

FBCB2 Team Wins Corporate Advanced Product Development Award



(L-r) Phil Burke, Bob Harrison, Jack Mierzwa, Ken McGuire and Al

Simonich were honored for their impressive accomplishments during this year's Corporate Advanced Engineering Symposium.

Five key members of the Force XXI Battle Command Brigade and Below (FBCB2) Product Development team, Allan Simonich, Philip Burke, Robert Harrison, Kenyon McGuire and John Mierzwa were honored with the receipt of a prestigious Corporate Advanced Product Development Award at the 2000 CAES (Corporate Advanced Engineering Symposium) held at the Palace Hotel in San Francisco from May 22-25. This annual event provides the opportunity for the technological community of Litton to engage in an exchange of technical ideas, review the paths of technology that the various divisions have taken and discuss the direction of the future.

The FBCB2 Challenge

Today's military applications are computer-intensive. For example, high-performance graphics with moving maps provide continuously updated situational awareness displays. The development challenge for the FBCB2 computer and display system was to incorporate all the capability of the latest desktop computer into a product that would withstand the punishing requirements of the military environ-



The FBCB2 computer and

display system is comprised of a processor unit, a remote keyboard/mouse unit and a remote flat panel display unit.

ment including operation in sunlight and at night. Perhaps the most impressive accomplishment of the team was in meeting all these requirements within an accelerated timeline of only nine months in which to design, develop and test the prototype units. The team knew they would have to invent or find and apply a number of new and untested design solutions for the FBCB2 unit, and so they undertook a series of exhaustive early design-verification tests in which functional mock-ups of critical design areas were fabricated and their performances validated. This concurrent, near-real time test effort was conducted in parallel with the actual design tasks and was an important factor in the relative ease with which the six prototype units passed the formal environmental qualification tests.

They also streamlined the process for obtaining the materials, fabricated parts and components required for engineering and prototype use. The procurement organization worked closely with the engineers to define the materials and to reduce the costs of the near-term prototypes.

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Data Systems **10** DAY
Litton

Ronald Sugar Named Litton President and COO

Litton Industries announced that Ronald D. Sugar, 51, was named president and chief operating officer of the company, reporting to Michael R. Brown, Litton chairman and chief executive officer. Dr. Sugar joins Litton from TRW, Inc., where he held the position of president and chief operating officer, TRW Aerospace and Information Systems.

Fulfilling an important part of Litton's succession plan, Dr. Sugar will be nominated for election to the corporation's board of directors at the Litton annual shareholders meeting in December 2000. The plan calls for Dr. Sugar to be elected to the position of Litton's chief executive officer on or before December 31, 2001 and, as part of the future leadership of Litton, for him to be in line to succeed Mr. Brown.

In an internal memo to Litton employees, Mr. Brown stated, "Ron brings to this position outstanding depth and breadth of experience from both the commercial and government industries. He has a proven track record of success in areas of growth and performance, and has clearly demonstrated the ability to work with customers, employees and investors to increase shareholder value



We will look to Ron to be a significant leader in the enhancement of the competitive advantage of our operating units and to his vigorous support of Litton's strategy to earn a significant return over our cost of capital."

Dr. Sugar graduated summa cum laude in electrical engineering from the University of California at Los Angeles, where he also received masters and doctoral degrees in the same field. He subsequently completed executive education programs at Stanford University and the Wharton School of the University of Pennsylvania.

Reporting to Dr. Sugar are: Jerry St. Pé, executive vice president and chief operating officer, Litton Ship Systems; Frank Brandenburg, senior vice president and group executive, Electronic Components and Materials; Harry Halamandaris, senior vice president and group executive, Advanced Electronics; and Ted Gordon, vice president, Washington operations. Dr. Sugar will also be acting in the role of group executive for Information Systems and, in that capacity, Jim Frey, president of TASC; Barry Rhine, president of PRC; Jim King, ISG vice president, finance; and Ed Rollin, ISG vice president, internal operations will report directly to him.

Bill Allison, president of Data Systems Division, will continue to report to Harry Halamandaris, who will assume the role of managing the Advanced Electronics Systems Group (AESG) in anticipation of the retirement at the end of this fiscal year by Larry Frame, senior vice president and group executive. Also continuing to report to Mr. Halamandaris will be: Bill Bowes, staff vice president, Strategic Planning; Dave Klein, staff vice president, Technology and Licensing; Jay Keefer, staff vice president, Strategic Resource Management; and Fred Sheldon, staff vice president, Corporate Business Development. □

DSD Ocean Springs Honors Employees of the Month

Data Systems Ocean Springs is proud to recognize the Employee of the Month recipients for April, May and June.

Freda Meagher (center) of the Scheduling Department was recognized as the April Employee of the Month for her outstanding contribution to the NITES IV program. Through Freda's extraordinary effort, NITES IV is the first program at DSD to establish a resource-loaded schedule in OpenPlan.

Employee of the Month honors for May were awarded to Tony McCarthy (left). A member of the Automation Solutions IPT, Tony

was recognized for his contribution to the Tactical Tomahawk Weapon Control System (TTWCS) program. Because of his dedication and perseverance, the program maintained remarkable



progress despite several setbacks. Tony's personal initiative was instrumental during a period of decreasing program resources and increasing individual responsibilities.

Ken Palmertree (right) was selected as June Employee of the Month. A newcomer to DSD, Ken is currently supporting both the Egyptian Navy Fast Missile Craft proposal effort and the JCC(X) program. Because of his customer knowledge and dedication, DSD is in a much better position to realize new business from these two opportunities.

Congratulations to our award-winning Mississippi employees! □

Data Systems Awarded AN/UPX-24(V) Contract

The U.S. Navy awarded a \$17 million contract to Data Systems for continued production of AN/UPX-24(V) Interrogator Sets.

Deliveries for the 30-month contract will begin in September 2001 and will consist of ten AN/UPX-24(V) Interrogator Sets in an open-systems architecture configuration. The contract also includes retrofit kits for field change installation on current systems and spares for use on DDG, LPD and CVN class surface combatants.

The system provides target data to the ship's C4I (command, control, communications, computer and intelligence) system through a digital interface and generates antenna and interrogation commands in response to C4I system requests for priority target identification. The Litton UPX-24 operates as part of a shipboard IFF system, accepting interrogation and control com-



The Agoura Hills-based AN/UPX-24 development team was

instrumental in the awarding of this contract. Production will be done at Data Systems' San Diego facility.

mands from and providing target reports or replies to a shipboard weapons system, such as Aegis or NTDS.

Responding to the contract award, Data Systems' president Bill Allison said, "Since the mid-1970s, the UPX-24 has been operational aboard the

CG 47 TICONDEROGA Class Aegis cruisers, the DDG 51 ARLEIGH BURKE Class Aegis destroyers and the LHD 1 WASP Class amphibious assault ships. We are extremely pleased to continue this work and our association with the U.S. Navy."

□

C2M Effort Earns ICARE Honors for Team of Twenty



Honored during June's ICARE award ceremony were (sitting, l to r) Maria Cabrera, Lupe Richter,

Madeline Osborne, Kim Shevlin, Richard Guzman, Myrna Chisholm, Miguel Lopez, Esperanza Rosas, Richard Pugh and (standing, l to r) Robert Fenlason, Dave Rogers, Dan Pratt, James Lyon, Philip Ruiz, Jerry Puentes, Alex Meza, Steve Prather and Carl Edstrom pictured here with presenter John DeVere. Unable to attend the presentation were Mary Silva and Panella Peters.

The team of Mary Silva, Lupe Richter, Panella Peters, Daniel Pratt, Richard Guzman, Jerry Puentes, Dave Rogers, James Lyon, Philip Ruiz, Miguel Lopez, Kim Shevlin, Myrna Chisholm, Esperanza Rosas, Maria Cabrera, Robert Fenlason, Alex Meza, Richard Pugh,

Madeline Osborne, Steve Prather and Carl Edstrom was nominated by C2M program manager Frank Kaatz for their system test efforts.

Each of the nominees went beyond their normal duties to correct documentation problems pertaining to the as-

sembly of the shelters, making it possible for the C2M shelter (as well as other systems being assembled concurrently with C2M) to be completed on time and avoiding cost penalties applicable if the schedule was missed.

Congratulations on a job well done.

□

Photo Lab Gets Facelift (sort of)



Well, okay, maybe not an actual facelift. But several pieces of recently installed new-technology equipment are already making a difference in how Mike Marcus does his job for Marketing Communications

With a Nikon professional digital camera (3 megapix for those who know about these things), an AGFA color film scanner (scans everything from 35 mm to 8x10 film), and a Kodak di-sublimation thermal color printer (don't ask) – Mike can now provide *almost* instant turnaround on professional-quality photos. No more sending film out to vendors for developing and printing. No more three- and four-day delays.

"Well, Mike," you might ask, "how do the new photos differ from the ones you turned out with the old equipment?" And his answer would be, "They don't; they're still the same top-quality photos. They're just faster and cheaper to produce." There you are: win/win

With installation help from Don Barteld (of Business Development Center fame), Mike's lab is now industry-standard. (All the photos you've seen in this newsletter for the past couple of months have been digital.) If you'd like to see the new equipment, just give Mike a call on extension 4547. He'll be glad to show you how it works. The lab is in the northeast corner of B2, downstairs. □

FBCB2

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and the ultimate production versions. Most of the mechanical parts were procured by sending 3D models directly to the fabrication shops, eliminating the need for detailed, dimensioned drawings. The new system proved extremely successful and is now being expanded and used in other development and production programs at Data Systems.

Allan Simonic, Director of Engineering of the Rugged Computer and Displays SBU was the chief Engineer of the product development team. He provided system design, directed the technical team, and led the component integration and performance validation. Philip Burke, lead engineer of the Display Integrated Product Team, was responsible for all aspects of the design, development and qualification of the two display units that are the man/machine interface of the FBCB2 system. Robert Harrison was responsible for the processor unit and keyboard unit system engineering, including ensuring that the design met both the requirements for FBCB2 and derivative programs that will be able to use the equipment. Scientist Ken McGuire was responsible for the technical aspects of the processor and I/O. He played a key role in resolving several critical issues concerning the operation of the system under the customer's chosen operating system and participated in the delivery and demonstration to the customer of the first two units. Jack Mierzwa's contributions included oversight, implementation and hands-on responsibility for all test planning, development of test strategy and actual testing for all hardware environmental qualification and production tests.

The FBCB2 program represents the latest major computer program initiated by the U.S. Army. Due to the efforts of the whole team, Data Systems was successful in winning the FBCB2 production contract, which will deliver a total of 60,000 units and has a potential value of \$500 million. It affirms the Division's role as the leading supplier of rugged computers to the Army and positions us favorably to win similar programs. □

FBCB2 LRIP Contract Signing Held

The ceremony for the Force XXI Battle Command Brigade and Below (FBCB2) program Appliqué+ V4 Low Rate Initial Production (LRIP) contract signing with the prime contractor, TRW, and its teammates Litton Data Systems and Paravant was held at Fort Monmouth, New Jersey on June 27.

Robert Lehnies, Deputy Program Executive Officer, Command, Control, Communications Systems (PEO, C3S) said, "The FBCB2 LRIP has truly been a team effort. Everyone involved, TRW, the PM, the CECOM Acquisition Center, the computer manufacturers, Paravant and Litton Data Systems, have all contributed to making this happen.

The cooperation and perseverance of this group is evident - this could only have happened as a team effort."

Colonel Stephen Monks, Project Manager for FBCB2, extended his thanks to "every member of the government-contractor team who has allowed the U.S. Army to take a major step toward information dominance. This LRIP effort marks the start of a revolution in the Army's Warfighting capability wherein information dominance will assure victory in future conflicts."

Representing Data Systems at the ceremony were John Milewski, manager of the Eatontown, New Jersey office, Jay Bass, FBCB2 program manager, and John Kryvoruka, director of the Computer and Displays SBU. □

Neil Denker Agoura Hills Employee of the Month for July



Employee of the Month Neil Denker (left) was

recognized by Division President Bill Allison during the Agoura Hills all hands meeting on June 30, 2000.

Neil Denker, Manager of Financial Control, joined Data Systems in July 1996.

Neil has direct responsibility for the managing and planning of Indirect Expenses, Capital, IRAD and Bidding budgets, overhead and G&A rates, in addition to preparing extensive reports for both Division and Corporate management.

He works with Contracts on the Forward Pricing Rates and was instrumental in projecting the overhead rates on the Huntsville AMCOM contract. He is also performing considerable planning and tracking of our restructure consolidation costs, and has created new ways of financially accounting on a monthly basis for expenses to all pools and planning total cost input to our business plans.

Neil consistently performs his job with a professional and courteous approach, responding to all requests in a timely manner and maintaining a friendly rapport with all those with whom he interfaces. If he is not able to provide the answer to a specific problem, he will take the time to identify the appropriate individual.

Neil's financial expertise was invaluable in his position as treasurer of the Management Club, enabling the Club to not only remain solvent in our current environment, but to turn over to the next administration an amount greater than that with which he began his term of office.

His dedication to the betterment of the division is unquestionable, reflected in the long hours dedicated to performing his job assignments. Neil is a worthy candidate to receive the Employee of the Month award □

DSD Ocean Springs Presents Papers at CAES 2000

Embedding High Frequency Transmit Antennas in a Low Radar Cross Section Composite Structure

by Mike Ebl, Perry Haymon and Bill Yordy

The U.S. Navy has become increasingly concerned with the Radar Cross Section (RCS) of its surface combatants and is actively seeking ways to reduce the "electronic visibility" of new and existing platforms. Reducing the electronic visibility helps to deprive hostile threats of the ability to locate and achieve a target "lock on" of the surface combatants.

As a result of their concern, DSD and Ingalls Full Service Center (FSC) collaborated on a proof of concept study to demon-

strate that embedding an HF Antenna suite in an Integrated Topside Demonstration System (ITDS) is practical and economically feasible. The concepts proven by the study are suitable for direct transfer into Litton's efforts for the Next Generation Land Attack Destroyer (DD-21) and other 21st Century Naval platforms.

As part of the study, DSD performed extensive computer modeling and

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Design Team (l-r) Mike Ebl, Perry Haymon, Bill Yordy

On Board

Data Systems welcomes the following new employees.

Administration: Daniel Menzie.

Engineering: Lance Mead, Nicholas Toole, Michael Vertuno.

DSD San Diego: Jeffrey Krattenmaker, Stephanie Zajac. □

ETC Notes

Gift Certificate Drawing

The winner of the monthly drawing in May for the \$100.00 J.C. Penney gift certificate was Terry Duren.

Fun Fact

Most people who make the switch from driving alone to carpooling do so to save money. □

Gone Fishin'

Data Systems salutes its retirees on their years of service and wishes them success in the years ahead.

Owen Kato □

'Situational Awareness' Update



The current state of affairs at the Division, along with new

marketing and investment strategies and an update of the Corporate consolidation study, were among the topics discussed by Division President Bill Allison during the all hands meeting on June 30

Fulfilling his pledge to keep employees informed, Division President Bill Allison held his second all hands meeting for Agoura Hills-based employees on Friday, June 30, 2000 at the Thousand Oaks Civic Arts Plaza.

Following a brief review of the corporation's third quarter financial results, Mr. Allison spoke about the recent changes in Litton's executive leadership, including the appointments of Dr. Ronald Sugar to the position of president and chief operating officer and Harry Halamandaris as group executive for the Advanced Electronic Systems Group (AESC). As part of this transition, Data Systems Division moves from the Information Systems Group (ISG) to AESC.

Turning to Data Systems, Mr. Allison reiterated his comments from the last all hands meeting regarding the necessities of meeting or exceeding the

"Plan" each and every year, fulfilling commitments to our customers in delivering quality products on time and within budget, and ferreting out opportunities both inside and outside of Litton. Leading the effort with him will be John DeVere, Vice President of Programs Manager, Jim Arthur, Vice President of Contracts and Pricing, Steve Johns, Vice President of Operations, Tom Kelly, Vice President of Business Services and Mark Harrison, acting Vice President of Administration. Alluding to recent, difficult decisions regarding the executive staff, Mr. Allison expressed full confidence in his newly reorganized executive management team.

New Marketing Focus

While we will continue our negotiations on the Egyptian Fast Missile Craft (EN-FMC) and Egyptian Combined Operation Center (ARE-COC) efforts, our

focus will be on expanding sales of our existing products and services in the rugged computer/display and integrated systems businesses and concentrating on our true core competencies in the command, control and communications and ships business units by being selective in choosing which business opportunities to pursue. Investments will be made to grow our capabilities in these areas, as well as the very promising CBITS/IETM arena.

Mr. Allison stressed that our marketing representatives must launch a campaign to establish or reestablish a very strong presence with both our past and present customers. In addition, there must be an emphasis on cooperation and an understanding of all our products and services amongst our business units so that full advantage can be taken of all opportunities to meet the complete range of customer needs.

And, finally, by shifting our focus to subcontracting, we will strive to be a member of most of the teams bidding prime on each contract, thereby increasing our chances of sharing in the award.

Consolidation Study

Mr. Allison concluded the meeting with perhaps the most prevalent question on employees' minds - a status report on the corporation's division consolidation study. The information-gathering phase of the various options has been concluded, but no decision has been made as to whether some type of consolidation will occur.

The next all hands meeting for Agoura Hills will be held in conjunction with the annual Management Club's President's Report to Management to be held on September 13, 2000. □

Pacific Theater Ticket Price Increases

Effective immediately, Pacific Theaters has raised their ticket price from \$4.50 to \$5.00.

Please contact Chris Cavaliere at extension 5382 if you need additional information. □



Take Stock In America

Watch for information on Data Systems' annual savings bond drive coming next month. □

Milestones

Congratulations to the following employees who celebrated their anniversaries during the month of July. Employees with 20, 25, 30 and 35 years of service are invited to be pictured here.



Amnon Levy

25 years, Manager, Program, Program Management



Linda Friedman

20 years, Engineering Project Director, Engineering

20 years: Randall Martin.

10 years: Shannon Mason.

15 years: Onofre Bantados, Gary Smith.

5 years: Michael Dockstader, Donald Kenney, Joseph DeMille, Lockwood Peckinpough. □

Import/Export News

The purpose of Import/Export News is to provide information on defense trade policy, licensing practices, and compliance issues. Direct questions and/or comments to Jean Tschopp, Division Export Coordinator at (818) 707-4063, or to Reina Bergfors, Export Coordinator at the San Diego facility (858) 623-6757. For further export related issues, visit the Export/Import site on the Litton Virtual Private Network (VPN) at <http://172.16.1.25/vpn/>.

DTC Receives Money To Hire New Licensing Officers

Congress recently designated additional funds to be used by the Office of



Defense Trade Controls for additional licensing officers and compliance officers. During a recent industry teleconference, Ms. Pam Frazier, the Director of the Office of Regional Security and Arms Transfers in the Bureau of Political Military Affairs, told industry that her office hopes to hire at least 20 new licensing officers to work at DTC over the next two years. To the long-suffering defense industry this may sound wonderful, but be aware that it will probably be another year before the impact of this appropriation will be apparent. DTC first has to advertise the positions, make selections, conduct security reviews, make offers, and train before they can produce a "finished" licensing officer. Many senior management people at DTC have to assist with the selection process which takes them away from their normal duties, and many licensing officers are used to train the new hires, which takes them away from their normal duties. So don't look for the light at the end of the tunnel just yet, but hopefully within the not too distant future, processing times should significantly improve.

Update On The Canadian Exemption

On 19 June 2000, the text of a joint United States-Canada statement on Defense Export Controls was released from the State Department stating that both countries have reached an agreement-in-principle on a coordinated package of national regulatory and leg-

islative measures to strengthen their respective defense trade control practices and enforcement, and thus ensure the control of defense technologies that both nations need to protect.

As part of this agreement, Canada has put forward new legislation, and will put forward new regulatory provisions, that will strengthen Canadian defense export controls. As a result of those changes, Canada's Export Control List will control the same defense goods and technology as identified in the U.S. Munitions List.

The United States, concurrent with Canadian legislative and regulatory changes, intends to revise its defense trade control regulations to reinstate most of the pre-April 1999 Canadian exemption, allowing for license-free transfer for most U.S.-origin unclassified defense goods and technology to Canada. The United States confirms its intent to expand the exemption to allow for license-free access to such U.S.-origin exports by Canadian citizens, including Canadian dual nationals, and Canadian permanent residents. The United States also intends to expand the prior exemption to permit the export without license of certain additional defense goods and technical data.

As part of this process, the United States and Canada will meet at least annually, and as necessary, in a consultative group to review their export control systems, including addressing changes to the International Traffic in Arms Regulations (ITAR) and Export Permit Regulations. Both governments plan to undertake a full assessment in the last quarter of 2000 of the progress made in implementing and enforcing the respective legislative and regulatory changes. Further, depending on the outcome of early consultations with the US Congress, both countries will actively explore opportunities for expanding the list of defense goods and technology that are subject to the ITAR exemption, and to facilitate

CAES 2000

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simulation for the HF Antenna and the antenna matching system to be embedded within the ITDS structure. Ingalls then built the ITDS that contains several embedded antennas and HM&E items. The ITDS considerably reduces the RCS of the ship's structure that it will replace.

The results of the study were presented at the recent Corporate Advanced Engineering Symposium by the design team of Bill Yordy and Mike Ebl from DSD and Perry Haymon, Dr. Will Warren and Bob Miller from the Full Service Center.

Technology Update on the Ingalls New Web-Centric IDE

by Ed Brennan

Also presenting at the Symposium was Ed Brennan on the new Ingalls Integrated Data Environment (IDE)

Ingalls first IDE harnessed the standards of the web by providing an HTML interface requiring just a browser at the client. The system stored documents and document attributes specified in an HTML form into an Oracle database using Perl to process the form, and Optegra Product Data Management (PDM) scripts to interface with Oracle. Optegra provided the document CM but lacked the capabilities needed for complex process automation (lifecycle) and full-text searching.

Ingalls needed a newer technology foundation that had IDE in mind from

the start. Parametric Technology Corporation (PTC) purchased Computer Vision and with it acquired a start-up company named Windchill. Windchill had started development of a web-centric platform that would allow companies to quickly build web applications. Once PTC acquired the company, they decided to build the applications and provide a robust set of functionality, not just a development platform. Windchill provides an object-oriented solution that emphasizes design and reuse for developers. Where our Perl development environment consisted of the vi editor, the Windchill developer first designs the system using Rational Rose. Once the design is complete, Windchill code, Java source files and SQL scripts for data persistence are generated.

Windchill administration is intuitive and powerful compared to Optegra's out-dated interface. Windchill provides many of the needed capabilities for a full-featured IDE including lifecycle, product structure, configuration management and process automation (workflow), and makes them easy to configure. The Windchill-based development and run-time systems, however, do cost more. When Ingalls embarked on producing an IDE, they chose the best technology available at the time providing standard software for users, and capabilities that met immediate needs. As their requirements for a more robust IDE developed, so did the technology. Ingalls realized that it was time to make the investment in tomorrow's technology today. □

Import/Export

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cooperation in research, development, and production of defense goods and technology, taking full account of responsible business practices in this field and relevant nonproliferation policies and practices.

Please note that prior to implementation, the change to the Canadian exemption will be the subject of a federal register notice which could take months to write, approve and publish. Any further updates regarding this contemplated ITAR revision will be provided in future publications of this newsletter. □

Hotline

Employees may call the Division "Hotline" with any questions or comments or perceived noncompliance with the "Standards of Conduct."

Agoura Hills ... 818-706-4669

Other Ca ... 1-800-843-5165