



## First Responders Praise the 'Magic Box'

#### Dependable- Innovation

searching for the magic box that can tie us all into the same network," said Merrimack, N.H., Fire and Rescue Deputy Fire Chief Frank Fraitzl. "This is that magic box."

Fraitzl was referring to BAE Systems' "First InterComm™" — a "For a long time we've been system that automatically creates a communications network between radios of different frequencies and protocols, allowing different emergency crews to immediately communicate during an incident.

Local firefighters and police officers cited the need for Electronics' & Integrated Solutions' (E&IS) First InterComm system at a meeting with New Hampshire Governor John Lynch, March 16. The governor had noted an interest in BAE Systems' solution, prompting the meeting.

FREQUENCY FLIERS — New Hampshire Governor John Lynch (right) listens as Merrimack Deputy Police Chief Paul Stavenger (center holding radio) and Merrimack Fire Chief William Pepler (left) conduct a demonstration of the First InterComm system at E&IS' Merrimack facility March 16. Seated behind are BAE Systems engineers (from left to right) Kristin Spang, Lisa Ross, Rebecca Marksch, and Mihir Boal.

The emergency officials told the group that First InterComm is the "magic box" they've been looking for to knit together widely disparate communications systems at the scene of a crisis.

The system is produced by E&IS' Homeland Security Solutions (HSS) business area in Merrimack.

"Firefighters, police, and others with First InterComm are automatically patched in with other vehicles and radios as they arrive on scene," said Mike Greene, an HSS director. "Any incident commander can hook into the system and access information from the network participants regardless of the make or model of their radios or the protocols their departments use."

At the meeting, the first responders cited real-world examples of incidents where the First InterComm system would have saved time and possibly lives.

Participants illustrated how the system could also save money that would otherwise have to go to fund entirely new and compatible radios across many agencies and fleets. They explained how the system would be useful in virtually any incident they come across.

"Talking groups can be created using the system and it can establish one-to-one communications plus a relay to a command center or dispatch," said Greene.

For more about First InterComm's capabilities, contact Greene at (603)885-9605.

### **Readiness & Sustainment Initiative Begins Information Sessions**

Electronic & Integrated Solutions (E&IS) Readiness & Sustainment (R&S) Strategic Initiative team will begin a suite of knowledge sharing and training sessions called "R&S Connections" on April 13.

The sessions - offered to BAE Systems employees via MediaSite Live — aim to increase employees' understanding of the latest readiness and sustainment strategies within the Department of Defense (DoD). The presentations will be broadcast live and also videotaped allowing most U.S.-based BAE Systems employees to participate over their computer monitors.

R&S Connections will be conducted monthly,

"The government is actively moving toward new, creative models for operational support," said Ed Zraket, program manager for the R&S

### **"IT'S IMPORTANT THAT WE** FURTHER DEVELOP OUR FUNCTIONAL CAPABILITIES TO MATCH THIS DOD **TRANSFORMATION ...**"

Functional Capability Development Initiative. "It's important that we further develop our functional capabilities to match the DoD transformation. These sessions will lend a hand in educating our employees."

Director of the Supply Chain Solutions Division of the Naval Inventory Control Point (NAVICP), Larry Garvey, is the guest speaker for the April 13 session, beginning at 10 a.m. EDT. Garvey will discuss the Navy's success with the PBL model.

The presentation and question and answer session is expected to last several hours.

For more information, employees can contact Zraket at (603) 885-7869.

with industry experts visiting E&IS to discuss performance-based logistics (PBL) and other issues that enhance logistics support to the war fighters.

Ed Zraket **R&S** Functional Capability Development Initiative Program Manager.

Employees with access to the Bluelnk network can log on to the MediaSite Live presentation at E&IS' MediaSite website at: http://bluas0419/mediasite/viewer.

## **Employee Business Plan Now Available Online**

The 2006 BAE Systems Company Strategy is now available online for employee review.

The "Company Strategy 2006" document is an update to previous years' Employee Business Plan. It will also be distributed in hard copy to all U.S.-based employees later this month.

Employees can access the plan by selecting the "Company Strategy" icon on the Electronics & Integrated Solutions (E&IS) home page.

The document has been published annually by BAE Systems to keep employees informed about the company's direction. This issue recounts the Company's 2005 accomplishments and spells out BAE Systems' strategy, goals and objectives for 2006.

The document includes messages from BAE Systems' Chief Executive Mike 'Turner, BAE Systems Inc. President Mark Ronald, and the U.S. operating group leaders.

The first part of the plan covers BAE Systems's 2005 successes in community sharing, technology, and programs. This is followed by a description of the overall company strategy framework, the role of the major elements in the business, and how strategic objectives are aligned to achieve the planned goals.

To get to the document, visit the E&IS Today website at: www.usa02.na.baesystems.com/ and click on the red Company Strategy button.

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## **E&IS RAD Hard Computers Orbit Mars**

#### **Ultra-Reliable Performance**

Electronics & Integrated Solutions' (E&IS) radiation-hardened computers helped navigate transmit information between Mars NASA's Mars Reconnaissance surface missions and Earth. Orbiter to successful insertion into orbit around that planet on March atmosphere, surface and subsur-10.

Cape Canaveral, Fla., in August 2005, and the two BAE Systems RAD750® microprocessors on board the spacecraft helped steer it on its 310 million-mile journey to the Red Planet.

The single-board computers built in Manassas, Va., — will also control the satellite's maneuvers to shrink the orbit and to collect and

NASA's orbiter will examine the face of Mars. Researchers hope to The mission was launched from learn more about the history of water on the planet to improve their understanding of planetary climate change and whether or not Mars ever supported life. The orbiter also will evaluate potential landing sites for future missions.

COMPUTATION BY E&IS - Artist's concept of the Mars Reconnaissance Orbiter. Guided by E&IS' RAD750\* computers, the spacecraft is now circling Mars and began transmitting images of Mars in late March.



### **E&IS, L&A Presidents to Join Exec Committee**

Electronics & Integrated Solutions (E&IS) President Walt Havenstein and Land & Armaments Operating Group President Tom Rabaut will join BAE Systems' Executive Committee, Chief Executive Mike Turner announced March 21.

The Executive Committee (EC) is the executive forum at which the BAE Systems' most senior line and functional leaders come together to communicate, review and agree actions of company-wide significance.

Those and several other changes are effective today. Turner stated in his all-employee memo. The new make-up of the Executive Committee than is shown at right.

The EC reviews operational and financial performance and delivery of the company's strategy, develops and sets the strategy, objectives and business portfolio actions. It also approves policies and processes for implementation company-wide, leads BAE Systems' high performance culture, and addresses management issues, among other tasks.

Havenstein and Rabaut will continue to report to Chief Operating Officer and BAE Systems Inc. President Mark Ronald. Both have multinational business responsibilities, Turner noted.

For the complete memo, visit http://connectus.intranet.baesystems.com/.

#### **BAE SYSTEMS' EXECUTIVE COMMITTEE APRIL 2006**

Chris Geoghegan - COO
Walt Havenstein - President E&IS Operating Group
Alastair Imrie - Group HR Director
Ian King - Group Managing Director CS&S
Michael Lester - Group Legal Director
Steve Mogford - COO
Tom Rabaut - President L&A Operating Group
Mark Ronald - COO & President BAE Systems Inc
George Rose - Group Finance Director
Mike Rouse - Group Marketing Director
Mike Turner - Chief Executive Officer
Nigel Whitehead - Group Managing Director Alr Systems
Alison Wood - Group Strategic Development Director

## **APKWS** Advantage











#### **FAST ENOUGH?**

This Electronics & Integrated Solutions (E&IS) advertisement shows actual images from a live-fire demonstration last fall at the U.S. Army's Yuma Proving Ground, Arizona, BAE Systems' Distributed Aperture Semi-Active Laser Seeker (DASALS) technology helped steer the laser-guided rocket to its target, proving the technology behind E&IS' Advanced Precision Kill Weapon System program -APKWS II.

"The average miss distance is just 0.9 meter, which represents significant margin to the APKWS II requirements of two meters," said APKWS Program Manager Dick Venuti.

The U.S. Army is expected to announce the winner of the next phase of APKWS this month. BAE Systems is teamed with Northrop Grumman in the competition.

The advertisement is running in the Redstone Rocket, the base newspaper of Redstone Arsenational the Patuxent River Tester, the base newspaper for Patuxent River Naval Air Station, Md.

You're looking at actual test firing results of a BAE Systems laser-guilded rocket demonstrating the company's solution for the Advanced Precision Kill Weapon System II. Using its istributed Aperture Semi-Active Laser Se achnology, BAE Systems is ready to ent ystem design and development to meet dis of the U.S. Army, Navy, Marines, Air Force 5 Special Operations Forces. Proven formance counts: APKWS II adds low-cost cision capability for point and lightly armored nd Sp argets, making possible new missions an urban operations with minimal collateral damage. Just one of the ways BAE Systems delivers advantage in the real world.

#### **BAE SYSTEMS**

### **Mojave Aces Mishap Exercise**



EXERCISE ONLY — Mojave Airport and Kern County rescue teams extract BAE Systems pilot Bob Kay from an F-4 during the Mishap Response Exercise.

#### **Emergency Planning and Execution**

Electronics & Integrated Solutions' (E&IS) Flight Systems business area at Mojave, Calif., participated during February in a successful major Mishap Response Exercise (MRE) as part of an Air Operations Inspection (AOI) by the U.S. Air Force.

The AOI process looks closely at QF-4 flight operations, maintenance procedures, and overall aircraft safety. The MRE is a significant element of the inspection that simulates an aircraft accident and judges how emergency personnel respond.

The exercise simulated a QF-4 aircraft departing the Mojave runway with an incapacitated pilot. Emergency crews from the Mojave Airport, Kern County Fire Department, Hall Ambulance, and a local private air evacuation company all responded.

Paul Nafziger, Flight Systems' general manager and Mojave site executive, reported that within two minutes of the start of the exercise, emergency response crews were on the scene, shutting down the aircraft engines, disabling the Martin Baker ejection seat, and extracting the "injured" pilot from the fighter.

Nafziger said that within 10 minutes, BAE Systems' pilot Bob Kay, who was feigning a neck injury, was strapped to a special spinal immobilization board to be placed onboard a Mercy Air helicopter for the flight to a nearby trauma center.

"This exercise clearly shows just how well diverse units can and do respond as a team to ensure saving valuable aircraft assets and minimizing the risk of people getting hurt," said Bob Rice, Mojave Airport director of Operations.

### An Eye For Detail



Chief of the Logistics Management Division of U.S. Army Utility Helicopters at Fort Rucker, Ala., Lowell Bidwell (right), observes Electronics & Integrated Solutions (E&IS) assembler Vicki Torres solder a T700 engine control used in Apache and Black Hawk helicopters.

Bidwell visited E&IS' Fort Wayne, Ind., facility Feb. 23 to view lean manufacturing areas and learn about the plant's Power Systems and Readiness and Sustainment capabilities.

"The work here is really world class," Bidwell said, adding that he "can see the commitment and dedication from folks."

Bidwell said the relationship between his organization and BAE Systems "brings a lot of confidence to us. There's an open communication and exchange of ideas, and I know that when I have an issue or a problem, it's something that I can freely discuss. We have a lot of shared ideas, and that leads to innovative solutions."

### **Company Opinion Survey is Headed to Employees' Desktops**

and the company wants to hear from every employee.

Within Electronics & Integrated Solutions (E&IS), that means nearly 19,000 team members from the U.K. to Hawaii and all points in between.

The company-wide survey will be held between April 24 and May 12. E&IS employees will be able to complete the survey at their computer workstations or by using hard copies provided by their Human Resources representatives.

Preliminary results from the survey will be presented to executives in the U.K. later this summer, said Michael Zgonc, an E&IS survey

BAE Systems is readying for its bi-annual Employee Opinion Survey coordinator. The results will then be presented to executives in the operating units. Employee responses to the upcoming survey are strictly confidential, said Bill Hughes, BAE Systems Inc. internal communications director and a member of the survey steering group.

"The confidentiality is important for maintaining the most reliable results possible from the survey," Hughes said. "Employee responses and comments will help guide us to building a better BAE Systems."

The survey will be tabulated and analyzed by independent consultancy Watson Wyatt.

More information about the all-employee survey will be featured in future issues of the E&IS Now and on the E&IS Today website.

### Around the OG

### **Revolutionary War Daughters Cite E&IS Patriotis**

#### **DAR Honors BAE Systems**

The Daughters of the American Revolution honored BAE Systems with a plaque and a donation to the USO for the company's display of patriotism.

Members of the Molly Stark, New Hampshire, chapter reacted to a news article in the Manchester press that recounted how Electronics & Integrated Solutions' Vice President for Advanced Systems and Technology Aaron Penkacik drove the replacement of much-worn U.S. and state flags at the Manchester courthouse. Penkacik had been called to jury duty last year when he noticed that the flags in the 10 court rooms were worn and faded. Robert Lee, and Air National Guard

Penkacik led an effort in which BAE Commandant Maj. Gen. Darryl Systems purchased and donated new flags.

The DAR's Flag Committee recognized the company's donation March 13 with its own certificate of award for "patriotic presentation." The honorarium that normally accompanies the award to individuals was sent by the DAR to the USO in BAE Systems' name.

#### "Ready to Learn"

BAE Systems was one of the major sponsors to host the Hawaii National Guard table at this year's "Ready to Learn" event, held March 15.

State Adjutant General Maj. Gen.

Wong, were BAE Systems' guests at the event. About 1,500 other guests gathered to raise money for the "Ready to Learn" organization, which furnishes basic school supplies to about 28,000 Hawaiian school children.

E&IS' Spectral Solutions business area in Hawaii helped sponsor the community outreach. The unit employs more than 100 people, engaged in Hyperspectral imaging and algorithm development.

#### **Hall of Famer**

Harold Wheeler, founder of Wheeler Laboratories, now a BAE Systems antenna specialty area, was



**Harold Wheeler** 

inducted into the Long Island Technology Hall of Fame March 9. Wheeler was recognized for his "outstanding life time contributions."

Wheeler directed the Hazeltine

Bayside Laboratory on Long Island, N.Y., from 1930 to 1939. After the end of WWII, he founded Wheeler Laboratories. That antenna group is still active within the Communication, Navigation, Identification & Reconnaissance (CNIR) LoB. Wheeler retired in 1987.

#### **E&IS NOW**

## **E&IS Introduces Students to High Technology**

#### In the Community

Employees from Electronics & Integrated Solutions' (E&IS) National Security Solutions (NSS) line of business and the Center For Transformation (CFT) technology organization participated in San Diego's Educational Technology Fair March 22.

"We want to get high school students interested in math and science, and to expose them to scientists and engineers from their community," said Ben Ochoa, CFT Senior Engineering Specialist at San Diego.

Nearly 2,000 students attended this year's fair from 14 San Diegoarea schools and many watched the BAE Systems' volunteer exhibitors introduce photogrammetry, 3-D anaglyphs, and Educational Technology Fair March 22. interactive 3-D models.

Ochoa said the students particularly liked navigating through NSS' computer-based 3-D model of the



"FAIRLY FUN" TECHNOLOGY — Students from San Diego area schools participate in the E&IS booth at the annual San Diego County

The annual event is sponsored by Education, and San Diego City the San Diego Science Alliance, the Schools. This is the fourth year BAE agencies.

National Mall in Washington, D.C. San Diego County Office of Systems has participated along with some 50 other area companies and

### "You've Got the Stick"



Stuart Britton, Platform Solutions' Vehicle Management Systems Business Development (left), assists a Singapore Armed Forces pilot at BAE Systems' Active Inceptor System (AIS) demonstrator during the 2006 Asian Aerospace tradeshow in Singapore, Feb. 27. Electronics & Integrated Solutions (E&IS) is developing the active pilot inceptor system for the U.S. Army's UH-60M Black Hawk program.

The system will replace the mechanical pilot controls on the current UH-60 with active technology that saves weight and provides pilots with intuitive tactile cues for easier handling and reduced workload. The AIS is also part of the Joint Strike Fighter program along with Platform Solutions' Vehicle Management Computer (VMC).

### **E&IS** Quality Policy

BAE Systems Electronics & Integrated Solutions (E&IS) and its employees are committed to understanding the needs and requirements of our customers and end users, determining their product and service requirements, and developing innovative solutions which meet or exceed their requirements. This is achieved through employee involvement and teamwork, and adherence to the highest ethical and quality standards.

**E&IS Affirms Quality Policy** 

Customer Satisfaction is a key indicator of quality performance; therefore, we value input and active involvement from stakeholders, including current and prospective customers and suppliers, in improving our processes, products, and services.

We assure total customer satisfaction by meeting our contractual commitments, establishing and meeting the quality objectives of the organization, and by continually improving the effectiveness of our quality management system through the use of metrics and data driven decisions.

Quality is the responsibility of everyone in our operating group.

er P. Havenstein, President

BAE Systems Electronics & Integrated Solutions

The system was demonstrated throughout the week-long tradeshow. More than 900 exhibitors from 43 countries and 34,000 trade visitors from 99 countries visited the event.

### **Don't Hesitate; Nominate**

Nominations are now being accepted for BAE Systems' premier program to recognize employees for technology innovations or business acumen - the Chairman's Awards. Two teams from Electronics & Integrated Solutions (E&IS) took home Gold Awards last year.

Chairman's Award nominations can be made in three categories: Innovation, Transferring Best Practice, and Enhancing Customer Performance.

The deadline for nominations is June 1. The nomination form can be downloaded from BAE Systems' website.



QUALITY JOB — This letter, signed by E&IS President Walt Havenstein, explains the company's new quality policy and employee's role in providing it.

#### **Commitment to Excellence**

Electronics & Integrated Solutions (E&IS) President Walt Havenstein has recently approved the operating group's new Quality Policy Statement. The policy provides a framework for establishing and reviewing quality objectives.

The new policy reaffirms Electronics & Integrated Solutions (E&IS) commitment to establish and maintain quality in its products, processes, and services.

"Top management is committed to comply with requirements and continually improve the effectiveness of the quality management systems within E&IS," the policy states.

The Quality Policy Statement requires an E&IS Leadership Team review every three years, as a minimum, or when significant reorganizations occur.

To view E&IS Quality policy, visit the E&IS policy website at: http://www.usa02.na.baesystems.com/eis\_ policies/index.htm.

# **INTEGRATION UPDATE**

## **Operating Group Integration:** "Punching Our Weight"

**E&IS COMPRISES ABOUT 19,000 EMPLOYEES** LOCATED AT NEARLY 50 SITES. PUTTING THESE **RESOURCES TO WORK TOGETHER EFFECTIVELY** INVOLVES BREAKING DOWN BOUNDARIES.

This special section of *E&IS Now* deals entirely with the integration activities ongoing within the Electronics & Integrated Solutions (E&IS) Operating Group

It's important that everyone understands what this integration is all about — and what it means, tactically and strategically.

For those who attended last year's President's Tour, you may recall my analogy of "punching our weight" in the marketplace. This means bringing all the necessary resources and capabilities together in a way that allows us to better focus and prioritize our efforts; in other words, to form the systems, tools and attitude that allow us to operate as One Team.

With One Team, we'll maximize our productivity, reduce redundancies and waste, and more fully capitalize on our talent — wherever it exists - to meet our customers' needs.

Since the E&IS Operating Group stood up last June, we've already accomplished a great deal, including a greater understanding among our 19,000 employees of our underpinning 3-D Concept of Operations.

The 3-D concept is central to how the integra-

tion takes shape. It defines the best way for an organization of this size and complexity to work together simply and effectively.

One big transition goal is implementing a common General and Administrative (G&A) rate structure. A common G&A structure will enable us to move new business resources across most of the operating group.

We recently met a significant milestone informing the U.S. government of our intent to change to a common rate structure across several business segments.

Why is that important to you? Because we'll be bidding on defense contracts using competitive rates that differentiate us from our competitors. Those rates are based on the targeted savings we know we can achieve as a result of successful integration.

So it's vital that we all work toward and support the integration goals. We must achieve these goals to deliver on our promises to our customers.

The integration also includes a common Oracle ERP footprint for the majority of the Operating Group. Having this common tool



Walt Havenstein **E&IS President** 

shared and used by almost all of us helps us dissolve the boundaries that divide our legacy organizations. We'll be able to more readily spot and reduce waste, act borderlessly, and capitalize on far-flung talent.

Alignment of tools and processes means each line of business can depend on One Team support from E&IS functions. The result will be consistent processes for deploying engineering manpower, procuring material, accounting for costs, and many other efficiencies.

I'm very proud of the integration team's efforts on your behalf.

Today, we're laying down the framework for a legacy that will long succeed us. It's hard work, but we owe that to our fellow workers and those still to come. Most of all, we owe it to our valued customers and users — the men and women who count on the products and services we provide, sometimes for their lives.

– Walt

## **E&IS Integration Goals and Principles**

Background: In June 2005, BAE Systems undertook a major realignment of its U.S.-based businesses precipitated by the acquisition of United Defense Industries. Three U.S.-based operating groups — each addressing a discrete customer segment — resulted: Electronics & Integrated Solutions, Land & Armaments, and Customer Solutions. These customer-focused groups were set up to be fully integrated enterprises with responsibility for performance and delivery of the business plan. BAE Systems Inc. President Mark Ronald stated at the time, "The resultant changes in the way we do business will enable us to maximize our critical capabilities and resources, and more effectively compete to win new, larger business opportunities; anticipate and shape customer needs and outpace the competition." And that is what drives this integration.



FACILITATE THE USE OF RESOURCES BY HAV-ING A COMMON GENERAL AND ADMINISTRATIVE (G&A) STRUCTURE BY **JANUARY 2008** 

**OPERATE AS A BORDERLESS ENTERPRISE –** 

### **Guiding Principles**

ACHIEVE YEARLY E&IS OG FINANCIAL GOALS

**KEEP RATES COMPETITIVE** 

IMPLEMENT CONSISTENT PROCESSES AND COMMON SEC-**ONDARY SYSTEMS** 

EASILY ASSIGNING WORK TO OPTIMIZE THE USE OF ALL RESOURCES, PEOPLE, AND FACILITIES.

**REDUCE COSTS. IMPROVE EFFICIENCY.** SHARE AND ALIGN BEST PRACTICES

WAYS AND MEANS - E&IS follows these guiding principles (right) in order to achieve the transition's goals. The principles stem from analysis and evaluation by the transition team and by consultation with Accenture, a management consulting firm with expertise in business integration.

IMPLEMENT BUSINESS SYSTEMS AND OTHER THIRD PARTY APPLICATIONS WITH NO CUSTOMIZATION TO SOURCE CODE

CHOOSE PROCESSES AND SYSTEM OPTIONS BASED ON COST/BENEFIT/RISK ANALYSIS, INTEGRATION SCHEDULE AND EMPLOYER OF CHOICE IMPACTS

AS FEASIBLE, INTEGRATE LEGACY BUSINESS SYSTEMS BY MINIMIZING THE NUMBER OF INTERIM SYSTEM AND PROCESS CHANGES

ENSURE THE 3-D CONCEPT OF OPERATIONS IS EMPLOYED WITH CROSS-FUNCTIONAL STAKEHOLDERS ENGAGED IN **KEY DECISION MAKING** 

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## Who's On the Integration Team? You Are.

At the E&IS Operating Group Leadership Team's (OGLT) first meeting last June, Walt Havenstein reminded the assembled leaders that E&IS's success is directly related to the speed with which it can respond to new business models and changes in the marketplace.

I was charged with the overall responsibility for the success of the E&IS integration into one company. To do this, I have enlisted the help of a remarkable team, led by Barbara Nelson.

While a number of the key players are shown on the chart below, it's important to stress that their success hinges on the commitment by all of our employees to engage, embrace and drive this integration to completion.

I call on every employee to view this integration as a corporate-wide

project — to help us think through this multifaceted task of getting our businesses and supporting functions tailored to supporting our broad business goals.

For example, each of our heritage organizations, cost account seqments, business units, functions or support activities brings with it a number of disparate elements.

In most cases, these processes, systems, or procedures were conceived, designed, created and executed with utmost care and thought for the future. However, they were built in isolation without the need to interact across the broad geographic or functional activities that are now part of E&IS.

These heritage systems and processes — separately maintained and different — may now be in conflict.

We need to integrate these elements because they affect supplier and customer interactions, and can increase the number of different views a customer or supplier holds of us.

A single view of our operating group is essential to our business success - it's essential to successful execution of our operating group strategy.

Integration will provide that single view.

E&IS will be far more effective at responding to changing market forces.

We'll re-use good processes and only invent the specific processes which need changing or creating.

With the efforts of the Integration Team — whose plan is outlined here — and your help, I know we



**John Lydiard E&IS Chief of Staff Integration Team Lead** 

will succeed at completing this transition in a way that enables us to punch our weight for our company and customers.

– Lyd



#### **PMO Structure**

### **E&IS Integration Teams Work the Front Lines**

Electronics & Integrated Solutions' (E&IS) integration is managed by the Program Management Office (PMO). Barbara Nelson, Director of Finance Applications at Nashua, has been selected as the PMO responsible for the overall integration.

The Business Leadership Team (BLT) consists of functional and line of business (LoB) leads. The BLT is responsible for representing the business in scope, resources, schedule and budget decisions as they relate to the integration. The BLT ensures timely issue resolution and adaptation within the business.

Five Working Project Teams (WPT) have been established:

• Mark Waks, OG-1 Director of Financial Systems, leads the Integrated Business Systems Team (IBST). The charter of the Integrated Business Systems Team (IBST) is to provide strategic and tactical review and guidance for the E&IS Operating Group's Business Systems.

Primary systems include Peoplesoft, Oracle ERP, PDM, and Information Delivery.

 Secondary Systems is led by Kim Campbell. Campbell is a former manager with the Independent Cost Evaluation 'Ieam for IEWS Finance. Campbell is responsible for selection of all non-Oracle ERP applications.

· George Link, Information Technology Manager from the Communication, Navigation, Identification & Reconnaissance (CNIR) line of business, is leading the Special Projects effort for 2006, including archiving and reporting. Additionally, Link will be the CNIR lead for Integration.

• Paul Scheffler - program manager for Commercial Electronics integration — will lead the CNIR Integration and is now heading the requirements and planning phase.

· Kevin Ryan, a program manager from the Information Warfare line of business, is the Phase I Integration Manager.

He and his team are responsible for the integration of Integrated Defense Solutions (IDS), Advanced Technologies (AT), Aerial Data Reduction (ADR), and Advanced Information Technologies (AIT).

**E&IS WILL BE FAR** MORE EFFECTIVE AT **RESPONDING TO** CHANGING MARKET FORCES. WE'LL RE-USE GOOD PROCESSES AND **ONLY INVENT THE** SPECIFIC PROCESSES WHICH NEED **CHANGING OR** CREATING.

John Lydiard, E&IS Chief of Staff

## **E&IS Approach Focuses on Task**

Shortly after the announcement of the creation of the new Electronics & Integrated Solutions (E&IS) operating group, a team was formed to determine the best approach for integrating the various business systems in use by the previously autonomous business units that now make up E&IS.

The team comprises people from various functions and all the lines of business across the operating group. Its top priority is to create a common General and Administrative (G&A) rate structure by January 2008.

Last summer, the team traveled to E&IS facilities at Wayne, N.J.; Johnson City, N.Y.; and Nashua, N.H., to evaluate differences between the two Oracle ERP footprints that existed among the operating group's lines of business.

The team's approach: to integrate Communication, Navigation, Identification & Reconnaissance (CNIR) line of business into the Platform Solutions' (PS) Oracle ERP footprint, and simultaneously integrate National Security Solutions (NSS) into the heritage Information and Electronic Warfare Systems (IEWS) — termed OG-1 — Oracle ERP footprint.

The team also investigated the various rate structures across the operating group, and the mix of different types of programs within each LoB.

Based on that analysis, the team recommended a revised four-phased approach using the structure outlined in the chart below. This approach was approved by the Operating Group Leadership Team (OGLT) in September.

For now, the approach excludes a majority of PS' systems and processes because of PS' business demographics. However, the approach capitalizes on the compatibility of the other LoB's and will result in a Common G&A structure across most of the operating group by the January 2008 objective.



**Barb Nelson Integration Team** Director

And most importantly, last month the team submitted the proposed Common G&A structure to the government. Executing Phase I and Phase II of the integration plan are key milestones in achieving the goals and enabling the implementation of that G&A structure.

## **E&IS Integration Plan is a Four-Phase Project**

NOTE: For the purposes of the transition, historical lines of business and business areas that were previously aligned with the Information & Electronic Warfare Systems (IEWS) business unit (EP, IW, ME, AS&T) as well as core functions that supported them are considered OG-1. OG-1 is simply a short-hand way of describing all those businesses elements and resources. In the chart below, the blue boxes represent current and future Oracle footprints.



TIMELINE TO RENDEZVOUS — The planned phases of the integration are based on the current Oracle ERP footprint – a major consideration in consolidating already well ingrained business systems. Phase 1, due to be completed by December, includes Advanced Technologies and Integrated Defense Solutions combining with former IEWS resources. Advanced Information Technologies (AIT) and Aerial Data Reduction (ADR) will combine with National Security Solutions (NSS). Phase II includes the integration of CNIR. Phases III and IV are currently interchangeable and the timing of each is still to be determined.

### Four Businesses Currently Being Transformed



**Kevin Ryan Phase I Integration Manager** 

phases. Phase I includes the integration of four business entities as depicted by the arrows in the table above. These actions involve more than 1,500 employees located in nine states and Washington D.C.

The process of integrating each of these business entities is similar. Each integration consists of migrating work processes into the business systems used by other business units, including those business systems used by E&IS' Human Resources, Finance and Operations functions.

These integration projects are combined under one leader. That ensures consistency in the process and the ability to take advantage of lessons learned between each. The Integrated Defense Systems (IDS) Project Team is

on track to complete its integration go-live milestone event by July 31. This team's most critical milestone was reached

The E&IS integration project is divided into several March 13, when the Hewlett Packard business system used by the heritage IEWS business unit (OG-1) was successfully migrated to the new Linux Remote Application Cluster (RAC) architecture (see story page 4).

> The Advanced Technologies (AT) Project Team is currently in the final stages of developing its program plan and schedule.

> The Advanced Information Technologies (AIT) and Aerial Data Reduction (ADR) teams started their planning Feb. 28. The final project schedules for both AIT and ADR will be completed in April. All Phase I projects will conclude in 2006.

> Following Phase I, the key Phase II effort will be CNIR. (See story, page 4.)

> Spectral Solutions (SSL) in Hawaii, the NSS line of business, and government-customer portions of the PS line of business migrate in Phases III or IV.

## **CNIR Integration Planning Underway**

#### Laying the Groundwork

Cross functional teamwork is the basis for the latest E&IS integration project — moving Communication, Navigation, Identification & Reconnaissance (CNIR) from its BaaN ERP system to the Oracle ERP Software footprint currently used in the OG-1 heritage IEWS —lines of business.

The CNIR integration project will affect more than 2,600 people at their Wayne, N.J., Greenlawn, N.Y., and Reston, Va. sites during the second phase of the integration.

The CNIR Core Team met Feb. 22 to launch the Strategy Phase of the project.

This is a five-phase project: it starts with the Strategy Phase, then Design, Build, Deploy, and finally a Support Phase.

The project will use knowledgeable, cross-functional resources from multiple business sites. The Oracle ERP system can be adapted to accommodate unique business types and varied models, while supporting lean initiatives and targeting opportunities to maximize efficiency and costeffectiveness.

The CNIR project will be the largest integration undertaken by the E&IS PMO team to date.

Each phase builds on previous phases using the requirements identified during the Strategy Phase. The team will constantly evaluate the process using cross-functional teams from CNIR, Platform Solutions and OG-1 to ensure success.

The CNIR Integration project will wrap up in early 2008.



Paul Scheffler CNIR Requirements Program Manager

### **Secondary Systems**

Selecting common secondary systems is critical to achieving the Integration Program goals of having a common G&A Structure by January 2008, operating as a borderless enterprise, and reducing cost.

It also allows work to be moved more easily from site to site and reduces software cost associated with licenses and applications.

The systems that many of us use each day to develop proposals, track our finances, record labor, and help manage our travel include such diverse products as ProPricer, Hyperion Financials, Auto Time, and CONCUR.

The E&IS Integration Project Team has been collecting data on those and others key secondary systems across the operating group. The plan is to evaluate and prioritize secondary systems during Phase I and II of the E&IS integration effort.



Kim Campbell Secondary Systems Lead

The team's main objective is to select the best near- and long-term solutions for secondary systems. Those systems will represent a best practice or combination of best practices across the operating group. Some will be incorporated right away; others may take years to fully implement.

With the assistance of Accenture consultants, a first draft of a decisionmaking model has been developed.

The model allows teams to evaluate secondary system options in a factbased manner. For example, two BAE Systems teams are currently piloting the decision making model by evaluating our system options for Travel Accounting and Proposal Development. These teams are gathering required data and beginning analysis to determine the best option. Once the pilots are complete, the team will finalize the decision making model and begin to evaluate additional secondary systems.

### **Real World Transitions: E&IS Borderless Culture at the Program Level**

Borderless means accessing talent, skills, and other resources, no matter where they are geographically.

The Borderless initiative will help optimize company resources. Borderless, moreover, is critical to the success of E&IS in the marketplace.

One program that has successfully completed the Borderless process is the C-130 mission computer production contract.

The C-130's Nashua, N.H., production capabilities were being overtaxed, while the plant at Austin, Texas, had unused capacity. Without breaking production, the work on the computer production contract was successfully transferred across the country.

The team had significant obstacles to overcome, including different operating systems, rate structures, and manufacturing process management. Success involved: establishing a cohesive team, identifying risks, setting up effective communications, and using a secure shared site for drawings, schedules, and other documents. The team generated detailed schedules and adhered to them. Communications included daily teleconferences and multiple site visits.

Once the planning stage had been completed, a

full production line had to be set up in Austin, even while Nashua continued to produce. This was necessary to keep production on schedule and to instruct the new team on assembly techniques unique to this system.

The first two mission computers built in Austin completed acceptance testing May 11, 2004, six days ahead of the baseline schedule, and

Success involved: establishing a cohesive team, the first mission computers were shipped more entifying risks, setting up effective communica- than a month ahead of the contract date.

The team did not miss any delivery commitments during the entire transition effort.

The success of this process of "schedule, gap analysis, risk mitigation, communication, and site visit" has resulted in its use to transition several other programs from Nashua to Lansdale, Penn.

BORDERLESS MEANS ACCESSING TALENT, SKILLS, AND OTHER RESOURCES, NO MATTER WHERE THEY ARE GEOGRAPHICALLY.

### **E&IS** Integration Team Lets the RAC Times Roll

#### **Making Room for Growth**

Electronics & Integrated Solutions' (E&IS) OG-1 Enterprise Resource Planning (ERP) system (IEWS heritage) was shut down in Nashua, New Hampshire, at 5 p.m. March 9 for an extensive upgrade resulting in the installation of Oracle's Real Application Cluster (RAC) software.

A team of people from E&IS, Computer Sciences Corporation (CSC) and Oracle Inc. spent the next 78 hours — through 11 p.m. March 12 — completing more than 100 unique tasks and meeting milestone after milestone until the job was complete.

Among the accomplishments, the team replaced all ERP UNIX application and database servers with Linux servers, installed a new storage system, and upgraded the Oracle database software to its latest version.

"The new architecture provides E&IS with the availability and scalability required to support the future growth of ERP usage within the operating group," said Dwight Brew, chief engineer on the project for E&IS in Nashua. "Because of the upgrade, increasing capacity in the future will require only the incremental addition of new servers to work with the existing ones."

Future upgrades will be less expensive and require less testing and less time to implement, said Brew, because the new ERP system is based on multiple small Linux servers being "clustered" together to run the ERP application and database.

E&IS' integrated ERP system supports billing, purchasing, accounts payable, accounts receivable, financial reports, receiving, inventory control, assembly, and labor collection.

All the functions used by E&IS' (OG-1) financial and manufacturing employees are controlled by the ERP system.

Heritage businesses installed servers and data storage in 2002. These were made obsolete as the business grew and a plan to upgrade the ERP system was created in 2005, Brew said. The solution had to address unspecified future growth and minimal impact to the business.

"The task of migrating from large UNIX servers to the new ERP Linux / RAC architecture began in May of 2005," said Bill Schnaars of CSC. "The new ERP Linux / RAC upgrade project supported 6,000 employees and faced an upgrade of its own almost immediately."

With the formation of the E&IS operating group in June of that year, the system was suddenly required to support more than 15,000 employees in the future. "And now they can be," said Brew. "As the integration continues and business units are brought onto the ERP system, additional Linux application and database servers will be added to work with the existing servers."

"The overall performance of most tasks has improved significantly under the new system," said Brew. "This level of performance will be maintained as the number of employees supported by the ERP system over the next few years more than doubles."