

Thanks to You... It Works For All of Us

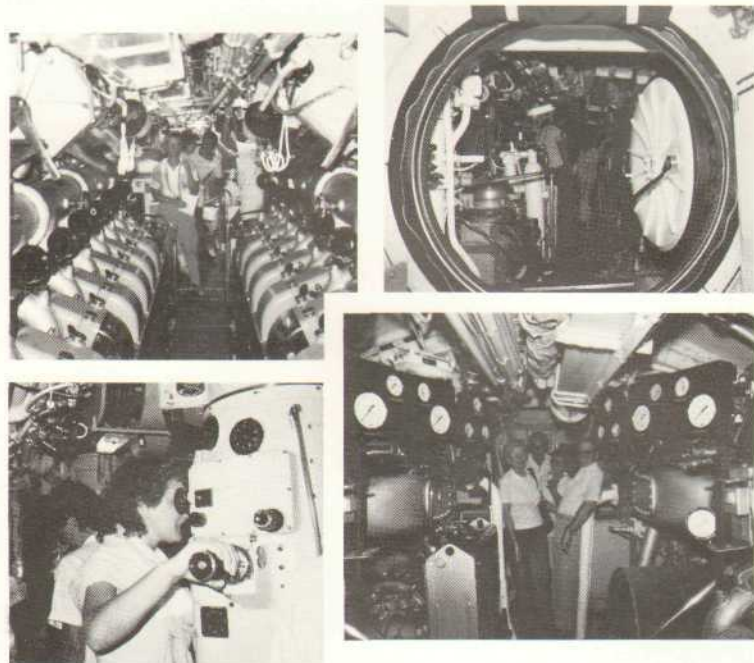


Two checks for the United Way were presented by Frank Yapp (left), Vice President, to Lt. Alan Fones, Commanding Officer of the Salvation Army Burbank Corps Community Center, representing the United Way. One check, totaling \$54,706, represents The Singer Company's matching gift. The corporate gift is based on 50% of the total Librascope employees' pledges each year. Employees pledged over \$100,000 for 1985 during last year's campaign. In addition, a check for \$30,000 was presented, representing the third quarterly donation made by Librascope employees to the United Way in 1985.

Each year more than 300 agencies and programs are supported by United Way donations...55 hospitals and clinics, 29 child care centers, 58 counseling services, 84 youth serving agencies, 48 neighborhood centers, 14 major health services, 13 Red Cross chapters, and 27 emergency aid programs. The annual Librascope United Way Campaign will be held during the week of October 15-19.

Librascope Goes on Board HMAS Onslow

In a generous exchange of hospitality, the crew of the Australian submarine HMAS *Onslow*, many of whom had recently visited Librascope, hosted a spectacular tour of their submarine for Librascope visitors. Berthed at the San Diego U.S. Naval Base, the *Onslow* conducted open houses for Librascope personnel on 27 July and 3 August. Captain Denis W. Mole made sure that each visitor had a thorough look at the workings of the submarine, even providing refreshments afterwards.



Easily noticed in the Attack Center was Librascope's Submarine Fire Control System Mk 1, which now is installed on all Australian Oberon-class submarines. The pride that the visitors felt in seeing the Mk 1 system in its operational setting, was mirrored by the crew's expressions of appreciation for the system.

September, 1985

Librazette

Congressman Wilson Visits Librascope

Representative Charles Wilson (D-Texas) visited the plant on Thursday, August 29th, as a part of a brief tour of Southern California firms. Mr. Wilson is a member of the House Appropriations Committee, and serves on its Defense and Foreign Operations subcommittees. After being introduced to certain of our facilities and having seen products-in-the-making, he spoke informally over lunch to a group of employees, mixing humor with political seriousness.

A graduate of the Naval Academy, Mr. Wilson was particularly sensitive to Librascope's work in the area of naval systems. He expressed great interest in the advanced nature of the work he observed.



Personal Responsibility is Theme of New Humorous Contest Posters

"We're excited at the prospect of having everyone assume even greater personal responsibility for what they are doing — and we're making the point by creating some cartoon characters who have no idea of what personal responsibility is all about," said Frank Yapp, V.P. of Personnel and Organization, in introducing the new "Wanted" posters that are appearing around the plant.

"We want to have some fun while creating an awareness of a subject that is crucial to all of us," said Yapp.

A new "Wanted" poster will appear monthly, and each will offer \$100 to the employee who gives the "Wanted" character the most appropriate fictitious name. (For example, the name of this month's "safety" culprit could be something like "Izzy Fatal".)



When asked about the campaign, Maurice Center, President, related an anecdote: "After a group of customers finished a plant tour several weeks ago, I asked what impressed them most. They surprised me by saying it was a little personal sign they saw in the machine shop that said: 'Build it like you're buying it.' That's wonderful. That's what personal responsibility means. You can't legislate it. It comes from the heart. That's the message of the campaign."

Contest instructions appear on each poster. The winning name and the name of the winning contestant will appear with the following month's poster.

Librascope Systems Play Key Part In Submarines' Strategic Deterrent Role



Los Angeles-class attack submarines are equipped with weapon control systems developed by Librascope Division. Nearly all U.S. submarines and surface ships, as well as submarines of allied navies, employ Librascope's weapon control equipment.

Ed. note: Librascope's overall involvement in submarine systems was reviewed in a recent issue of *The Singer Company's Quarterly Report to Shareholders*. It has occurred to us that the article would be of special interest to Librascope employees as well, and so it is being presented here in a somewhat expanded version. It is impressive for the editor to realize that Librascope personnel who may read this article are among the world's finest in the technical areas being described here.

Librascope A Long Time U.S. Navy Supplier

The unique capabilities of America's nuclear submarines make them the key strategic deterrent to war. Because they ply the seas virtually undetected and are able to survive a first strike, these vessels represent a force for peace by assuring a would-be aggressor nation that it will suffer unacceptable retaliation in response to an attack.

Beyond the ability to remain undetected, U.S. nuclear submarines also carry sophisticated defensive weapons to ward off any attempts to neutralize their deterrent capabilities. Playing a key role in the effectiveness of these weapons are the tactical information and weapon control systems developed and produced by Librascope.

Librascope has been a principal supplier of underwater weapon control equipment to the U.S. Navy for more than 40 years — and has a growing involvement in serving allied foreign fleets as well. Virtually every submarine in the U.S. fleet is equipped with Librascope systems designed to control such sophisticated weapons as the Harpoon and Tomahawk cruise missiles and the Mk 48 torpedo. For America's Trident (ballistic missile) submarine, Librascope provides the equipment to launch and control its defensive weapons. For our modern fast-attack class submarines, Librascope builds equipment for both back-fit and new construction purposes. In addition, most surface ship antisubmarine weapons are launched and controlled by systems built by the Division.

Vertical Launch Programs

Beyond controlling weapons fired from conventional launchers and torpedo tubes, Librascope applies its expertise in other areas. One of its newest projects is developing a prototype control system for the vertical launch of the Tomahawk cruise missile from Los Angeles-class attack submarines. The Tomahawk is a defensive, long range cruise missile that can be preset and launched at sea to attack targets on land or sea with great accuracy, skim-

ming the surface at altitudes low enough to avoid early detection by conventional radars.

Librascope's system will control the firing of Tomahawk missiles carried vertically in a cluster outside the pressure hull, thus greatly increasing the weapons complement of the vessel with a cost-effective enhancement of its firepower.

Librascope also is building a weapon control system for the vertical launch of the ASROC (anti-submarine rocket) missile from surface ships. The ASROC control system is used to select the missile, compute ballistics, and initiate launch sequence. To carry out these tactical functions, the operator need only press a touch-sensitive screen.

Upgrading Earlier Systems

Another major business area for the Division is in upgrading and replacing systems previously installed on submarines and surface ships of the U.S. Navy. This upgrading takes advantage of new technological developments and thus augments the capability of existing vessels.

An example of such upgrading involves Librascope's Fire Control Systems Mk 113 Mod 9. This system is presently installed on board Lafayette-class ballistic missile submarines and is being modernized by Librascope during regular submarine overhauls. Included in this upgrade are improvements to the Mk 78 display console and the embedding of a new computer. A laboratory at Librascope is devoted specifically to the carrying out of this program.

These modernization programs characteristically involve the application of the advanced electronic systems in



Librascope's Mk 1 highly-automated, underwater combat control system enables submarine personnel to perform threat analysis and weapon control functions on dual consoles. The Mk 1 is designed for international applications and has been purchased for installation on submarines of the Australian, Canadian and Indian navies. The photo shows a Canadian Mk 1 system in operation at Librascope.

which Librascope has a leadership position. Earlier Librascope systems are also installed on vessels of foreign navies which must maintain up-to-date sea defenses. In fact, more than 230 active allied surface ships carry Librascope systems, so the international market potential for modernization is strong.

International Activity

Librascope's potential in the international marketplace is further strengthened by its knowledge of modern naval weapons. U.S. weapons currently used on foreign vessels, and undersea weapons produced by Germany, France, and England, are all familiar to the Division, giving it an advantage in proposing combat systems wherever these weapons are used.

Librascope also recognizes that the technological challenges of the international market differ from those associated with the U.S. Navy. Naval systems work for the U.S. Navy is primarily in the area of weapons launch and control, in keeping with the nature and mission of the large U.S. submarine. Submarines of allied navies are smaller, with fewer crew members, requiring that command and control systems on board be more integrated, automated, and comprehensive in the types of data they process.

Combat Control System Mk 1

To meet the requirements of the growing international submarine market, Librascope pioneered the first production all-digital weapon control system for the Australian Navy's Oberon-class submarines.

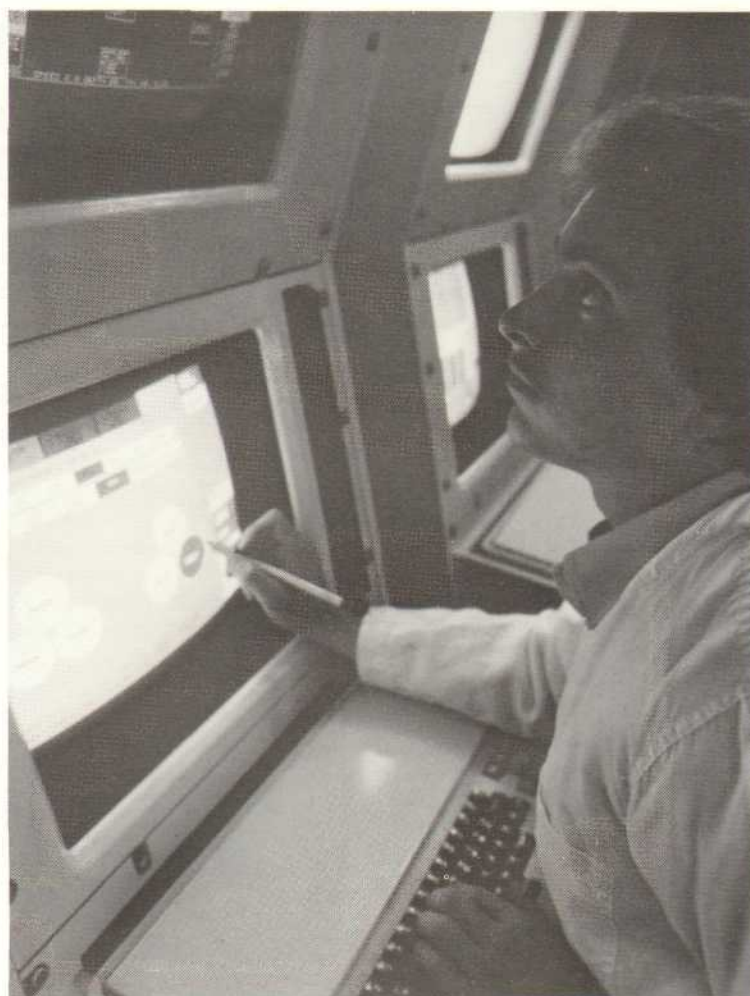
The Combat Control System Mk 1 is a highly automated underwater combat system which integrates functions performed by earlier systems into more compact hardware that requires fewer operators.

Another advantage of the system is its adaptability to the requirements of a variety of submarine hulls. In addition to Australian vessels, the Mk 1 is currently installed on the submarines of the Canadian Navy and was selected by the Navy of India for its new submarine. For each of the Australian, Canadian, and Indian applications, the Mk 1 is built to particular weapon specifications and tailored to meet specific operating requirements.

Combat Control System Mk 2

Currently under development at Librascope is a new-generation naval combat system which further enhances the operational capability of submarines. Submarine Combat Control System (SCCS) Mk 2 is an all-digital control system employing advanced technologies, such as microprocessors which replace mainframe computers. This new technology offers exceptional compactness, versatility, and simplicity. A version of the SCCS Mk 2 has been sold to an allied nation.

The Mk 2 system's use of microprocessors and other features provides significant advances in ease of operation, software design, and maintenance, with savings in space, training, response time, and lifecycle costs. Further advantages of microprocessor technology include



Combat Control System Mk 2, under development at Librascope, employs advanced technologies and offers exceptional compactness, versatility, and effectiveness.

greater flexibility, reliability and expandability than with traditional mainframe computer-based systems. Because of the general-purpose nature of the Mk 2's design, it is also well suited for use on surface ships.

The SCCS Mk 2 system will display and control all data relevant to submarine control, including sensor data management, navigation, and communications, in addition to that data associated with the preparation and launch of weapons.

It will automatically perform ongoing motion analysis and position projection on up to 25 vessels simultaneously, while providing a visual display of these sonar contacts, as well as a choice of ship maneuvers and weapons selection to best counteract the highest priority threats. Multiple control consoles permit one operator to focus system resources on one particular vessel, while general surveillance can be maintained by other operators.

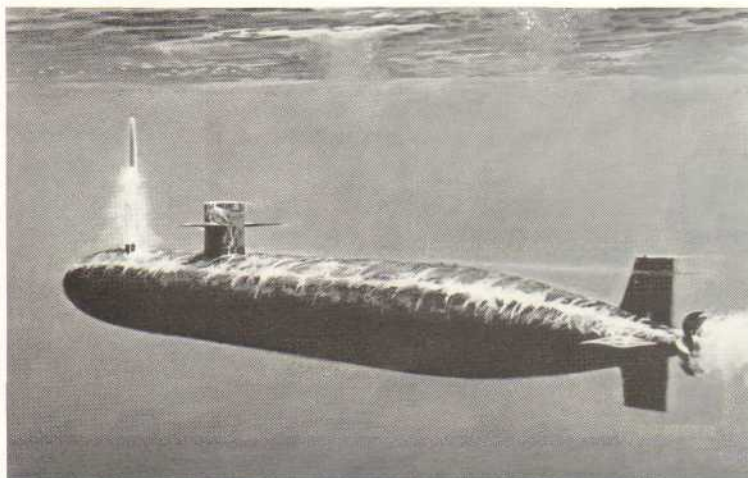
All major system processing functions are automated to ensure the fast response required in rapidly changing tactical environments. The system automatically performs perfunctory operations, provides computer-aided system recommendations to an operator, and supplies the operator with only that data necessary to accomplish the next task, thus leading an operator through a logical sequence of steps.

An On-going Commitment to Excellence

Librascope's commitment to designing and building the best naval systems available is typified by its Naval Combat Systems Laboratory, which permits the development and testing of combat systems under the most realistic of simulated operational environments. (The laboratory is a restricted area, accessible only to persons who have work responsibility within it.)

With the on-going contributions of its people, Librascope will continue to enhance its already prestigious reputation among the navies of the world.

(An overview of our Army programs will appear in a future issue of the Librazette.)



Artist's conception of the vertical launch of the U.S. Navy's Tomahawk cruise missile from a Los Angeles-class attack submarine. Librascope is developing a weapon control system to accomplish this type of launch.

Libravets



Frank Copple
35 Years
Manufacturing
Engineering



Virginia Beach
25 Years
Adjusting
Magnetics



William Brockway
25 Years
Field Service

NOT PICTURED:

30 Years - LaVonne Cobb, Clarine Miller
25 Years - William Barnett, Adeline Golden

MORE LIBRAVETS:

20 Years - June Pratte, Lawrey Chapin, Norris Guy, Sonia McNair, Harold Ferguson, Glenn Frain, Joseph Collin, Mary Ann Hutnick, Stella Whitaker

10 Years - Robert Riley, Jo Ann Binns, Nikola Kronic, Walter Newcomer, Brigit Schellerup, E.J. Amatuzzo, George Djurkowitsch, Marshall Ameen

Dynasties in the Making!

Two company sports teams decimated their competition by wrestling league titles during undefeated seasons.



With a team spirit that knew no equal, the Men's Fast Pitch Softball Team went 14 and 0 in winning the Glendale C-Division title. Left to right: 1st row — Jack Truschell, Chris Esposito, Ray Castro, Steve Lovas, Ron London. 2nd row — Hector Vega, Dan Padilla, Bill Willis, Aaron Bowers, Kevin Smith (Coach), and Bob Mehmen.



With similar fervor, the powerful Volleyball Team won the Burbank Recreational Volleyball Championships, scoring 12 and 0, not losing a game for the second consecutive year. Left to right: Jill Lavarney, John Klohoker, Patty Klohoker, Scott Olthoff, Sandy Hannibal, and Steve Wallace.



Youth Motivation Task Force Volunteers: L to R, Front Row — Madelynn Fredsti, Sandra Young-Fields, Avima Yaffe, Rhonda Riley, Liz Dietl, Machele Garza. Back Row — David Dyer, Alfred Eaton, Kim Suhr, Deidra McAlpin, and Raul Navarro, Coordinator.

Librascope Supports Youth Motivation Task Force

"Youth Motivation Task Force is a county-wide program in which public-spirited volunteers from industry visit local schools to encourage students to finish their education," said Raul Navarro, Librascope's program coordinator. "Our employees have supported the program strongly in past years and many have told us how satisfying it was to meet and share their experiences with the students. As a result of these visits, we have received reports of students who were persuaded to continue their education after deciding to drop out. This is one of the most rewarding public service programs that Librascope supports."

Librascope currently has fifteen volunteers. Each is assigned to visit a maximum of two schools per year — one visit in the Fall and one in the Spring. Volunteers act as role models, and often have community, cultural, and ethnic backgrounds similar to those of the students they meet.

Employees who wish to volunteer should obtain supervisory approval and advise Raul Navarro on Ext. 2309.

promotions

Rhonda Rockwell, from Component Technician to Sr. Electronic Technician; Robert Bills, from Supvr., Support & Evaluation to Manager, Field Engineering, Newport, RI; Gary Cannon, from Sr. Installation Engineer to Supvr., In-Service Engineering; Steven Dietrich, from Installation Engineer to Engineer; Helen Esposito, from Contract Administrator to Sr. Contract Administrator; Dona Filkins, from Project Administrator to Staff Assistant; Gregory Gill, from General Supvr., Assembly to Manager, Production Project; Warren LeBow, from Sr. Engineer to Supvr., Support & Evaluation, Newport, RI; Lisa Center, from Engineering Planner Associate to Writer, Specification Associate; Jannette McGreevy, from Technical Programmer to Programming Systems Specialist; James McKee, from Customer Training Engineer to Supvr., Adjusting; John Ramsey, from Supvr., Maintenance Engineering to Manager, Maintenance Engr. & Training; Donald Sakamoto, from Supvr., EDP Operations to Manager, Data Center; Robert Sharp, from Supvr., Adjusting to General Supvr., Assembly; Linda Spencer, from Gov't Bill of Lading Clerk to Group Leader; Mary Torre, from Administrative Secretary to Executive Secretary; Chet Urata, from Associate

Engineer to Engineer; Terence Wahlberg, from Manager, Purchasing to Manager, Procurement; Edward Wisniewski, from Engineering Drafter to Design Drafter; Joseph Canata, from E & M Instrument Technician to E & M Instrument Technician Lead; Gaylene Lowinger, from Secretary to Procurement Follow-Up; Sandra Tomsin, from Telecommunication Analyst to Manager, Telecommunications & Mail; Jean Anderson, from Customer Training Instructor to Mfg. Training Engineer; Gary Lin, from Sr. Engineer to Staff Engineer/Supvr., ATE; Madeline Arel, from Material Order Processor to Inventory Data Analyst; Steven Chan, from Asst. Programmer to Programmer; Michael Heine, from Engineering Drafter to Design Drafter; Kenneth Kelley, from Field Service Engineer to Sr. Field Service Engineer; Jill Lavarney, from Technical Illustrator to Sr. Technical Illustrator; Jeff Nissen, from Sr. Technical Illustrator to Industrial Artist; Daniel Padilla, from Asst. Programmer to Programmer; Stella Shih, from Automatic Graphics Operator to Sr. Automatic Graphics Operator; Greg Suzuki, from Asst. Programmer to Programmer; Leslie Uyeda, from Asst. Programmer to Programmer; Arthur Meier, from Liaison Engineer to Sr. Liaison Engineer.

Coming Attractions



© MCMLXXXV "Walt Disney Productions"

Special AUSA Days at Disneyland



Librascope employees have been invited to participate in two special discount days at Disneyland sponsored by AUSA, the Association of the United States Army. The two days are Sunday, October 6, and Sunday, October 20, from 9 am to 9 pm. Tickets are only \$8.75 each and are good for either date. The regular admission price at Disneyland is currently \$16.50 for adults.

This is a fund raising event held annually by AUSA at Disneyland for their ROTC and educational fund programs. Librascope is a member of AUSA, and participates each year in this event.

Knott's Holiday Food Gift Package Discount

Here's an opportunity for Librascope employees and their families for fast, easy shopping at a 20% savings on Knott's famous Specialty Packs, and in plenty of time for Christmas mailing.

This special sale begins October 1. Catalogs and order forms will be available in the Employee Services Office and throughout the plant. All orders are due in to the Employee Services Office no later than Friday, November 1. Gift packs will be ready for pick-up (for those not using Knott's mailing service) on Monday, November 25, in the Employee Services Office.

GIVE LIFE

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DON'T FORGET

Librascope Blood Drive — Friday, October 25, 7:00 a.m. to 4:45 p.m. Blood donor cards will be distributed to all employees on Thursday October 3.

Step Right Up and Get Your Tickets Here!

CONCERTS

Greek Theatre - Barry Manilow, Saturday, October 5, 8:00 pm, \$30 each. Universal Amphitheatre - Kenny Loggins, Sunday, October 13, 8:15 pm, \$17.50 each; Howard Jones, Wednesday, October 30, 8:15 pm, \$17.50 each; Rodney Dangerfield, Wednesday, November 27, \$18 each, regular \$20 each. Pacific Amphitheatre in Costa Mesa - Oingo Boingo, Thursday, October 31, 7:30 pm, \$15 each.

MUSICALS

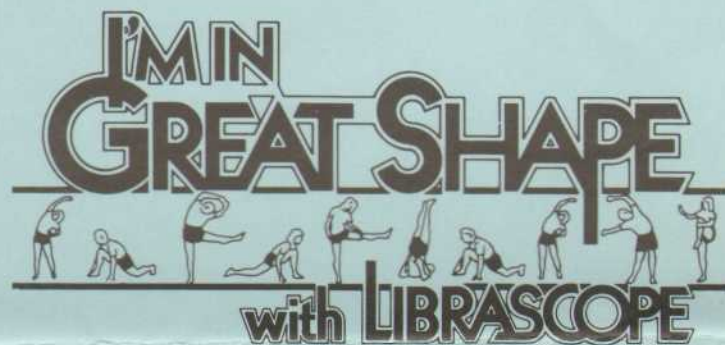
The Shubert Theatre - CATS, Sunday 24, 2:30 pm matinee, and Sunday, January 19, 1986, 2:30 pm matinee. Mezzanine seating, \$36 each, regular \$40 each, for both dates.

L.A. COUNTY FAIR

The Los Angeles County Fair continues in Pomona through September 29. Adult \$4 each, regular \$6 each, Children, 6-12 years, \$2 each, regular \$3 each, Children 5 and under are free. Map and entertainment schedule available when purchasing tickets.

MOVIE THEATRES

Discount movie theatre tickets for Mann Theatres \$3 each; General Cinema Theatres \$2.50 each; Pacific Walk-in Theatres \$3 each; and Pacific Drive-In Theatres \$3.75 each (good for 1 carload).



New Exercise Class Started

Exercise classes conducted by the Glendale YMCA are now being held at Librascope every Monday and Wednesday, from 4:15 to 5:15 pm for all employees. Sessions consist of combinations of aerobics and stretching/toning exercises, geared for beginners as well as for the more advanced exercisers.

Classes will be held on a continuous basis, every Monday and Wednesday, at \$2 per session, payable at the beginning of each class.

Pre-registration is not necessary. Participants should just show up for the classes, bringing an exercise mat and wearing loose fitting clothes, i.e., t-shirts, shorts, tennis shoes.

The fitness classes are temporarily being held in the vacant Electronics Lab area in Bldg. 3.

Alternatives to Smoking

If you want to quit smoking and need help in doing so, the Company is offering a program that can make quitting easier. Conducted by The Saint Joseph Medical Center, this smoking cessation program is a positive one...no scare tactics or aversion therapy. The program starts Wednesday, October 9, and will run for six weeks, every Wednesday, from 4:15 to 5:15 pm, in the Librascope Dining Room.

Changing habits of many years is never easy, but you will be given tools for making changes and you will be taught how to use them. In a congenial, supportive atmosphere you can reduce the stress that may result from adjustments to a new way of life. The healthy, more satisfying lifestyle of a permanent non-smoker can be yours upon completion of the program.

Cost of the program is \$60, with \$20 refunded by Librascope to those who complete the program.

To make purchases, or for information about any of these attractions, visit the Employee Services Office, located next to the cafeteria, or call x-1210.