Lockheed Martin Librascope

Librazette

August 1999

A Message from our General Manager

Our mid-year business results are positive in all financial areas. We will meet all of our commitments to Corporate including improving our Return on Sales (ROS) to 8%. This puts us on schedule to meet our long-term goal of a 10% ROS by the year 2000.

The recent announcement on JWARN delaying contract award until after the Milestone II decision neess is completed, has caused some concernant does not negatively impact our year-end financial status. This is due to JBPDS overachieving against their financial plan relative to the size of the rebaseline effort. JBPDS will exceed their plan to offset the JWARN delay.

Our new MICAD Production contract is under way and this work remains key to our future business prospects. Associated with this contract are our MICAD Fox, EMD and Software ECP contracts, which provide a solid business foundation for the site.

We are just completing a DARPA contract on defining NBC building protection methodologies (on time and within budget). Hopefully, this will lead to additional contracts in the Governments next fiscal year budget.

We have also submitted a AAAV proposal to design weight reduction improvements to the ginal unit. We should know if we are

awarded this contract in the next couple of months

If you have any questions or new ideas, please stop by my office to discuss them.

Craig

AWARDS

MICAD PRODUCTION - The Army Materiel Command Acquisition Center, on 29 June 1999, Lockheed Martin Librascope awarded Corporation a Firm Fixed Price Contract for \$7.2M for manufacture of the M27 Multipurpose Integrated Chemical Agent Alarm (MICAD). The contract includes delivery of M27 MICADs for the Fox and HMMWV platforms, upgrades of existing Fox MICADS, and Embedded MICAD for the Bradley Fighting Vehicle and Abrams Tank. The contract also contains options which could bring the total contract value to \$13.4m.

Our teammate, Intellitec will be responsible for fabrication of the M27 MICADs while Librascope will develop and produce the Embedded MICAD and be responsible for test and installation.

JBPDS - On 19 August 1999, Librascope received contract modification P00026 to the JBPDS program. This modification represents a letter contract with additional funding of \$2.6M and a potential definitized value of \$9.8M. The effort will consist of continued development of the existing JBPDS system (utilizing the Flow Cytometer), and in parallel, an extension of the previous and current BAWS III integration work. The customer will decide in the first quarter of next year whether to go with the BAWS III for their trigger/detector or continue with the Flow Cytometer.

NEW BUSINESS

The search for new business opportunities continues at an unabated pace through the summer. While we all took a few brief moments to celebrate our MICAD Production win, we also know we can't rest on our laurels in this very competitive marketplace. In addition to the future Department of Defense programs we always track, concentrated efforts have been made to Domestic opportunities in the identify Preparedness and international markets. John Gustafson, Jonathan Peeri, and Cliff Megerle have all been busy pursuing various potential which, if successful, will programs Librascope an opportunity to contribute to this nation's defense against chem/bio terrorism. We are currently working an effort for DARPA related to building protection and we are hoping to hear positive results on some other initiatives in the next few weeks.

On the international scene, Librascope is continuing with our long-term strategy of gaining a position in the international NBC market. In June we opened a new international web page based in the United Kingdom and targeted to our potential customers. If you would like to take a look, check out this internet site: www.army-technology.com/contractors/nbc/lockheed/. We have been really pleased with the results so far having received inquiries on our products from Japan, Germany, Pakistan, and Brazil, among others. Hopefully, in the not too distant future we will be asking for information on how many foreign languages you can speak!

To capitalize on this market interest and bring clearer focus to the Middle East, where NBC defense is a major item of concern, LM Librascope is participating in an NBC Trade Mission with about 10 other members of the NBC Industry Group. **Bob Chapman** will be our representative as the group visits four countries over a 10-day period. They will be making presentations on capabilities to the senior defense officials in Egypt, Kuwait, Saudi Arabia, and the United Arab Emirates. This is a great

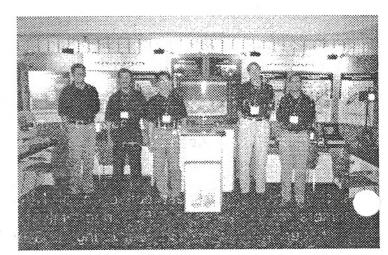
opportunity to describe LM Librascope to these key decision-makers and may lead to some exciting business opportunities.

On a final note, in the last edition of *Librazette* we mentioned *Bob Daymo* was working with a film crew in Arizona on a training film for first responders to a terrorist incident involving biological weapons. Our BAWS system is highlighted in the film. We have received a copy of the film and it provides excellent advertising for LM Librascope. Bob also did an excellent job of making sure they filmed his "good side". Well done Bob!

TRADE SHOWS / SYMPOSIUMS

NBC Symposium and Exhibit

The Trade Show activity was in full force for the month of June as the NBC Symposium and Exhibition was held at SBCCOM in Edgewood, Maryland during the days of 21 - 25 June 1999. The NBC Symposium and Exhibition required knowledgeable people with detailed technical information about Librascope and our product To accomplish this, Engineering and Business Development worked together to provide a successful team for this exhibition and display effort. Eric Scherff, Ivan Chan, Scott Maurer, Bob Chapman, Rick Read, Mel Metcalf, Paul Spencer, and Brian Klump worked the display booth for Librascope. Bob Goebel also worked the program booth and helped showcase the JBPDS shelter and man-portable systems for the government.



Overall the NBC Symposium and Exhibition was huge success. With a large amount of positive response generated by customers, various individuals, and other companies attending the show. We at Librascope were definitely the "best in show" in terms of the booth display. The interest in BAWS, Battlespace Lab, MICAD, and JBPDS were the most outstanding parts of the show. The fact that Librascope actually had "hands-on" hardware showing the capabilities of the digital NBC BattleSpace was important in showcasing this technology.

For the Battlespace Lab and BAWS, we demonstrated the following capabilities:

- Battlespace Lab (NBC Battle Management) – comprised of:
- Detector network configuration and maintenance using H Openview and Simple Network Management Protocol (SNMP),
- Remote detector query and control using Management Information Base (MIB) traps,
- Echelon Specified Displays of detector networks, ATP-45 hazard areas, and plumes using OMI's NBC_Warn
- Interface to real and simulated sensors (M88 and JBPDS) developed in C/C++
- BAWS (Chemical/Biological (CB) Network Management) – comprised of:
- BAWS 98 base station and two remote stations
- Remote network spatial display using PC Analysis Workstations (PAWS)
- Remote network simulation using Hazard Environment MICAD Interface (HEMI) workstation
- Bio network alarm, ATP-45 hazard areas, and plumes displays using OMI's NBC_Warn
- Interface to real and simulated remote sensors developed in C/C++

is show had the largest collection of NBC customers and was a terrific opportunity to display our hard work in delivering quality

products. The success of the event was a tribute to all members involved at Librascope. Thanks again for your continuing efforts in showing the innovative and forward thinking of our company.

IR&D Presentation at NBC Symposium

On 24 June 1999, during the NBC Symposium & Exhibition, *Mel Metcalf* made a presentation on the future Librascope IR&D plans to a panel of government evaluators. Also in attendance were *Rick Read* of Librascope, and Col. Steve Reeves, US Army PM NBC Defense Systems. This IR&D Conference provided LML the opportunity of a "sanity check" on our IR&D plans. Evaluator feedback was positive, agreeing that our plan is in-line with the needs and future plans of the military NBC community. Col. Reeves said we were "right on line" with the Army plans. Our next challenge is to secure the necessary IR&D funding to fully address these plans.

GENERAL INFORMATION

BAWS III Sensor Integration and Test with JBPDS Man Portable and Shelter System Configurations was successfully completed during the first week of August 1999. BAWS III prototype sensor was first installed into the Man Portable Bio-Suite Unit (MP-BSU), replacing the Trigger, and tested with the Lockheed Martin Bio-Suite Librascope modified Controller software. The MP-BSU tested with BG (Bacillus Globigii, a simulant spray) performed Collection and Identification functions when triggered by the BAWS III sensor. The sensor was then installed in the JBPDS Shelter Basic Bio-Suite Unit (BBSU), replacing the trigger and the detector, and tested with the modified software. Again the BBSU successfully performed the Collection and Identification functions when triggered by the BAWS III sensor.

The BAWS III prototype sensor is developed by MIT Lincoln Labs in Bedford, Massachusetts. This sensor uses 3-channels (ultraviolet, visible

light) to provide improved and elastic discrimination capability. This sensor has performed extremely well in tests with simulants and Biological Warfare (BW) agents. Further tests on JBPDS integrated with the BAWS III sensor are planned during the months of October and November 1999 at Dugway Proving Grounds (DPG), Utah. Successful testing at DPG will allow us to replace the existing JBPDS trigger and detector units with the BAWS III sensor. This will result in significant reduction in system complexity, weight and power requirements and at the same time improving the system performance and reliability.

Gary Rever, Bob Daymo, Paul Perillard, Bill Chin and Tom Trinh were instrumental in working with the MIT Lincoln Labs team during this resuccessful grompletion of BAWS III Integration tasks of the opening the second control of the second cont

Generic Interface Box Design Complete (GIB)

- Librascope Engineering Department has successfully finished the design of a detector Generic Interface Box (GIB). The project which was funded by IR&D budget started in January 1999 as an effort to investigate the feasibility of designing a small and light detector hardware interface. The GIB was designed to interface to various (existing and future) NBC detectors, with anticipated future requirements being used as the main guideline for developing the unit. This approach will hopefully give LM Librascope an advantage by reducing the development risk for future programs, thus allowing us to be more competitive when bidding new programs that require GIB capability.

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Our new cutting-edge tools have been utilized in the process of designing the GIB. New CAD tools have been used for the mechanical desir Layout, Routers and Simulators and for and electronic design plus our new Requirements Management tool (DOORS) has been used to track, archive and manage the GIB requirements. State-of-the-art components and innovative design provided for the small, lightweight and durable design of the unit. The required parts have been ordered and received, and a GIB unit will be assembled and tested in the next phase of the project, as funding becomes available. A copy of the Final IR&D report is available on the web at \\Libraweb\users\Programs\IRAD\GIB\ Released\Final report.

We want to thank *Mel Metcalf*, *Lonnie Prater*, *Sam Yi*, *Dave Godso*, *Will Teragawa*, *Bob Schmied*, *Don Tubbs* and *Jonathan Peeri* for their participation and contribution to the successful completion of the project.

Engineering Training - In June, two 3classes were taught at Librascope by the Martin Systems and Software Lockheed Center (SSRC). Resource 17 engineers completed System Engineering Principles and Practices. 24 engineers completed Configura-tion Management. Individuals that attended these classes were very positive about the class material and believe the information will help us to be more effective in meeting customer needs.

On 7-9 September, the SSRC will teach System Integration and Formal Test to 24 engineers.

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AWARDS

On August 10 Craig Gifford presented awards in recognition of the MICAD Production Program win. The following individuals were recognized for their contribution to the proposal effort: Eric Scherff, Ivan Chan, Roy Kramer, Steve Wallace, Gwen Cliff, Rick Beckler, Gennaro lovino, Mel Metcalf, Carole Kuruma, Joanne Maccari and Al Stewart (Manassas). Thanks for a job well done! Seve Godso.

AUGUST - OCTOBER COMPANY ANNIVERSARIES

^UGUST

arold Ferguson - 34 years Ed Niekamp - 33 years Bob Jashinsky - 18 years Jim Brantley - 18 years Blair Belshiem 15 years Practices 24 engineers Scott Maurer - 2 years Cliff Megerle - 2 years

SEPTEMBER

Ron Howe - 20 years Roy Kramer - 18 years Gennaro Iovino - 18 years Doug Dunnet - 18 years Jim Phillips - 16 years Nancy Barnett - 14 years Ivan Chan - 11 years Bob Goebel - 2 years Bob Chapman - 1 year

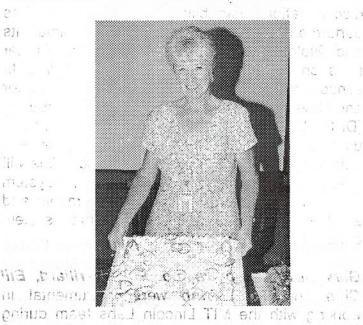
OCTOBER

Dick Bell - 32 years arole Kuruma - 12 years Satish Bondale - 11 years Special Congratulations to Tommy Smith and Pat Ha'o on their 40th anniversaries with Librascope.

Remembering the last 40 years ----

Pat Ha'o ...

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"I started work at Librascope in July of 1959 accepting a summer job with plans to return to college in September..... 40 years later, guess what? I'm still here! I met my husband Charlie at Librascope and we have two grown daughters. est manurique, orie

My first job was in the repro department and three months later was made repro group leader on the SUBROC Program. One day when we returned from lunch all the walls of our offices had been torn down and only the desks and chairs remained - that's how we found out we were moving to Building 3. With the move to Building 3 I transferred into the Finance Department holding various positions including Supervisor of Billing and Manager of Cost Accounting and Government Property. Recently Security and Records Retention have been sadded storing responsibilities. The state of the seminated and the seminated areas and the seminated areas are seminated as a seminated areas are seminated as a seminated area. equire GID appaility.

Over the past 40 years I have seen a lot of changes at Librascope. We have had our ups and downs, but I can truly say I have enjoyed my work and have made many close friends. Librascope is like our second family."

Tommy Smith



"I was discharged from the U.S. Navy on Friday June 12, 1959 in Long Beach, CA, and moved my wife and 2 month old son to Glendale over the weekend. I went to work at Librascope the following Monday morning June 15th. I was hired as an electromechanical technician and my first job was to assist engineering with the checkout of the prototype MK 80 POLARIS Fire Control System (John Gustafson was one of the young lead engineers on the system at the time). After six months, I transferred into engineering as an electronics technician and worked on the prototype MK 113 SUBROC Fire Control System for the next three years. I transferred into Installation Engineering in 1964 and remained in that department until our current ILS department was formed about ten years ago.

Librascope had over 4000 employees in the early and mid 60's, and some of the larger contracts we had over the last forty years included:

- FCS MK 113 System was installed in over a hundred U.S. submarines, both fast attack and FBM.
- FCS MK 105, MK 111, MK 114 and MK 116 Systems were installed on just about every destroyer in the U.S. Navy between 1950 and 1990.

- Torpedo MK 48 Integration In 1965
 Librascope was awarded a contract to design and develop hardware that could be integrated into existing navy fire control systems that would allow the presetting, firing and guidance of a torpedo by wire. That torpedo was the MK 48 and could be launched from both surface and subsurface platforms. We were awarded follow on production and service contracts that continued into the early 80's.
- FCS MK 1 MOD 1 Seven systems were originally built for the Royal Australian Navy (RAN) in the early 80's. Systems were installed on six of their Oberon class subs and in one trainer. The same system was eventually built for the Canadian (MOD C) and Indian (MOD I) Navy's.

Librascope has been a wonderful place to work and has given me many fond memories to reflect upon. I have literally spent my entire adult working life on these premises. It has truly be a great ride."

Any ideas or comments on the Librazette?, call Marti Anderson, ext. 1153.