Additional photos will appear in next month's

Dubbello Zero

Buzz Newman Explains 'Estate Plan'

New Way to Boost Savings Offered by Credit Union

Thrift-minded members are starting to take advantage of the Librascope Employees Credit Union's new Estate Loan Plan, according to E. Buzz Newman, credit union president.

whereby members can add to their savings and at the same time vastly increase their benefits by taking full advantage of the LECU's two insurance policies," Newman said.

Borrow to Save

Newman explained that un-Estate Loan procedure, members merely borrow money from the credit union at low

THEIR NEW JOBS

GROUP - Ann M. Sutten, Ken G. Thornton, Ruth Gral-nick, William H. Ashley, Steve Sperber.

SYSTEMS DIVISION - John G. Wentworth, Stuart C. Berman, Barney S. Early, Ralph Olivarez, Robert L. Odell, Arthur Robledo, Martha Hajduk, Charles A. Bell, Stanley E. Huff, John O. Bayer, Dorothy M. Marvin, Jeanine M. West, Bon-Wieser, Irma Galloway, Colene J. Fido, Patricia C. Slater, Gladys Kaiser, Eleanor R. Hutchins.

ADVANCED TECH-NOLOGY CENTER - Carl E. Sutton.

COMPONENTS DIVISION Patricia E. Brandle, Paul A. LaFond, Hampton Anderson, William L. Paterson, Presley M. Hite, Keisuke Yamada, Connie J. Bomar, Linda C. Morlacci, Carol Jean Tyhurst, Francene M. Haworth, Mercedes B. Brunswick, Penny Jayne Chadock, Patricia L. Cox, Ruth S. Hernandez, Henrietta P. Tait, William H. Wright, Michael A. Wycuff, Louise V. Evans, Patrick B. Evans, Patrick B. Clifford, Thomas A. Cooksey, Michael C. Gaines, Yu-Sheng Hsu, Francis B. Marshall, Charlie T. Best.



HAPPY DAY-Jim Gaines, a veteran of 14 years of service at Librascope, cuts himself a slice of cake during his recent retirement party. Gaines retired last month and plans to make his home in Oregon.

"The plan provides a means interest rates and put it into savings shares where it not only earns dividends, but is matched by insurance.

> The interest rate for a share loan is just 7/10 of one percent on the unpaid balance, he said. Savings may draw dividends at the rate of 41/2-5% annually and two insurance plans (Loan Protection Insurance and Life Savings Insurance) are provided by the credit union at no extra cost to members.

Cites Example

"For example," said Newman, "let's say you already have \$250 in LECU savings shares. You arrange a loan for another \$250, repayable in seven months at \$36.75 per month, and put the full amount into savings.

"This brings your total savings to \$500," he said.

At the end of the loan payoff

period (seven months), the mem-ber has paid only about \$7.50 in interest. Meanwhile, the additional \$250 savings has accumulated some \$6 in dividends.

"So, to double his savings program has cost the member only a dollar and a half," Newman

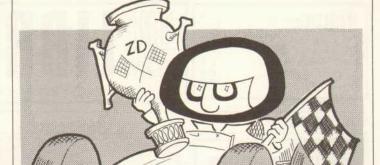
Full Protection

During the entire period, he added, both the loan and the savings shares have been protected by the two insurance policies.

In the event of the member's death or total disability, Loan Protection Insurance would have paid off the loan. Life Savings Insurance would have paid the member's beneficiaries an additional \$500 in the event of the member's death.

"Where could you get more for \$1.50?" Newman asked.

Additional information about the Estate Loan Plan is available at the Librascope Employees Credit Union office.



ALWAYS A WINNER — In observance of Memorial Day, Agent Dubbello Zero dons a hard hat, steps into the cockpit of a racing car and puts forth a winning effort. Says Dubbello: "You're always a winner when you practice ZD."

Corlyn Kent to USIS Post in Phillipines

Art Kent's daughter, Corlyn, who recently was selected for training with the United States Information Service (USIS), has reported for duty in Baguio City, Phillipine Islands.

Kent, a material order processor in Bldg. 17, proudly tells how his daughter completed the USIS training course in nearrecord time.

'The usual training period is six months long," Kent said.
"But Corlyn completed the course within six weeks."

Corlyn left for the Phillipines April 9. She departed L.A. International and flew to Hawaii. After a 12-hour stopover (which she spent basking on Wakiki Beach) she continued on to Manila.

"Lost Easter"

"Somewhere along the way I lost Easter Sunday," she said in a letter to her family.

During the flight from Hawaii to Manila the plane crossed the International Date Line, thus "losing" a day . . . Easter Sun-

Corlyn writes that the weather is wonderful, the scenery similar to our own Lake Tahoe and Lake Arrowhead areas. The Filipinos are friendly and polite, her work interesting.

Blondes are Rare

But blondes are a rarity in the Phillipines and Corlyn, who is rather tall, very fair skinned and extremely blonde, says she's having a hard time getting used to being stared at.

Art Kent says anyone who wishes may write to Corlyn for first-hand information about the Phillipines. "Just stop by Bldg. 17 or give me a call. I'll be glad to give you her address,' said.

🚇 Libra Vets

Ten Libravets celebrate service anniversaries during the month of May, 1966. Their names and service dates are:

20 Years

Walter M. Lebert, May 6

15 Years

Stephen E. Jackman, May 7 Lloyd E. McConnell, May 28

10 Years

William H. Miller, May 7 George L. Whiteford, May 10 Jerome L. Deitz, May 14 George W. Seevers, May 19

5 Years

Thomas J. Gainty, May 8 Peter W. Richards, May 15 Mable O. Nelson, May 29

Precisioneers Personals

Thanks . .

. . to all of you. It's hard to find words nice enough to even half express the thanks each of you deserves for your thoughtfulness. THE FLOYDS.

We wish to thank each and every one of you for remembering Alma Lus in the hospital when she was so critically ill. She just loves the little duck. We wish we could thank each one personally. ALMA LUS and THE LAURIDSENS.

Dear Precisioneers,

Your flowers brought a bit of Springtime into my hospital room. I appreciate your thoughtfulness. Thank you to the entire group. TERRY BOWDEN.

I'm enjoying my decks of cards so much. What a thoughtful way you have in everything you do. C. L. GREENWOOD.

To the Precisioneers

The family of NORVAL F. BASAKER gratefully acknowledges your kind expression of sympathy.

The Flowers .

. were lovely and so was the thought. I know not how to express my true "thanks" to you grand

CARRIE MOTT SIMS AND

THE LIBRAZETTE

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....Earl W. Erickson Editor ...

Contributing Reporters: Bldg. 1 — Bill Bietsch, Ext. 1222; Bldg. 2 — Donna Williams, Ext. 1126; Bldg. 5 — Dave Gardner, Ext. 1564; Bldg. 15 — Herb Bock, Ext. 1465; Bldg. 16 — Bob Laperle, Ext. 1803; Bldg. 17 — Champ Vance, Ext. 1831; Washington Sales Office — Carol Cogar, and Optics Technology Center — Shirlee Murray.

Art Services: Jim Norwood, Roy Brown and Andy Cook; Cartoonist: John Erickson. Photos: Jim Avera and Bill Holst. Printing: Librascope.

Sperber Named New Industrial Relations Rep

Steve Sperber, a former Vocational Counseling Psychologist for the Veterans Administration and Industrial Relations staff member at Scientific Data Systems, has joined Librascope as Industrial Relations Representative.

The appointment was announced this week by Ray R. McDonald, Industrial Relations Manager for Librascope Group.

A native of Brooklyn, N. Y., Sperber moved to Southern California in the Summer of 1963. "I guess you could say I sort of followed the Dodgers to Los Angeles," he said.

Attended SC

He was graduated with a BA degree in Psychology at New York University (NYU) spent his first year on the West Coast earning a Master's Degree in Industrial Relations at the University of Southern Cali-

Upon completion of his studies he was appointed to the counseling position at the VA Hospital in Long Beach. He later moved to SDS, Santa Monica, and served there until coming to Librascope

Broad Responsibilities

Sperber will have a broad range of responsibilities in Librascope's Industrial Relations Department. Reporting to Mc-Donald, he will work in conjunction with the Wage and Salary, Training and Employ-ment. His initial assignment will be to work under direction of Frank Yapp, Compensation Manager.

The new Industrial Relations Rep currently is attending night classes at SC, working toward a Ph.D. in Industrial Psychology. His wife, Joyce, will graduate with a BA degree at San Fernando Valley State College this year and begin training for

a teaching position.

Another 3-Day Weekend Ahead

Librascope employees will have an opportunity to enjoy another three-day weekend this month as the company observes the Memorial Day holiday on Monday, May 30.

The year 1966 is proving to be a real bonus year where holidays are concerned. Every regularly scheduled holiday, with the exception of Thanksgiving Day (Thursday, Nov. 24), falls on a Friday, Saturday or Monday, thus pro-

viding a three-day weekend. In the case of Thanksgiving Day, Librascope people get an added bonus – a fourday holiday - as the company observes Friday, Nov. 25, as its annual "Floating Holiday."



LEE ON ZD TOUR — Richard W. Lee, center, Librascope President, toured the plant last week with Zero Defects Program Chairman Jack Pelamati, left, and ZD Performance Evaluation Committee Chairman Pat McMann, not pictured. As illustrated here, Lee paused often to discuss Zero Defects progress with employees and supervisors.

Quarterly Award Winners Honored at ZD Luncheons

Some 40 Librascope employees recently were luncheon guests of the Company at the Smoke House Restaurant in Toluca Lake as the Zero Defects Awards Committee honored the first groups to win quarterly ZD

First-Ouarter 1966 ZD awards went to Pete Maimone and his Art Service Department, Systems Division, and Norm Vickers' Brush Block Assembly Department, Components Divi-

Also honored was Vaughn



VICKERS

MAIMONE

Gillette, Systems Division Purchasing, the first Quarterly Roadblock Removal Award din-

Added Recognition

The luncheons marked the beginning of a new Zero Defects recognition program which provides both quarterly and semi-annual awards in addition to the normal monthly award plaques.

Maimone's group won the ZD plaque for January and was a Blue Ribbon runner-up in March.



Goal of the Art Services Department was to reduce errors on art illustrations to no more than two error per il-Iustration. At the conclusion of this goal ef-

GILLETTE fort the artists were averaging only 0.4 errors per illustration.

Department won the ZD plaque in January and again in March. Their goal was to reduce and maintain brush block rejections at 5% or less. Under Vickers' leadership, the department lowered the rejection rate to 3.5% (see related story on page seven).

Roadblock Removal

Gillette received the quarterly award for a Roadblock Removal idea concerning Material Review Board actions.

He recommended having a purchasing department repre-sentative in attendance during MrB actions, thus greatly reducing the turn around time and saving paperwork when rejected parts were sent back to the vendor. His idea cuts as much as three days off the previous method.

The First-Quarter 1966 winners will compete with Second-Quarter winners for the first semi-annual awards - \$25 Savings Bonds - which will be presented in July.

Each member of the semiannual award-winning groups will receive a \$25 bond.

COST-CUTTING TOPS TARGET AGAIN IN MARCH

A look at the Cost Reduction/Cost Prevention records for the month of March shows that Librascope people are becoming experts at cost-cutting, according to Robert H. Smith, coordinator for the program.

During March some \$143,128 in savings was recorded, topping the monthly goal by more than \$3,000.

Total cost savings to date (January - February - March) is \$735,642, nearly \$200,000 over the target for the first three months of 1966.

Savings target for the year is The Brush Block Assembly \$1.8 million.

Cliff Dahl is **Back After 10** Months at Link

Clifford Dahl, Librascope Plant Engineer who has been on loan to GPI's Link Group, Binghampton, N. Y. for the past 10 months, returned to Librascope April 11.

Dahl went to Link in June, 1965, to supervise construction of a \$1.8 million administration and engineering building. The building now is completed and Dahl



supervised the move-in before returning to California late in March.

He and Mrs. Dahl took a two-week vacation trip to Hawaii before Dahl reported back to work at the Glendale facility.

Good to be Home

"It's sure good to be home," Dahl said. "I'm not much of a cold weather man and I certainly missed the sunshine and balmy temperatures of Southem California.'

A Libravet with 23½ years of service, he has worked his entire career at Librascope with the exception of the 10-month job for Link Group.

Supervisory Post For Ernest Pool

Ernest T. Pool, Jr., former Project Engineer, Systems Engineering, for the Mk 48 Program, has been promoted to Supervisor of Engineering Analysis.

Pool reports to Bud Biloon, manager of the Analysis Section, Systems Division Engineering Department.



In his new supervisory capacity, Pool will further the advanced study and new business goals in support of Advanced Programs. He also will retain the

POOL responsibility for technical direction of the Mk 48 Program

system analysis test and evaluation task, which is under the direction of the Mk 48 Engineering project office.

Started With Mk 48

Pool started his career with Librascope a little over five years ago and worked on the Mk 48 Program when that project was in its infancy, from original concept to design.

He was graduated with a BS degree in Physics at the University of California at Berkely in 1957 and later studied Engineering Psychology in the Graduate Division of George Washington U., Washington, D. C.



M. Center Vice Pres. & Gen. Mgr. Systems Division



R. D. Bartlome Manager Mk 48 Program



D. L. Simon Assistant Mgr.



V. J. Lombardo Mk 48 Contract Admin.



R. A. Chambers Mk 48 Engineering Mgr.



J. O. Pack Mk 48 Logistics Mgr.



A. J. Pankratz Mk 48 DDAS Mg

Many Systems Division Elements Involved

Busy Months Ahead as Mk 48 Groon

Men of the United States Navy will be a familiar sight at Librascope again this year as fire control equipment manufacturing increases and fleet personnel begin ordnance training courses at the Glendale facility.

This means a major step-up in MK 48 Program activities. New systems must be designed and fabricated, prototypes built. In addition, Librascope fire control experts are to modify many of the Navy's existing fire control systems to make them compatible to the new weapon system requirements.

Complex Task

The task is loaded with technical problems . . . problems so complex that they cannot be handled aboard ship. As a result, some fire control equipment must be removed from the ships and brought to the Systems Division manufacturing department for modifications.

At the same time, Navy fleet ordnance personnel will undergo weeks of extensive operator and maintenance training at Librascope in order to keep abreast of the changes.

Work on the new weapon system installation designs already is under way. Some of the installations start shortly and the first fleet personnel training courses begin early in June. Additional courses start in October and will continue on a sustained basis into 1968.

Important to Defense

Librascope's top management is taking an active part in the program (see related story on page one) and attend monthly meetings with Navy Department officials.

"It's a tremendous job and a great responsibility," said Maurice Center, Librascope Vice President and Systems Division Manager.

"The success of this program is important not only to our country's defense effort, but to Librascope and each of us individually," Center said.

Key Personnel

Direction and control of the Mk 48 Program is provided by Roy D. Bartlome, Program Manager with assistance by D. Lee Simon, Assistant Program Manager.

Vincent J. Lombardo and Jack Flynn handle contract administration, Kenneth D. Burton is Mk 48 Staff Assistant and Jack B. Bromley provides financial control and reporting.

"Due to the complexity of the program," Bartlome said, "Two men, Dick O'Connor and Lyle Crawford, have been assigned to posts on the East Coast to provide technical and administrative liaison with the Navy."

Navy technical direction is provided by the U.S. Naval Underwater Weapons Research and Engineering Station, Newport, Rhode Island. Daily liaison and coordination is required with NUWS Technical Director L. F. Risko and Assistant Director G. H. Allen.

The basic fire control equipment and system design, installation, plus documentation and evaluation efforts are directed by Robert A. Chambers, Mk 48 Engineering Manager.

Limited Space

"The new designs take into consideration shipboard space limitations," said Chambers, "and we've made extensive use of new micro-electronic flat packs in this new equipment."

The flat packs, sometimes called "bugs," are micro-miniaturized electronic packages. Each bug is about the size of your fingernail and contains about 20 separate components—resistors, diodes, transistors, etc.

Broad use of such miniaturization drastically reduces the over all size of the new systems.

"This program marks the first major application of new microelectronic technology in the Navy's fire control systems," Chambers said.

Under the new development program, Librascope will supervise shipboard installations. Chambers' group already is working on plans for the initial installations with lead shipyards.

Specific maintainability and reliability goals have been established. These will be demonstrated and measured during tests conducted aboard ship. In addition, specific hardware design and fabrication — to support laboratory and "at sea" equipment evaluation programs — has begun.

Special Requirements
These include the require-



O'CONNOR



NOR BUCHANAN



CRAWFORD





FLYNN

ments of problem generation systems, data recording system and several general purposition computers. Some of the computers have been ordered Librascope and are schedule for delivery later this year.

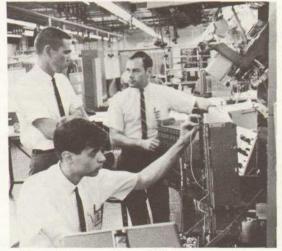
Logistic support for the program includes a broad spectru of functions directed by Jess Pack, Mk 48 Logistics Manage

Fleet training materials a being prepared and special programs readied for the in-pla training of Navy personnel. No and modified equipment har books (OP's), along with FAT QAP's, Specs and other put cations, already are in proce according to Pack.

A very active Value Engineing/Product Engineering/Mar facturing liaison is directed Frank T. Copple, Mk 48 Product Engineering Manager. If 48 Product Assurance Manages Leon H. Hachey directs the liability and quality control equirements.

Other associated activities clude the design and fabricati of a complex laboratory evalution system to be installed





COVER CASTING — In the photo at left, Gary Wynn, mill machinist, machines a Mk 22 Weapon Simulator cover casting. More and more Machine Shop work is being devoted to such Mk 48 Program projects. CHECKOUT — In photo at right, Phillip Kibby, left, Project Engineer, discusses final checkout of new Mk 48 equipment with Engineer Ron Kenny, while Technician Ray Fitzherbert, foreground, checks internal components.



F. T. Copple Mk 48 Product Engineering Mgr.



L. E. Hachey Mk 48 Product Assurance Mgr.



G. H. Klein NUWS Lab Program Mgr.



K. D. Burton Mk 48 Staff Assistant

is for 'Max' Effort

NUWS (Naval Underwater Research and Engineering Station) to evaluate the weapon system. This effort is directed by G. Harold Klein, NUWS Lab Program Manager.

For 'At Sea' Tests

A. J. Pankratz, DDAS Program Manager, is directing the Digital Data Acquisition System design and fabrication, a system that will be used during the Navy's evaluations both at the NUWS laboratory and during the "at sea" evaluations.

Cathy Buchanan, secretary to Mk 48 Program Manager, is the program's "Girl Friday," according to Bartlome.

"Cathy has the responsibility for coordinating a voluminous amount of correspondence and technical documentation. At the same time serves as receptionist and reservations specialist for a continuous stream of Government personnel who visit Librascope on Mk 48 Program liaison trips," Bartlome said.

Active Support

All elements of the rapidly expanding program are actively supported by the functional line organizations of the Systems Division, said Division Manager Maurice Center.

"To achieve the required technical excellence demanded by this weapon system program, we must utilize the full technical capabilities of our division," he said.

Center indicated that design reviews are being conducted by technical specialists from the various line organizations. Design planning for the Navy's technical evaluation, for example, is being accomplished by the Engineering Analysis Group. A large part of the NUWS Laboratory and DDAS phases are being handled by elements of the Engineering Department, directed by Jerry L. Deitz, Chief Engineer.

"In many cases, manufacturing procedures have been modified to accommodate the new Mk 48 Fire Control equipment requirements," said Harlan Buseth, Operations Manager for the Systems Division.

"Special procedures, processes and techniques are being developed," he said.

Checkout and adjustment efforts on the new fire control system models are in process and fabrication of the initial prototypes will be completed soon.

Future Production

"We anticipate that the Navy will initiate procurement of production quantities of this new equipment in the near future," said Bartlome.

All in all, it looks like there are many busy months ahead for the growing Mk 48 Program and apparently, more and more Systems Division elements will get into the act before the project is completed.

In summing up the importance of the development program. Maurice Center said:

"Only through the cooperative efforts of all Division elements can this program be completed and the Mk 48 Weapon successfully deployed by the Navy."



NAVY VISITORS — NUWS Technical Director L. F. Risko and Assistant Director G. H. Allen, (second and third from right), of the Naval Underwater Weapons Research & Engineering Station, view a Mk 48 Program "Attack Director" with Mk 48 personnel Vince Lombardo and Program Manager Roy Bartlome, left, and Lee Simon, extreme right.

Librascope's New Disc-Memories Shown at Computer Conference

Three new disc-memory systems with storage capacities ranging from 1 to 24-million bits were introduced by Librascope at the Spring Joint Computer Conference held in Boston, Mass.

Two of the systems, the L207 and the L210 are compact high-speed models weighing 11 and 35 pounds, respectively, with one to two million bits of storage capacity.

The third, Model L416, is a high performance disc-memory system utilizing integrated circuitry and having a capacity in excess of 24 million bits.

Militarized Model

The 11-pound L207 is a militarized model with a 6½ inch disc designed to provide high reliability performance in extreme environments, meeting or exceeding the requirements of Mil-E-5400 G Class II.

The memory's small size (less than ½-cubic-foot), light weight, resistance to shock, vibration, temperature extremes and altitude, make it useful for almost any naval, aircraft, spacecraft and mobile field-data system.

Economy Package

The L210 is a line of lowcost memories offering greater flexibility in choice of access times, bit capacities and recording heads.

Each L210 system utilizes a single magnetic disc, 10 inches in diameter, in a compact package that measures less than one cubic foot and weighs only 35 pounds. Discs rotate at 1200, 1800 or 3600 rpm, affording access times of 8, 17 or 25 milleseconds.

Available in 15 off-the-shelf models, the L210 provides the

Mk 48 Speed-Up

Continued from Page 1

several existing fire control systems in addition to design of new equipment.

"All elements will be designed to achieve levels of performance, reliability and maintainability that far exceed those of present Navy weapon systems," Bartlome said.

Work Already Begun

To achieve these objectives, the Navy has established a broad development program with Librascope as the Fire Control prime contractor. Development models and prototypes have already been designed and fabricated and currently are in final adjustment and checkout stages. These first models will be used in a sophisticated evaluation program.

"The evaluations will include tests at Librascope, evaluation at the U.S. Naval Underwater Research and Engineering Station (NUWS), and finally, a complete 'At Sea' technical evaluation," said Bartlome.

Two of the systems, the L207 user with a virtually customd the L210 are compact higheed models weighing 11 and price.

Integrated Circuits

Librascope's new Model L416 is part of the Series L400 Magnetic Disc-Memory Systems. The use of integrated circuits which are packaged and mounted right on the head-mounting plate, provides the compactness and reliability necessary to meet the memory's high performance requirements.

The L416 utilizes both sides of two 16-inch magnetic discs to obtain its more than 24-million-bits capacity. It can be used as a main storage unit, for buffer storage or to supplement other memories.

Dave Cox Named Toastmaster 'Best Speaker'

A speech entitled "We Are Becoming Obsolete" won Best Speaker honors for Dave Cox at the April 20 meeting of Librascope Toastmasters Club No. 1978.

The meeting, held at the Old Town Inn, Burbank, was attended by 11 members and 5 guests.

Four of the guests — John Clemesha, Lloyd Jensen, John Sandlin and Steve Wong — were attending a Toastmaster meeting for the first time. It was the third meeting for guest Bill Cook.

A talk by Ted Lewis won the Runner-up Best Speaker award. Honors also went to Joe Freiberg who was adjudged Best Table Topics, Best Evaluator and tied with Wayne Strong for Most Enthusiastic.

Bill Jordan won the Boo-Boo award.

Librascope Toastmasters meet the first and third Wednesdays of each month. Employees interested in joining the club are invited to contact Herb Meyer, ext. 1206.

Al Germano Speaks At Optimist Club

Some 60 members of the Glendale Optimist Club met April 28 to hear a talk on Anti-Submarine Warfare by Al Germano, Systems Division Marketing Manager.

Germano was guest speaker at the Optimist Club's breakfast meeting at the Glendale YWCA.

Using viewgraphs to illustrate his talk, Germano spoke at length about ASW and Librascope's part in the National Defense effort.

5,000 Hours Under The Sea

"I yelled as loud as I could into the water and banged my air tanks with the crowbar. Three of the big Blue Sharks turned away ... but the fourth kept coming. There was no escape. All I could do was grip the crowbar tighter and wait ... "

Harry Neff, engineering writer respect for the sea and the in Librascope's Publications Section, tells a story of the wonders beneath the sea in excited tones and he speaks with the kind of knowledge that only comes from experience.

Neff is a SCUBA (Self-Contained - Underwater - Breathing -Apparatus) diver in his spare

A member of the Santa Monica Bluefins SCUBA-diving club, he has spent nearly every weekend of the past 11 years underwater and soon will have logged 5,000 hours of diving time.

But even with that kind of experience, Neff, like most SCUBA-divers, has a profound creatures that live there.

Dangerous Dive

Once, he explained, while diving near Catalina, Neff and his dive partner became sepa-rated while searching the hulk of a sunken ship. While prying at the wreckage with a crowbar, Neff sensed something akin to danger, looked up and saw four large Blue Sharks heading straight for him.

"Blues are reportedly among the more dangerous sharks," he "And it was morning breakfast time for most fish so I became more and more apprehensive as they came steadtimes frightens sharks, I pulled off my mouthpiece and yelled into the water as loud as I could. At the same time I banged my air tanks with the crowbar. Three of the Blues turned away ... but the fourth kept coming. No Escape "There was no time to escape,

"Knowing that noise some-

no place to hide. All I could do was grip the crowbar tighter and wait," Neff said.

The shark moved in cautiously at first, circled Neff several times, then, apparently thinking the diver was defenseless, attacked.

"I waited until the last possible instant, then threw myself out of the path of the shark's gaping jaws and lashed out with the crowbar, striking him on the nose as he sped past.'

The shock of the blow seemed to surprise the Blue. It hesitated momentarily and began to circle once again.

A Lucky Blow

Neff knew the punch-in-thenose he gave the shark was a lucky blow and that he couldn't be sure of being that lucky again. He knew that somehow he had to frighten the animal

Taking the initiative, I headed straight for the shark, threshing my arms and legs through the water, yelling and screaming for all I was worth," Neff said.

"Luckily, my strategy worked. The shark went off to find a less troublesome breakfast.'

The mild-mannered Librascope engineering-writer tells this story with little emotion. This is not to say he's immune to the dangers of life beneath the sea, but he does approach them with a knowledge and confidence born of many years of training and practice of underwater safety.

Valuable Lesson
"I'm no hero," says Neff. "The incident with the Blue Shark was frightening. But it also served as a valuable lesson."

He explained that members of the Bluefins club always dive

in pairs. This serves a double purpose: two men can work better at underwater salvage and lobster gathering, but more important, it is much safer to have a buddy along if one diver gets into trouble.

"I learned the value of this when the shark caught me by surprise. It's possible that the Blue might not have attacked if my partner and I had been together.

"I also added to my knowledge of the habits of sharks. For example, some people foolishly claim a shark will not at-tack a man unless he appears helpless or hurt. This is non-sense. Any SCUBA-diver will tell you . . . and my experience is further proof . . . that a hungry shark will attack almost anything it's big enough to tackle."

Educational Pastime

If you ask Neff why he participates in such a dangerous hobby, he'll quickly assure you that SCUBA-diving is no more dangerous than other sports and that prowling around underwater is more of an education than a hobby anyway.

"True, I dive because I enjoy it. It's fun. But even more important," he said, "I'm get-ting a valuable education in Marine Biology and Archae-ology through the continued study of undersea life and the search for sunken artifacts.'

To Neff, this oceanographic education has become almost a way of life. He has gone as deep as 235 feet (approaching the limits for compressed air) to study the multitude of plants and animals that live at various depths.

Plantlife can be especially beautiful on a bright, sunlit day, he said.

The sunshine filters down to the bottom and seems to bathe the ocean floor with a strange vellow-green light. Plants and flowers, some brilliantly colored, flash and gleam as the light changes. And occasionally, a brightly-hued fish swims by, adding to the colors of the

Continued on Page 8



" . . . the sunshine filters down to the bottom and seems to bathe the ocean floor with a strange yellow-green light."



"... and occasionally, brightly-hued fish swim by, adding to the colors of the underseascape."

Underwater photos by Dave Dean

Assembly Groups Win March ZD Honors

Assembly group personnel walked off with all the Zero Defects monthly awards this time and one of the winning groups was a repeat winner.

The Systems Division award and ZD plaque for March went to Gerald Henshaw's Circuit Board Assembly Department. In the Components Division, Norm Vickers' Brush Block Assembly Department won the plaque for the second time.

Vickers' group also won the monthly award for January and was named the Components Division quarterly award winner (see story on page three).

Roadblock Removal

The March Roadblock Removal award and plaque went to Suzanna Kovalchik, production wireman — lead, Systems Division final assembly area, for her idea for a fast and simple method of identifying the numerous crimping tools, lugs, pins and removal tools used in production.

Both winning groups exceeded their ZD goals.

Henshaw's group set out to

Henshaw's group set out to increase productivity from 65% to 80% and during the five weeks prior to the award, averaged 80.7%.

Brush Block Assembly's goal was to reduce and maintain Brush Block rejections at 5% or less. For eight weeks preceding the award the rejections averaged 3.5%.

Runners-Up

Blue Ribbon Runner-Up awards for March went to Pete Maimone's Art Services Department, a previous monthly win-

Stock Dividends Declared by GPE

Tarrytown, N. Y. — A dividend of 30 cents a share on General Precision Equipment Corporation common stock has been announced by the Board of Directors.

The dividend is payable June 15, 1966 to stockholders of record on May 18, 1966, the Corporation announced.

The Board also declared a quarterly dividend of 40 cents per share on GPE \$1.60 Cumulative Convertible Preference Stock, payable June 15 to stockholders of record on May 18.

As previously reported, a quarterly dividend of \$1.18% on the \$4.75 Cumulative Preferred Stock, is payable June 15 to stockholders of record May 31.

An additional dividend of \$1.18% on the \$4.75 Cumulative Preferred, has been declared payable September 15, 1966 to stockholders of record on August 31, 1966, the directors said.

ner and Systems Division quarterly award winner; Publication Production, headed by Paul Kane, and Reproduction Services, headed by Bob McEwen.

TOP RIGHT — Suzanna Kovalchik, Roadblock Removal award winner for March, receives the winning RR plaque from Maurice Center, Vice President and Systems Division General Manager. Looking on are, left, Bob Peterson, Assembly Foreman and the RR winner's supervisor, and right, Superintendent of Production John Blake.

RIGHT — Maurice Center, Librascope Vice President and Systems Division General Manager, third from left, takes time out during the recent ZD Quarterly Award luncheon to congratulate the Systems Division winners. Seen left to right are Jim Norwood of the winning Art Services Department; Vaughn Gillete, Purchasing, Roadblock Removal winner; Center; Dick Wilson, Joe Prado, John Guarino and John Erickson, of Art Services.







A R-R-R-REPEATER — The Components Division's Brush Block Assembly group repeated as March winners of the monthly ZD award plaque. The group also won the award in January. Left to right, front row, are Peggy Lopez, Angie Argentina, David Chavez, Norm Vickers, foreman, George H. Bradley, Components Division manager, Dolly McLaughlin and LaVerne Petsch. Second row, left to right—Ray Johnson, (Vice President & Treasurer, Librascope Group), Jackie Hoehnke, Margaret Davis, Fay Partee, Louise Baker and Jack Pelamati, ZD Program Chairman. Third row, left to right — John Sandlin, Manufacturing Manager, Sarah Moore, Cel Morales, Jan Brovelli, Francis Cutter, JaNien Milhorn, Ann Webb, Adeline Golden, Helen Lisowski and Louise Owens.



SYSTEMS DIVISION WINNERS — Members of the Circuit Board Assembly Department's ZD award-winning group are: Front row, left to right — Darlene Kent, Norma Babcock, Vi Furman, Helen Roberts, Cora Rehill, Charlotte Webberson, Evelyn Emberling, Ida Tripoli and Toni Kirham. Maurice Center, Systems Division General Manager, presents the plaque to Gerald Henshaw, Circuit Board Assembly foreman. Top row, left to right — Steve Jackman, John Dahlgren, Al Lis, Alice Gardner, Mary Walters, Louise Collaraffi, Vi Brey, Betty Gerlack, Sophi Myslicke, Sue Polizzo, Eunice Larimor, Lois Somers, Betty Beavers, Evelyn McDonald, Lois Cain, Alberta Davis, Ora Lee Price, Sidney L. Briggs, Librascope Group Vice President — Administration, Lloyd Somerfield and John Blake. Not pictured—Mamie Fickler, Shirley Edwards, Twila Bilger and Lucille Spitza.

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THE LIBRAZETTE

MAY, 1966

Precisioneers Reps Attend Recreation Council Confab

Mr. & Mrs. Steve Jackman, Mr. & Mrs. Fred Killips and Earl Erickson, Librazette Editor, represented the Precision-eers at a recent dinner-conference of the Associated Indus-trial Recreation Council (AIRC) in Burbank

More than 100 representatives of management and em-

Summer League **Bowling to** Start May 24

The Librascope Summer Bowling League gets under way Tuesday, May 24, at Grand Central Bowl, it was announced this week by E. Buzz Newman, league president.

This will be a mixed handicap league with four or fivemember teams, depending on the turnout," Newman said.

In a mixed league, fourmember teams consist of two men and two women, five-member teams are either three men and two women or three women and two men.

All Employees

The league is open to all Librascope employees, their families and friends, according to Newman.

"In order to insure evenly rated teams, we can't guarantee team entries," he said. "But we can promise that a husband and wife can bowl on the same team if they wish."

League play begins at 6 p.m. on the May 24 date.

Employees interested in signing up for the Summer Bowling League are urged to contact Buzz Newman, ext. 1032, or Pat Korecky, ext. 1558, as soon as possible.

Whoops!

In last month's Librazette story about Harry Callaghan's baseball predictions, Callaghan was quoted as saying the Dodgers would finish no higher than fifth place even if Koufax and Drysdale signed their 1966 contracts. This statement was in error.

Callaghan really said that "with Koufax and Drysdale the Dodgers would finish no higher than third place."

Sorry Harry!

ployee recreation organizations attended.

Don L. Neer, executive director of the National Industrial Recreation Association, Chicago, Ill., was speaker for the after dinner meeting.

Tells of Growth

In his talk, Neer spoke of the growth of industrial recreation groups across the nation and praised the efforts of community recreation centers in working with the industrial groups.

The AIRC provides an opportunity for industrial recreation group representatives to meet regularly with community recreation leaders to exchange ideas and work toward a continuing program of improved employee recreation services and facilities.

The Precisioneers was one of the first groups to join the AIRC when that organization was formed in the early 1950's. Bob Jewett, of Librascope, was the first AIRC president.

LECU Celebrates 13th Birthday

Thirteen years ago this month the Librascope Employees Credit Union (LECU) was chartered and since that time has served its members to the tune of some \$91/2 million in low interest cost loans.

Owned and operated by its members and their elected representatives, the LECU now has nearly a million dollars in assets.





TOURNEY WINNERS — Posing with their trophies are Librascope's top golfers of the recent Precisioneers Golf Club tournament. From left to right: Jim Drugan, low gross; Ted Embree, 2nd low gross; Jim Hachtel, 2nd low net, and Frank Yapp, low net. The tourney attracted some 47 golfing enthusiasts.

5,000 Hours Under the Sea

Continued from Page 6

underseascape.

Most people - landlubbers, sailors and divers alike - admit readily to the fact that man is out of his element at the bottom of the sea.

Why, then, do men like Neff swim to the ocean floor in such an eager fashion . . . and in ever-increasing numbers?

The Last Frontier

The ocean, they explain, is really the last frontier for exploration. Despite the scientific era in which we live, man knows less about the things that go on beneath his oceans than he does about space exploration, a surprising fact when you consider that the ocean's mysteries are ever so much closer to mankind than the planets we seek to visit.

"The mere fact that by diving to the bottom I may be going where no man has been before is enough for me," says Harry Neff. "There's a whole new Neff. "There's a whole new world down there just waiting to be discovered."

Asking why SCUBA-divers explore the ocean depths, then, is kind of like asking why a

Room for 4 Fishermen

Buzz Newman reports that there's still room for four more fishermen (or women) on the Deep Sea Angler roster.

The club holds its first outing

May 7 and another is set June

Interested employees can telephone Newman on ext. 1032

mountain climber attempts to scale Mt. Everest, or why Gus Grissom wants to go to the

The only real answer seems to

be . . . "because it's there."

This philosophy is rare, but hardly new. A lot of men have felt this way. Each has left his mark on the world we live in.

Precisioneers Post 6-1-2 Record in **Pre-Season Games**

The Precisioneers Softball team has just completed a successful Spring Training, posting 6 wins, 1 loss and 2 ties in Class "A" pre-season competi-

"After winning the league title in '64 and finishing in second place last year, we're really looking forward to being back on top again in 1966," said Paul Lough, team manager.

Regular league play begins May 10. A schedule of games will appear in next month's Librazette.

Team Captain John Guarino, Boh Perry, Pete DeYoung and Tom Smith are wielding the hottest bats thus far, but according to Lough, other hitters are warming to the task rapidly.

Most Precisioneers games will be played at Olive Recreation Center in Burbank. All emplovees are invited to attend the games. Admittance is free.