intercom

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INNOVATION ...

... leads to Better Ways of Doing Business

intercom

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About the cover

This month's cover focuses on better ways of doing business in communications and information.

Cover by Tech. Sgt. Mike Leonard

Devising a better way through GCSS-AF

For Air Force warfighters to be successful in today's high operations tempo air campaigns, they need to have current, accurate information available on demand. This is one of the lessons of Kosovo.

Large numbers of precision-guided munitions were being used up rapidly. Warfighters wanted to know how many more were available, their location, their configuration, how soon they could reach their destination, when they were projected to run out, and the manufacturer's surge capability. Since there was no comprehensive system for quickly providing that kind of vital data, support people were kept scrambling on the telephone, e-mail and fax. Leaders lost confidence in the information, causing adverse impacts on weapons employment decisions.

Devising a better system is the mission of the Global Combat Support System – Air Force. Chartered by the Air Force's Chief Information Officer, the GCSS-AF Requirements Integration Directorate has formulated a plan and an approach for doing better. It's based on the GCSS-AF's Vision: "Provide the warfighter and supporting elements with timely, accurate and trusted Agile Combat Support information, with the appropriate level of security, needed for the Expeditionary Aerospace Force to execute the Air Force mission throughout the full spectrum of military operations."

Leading this multi-faceted effort is the task of Brig. Gen. Anthony W. "Bud" Bell Jr., whose responsibilities include vice commander of the Air Force Communications and Information Center, and chief of the GCSS-AF Requirements Integration Directorate. He recently shared his views on this subject in an interview with Len Barry of the intercom *staff.*

Photo by Mickey Sanborn, 11th CG

Q. General Bell, what is the goal of GCSS-AF?

A. Our vision really says it all. We need to give our leaders and our warfighters the kind of timely, accurate and reliable information they require to make the right decisions for the Air Force to succeed in combat, and at the same time, to help preserve our dwindling resources. Without that kind of information, we'll be far less successful in combat, and we'll use up our resources less effectively and less efficiently. Especially under the EAF and AEF concepts, and with our increasingly global mission responsibilities, the Air Force must find the way to provide this kind of information support for our warfighters. GCSS-AF has a history of being many things to many people, so we are continually trying to clarify the vision.

Basically, GCSS-AF will provide an information-sharing environment through a system called the Integration Framework, which will give commanders, warfighters and functionals at all levels access to the information they need.

GCSS-AF will assure continuance of all the information services commonly available today, such as directories and Public Key Infrastructure (PKI), while adding some new ones, like a single login to give users role-based access to multiple information systems.

Q. How is your directorate going about meeting this goal?

A. We've done a number of things. To give you a little background, the CIO appointed a tiger team, which I headed, last May to study this question. We came out with a report in August, which we call "The Way Ahead," briefed the findings to Secretary (of the Air Force F. Whitten) Peters, and the GRID stood up on Nov. 1st. We identified the need for an Air Force champion who had the authority, responsibility and resources to come up with an integrated approach to Agile Combat Support. The GRID's role, as we envisioned it, was to lay the groundwork for setting up a permanent lead agency to take on this tasking. We saw several other requirements, including streamlining the acquisition management process, consolidating EB/EC (electronic business/electronic commerce) management, and developing a framework to enable data sharing among the key players – all of this under the direction of the GCSS-AF lead agency. We also felt some basic measures and metrics were needed to evaluate progress. At this time, the lead agency has not yet been designated. However, we've received approval for the Air Force EB/EC Implementation Plan, and distributed it in February. We're also working two integration prototypes that are a di-

See **GCSS-AF** Page 4

rect result of the Air Force's experiences in Kosovo: one involves munitions data capture, and the other deals with matching training qualifications to AEF assignment needs. And we just started work on a third at the direction of Secretary Peters. In addition, we have an operational requirements document and a program management directive in coordination, and due to our work in the last POM (program objective memorandum) cycle, the Air Force has recommended DOD approve additional funding for GCSS-AF. In short, there's been a lot going on to keep this process moving forward.

Q. How important is the EB/EC implementation plan to the success of GCSS-AF?

A. In a word, essential. It's our roadmap for convening corporate and defense forces to achieve the GCSS-AF vision. It's the key to meeting our information integration needs in a way that will reduce costs, enhance process efficiency and decrease our deployment footprint. It gives us the tools to establish an enterprise-wide electronic environment that enables our functional areas to give AEF commanders the best available combat support, including timely, accurate and trusted information. The plan provides the foundation for the Air Force to develop an effective support infrastructure that can meet today's needs, and still be flexible and versatile enough to contend with explosive technological growth in the future. Now we are taking it one step further: putting together a campaign plan that really gets to the nuts and bolts. It will be a combined plan, including PKI and Common Access Card. All of these are issues that cut across functional lines and directly affect the way we must design and modernize automated systems and shape Air Force business processes.

Q. What are the objectives of the two prototype projects?

A. Both of them are a result of information deficiencies identified in Kosovo. The first, our Integrated Training Management prototype, quickly matches training qualifications to assignment needs, so it's useful to AEF trainees, trainers, supervisors and commanders. It allows users to retrieve training data, and it automates individual and ancillary training records. It projects training requirements by individual and group, automates training products, annotates training completion and validates training. This tool makes it easier to assure the right people are trained and ready to go where and when they're needed. The second prototype, Munitions Data Capture, automates collection and processing of munitions information. It reduces munitions data latency, provides automated data entry, reduces manual munitions operations and provides electronic connectivity between multiple work centers. It closes air gaps between the various points in the onbase process, from the ammunition control center to storage igloos, to build-up areas, to aircraft, to holding areas, and back to igloos. MDC eliminates the need for considerable paperwork, including five forms. Bottom line, and most importantly, it assures accurate and trusted information is more quickly and easily available to deployed forces and all echelons of command. These are just a couple of the initiatives we've developed so far that are making a difference in improving ACS.

Q. What roles do the operational requirements document and the program management directive play in this process, and when do you expect them to be approved?

A. These two documents, together with the EB/EC implementation plan and the various GCSS-AF technical guides, represent the heart of the GCSS-AF program. The ORD outlines key performance parameters, including responsiveness, information integration, interoperability, security and information improvement. It's scheduled to go to the Air Force Requirements Oversight Council in July, and to the Joint ROC by August or September. The PMD incorporates EB/EC as a fundamental strategy, and authorizes the lead agency to develop, submit and advocate a Combat Support Automated Information System POM. It requires that functionals coordinate with the lead agency in order to assure applications support EAF and ACS, to identify and resolve cross-functional data requirements, and to field applications under GCSS-AF. SAF/AQI is working on resolving the single acquisition manager issue prior to coordination with the Air Staff. We hosted a requirements integrated process team meeting in June to further refine warfighter requirements, for inclusion in future ORD annexes and to provide a basis for future integration work. The PMD is in the final stages of coordination, so I anticipate it will be approved in the near future.

Q. What's next for GCSS-AF?

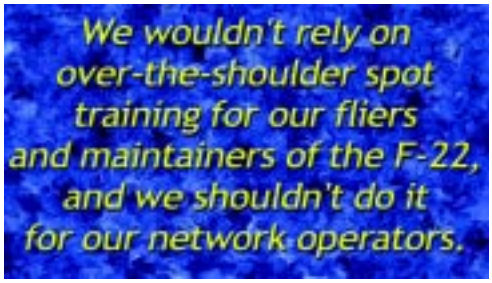
A. It seems obvious that the Air Force will continue this process into the foreseeable future. It's too important for us to do otherwise. On the operational level, we must share information and take advantage of decision tools so we can meet the demands of the EAF construct. On the technical level, we must share such things as services, software development efforts and servers, so we can effectively meet tomorrow's information requirements with dwindling resources. When fully implemented, GCSS-AF will be the primary operational planning and execution tool for CINCs and JTF commanders. It will be our guide as we transition from peacetime to wartime and back again. GCSS-AF will greatly enhance the Air Force's ability to provide reliable integrated combat support information to the warfighter wherever and whenever it's needed. (*Editor's Note:* The AF EB/EC Implementation Plan is on the Web at http://ecommerce.af.mil/.)

Air Combat Command seeks better preparation of computer network operators

By Chief Master Sgt. Elaine LaMaster
Communications and Information Systems
Headquarters Air Combat Command,
Langley Air Force Base, Va.

We depend so much on computer networks today that the majority of our workforce has to stop work when the network crashes. Most of us have heard, or might even be guilty of saying, "Well, the network's down, so I can't do any work." The recent "Love Bug" virus reminded us just how much we depend on the network to do our jobs.

Over the past 10 years, the Air Force has spent hundreds of millions of dollars buying state-of-the-art equipment and installing it on our bases to stand up computer networks. Unfortunately, we've too often neglected to spend the time, energy and money to ensure we trained and certified our folks to operate those systems. Think about it. We wouldn't rely on over-the-shoulder spot training for our fliers and maintainers of the F-22, and we shouldn't do it for our network operators.



Currently, the Air Force requires only that airmen complete their Career Development Courses and one year of on-the-job training at their duty station. We have not required trainees to complete computer-based training as part of their OJT, even though it has been available for the past 3-4 years. To help fill this gap, Air Combat Command is working with the Air Staff to do the following:

1) field network training centers;

2) institute a certification process using standard operating procedures and evaluations; and

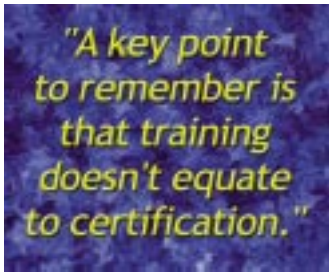
3) establish a Standardization-Evaluation function to give trainees initial and annual "check rides," similar to those given to aircrew members.

The Air Force took a great stride forward in the past year to improve training programs by making available Air Force Instruction 33-115, Volume 2, Licensing Network Users and Certifying Network Professionals, which outlines the training our network professionals need.

As part of the structured OJT initiative, network training centers will provide classroom courses building on the basic network skills taught in the 3- and 7-level courses, and will reinforce knowledge and skills taught in the CBT. The command is also developing tactics, techniques and procedures for normal and emergency operations on the network. These TTPs will enhance our ability to protect and ensure the operational availability of our networks and information. They also will help standardize training processes and network operations.

The TTPs will capture procedures and rules of engagement in technical order-style instructions and checklists – similar in format to those the rated community uses to operate and maintain aircraft. We will insert the TTPs into the Master Task Training list as a training source for the different NCC and NOSC positions. We will also incorporate them into our "check rides." The result will be better preparation of our computer network operators.

After trainees pass their initial check ride, the wing approving authority will certify them to perform the mission. They will retest annually to ensure proficiency. A key point to remember is that *training* doesn't equate to *certification*. Training offers individuals the *ability* to perform as network operators, while certification grants *permission* to perform those duties. Just because people are trained, it doesn't necessarily mean they're qualified and ready – that's where the evaluation and certification process becomes vital to mission success.



We are working with the Air Staff to standardize the entire process and to incorporate the instructions and checklists into AFI 33-115, Volume 2.

Meanwhile, to see what ACC is doing, you can download ACC's TTPs from http://networks.acc.af.mil/scnm/ttps/checklists.htm.

ACC's Computer Management Approach

A process reengineering to electronic business success story

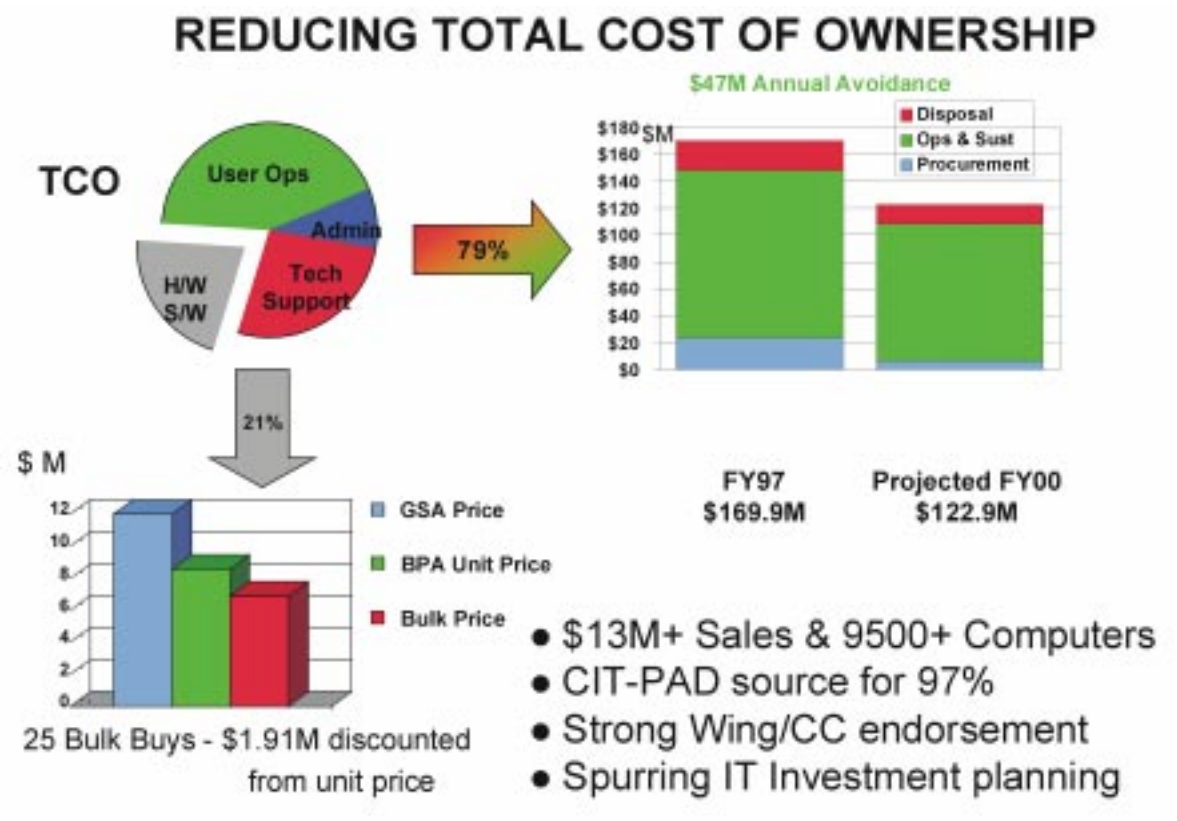
By Mario Manfre and **Master Sgt. Eric Holder**
Communications and Information Systems Headquarters, Air Combat Command, Langley Air Force Base, Va.

If information technology can be leveraged to eliminate steps and streamline processes, why not use it? That's what Air Combat Command's ACCWAY computer management system does for anyone who buys, uses, supports or manages personal computers. The new process sprang from a cross-functional process reengineering initiative involving computer users, the ACC Chief Information Officer, contracting, finance and the support community. Their results reengineered the complete information technology lifecycle process, slashing time and costs, and making critical new functions possible.

The IT lifecycle involves identifying computer needs, and then purchasing, using, maintaining and disposing of them. Previously, there wasn't a single process connecting these activities. Since the disjointed, inefficient steps weren't institutionalized, they caused buyers, users and technical support members to spend more time and money than reasonable. The broken process also made it impossible for the CIO to manage entire aspects of ACC's IT enterprise. ACC partnered with the Standard Systems Group at Maxwell AFB-Gunter Annex, Ala., to add CIT-PAD vendors to the site.

CIO chartered a team to tackle reengineering of the IT lifecycle process, including all process activities associated with every IT purchase. The multi-disciplinary team involved subject matter experts from communications and information, contracting, and financial management. By incorporating each functional's processes, the team generated intense interest with spontaneous, unanimous support in each of the communities. The solution team fine-tuned the design, built ACCWAY (the computer management system) and ACC began command-wide implementation last July.

ACCWAY is a solution that integrates a new business process with a tailored IT. The business process incorporates buying new computers (an electronic commerce piece), and the automation is Web-based, flowing electronically from buying to support, management and planning. The Web-supported process starts with CIO standards for hardware and software being applied



"When ACCWAY is fully implemented, ACC expects to reduce IT activity costs by $47 million annually."

so that only compliant products are listed, and allows buyers to choose computer technology levels, configure systems, compare between multiple vendors' offerings displayed on a single screen ranked by cost, and make the purchase. The purchase information automatically flows for approval and electronically "inventories" the purchase.

ACCWAY has dramatically reduced ACC's Total Cost of Ownership by saving time and money, and increasing the technical soundness of the ACC IT enterprise. The site eliminates the Computer Systems Requirements Document (AF Form 3215) paperwork, and cuts manual PC purchase coordination to zero. The contracting community participates in vendor selection, and CIO standards filter the products before the customer's purchase process even begins. PC buyers literally can't select problematic non-standard products. The average acquisition cycle has dropped from 14 to two days, since product selection can be accomplished in minutes with simple configuration choices and instant on-screen head-to-head product comparisons. The purchase coordination is automated and includes everyone needing to know about, approve or plan support.

While the average is two days, whole procurements have been accomplished in under five minutes. The site's continuous product price and feature competition ensures the best price available. Large purchases trigger an automatic process that provides additional vendor discounts and depicts the information in the same head-to-head comparison format. Each purchase has an electronic audit trail, and the cost and item information electronically feed an asset management database. On-line reports are immediately available to confirm equipment purchased, cost and order status.

The volume discount potential has generated Air Force-wide interest, because ACC received more than $1,919,000 in discounts in only nine months. Competition is generating larger discounts. The average bulk discount in Fiscal Year 1999 was 11.7 percent, while the average in FY '00 is 27.9 percent and growing. Bulk purchases are now enjoying an average discount of $495 per computer.

While hardware cost savings are significant, the largest gain is in reducing IT lifecycle activity costs. All ACCWAY PC purchases come with the ACC standard software (such as Microsoft Office and network client licenses) preinstalled, speeding setup and reducing technical support workload. Bulk purchase discount incentives are raising the average number purchased in a single buy. Earlier surveys showed each IT purchase averaged 3.5 computers. Today the average is 12.1 per purchase and rising. As a result, ACC eliminated 1,956 individual procurements, while buying 9,500 computers. When ACCWAY is fully implemented, ACC expects to reduce IT activity costs by $47 million annually. ACCWAY is dramatically reducing effort, while speeding and improving results.

Whenever good, simple to grasp ideas are first discovered, many reactions are along the lines of, "Of course! Why didn't I think of that?" Within the Air Force IT community, that type of reaction has been universal. The most accurate validation is peer review, and ACCWAY is receiving unanimous approval, culminating in its selection as the new Air Force standard process for IT lifecycle management.

Watch for Air Force implementation to grow and mature, with all major commands participating in guiding its evolution.

Bomb damage assessment photos of the Baghdad Directorate of Military Intelligence Headquarters, Iraq, used by Chairman of the Joint Chiefs of Staff Gen. Henry H. Shelton, U.S. Army, in a Pentagon press briefing on Dec. 17, 1998.

New system speeds delivery of video imagery to warfighters

By 2nd Lt. David Blau
1st Combat Camera Squadron.
Charleston Air Force Base, S.C.

Delivery of vital video imagery to warfighters has been reduced from days to hours, thanks to a system pioneered by Weapon Systems Video. The new approach replaces classified couriers with a combination of the Web and network computer systems.

In wartime, Weapon Systems Video is an essential and vital source of Battle Damage Assessment imagery and a Combat Camera core competency. In general, WSV imagery is used at three levels: strategic, theater and unit. At the strategic level, WSV imagery provides immediate documentary evidence of air component actions, and helps disprove enemy claims of civilian targeting and collateral damage. At theater level, WSV imagery provides rapid BDA to assist in planning future targets. At the unit level, WSV imagery is downloaded from strike aircraft, and analyzed by tactics and intelligence personnel to determine sortie success and initial effectiveness. WSV is also important as a resource for informing the public, and influencing national and international opinion.

WSV's primary purpose is to rapidly identify, process and disseminate video imagery to headquarters of U.S. combatant commands, the Joint Forces Air Component commander, Joint Task Force commander, agencies responsible for BDA, the Pentagon, and other agencies conducting task force objectives analysis. Video depiction of the acutal delivery and impact of ordnance is a principal source of "over the target" documentation.

Combat Camera is the only organization tasked to provide theater-level collection, management and dissemination of WSV imagery. In Operation Desert Storm, armament delivery recordings became an essential part of operational support. During the Gulf War,

however, this process proved to be lengthy and time-consuming. Bomb imagery was first recorded on VHS tapes, then transported by classified courier from deployed fighter squadrons to theater headquarters for review by operations and intelligence personnel. The Air Force was not keeping up with technology advances that made it possible to provide imagery quickly to those who needed it. It was now possible to acquire imagery digitally, and with the increase in bandwidth, it could be sent directly to customers electronically. With these technological advances available, changes had to be made in the method of disseminating WSV imagery to operations, intelligence, public affairs, the Pentagon and other customers.

In December 1998, Operation Desert Fox reemphasized the need to improve the delivery of imagery. Not all Joint Task Force – Southwest Asia WSV imagery could be rapidly processed and distributed to meet national and operational requirements. Given the unstable situation in that area of responsibility, and the potential for escalating hostilities, a baseline WSV collection and distribution process needed to be established within the theater with minimum personnel and equipment.

At the request of USCENTAF, a team from 1st Combat Camera Squadron, Charleston AFB, deployed to SWA to determine how to best employ and integrate Combat Camera and Visual Information assets at the wing and base level, and at JTF-SWA. The team developed a concept of operations to address current needs, existing procedures, organizational issues, theater limitations and a proposed solution.

Our solution for expediting the process of collecting and disseminating WSV imagery started immediately after mission completion.

Intelligence personnel debriefed the aircrews, collected the WSV tapes, turned them over to VI personnel and prepared the mission report.

VI enhanced the clip and forwarded it with the MISREP electronically to the Combat Camera JTF-SWA WSV server through a Secure Internet Protocol Router Network interface on the World Wide Web.

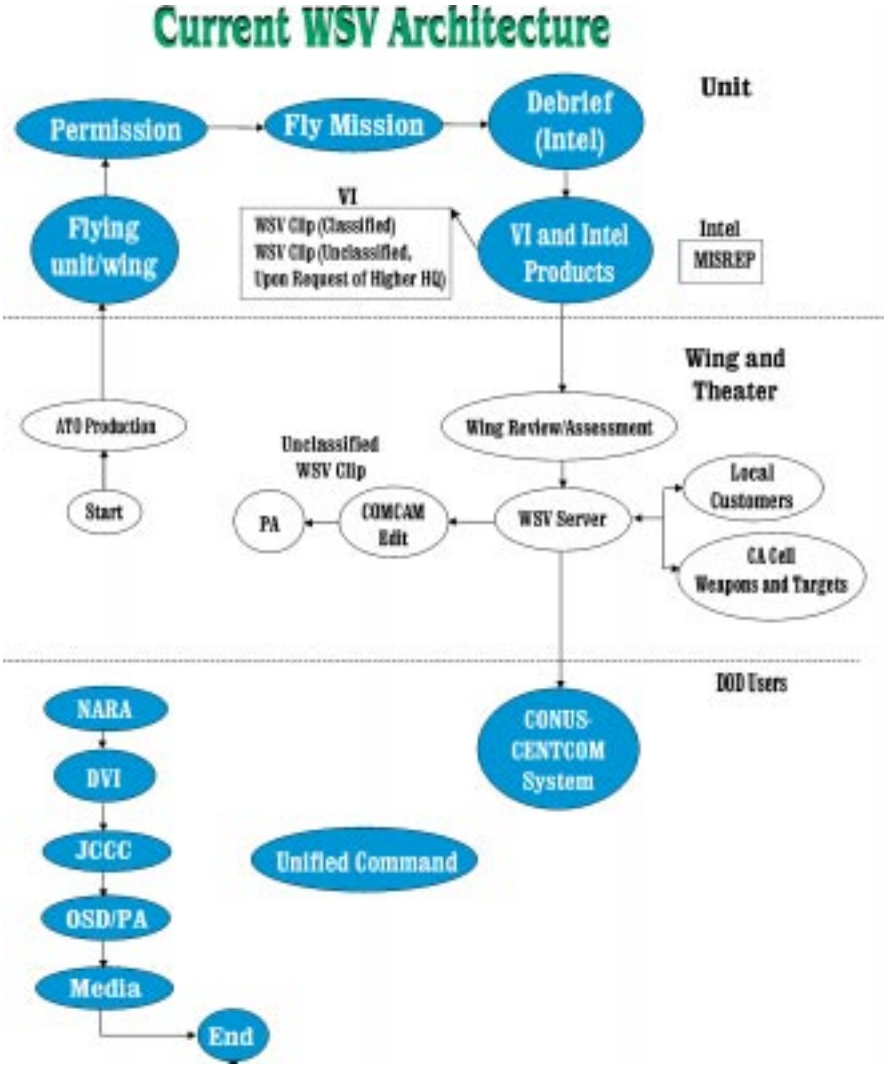
The MISREP and the WSV were stored on the SIPRNET WSV server, so that the Combat Assessment Cell and local customers could perform strike analysis.

After the clip had been released from theater, Combat Camera forwarded it and the MISREP to USCENTCOM headquarters, where it was stored on the Global Command and Control System.

From GCCS, the clips were made accessible to all authorized personnel worldwide.

Appropriate clips were pulled from the JTF-SWA WSV server, edited by Combat Camera, and given to Public Affairs for release. (See Current WSV Architecture figure)

Combat Camera currently has one person deployed to JTF-SWA to perform maintenance and upgrades for the WSV server. CONOPS for full implementation of this process is in final development, and the interim certificate to operate is under review for approval. When the CTO is approved, the WSV server will be put on the SIPRNET and the process will be fully operational. This new electronic process allows the WSV clip to be viewed by customers worldwide within a couple of hours. The old process of hand-carrying tapes by classified courier took two to three days. USCENTCOM is the only major command employing this new WSV process. However, once it becomes fully operational, we believe that other commands will be quick to buy into this highly effective and efficient method of getting critical WSV imagery to the customer.



Business Process Reengineering: A valuable tool for OPTN

PENTAGON – Much has been written about the advantages of Business Process Reengineering, but little has been written about the Air Force's success with BPR as a construct of the Operationalizing and Professionalizing the Network concept. This article describes OPTN through a BPR framework. BPR seeks new methods of organizing work, and OPTN has provided a unique opportunity to frame Air Force communications operations into a new, dynamic BPR construct.

Air Force communications and information resources are force multipliers directly supporting the Air Force core competencies of Global Engagement, Aerospace Superiority, Global Attack, Rapid Global Mobility, Precision Engagement, Information Superiority and Agile Combat Support. The Air Force's three-tiered hierarchical structure manages unclassified and classified voice, video, data, imagery and sensor networks that provide essential information to decision-makers, warfighters and users, enabling them to achieve their operational objectives.

One goal of OPTN is to formalize networking initiatives under one corporate umbrella. OPTN has successfully integrated corporate Air Force knowledge into a formal construct supporting the enterprise engineering function by examining alternative organizational models. The unprecedented success of the Air Force Y2K effort is a good example of using OPTN constructs to integrate a variety of network designs to permit a quick response and reaction to an enterprise threat. OPTN has provided the means for visualizing the entire Air Force Enterprise Network Operations.

Operationalizing, which is the focus of this article, means instilling operational rigor into Air Force networking business through the following:

Readiness requires the Air Force to apply the same rigor to the mission readiness of networks as other combat systems. Readiness is determined by people, equipment and training directed by the right doctrine, operational plans, capability and resources to support air and space operations. Throughout the Air Force, readiness is measured using the Status of Resources and Training System, and network operations are no different. The network is an integral part of today's warfighting capability. We must ensure the network's personnel, equipment and training are ready.

Inspection and Evaluation means measuring capabilities and guaranteeing compliance. Incorporating networks into every facet of the inspection process is vital. We are developing tools such as self-inspection guides, identifying special interest items, creating meaningful metrics, and inspecting for compliance. Using these tools, we will conduct staff assistance visits, standardization evaluations, compliance inspections, operational readiness inspections and exercises. Inspections and evaluations provide commanders with a realistic assessment of their network and insight to its operations. Thorough inspection and evaluation processes enable commanders to have confidence their network can be trusted as a key weapon system in operations.

Graduated Response prioritizes network resources and applies countermeasures as a situation dictates. It involves escalation procedures for reporting and reacting to increased threats. Information Operations Conditions has two pillars: structured and unstructured attacks, and operational generation—a direct response to a situation. Together they provide the structure to identify threats and attacks against Air Force communications and information resources, disseminate attack warnings, and posture our networks to respond to real world situations. These form a graduated reporting structure that gives decision-makers situational awareness of capabilities lost or degraded by an incident.

Operational Reporting gives decision-makers a concise picture of events and situational awareness essential in making timely operational decisions. Knowing the status of Air Force networks is critical to our aerospace forces. When network events and incidents degrade network operations and interfere with the flow of critical information, the OPREP structure allows decision-makers to quickly assess the impact on their operational capabilities.

Rules of Engagement detail the set of passive defensive measures used to minimize adverse effects of network vulnerabilities, threats or attacks. They involve a wide range of actions, such as connection denial, firewall configuration, password protection, removal of vulnerable components, and establishing redundant connectivity.

OPTN is a bold initiative to standardize Air Force network operations and institutionalize networking skills, in order to treat the network like the weapon system it has become. Benefits of a successful BPR effort, such as OPTN, are readily apparent and continue to improve critical network operations. *(Courtesy Air Force Communications and Information Center/SYI)*

'You can't cross a chasm in two small jumps'

By Maj. Dale Long
Headquarters Air Mobility Command,
Scott Air Force Base, Ill.

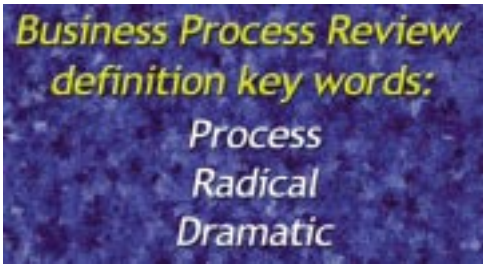
Business process reengineering has been part of the business scene for about 10 years. It has been tried, with varying degrees of success, across the corporate and government spectrum. This article will briefly revisit what BPR is and how it's supposed to work.

According to Dr. Michael Hammer, the man who claims credit for coining the term, business process reengineering is:

"The fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical measures of performance (cost, quality, capital, service and speed)." Three key words are in the definition:

Process: A collection of activities that create value.

Radical: BPR is a "rip it out by the roots" process. You don't do "as-is" modeling with BPR, because you really don't care what your current process is. Start from scratch. If your business didn't exist today, how would you create it?



Dramatic: We want a quantum leap, not incremental improvement. Dramatic results means an 80 percent reduction in cost, or a tenfold increase in productivity, and preferably both at once.

Here's the good news: Companies like Ford Motor, Taco Bell, and Texas Instruments have achieved these dramatic results with BPR. The bad news: For every organization where BPR succeeded, there were at least three where it failed.

Some of the reasons BPR fails:

- Lack of support from top management is probably the number one killer of BPR. Start the project, hand it off to a team, and go back to executive concerns. This will result in certain death for anything remotely controversial. Even worse is when management puts the people who will be displaced if the BPR succeeds in charge of the project. This will virtually guarantee no substantive change.

- A second reason BPR fails is by picking the wrong process. Some people loathe tinkering with anything critical, so they squander precious resources on a peripheral project that doesn't threaten anyone or have any significant impact on the bottom line. This simply drains productivity from more important areas.

- A third problem is uninformed optimism. BPR is not solely about adding new technology. Some people seem to have the childlike belief that if we buy enough technology we can solve any problem. Unfortunately, computers and modeling techniques only act as extensions of our own, often imperfect, understanding. If our basic processes are flawed, a computer will only help us make our mistakes much faster and in greater quantity.

- Finally, don't let the "techies" hijack the reengineering. BPR is a business operation first, and a technical implementation second. Just because a project involves an infusion of computer technology doesn't mean the programmers should be making business decisions. Reengineer based on performance outcome, not system requirements.

If we want the dramatic improvements possible from BPR, we must be willing to change fundamental assumptions and beliefs. BPR must focus on business processes, not artifacts (including people or equipment) or organizational boundaries. Nothing should be sacred. You may literally have to fire everyone, redesign the entire business from the ground up and then see who's still qualified when you rehire. With that kind of organizational stress, a 10 percent return on investment isn't worth it.

This is why most people really don't do BPR. We're generally more comfortable with making incremental changes where we take small steps and change things a little at a time. BPR is more of a "jump or die" process.

There was an oil rig fire in the North Sea about 13 years ago. With no other way to escape the fire, one man leapt from the burning oil rig into the bone-chillingly cold water. When interviewed afterward, he was asked if he knew how cold the water was and that he'd have only lived 10 minutes, at most.

"Yes," he replied. "But if I'd stayed on the rig, I'd have been dead for sure."

That pretty much sums up BPR. The stress and risk involved should make it a means of last resort for most situations, and if we don't do it correctly we can simply wipe ourselves out that much faster. Done well, however, BPR can transform an average process into a top performer, if we're willing to make a total commitment and do it correctly.

If you want to try BPR, here's a bit of advice from David Lloyd George, the British statesman and WWI-era Prime Minister:

"Don't be afraid to take a big step. You can't cross a chasm in two small jumps."

Air Combat Command initiates virtual Management Level Review

By Eula Simpson and **Capt. Chris Anderson**
Communications and Information Systems
Headquarters Air Combat Command,
Langley Air Force Base, Va.

Air Combat Command has developed a way to make its promotion review process more accurate and less costly.

Using process reengineering and information technology as its basic tools, ACC's directorates of Personnel, and Communications and Information, initiated a virtual approach to Management Level Review that reduces errors, while saving process steps, man-hours, and coordination and travel time.

MLR is the portion of the promotion process that occurs after recommendations are made by senior raters at wing, numbered air force and major command levels, and before the candidates' records go to the Central Selection Board that ultimately determines who gets promoted. The project began last August, when the two directorates decided to pursue information technology solutions. The team used Targeted Process Reengineering, spiral development, and contract support to develop the system, which will be ready to use in September.

The goal of the reengineered MLR process was to maximize system integrity and minimize expenses. The result meets both criteria, by establishing a flexible Web-based system that improves accuracy, and by making it possible for board members to review and score records without departing home base.

Our first step was to reengineer the process before applying an IT solution. Our TPR team of facilitators from the Reengineering office, customers from Personnel, and technical experts from Communications and Information spent two weeks on the task. This step included a look at how to integrate inputs from senior raters with outputs of the Air Force Personnel Center.

The first week's focus was on mapping the MLR process "as-is." In the second week, we took a "clean sheet" approach, developing an "ideal to-be" process. We analyzed ways to use IT, finally accepting a mixture of IT and some necessary manual processing.

We identified some potentially dramatic cost savings. By automating manual processes such as data entry and tabulation, the reengineered process actually increased the integrity of the system. It decreased data interfaces from 11 to 5, or 55 percent. Processes involved in accomplishing an MLR dropped from 218 to 169, or 22 percent. Manual steps such as copying and data entry decreased dramatically from 61 to 12, or 80 percent. When the system becomes virtual, there will be no need for TDYs, saving ACC $317,000 and 300 man-days annually.

During discussions on "how to get there from here," we decided to build the tool using a spiral development methodology, to mitigate risk and ensure flexibility in meeting user needs. We first developed an on-line scoring capability, getting the "most bang for the buck" by immediately decreasing Personnel's manual workload. We then provided on-line duty qualification histories, records of performance, and personnel record files. To effectively manage this change in business, we're using a phased implementation approach to achieve senior rater buy-in.

Our first effort, on-line scoring at Langley for the June MLR, was successful. Next, we plan to prove the concept of on-line records, PRFs and Duty Qualification History Briefs by using one of the sessions at the Majors' MLR in August. The virtual MLR software will be completely developed by early fall, with continued incremental implementation. Integral to this successful rapid application development was thorough system level testing, and the Capability Maturity Model Level Three planning and documentation developed by our contractor, Science Applications International Corporation.

The vMLR project's success is directly attributable to the teamwork and partnering of ACC's Reengineering office, Personnel, Communications and Information, and SAIC. Reengineering provided expertise and an objective, third party perspective. Communications and Information managed the overall vMLR project, from participating in the reengineering, to hiring the contractor, to performing as the Quality Assurance Evaluator. Personnel provided subject matter expertise and was integrally involved, from leading the reengineering, to surveying senior raters, to keeping an open dialog with Headquarters Air Force and AFPC for their buy-in and approval. Personnel's staunch commitment was evidenced by always being available to answer questions, attend meetings and gather information for the team. SAIC quickly learned the process, researched all interoperability issues and developed the tool.

Our dialog with higher levels continues, as we advocate implementation of vMLR Air Force-wide.

AF Electronic Commerce Technology Office provides variety of EC services

By Barbara Marshall
Headquarters Standard Systems Group, Maxwell Air Force Base-Gunter Annex, Ala.

The Air Force Electronic Commerce Technology Office is the focal point for insertion of Electronic Business and EC practices and technology into Air Force standard automated information systems. Although its primary focus is on standard systems, AFECTO is chartered to assist Air Force and DOD agencies on a cost-reimbursable basis. To do this, AFECTO provides products and services in three main areas: EC Services, EC Analysis and EC Technology.

AFECTO has been hosted by Standard Systems Group at Maxwell AFB - Gunter Annex since its creation in 1994. AFECTO's original charter was to help the Cargo Movement Operations System Program Office develop the ability to electronically transmit government bills of lading to trucking companies and overnight delivery services supporting over 130 Air Force locations throughout the U.S., using American National Standards Institute X12 transaction set formats. As DOD-level logistics and transportation plans involving EC are put in motion, AFECTO expects to continue helping logisticians achieve their Joint Total Asset Visibility and CONUS "reach-back" objectives.

In response to President Clinton's executive memorandum, "Streamlining Acquisition Through Electronic Commerce," October 1993, AFECTO led development and implementation of the Base Contracting Automated System's-Menu-Assisted Data Entry System II Electronic Data Interchange module. The MADES II EDI module helps contracting officers make contract solicitations between $25,000 and $100,000 available to more potential vendors. AFECTO oversees the transmission of electronic solicitations, vendor responses and award notices.

Another area AFECTO has reengineered is the electronic method the Defense Finance and Accounting Service uses to pay DOD contractors and vendors. While electronic funds transfer had been used for several years, the process that initiates an EFT had been manual and paper-based. AFECTO designed the electronic interfaces that notify the Federal Reserve System to make electronic payments. For the first time, the Federal Reserve and payee began receiving advance notice of payment.

AFECTO's most recent achievement is implementation of the DFAS Web Invoicing System. WInS was implemented, in partnership with DFAS-HQ, Concurrent Technologies and Tecolote Research, to enable small- to medium-sized paper-based vendors to submit invoices to DFAS electronically with little or no cost. WInS does not require vendors to use translation software or Value Added Network services. Vendors may either send a batch file to WInS or key in the invoice data. Invoices are submitted through the WInS Web server and translation to the ANSI X12 transaction set is accomplished on the Air Force EC Gateway. The system makes it easy to collect and securely transfer invoice data from the vendor's personal computer to the DFAS payment system. WInS resides on an SSG government Web server. Invoicing is one of the most paper-intensive functions at DFAS. Processing invoices with EDI has enabled DFAS to improve customer service and reduce operating costs.

A close association with SSG's developers and functional area experts, allow AFECTO to get into the "nuts and bolts" of evaluating new and existing systems and preparing them for full use of electronic commerce. The resulting design provides the "best fit" with transactions and processes that guarantee success. Unique to Gunter is robust EC prototyping that allows complete "end-to-end" testing during development. After an EC environment becomes operational, the EC staff can provide comprehensive customer support to ensure it remains viable and reliable.

With new ideas and technology emerging every day to support EC, an essential function is developing new opportunities, services and answers to old business problems. Our continuing evaluation and testing of commercial translators, gateway software and communications protocols helps keep the Air Force out front and positioned to support President Clinton's "Framework for Global Electronic Commerce," announced in July 1997.

AFECTO has been the key element in moving EC into several important Air Force business areas, and it has already saved millions of dollars and hundreds of man hours annually, while reducing processing time. AFECTO's efforts are generating significant tangible savings for the Air Force and DOD by changing the way routine business was historically performed.

For more information about AFECTO, contact Capt. John Morgan, chief, AFECTO, DSN 596-1418; Barbara Marshall, deputy, DSN 596-3294; or Tech. Sgt. James Howell, NCOIC, DSN 596-5955.

Information Warfare Battlelab

New paradigm for research, development, acquisition

By John M. Pirog
Air Force Information Warfare Battlelab,
Kelly Air Force Base, Texas

The Air Force's method of acquiring new information warfare capabilities has undergone some significant changes. The biggest is the standup of the Air Force's Information Warfare Battlelab. The battlelab has had a positive effect on the ability of the Air Force to acquire and field IW capabilities that meet user needs. Unfortunately, the IW Battlelab is an ongoing experiment that hasn't been institutionalized. Its paradigm is a teamwork-based approach that involves users, developers and operators, and it's helping to remove impediments that have plagued the development community for years.

The current process of developing and fielding IW capabilities is riddled with inefficiencies and problems. Along with the usual restrictions placed upon all government research, development and acquisition, the speed at which IW technology changes makes it even tougher. Since the Air Force can't possibly keep pace with the rate of change, it has learned to take advantage of the commercial marketplace (industry and the public). While this approach helps, it's not enough. For instance, in the computer network defense area of IW, the marketplace doesn't have the same CND needs. Industry can write off their losses due to computer intrusions, but the Air Force can't afford to do this, so its CND capabilities must be far superior. Because of this shortfall in commercial marketplace technology, the Air Force must find a way to efficiently acquire needed CND capabilities using its own research, development and acquisition system.

The current three-player, stove-piped process of acquiring IW capabilities must be replaced by a team based approach. The process flow and relationship between the three main players – researcher, developer and user – is problematic. The researcher, by definition, pushes the state of the art. While freedom fosters innovation and creativity, if left totally unchecked, it can lead to "sandboxing" or "research for researchers' sake." Some guidance is required. Direct user-to-researcher contact usually leads to overselling on the part of the researcher, and inflated expectations on the part of the user. Instead, researchers need the guidance of a middleman who understands both the research side of things, and yet can "talk" to users. The IW Battlelab fulfills this role.

Enter the developer. The developer's traditional duties span the entire spectrum of the development process as shown in the Developers Spectrum (next page) – which is another problem. They dabble in research, just as the researcher does, they explore new and existing technology, and they implement operational systems. Unfortunately, it's unreasonable to expect a developer to work the entire spectrum effectively. Developer functions need to be separated into two functions.

The first function goes to the developers that have a foot in the research world. These developers, called Explorers, experiment with both commercial-off-the-shelf and government-off-the shelf technologies. Like researchers, they investigate technology, but they base their investigations on existing technology. They can explore what is possible and still attempt to tie their work to user needs. The IW Battlelab seeks out the Explorer's concepts, as they have matured enough to be demonstrated, yet there is still an element of innovation and, consequently, risk. Where the Explorer leaves off, the second developer function kicks in – acquisition.

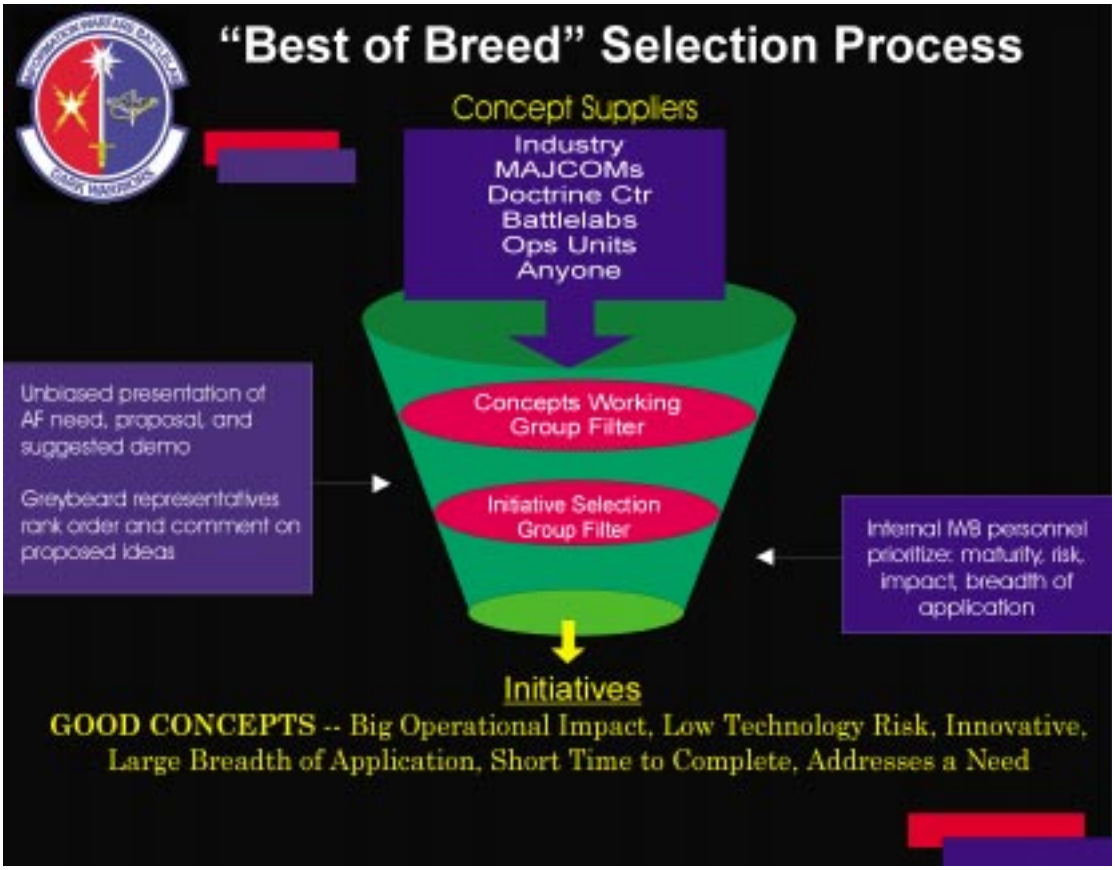
The acquisition community must use everything the Explorer or commercial world has to offer in developing their systems. This hasn't always been the case, but because the development functions are separated, you can now find people who, operating as a team, are able to effectively work the entire development process. The IW Battlelab fosters this separation of duties by ensuring involvement of both types of developers, making the whole process more efficient and involving the most important player – the user.

While the current user duties include requirements, funding and operator activities, a key user function is still missing. The missing function is the testing and operational evaluation of IW capabilities, by a user,

Developers Spectrum

within an operational environment setting. The IW Battlelab facilitates this by bringing the Explorer, user and acquisition community together as a team to operationally demonstrate the military worth of a concept. This teaming concept should not be left just to Battlelabs to facilitate, but should be institutionalized throughout the research, development and acquisition processes.

In summary, the IW Battlelab continues to encourage the teaming among Explorer and user (operator) in order to find those select few concepts that can make an immediate impact to the Air Force's IW capabilities. As part of its paradigm, the Battlelab brings the acquisition community into the team to push the concept into a full capability in the shortest time. The acquisition community needs to use established teams of researchers, explorers and users to reduce their risk and guide them in developing and fielding IW capabilities. It's only through the team based approach that the Air Force can hope to keep up with the fast paced IT world, upon which it depends so heavily. With the Air Force IW Battlelab's continued success, the mainstream research, development and acquisition communities can't help but look closely at the new paradigm that is reshaping how the Air Force acquires IW capabilities.



Focus on the customer – another piece of the puzzle

By Maj. Timothy N. Williams
32nd Air Operations Squadron, Ramstein Air Base, Germany

From left: Staff Sgt. Swan, Tech. Sgt. Bowermaster, and Tech. Sgt. Krzyzanowski work in the U.S. Air Forces in Europe AOC testbed.

The Air Force communications and information community has long been concerned with "doing business better." We're often involved in process improvement, metric measurements, and management reviews. These efforts often help us improve how we do our jobs. However, we too often focus only on the technical aspects, such as increased processing speeds, reduced network outages and faster turnaround times. Due to the nature of our business, we tend to equate "quicker" with "better." While this is sometimes true, we must be careful to make sure what we perceive as an improvement really does make life better for the people who matter the most: our customers.

Directly enhancing the ability of customers to do their job is often elusive. It's our responsibility as military professionals to find ways to help the customer complete the mission easier, faster, better. With the diverse customer base we face throughout the Air Force, there is no set formula for tackling this task. However, I can share some approaches used by communicators supporting the USAFE air operations center. Hopefully, you'll be able to apply similar solutions to your operation.

The largest hurdle often is figuring out what the customer really needs. For USAFE's AOC, we have many standard methods of getting this information, including Communications Systems Requirements Documents (AF Form 3215) and an AOC Configuration Control Board. These are usually reactive in nature, instead of proactive. Therefore, we established a technician ownership program and instituted daily walkthroughs of each facility. This accomplished three important things. First, technicians—who each "own" a specific facility with a set of users—feel a sense of responsibility for "their" customers and are on the lookout for ways to improve service to them. Second, daily walkthroughs identify potential problems early … a kind of preemptive maintenance at the customer level. While it may sound time-consuming to perform daily walkthroughs, we found technicians actually spend less time on jobs under this program. Finally, we get much better customer involvement. Technicians, with whom the customers are now familiar, point out better and easier ways of using applications to do their jobs, and customers can readily get a trained communicator's suggestion for new products or procedures. It's important to note that the ownership program did not eliminate our help desk. Customers can still call any time for service, and technicians also log jobs they perform dur-

Senior Airman May works with a customer.

ing walkthroughs. With the ownership program, we actively seek ways to help the customer, rather than waiting for calls to come to us.

Another obstacle to customer focus is the mentality that assisting customers is an annoyance, rather than the purpose of our job. For some units, this may require a culture change. We need to take the initiative to find ways to better serve our customers. Again, the answer is not always a faster computer, a larger hard drive or fancier phone instruments. To help the customer in this way means having at least a rudimentary knowledge of their job. But think about it: except for some of the folks at the very tip of the pointy end of the spear (fighter and bomber crews), most of our customers are involved in moving information. Providing tools and expertise to move information is our forte. USAFE AOC technicians have worked so hard at finding ways to help customers that they've gained considerable knowledge of their customers' areas of expertise. This diligence has paid off in many ways. For instance, by determining what mix of automated tools was both preferred and required by operators on the AOC floor, technicians built Sun workstations that could run both Unix-based applications and commonly-used Microsoft products. This eliminated many desktop computers, thus freeing up much-needed desk space, and creating a more pleasant working environment. The customers loved it!

Finally, we must ensure what we're giving the customers actually makes their job easier or helps them do it better. Since we generally don't want to test ideas or solutions on live systems or in the customer's office, we're usually forced to work during "downtime." If your unit doesn't perform shift work and you aren't manned 24 hours, this can be a problem. The only answer is to develop a testbed. Like most units, we have few funds to spare, so we used a little military ingenuity. The USAFE AOC had mobile shelters which were being used as storage bins. We cleaned those out (a feat in itself) and set up a small network testbed. While it's nothing extravagant, it allows us to test new products and procedures before we hand off to customers. A side benefit is we can also use the testbed as a training platform for new troops.

Feedback from AOC users regarding our initiatives has been totally complimentary. But more importantly, we see direct, positive mission impacts on a continual basis. So keep your focus on the customer and you too will see superior results where it really counts.

Staff Sgt. Heinlein kneels down to lend a helping hand during her daily walkthrough.

America's Air Force - global vigilance, reach, power

By F. Whitten Peters
Secretary of the Air Force,
and **Gen. Michael E. Ryan**
Air Force Chief of Staff,
Washington

This week, we released America's Air Force: Global Vigilance, Reach & Power, to update our vision for the 21st century. It captures where we're going as a service and helps Air Force people plan for the diverse challenges we'll face in the 21st century.

This document builds upon and extends ideas in our previous visions and reflects organizational and conceptual improvements since the publication of our last vision. It also supports the principles laid out in the recently released Joint Vision 2020.

Airmen from across the Air Force contribute to our ability to deploy and sustain powerful aerospace capabilities wherever and whenever necessary. While there is much in the vision that is new, the foundation remains the same — our people and our values. The vision makes clear that we will continue to rely on our great Air Force people to be the engines of change and integration and progress. We'll rely on all our people — active duty, Guard, Reserve, and civilian — leveraging the strengths of the total force.

The document is short and concise. It does not talk about specific weapon systems or about the details of defense budgets. Instead, it represents our thinking about the aerospace domain and our role in it — how we'll exploit the full aerospace continuum to meet the nation's needs. The art of commanding aerospace power lies in integrating air, space and information systems to produce the exact effects the nation needs. We'll continue broadening Air Force leaders to capitalize on the range of potent capabilities aerospace power offers.

Global Vigilance, Reach and Power are the overarching aerospace capabilities described in our vision: vigilance to anticipate and deter threats, reach to curb crises and power to prevail in conflicts and win wars. We will realize the true potential of full-spectrum aerospace power by thinking of vigilance, reach and power not as separate and distinct, but as capabilities that, when fully integrated, add up to much more than the sum of their parts.

Key to our concept is the expeditionary aerospace force, which will provide both increased capabilities to meet the nation's security requirements and greater predictability and stability for our people. Operation Allied Force proved the potential of our developing concepts. Impressive as the improvements seen recently have been, they're just the beginning. Aerospace power is America's asymmetric advantage and we're determined to ensure America keeps that advantage.

Our vision focuses on what we will do as America's airmen, but it includes a firm commitment to work effectively within the joint team, ensuring that we never forget the trust the American people place in us.

Realizing the potential of our vision will take the dedicated efforts and teamwork of all of you in the years to come. There'll be copies of the vision in the field soon. Meanwhile, you can find it on the web at http://www.af.mil/vision. We encourage you to read it, talk about it and understand it. It's your future, and it's brighter than ever. *(AFPN)*

Airman establishes effective workgroup manager training plan

By Senior Airman R. Galenda Mathes and
Airman 1st Class Heather Wolford
752nd Computer Support Squadron,
Tinker Air Force Base, Okla.

Photo by Airman 1st Class Heather Wolford

Senior Airman Ruby Mathes instructs a student on the correct assembly of a computer.

How, in an ever-changing technical Air Force, do you train 3A, information management, and 3C, communications-computer systems personnel effectively to meet the demands placed on them? Early last year all 3As were tasked to instantly know quite a few new job-related tasks, many of which are similar to 3C job functions. The question was how to get them trained effectively. I had to tackle this question when I arrived at Tinker AFB, in December 1998. I was tasked to create a merged 3A/3C training plan, because there was not an effective training process in place. An assignment to the wing LAN shop (which is now composed of both 3As and 3Cs) gave me an opportunity to create a training plan that incorporated information and concepts from both career fields. The training was broken down into three phases: Initial Evaluation, Modules and Follow On.

In the Initial Evaluation phase, trainees are evaluated on an individual basis and a level of competency is determined. This allows for target training in the trainee's weak areas, eliminating redundant training.

The Module phase is formal classroom training of computers and network theories and practices. Each module is broken into three levels of training: computer based, in-house and advanced off-base training.

Module I is Network Client Administration and Configuration. It teaches effective network management. This includes adding workstations, software, printers, users and mail accounts to the network in an effective way.

Module II is Technical Level PC Maintenance and Repair, and gives students 40 hours of in-depth, hands-on hardware experience and familiarization. To complete the class successfully, students build a PC from the motherboard up, load dual boot operating systems and print to a network printer.

Module III is Technical Level Network Concepts. It includes network concepts of a wide area network with an in-depth look at NT Workstation, TCP/IP and effective network management. By the end of class, students have a working knowledge of network infrastructure and the role each component plays as part of an effective system.

Module IV is Advanced Troubleshooting and Professionalizing the Network. It encompasses COMSEC, physical/logical network layout, ADPE and base help request procedures. The first two days is classroom lecture and practice of COMSEC, ADPE and Help Desk procedures. The last three days are the beginning of an internship working in a LAN shop. Students are given work orders and are taken through effective troubleshooting and resolution. A process has been set up, upon successful completion of this class and pending supervisor approval, that will allow students a one-month internship in a LAN shop.

The Follow On phase consists of directed software familiarization. This includes targeted short-term classes to educate end users on how to effectively use software they will encounter on a daily basis. This is geared not only to 3As and 3Cs, but to all users on the network. This helps reduce a great number of work order calls based on lack of familiarization with the software and operating systems.

This training, in only four weeks, allows our inbounds to have the knowledge and skills necessary to accomplish the mission with little follow-up training. This greatly impacts the readiness of our unit and wing, allowing us to deploy our people more effectively. Training both career fields together helps dispel misconceptions and fosters a sense of teamwork toward a common goal.

Air Force signs service-wide license agreement with Oracle

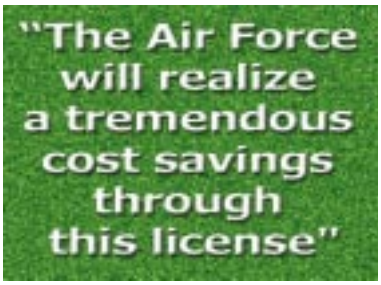
By 1st Lt. Alycia Vrosh
Standard Systems Group, Maxwell Air Force Base-Gunter Annex, Ala.

Standard Systems Group has announced an Air Force-wide software license agreement with Oracle. The $45 million deal provides database and Advanced Security Option products for the Air Force and unified commands hosted on Air Force bases.

"The Air Force will realize a tremendous cost savings through this license," said Robert Frye, SSG executive director. "The breadth of Oracle products and support in this license will enable the Air Force to develop, deploy and transition existing information systems to the latest technologies being offered."

Matt Mleziva, director of Defense Infrastructure Initiatives at SSG's parent organization, Electronic Systems Center said, "In addition to securing the database and security product licenses for the Air Force's active, Guard, and Reserve components, Oracle and its partner Logicon included a number of products and support that could help the Air Force transition existing IT systems to a leaner, Web-enabled business environment."

The Air Force's Commercial Information Technology Product Area Directorate, at SSG, negotiated the



agreement. In addition to product licenses for Air Force users, the deal includes full licensing for commander-in-chief headquarters staffs at Air Force bases, such as U.S. Central Command, MacDill AFB, Fla.; U.S. Strategic Command, Offutt AFB, Neb.; U.S. Space Command, Peterson AFB, Colo.; and U.S. Transportation Command, Scott AFB, Ill.

The agreement covers incidental use of Air Force computer applications by non-Air Force users, and provides a means to cover some Air Force-led applications in a joint environment. It gives the Air Force unlimited surge capability during wartime, and includes several development products to assist training at Keesler AFB, Miss., and software operations at Maxwell AFB-Gunter Annex, Ala.

For five years, the Air Force, Logicon and Oracle have successfully partnered to provide the Air Force community with large enterprise-wide licenses. The agreement consolidates prior acquisitions and Oracle licenses in other commands under a single agreement.

"By combining existing licenses with new ones, the Air Force will receive full enterprise coverage, plus attractive yearly support with no escalation through 2009," said James Harbison, Oracle software product manager at CIT-PAD. "This will help ensure proper management and successful deployment of the license."

CIT-PAD worked with the Army's Small Computer Program, at Fort Monmouth, N.J., to ink the final deal, according to Air Force Lt. Col. Glenn Taylor, CIT-PAD director. "The Army support – from Pentagon staff to the folks at Communications and Electronics Command – was outstanding," he said.

Army is the lead for the Office of the Secretary of Defense's Enterprise Software Initiative for databases for all DOD agencies.

Air Force Col. William Nelson, director of Chief Information Officer Support at the Pentagon, explained this is one example of how the Air Force intends to use the DOD ESI program. He said this approach to enterprise licensing will gain broader use throughout the Air Force to achieve additional savings and hold down costs. More information is available on the CIT-PAD Web site at http://www.itsuperstore.af.mil.

ANG stands up MILSTAR squadron at Vandenberg

VANDENBERG AIR FORCE BASE, Calif. – The California Air National Guard is standing up a MILSTAR Space Operations Squadron (148th SOPS) at Vandenberg AFB. The unit was created from the 148th Combat Communications Squadron, at March Air Reserve Base, Calif. According to Lt. Col. Dean Cunningham, 148th commander, there is an immediate need for 13S3x, 1C6x1 and 3C1x1 personnel to fill both full time and Reserve positions.

Mission equipment is being installed in remodeled facilities at the Vandenberg Tracking Station, with a required operational date of Sept. 1. The facility will be known as the MILSTAR Operations Center - Vandenberg, or MOC-V. The 148th SOPS, along with 4th SOPS at Schriever AFB, Colo., will have responsibility for day-to-day control of MILSTAR communications satellites.

Vacancy announcements are listed on the California National Guard Web site, http://www.calguard.ca.gov/cahr/job/angtec.htm.

Assignments include five full time crews and 27 Reserve positions. More information is available from the commander's office at DSN 947-6331.

Get 'personal' with your personnel records

By Michael J. Zimmerman
CICP Position Management Administrator, Randolph Air Force Base, Texas

Can you remember when you worked on your first project, coded your first application, or designed your first system? You were on the verge of doing something new, exciting, different, and more importantly, something that would make a substantial and lasting impact on mission objectives. As you progressed in grade and responsibilities, you continued to find new and better ways to achieve mission objectives, giving it your best effort and personal touch.

However, remember the little things you couldn't do with your personnel record to keep it current? To update items in your personnel record, you had to fill out an Air Force Form 172 or equivalent and take it to your local civilian personnel flight. And to change your geographic location codes or update your career program preferences, you had to fill out an Air Force Form 2675 and take it to your local CPF. Well, help is on the way.

The Air Force Personnel Center is making great strides to change the way we do business concerning civil service personnel actions. Basically, we're putting "personal" in your personnel records. Gone will be the days of frustration and anxiety because your personnel record doesn't reflect your most current information.

The Communications and Information Career Program, along with the rest of the civil service career programs, announces a new way for you to manage your records. Soon, CICP registrants will be able to review, and in some instances, update some of the information in their personnel records through the Online Records Review.

This process allows the individual to review or update their GEOLOC codes, career program registration, training history, awards, benefits and entitlements, and education. To register for the Online Records Review, go to the website: http://www.afpc.randolph.af.mil/cp/. Once there, go to the left side of the page and down to the section titled "Personnel Record Review and Online Registration," and click. Just follow the directions to register. You will need your latest Leave and Earnings Statement to register.

In addition to the above features, there is another important enhancement known as the self-nomination process. This is the latest innovation designed to make it easier for career program registrants to apply for career program vacancies. Instead of identifying geographic locations as in the current process, the new process will require registrants to review and select position vacancies. We believe that this process will be as easy as one, two, three.

Step 1. Complete your resume. Your resume will be required to apply for a job vacancy. So, how do you complete a resume and how should it look? Just go to the AFPC Civilian Employment Home Page website at http://www.afpc.randolph.af.mil/dpc/eis/ and follow the job kit instructions.

Step 2. Check the job vacancies. In addition to the AFPC Civilian Employment Home Page to view job announcements, you can register with the Civilian Announcement Notification System. CANS allows you to view job announcements via e-mail that match a predefined search criteria. The CANS website is at http://www.afpc.randolph.af.mil/afjobs.

Step 3. Self-Nomination. Once you've found the job(s) you're interested in, log on to the AFPC Civilian Employment Home Page and use the self-nomination button to apply for those positions. Remember, the only personnel to be considered for job vacancies will be those who nominate themselves.

The CICP is dedicated to keeping you, the registrant, informed and aware of the most current information. We **strongly** recommend that all CICP registrants join the CICP List Server to receive the latest information about the up-coming self-nomination process and other career program developments. To register for the CICP list server, go to our website at http://www.afpc.randolph.af.mil/cp/cicp/list_server.htm.

As always, the CICP stands ready to serve our registrants. If you have any questions or comments, please call us at DSN 665-3691 or e-mail us at cicp@afpc.randolph.af.mil.

AF postal community –
key players on Comm & Info team

Courtesy photo

Airman 1st Class A.J. Haro, RAF Mildenhall, England, helps a customer with a parcel package during Joint Task Force Shining Hope at Tirana, Albania.

Senior Airman Dina Colancecco, deployed from Ellsworth AFB, S.D., sorts mail at Tent City, Cairo West Air Base, Egypt, during an exercise.

Photo by Staff Sgt. Jim Varhegy

Photo by Senior Airman Sherrell White

Airman Jonathan Martinez, 51st Communications Squadron postal clerk, Osan AB, Korea, checks mail bag tags.

Staff Sgt. Kenard Hill Jr., 375th Comm Support Squadron, Scott AFB, Ill., loads crates for the morning mail run.

Photo by Master Sgt. Ed Ferguson

A1C Keanna Thomas, 375th CSS, Scott AFB, sorts mail for base distribution.

Photo by Master Sgt. Ed Ferguson

Photo by Senior Airman Aaron D. Allmon II

Airman 1st Class David J. Helms, Det. 1, USAFE/APS, Rhein Main AB, Germany, processes mail.

NCO trades in blues for SCUBA gear

Photos by Bud Hancock

Tech. Sgt. Brian Smeltzer uses an underwater metal detector to search for missing weapons in Greenville, Ala.

By Staff Sgt. Beverly Isik
Standard Systems Group/Public Affairs, Maxwell Air Force Base-Gunter Annex, Ala.

Tech. Sgt. Brian Smeltzer has spent the past few years working on a software development team, but he's not a geek. He doesn't wear glasses that are taped together or a pocket protector full of pens.

By day, he's a functional systems analyst for Standard Systems Group. But after work, he hangs up his Air Force blues and steps into SCUBA gear. The 16-year enlisted veteran is instantly transformed to Maj. Brian Smeltzer, deputy commander for the Montgomery County Search and Rescue Squad.

The 35-person MCSAR is an all-volunteer, nonprofit agency that often helps local law enforcement agencies and the FBI recover evidence, boats, vehicles and bodies from area lakes, rivers and ponds. The squad also has one of the only civilian K-9 teams in the state capable of air scent and cadaver search; and is the Rapid Response Unit for all Army Corps of Engineers parks in Central Alabama.

"He's definitely a go-getter," said MCSAR commander Col. Mike Pettit. "He's a valuable part of the squad and has been very instrumental in everything we do. I'd say he's been on at least 75 percent of our operations."

Even though Smeltzer has dived into murky Alabama waters on several occasions looking for everything from weapons to missing people, he's not used to it. "Body recovery is very difficult," he said. "I'll never get used it."

So what keeps him coming back? The old adage of the Air Force taking care of its own? The sense of obligation to give something back to the community that's instilled in service members early in their career?

"Most people can't afford to bring in an expensive, specialized search and rescue unit to help find a missing family member," he explained. "We don't do it for money. We're just glad to help out families who need help."

Camaraderie and meeting people outside the military circle are also key to his dedication to MCSAR. "The people with the squad are more than just team members. Most of us are good friends."

Being in the military and volunteering with the squad often complement each other.

"The biggest thing I take from the military that comes over into search and rescue is discipline and leadership," he said. "The military discipline bleeds over into the squad."

Pettit agrees. "Being retired from the Air Force myself, I like the military discipline. It makes things go a lot smoother," said the retired captain. "We may be volunteers, but we're a very professional unit."

Military volunteers also make a big impact on how the community views those who wear the uniform.

"We had a meeting a couple of months ago with the new Montgomery mayor," Smeltzer said. "When he went around the room asking each of us what we do for a living, I could see he was really proud to find that military people don't just sit behind their fences, that we're out helping the community and providing a service."

On the other side of the coin, serving on the squad is an opportunity for military members to execute military skills during real world situations.

"It's really helped me grow in my military career," he said. "I think it came to me about a year ago that what we do on the squad is what the military has been

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SCUBA

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teaching me for the past 13 or 14 years."

He also applies many lessons learned serving on the squad to his civilian life.

"It's kind of ironic, the different kinds of skills you learn when you work with a volunteer organization like this that doesn't have a lot of money to throw around," the Pennsylvania native said. "I've acquired some unusual skills like welding, repairing all sorts of search and rescue equipment."

The Smeltzer's have made MCSAR a family affair. His wife, Michelle, who is a registered nurse at a local hospital is also a member of the squad. "It's hard for her to do a lot with a 19-month-old, but she's still active in fundraisers and things like that."

Everyone has something to offer this sort of organization. "There's a lot of talent between Maxwell and Gunter – a lot of people who are looking for a challenge," he said. "We're not just looking for people with special skills like diving or a medical background. The rescue squad always needs dedicated members with a willingness to volunteer their time to help the community."

Pettit, who was the founder of the MCSAR, is a disabled Vietnam veteran who's confined to a wheelchair. "Now there's an inspiration for someone who thinks they can't contribute to such an organization."

To volunteer, call local fire and police departments or the closest emergency management agency.

Eielson NCOs survive hunting trip nightmare

By Capt. Don Lewis
354th Support Group,
Eielson Air Force Base, Alaska

What was supposed to be an adventurous bear-hunting trip for four noncommissioned officers stationed here turned into the adventure of a lifetime.

Master Sgt. Brian Alvarez, Staff Sgt. Bryan Spake and Staff Sgt. Bob Summers, 354th Communications Squadron, and Master Sgt. Sean Kazmar, 354th Security Forces Squadron, set out for Valdez, Alaska, April 28, hoping to return a week later with a trophy bears.

They almost didn't return at all. "I've been out in the bush more times than I can count," recalled Summers. "I thought I was bigger than Alaska. I don't think that anymore." Summers has a good reason for changing his mind.

He and his friends spent four cold nights in the Alaskan wilderness with little more than the clothes they were wearing and their will to survive.

Luckily, that turned out to be enough. The team carefully planned their trip, calculating what they needed versus what Summers' boat could carry to their camp site near Valdez, about 15 miles west of Columbia Glacier. It turned out they needed more gas than they anticipated, so early in the morning of April 30, Summers and Kazmar returned to Valdez to fill up.

While they waited, Alvarez and Spake watched two bald eagles work together to distract and steal fish from seagulls.

"Their teamwork had me in awe," said Alvarez. "It's ironic how it inspired me in the days to come."

When their friends returned that mid-afternoon, they ate the last real meal they would have for the next four days. Anxious to pursue bears they had seen on their way to camp, they polished off their plates and set out in the boat. Soon after, they spotted a black bear and quickly pulled to shore. Spake jumped out of the boat with his rifle.

"I was going to go with him, and I knew I should have," said Kazmar. "But then I thought, 'He'll be fine.' You should never let anyone go out there alone. I know I'll never again go 10 feet into the woods without everything I need to survive in there for a long time."

Kazmar, Alvarez and Summers continued a few more miles up into a bay and spotted a second bear. After dragging the boat through knee-deep water for about 150 yards, Alvarez was convinced the boat was beached when he had it nearly completely up on the sand.

Kazmar and Alvarez began stalking the bear, with Summers following shortly thereafter. He joined Alvarez and Kazmar, who had already shot several times at the fleeing bear.

Minutes later, they turned and saw the boat had shifted slightly. Just a few short minutes after that, it was floating away. All their supplies were on board. Alvarez recalled the horror.

"When we reached the beach, the boat was already about 100 yards away. The water was probably 40 degrees, which made the distance seem like miles. Still, I kept thinking I could make it."

Summers thought he could make it as well, but the memory of a recent cold-water drowning of one of his friends coursed through his veins.

"I needed to try, but the thought of my friend drowning was powerful," Summers said.

The trio worked their way around the cove to a rocky ledge that allowed allowed them to get within 40 yards of the drifting boat.

Already waist deep in the water, Summers tried to swim for it.

"My heels slammed against my butt and wouldn't move - my hamstrings were cramped tight," he said.

Summers barely made it back to the rocks using just arm power. Alvarez also made several attempts, but to no avail. They watched helplessly as the

boat drifted toward sea and out of sight.

Soaked and shivering, they regrouped. Not much was said that night. They made good use of one of the few survival tools they had -- waterproof matches -- to light a fire. All three realized they were in real danger. Kazmar's rifle had one remaining round, and the ample supply of bear signs made it a precious commodity. Later, he would contemplate using the lead tip of that bullet to try to write a note to his wife and kids. Sleep came in fleeting 10-minute naps.

"The following morning, when we got up, we knew we'd make it," said Summers. "We made it through the night, and we had each other."

Alvarez agreed. "I told them 'I'm not going to die out here. We're getting out. We can do this.'"

They were overcome by one thought -- find Spake. The terrain, though, proved to be daunting. Rocky, seaweed-covered shorelines, sheer cliffs, and deep snow provided no safe passage. At the end of Sunday, they found themselves exhausted only four miles from where they had begun.

Rainy weather dampened their spirits and their attempts at an effective fire. Though they found plenty of water to drink in the spring run-off that flowed all around them, they didn't eat all day.

On Monday, cold, tired and malnourished, they set out again. They took turns urging each other on, being good leaders and great followers when they needed to be.

Kazmar blazed the trail. Alvarez gathered wood. Summers lit and tended the fire. Inexplicably, they found a tarp in good shape lying near an old, abandoned wooden trap.

That night, while camped beneath a big tree, they managed to set a roaring fire, which had just as much of a positive psychological impact as a physiological effect. Better yet, Alvarez made an important discovery.

"I found a bed of mussels on the shore. When we threw them on the fire, they opened up and we ate them. They were good." They also heated and ate an ample supply of seaweed, joking that it was Caesar salad.

Their spirits bolstered, they set out Tuesday and quickly realized the shoreline was taking them too long to get to Spake.

"We didn't know how he was," said Kazmar. "We had each other, but he was all alone, not knowing what happened to us."

They decided to climb a 1,600-foot mountain, sure that they'd be able to see their base camp, where they had stowed their rowboat.

The group scaled cliffs and traversed crevasses. Summers and Alvarez were wearing waders, which had worn badly. Summers' feet swelled so much at one point he had to stick them in the snow in order to squeeze them back into his waders.

The day proved to be a trial. When they got to the top, they didn't recognize the landscape beneath them at all. Later, they realized their camp was behind the next mountain range.

"That was a punch to the gut," said Kazmar.

Dejected, they made their way down the mountain to a soaked shoreline where they couldn't get a fire going. Then, miraculously, they made their second fortuitous discovery: a pair of socks.

"I can't explain it, but somehow, everything we really needed was provided," Summers said.

Despite that stroke of luck, Kazmar said that night was their low point. They had the presence of mind to use skills they had learned in classes like Arctic Survival School.

"We had each other's feet in each other's armpits to try to stay warm - anything to share body heat." On Wednesday, they were sitting on a hillside warming themselves in the first real sunshine they'd seen since the beginning of their ordeal.

"We were planning for the long haul," said Alvarez. "We were talking about building a cabin."

Then a plane flew overhead without any acknowledgment of their attempts to signal it. At that point, they decided to build a signal fire. A big one. Setting a good blaze near a stand of trees, they watched as the trees accepted the flames one by one. Soon, a good portion of the hillside was on fire. The three sat nearby and waited, knowing the hillside would burn until it reached the snowline, and that any nearby boats or planes would be sure to see the smoke.

Soon thereafter, Alvarez saw a boat driven by Fred and Judy Millbocker of Anchorage. Elated, they hailed their rescuers and set out to find Spake. It didn't take long before they spotted his "S.O.S." signal spelled out in logs on the shore near where they dropped him off, and Spake himself waving them down close by.

Spake waited the first night until well after dark for his friends to return, staying warm by running up and down the beach. The next day, he saw Summers' boat drift by with no one aboard and no apparent damage.

Knowing something was wrong, he built a small shelter and settled in. He managed to shoot a deer and fed on it while he waited for rescue.

More importantly, he stayed put where passing aircraft or watercraft could spot him and where he knew his friends would look for him, if they were still alive.

Summers' boat was found and towed in by a local fisherman. Though it cost him some money to recover it and his gear, except for a few bumps and scrapes, it's relatively unscathed.

The men have since regained the 20-30 pounds each lost during their ordeal. They also seem to have renewed their spirits. And they've definitely developed a bond between them that few of us will ever fully understand.

Promotions

Airman 1st Class
Jennifer L. Chaney
Michael J. Droddy
Dana R. Morgan
374th CS, Yokota AB, Japan

Senior Airman
Melesa D. Alexander
Matthew W. Harris
Sean A. Harris
Jeffrey A. Knight
Juan C. Lara Jr
Jarrod L. Miller
Raymond F. Schultes III
Nakia N. Vance
Eldon O. Visitacion
374th CS, Yokota AB, Japan

Staff Sgt.
Mario G. Cappellini
William M. Funk
Brandon D. Knaack
Neil R. Lagman
Vernell D. Whitney
Roy L. Baker
Joann C. Johnson
Demetrius D. Jones
April L. Kerr
Thomas E. Yingling
374th CS, Yokota AB, Japan
Shelly Koen
210th EIS, St. Paul, Minn.

Tech. Sgt.
Dulce Amor D. Barcenas
Brian H. Engle
Stoney E. Glover Jr.
James E. Hawks Jr.
Kenneth Luster
Craig H. McCorquodale
374th CS, Yokota AB, Japan

1st Lt.
Rodney O. Daniels
374th CS, Yokota AB, Japan

Medals

Meritorious Service Medal
MSgt. Paul A. Millner
374th CS, Yokota AB, Japan

AF Commendation Medal
TSgt. Robert S. Kirksey (3OLC)
SSgt. Troy M. Coulombe (3OLC)
TSgt. Eric R. Miller (2OLC)
MSgt. Joseph H. Mason Jr. (2OLC)
TSgt. James S. Johnson III (1OLC)
SSgt. Paul A. Paras
SSgt. Carter A. Cort
SSgt. Danita A. Stewart
SSgt. Thomas G. Watson Jr.
374th CS, Yokota AB, Japan

NATO Medal
TSgt. John R. Finch
A1C Kalina K. Zajac
374th CS, Yokota AB, Japan

AF Achievement Medal
SMSgt. Shawn S. Powell (1OLC)
SSgt. Michael J. Smith (1OLC)
SrA Scott E. Toupin (1OLC)
SrA Kenneth S. Paquin (1OLC)
SrA Matthew W. Harris (1OLC)
SSgt. John L. Wilkerson (1OLC)
SrA Kenneth S. Paquin (1OLC)
2nd Lt. Kevin Milam
SSgt. Donald K. Curtsinger
SrA Daniel A. Jackson
SrA Wallace D. Moore
SrA Christopher J. Gillispie
A1C Connie M. Hinson
A1C Amanda K. Reynolds
A1C Nakia N. Thompson
374th CS, Yokota AB, Japan

Awards

First Quarter Awards
Field Grade Officer
Maj. Debby Morrison
HQ AMC/SC, Scott AFB, Ill.

Company Grade Officer
Capt. William Bessemer
HQ AMC/SC, Scott AFB, Ill.
Capt. Garald D. Egts
374th CS, Yokota AB, Japan

Sr NCO
MSgt. Alan K. Eagle
374th CS, Yokota AB, Japan
MSgt. Robert Rustenbeck
HQ AMC/SC, Scott AFB, Ill.

Valor & Recognition

If you've received an award or promotion, tell the rest of the Communications and Information community. Send an e-mail to intercom@scott.af.mil or mail it to AFCA/XPPA (*intercom*), 203 W. Losey St., Room 1200, Scott AFB IL 62225-5222

ABS	Air Base Squadron
ACOMS	Air Communications Squadron
AFCA	Air Force Communications Agency
AFFMA	Air Force Frequency Management Agency
AFCQMI	Air Force Center for Quality and Management Innovation
AFPCA	AF Pentagon Communications Agency
AFSOC	AF Special Operations Command
AFTAC	AF Technical Applications Center
AFWA	Air Force Weather Agency
ASOS	Air Support Operations Squadron
CCS	Combat Communications Sq
CG/Comm Gp	Communications Group
CLSS	Computer Logistics Support Sq
CS	Communications Squadron
CSG	Computer Systems Group
CSO	Computer Support Office
CPSS or CSS	Computer Systems Squadron
DISA	Defense Information Systems Agency
EIG	Engineering Installation Group
EIS	Electronics/Engineering Installation Squadron
JCSE	Joint Communications Support Element
MSG	Materiel Systems Group
RSG	Regional Support Group
SSG	Standard Systems Group

NCO
TSgt. Louis A. Moussette
374th CS, Yokota AB, Japan
SSgt. Walter Reed
HQ AMC/SC, Scott AFB, Ill.

Airman
A1C Jarrod L. Miller
374th CS, Yokota AB, Japan

Military Local Civilian
Kayoko Matsuoka
374th CS, Yokota AB, Japan

U.S. Civilian
Davis McClendon
374th CS, Yokota AB, Japan

Category I Civilian
Terry Smith
HQ AMC/SC, Scott AFB, Ill.

Category II Civilian
Terri Perez-Yates
HQ AMC/SC, Scott AFB, Ill.

Category III Civilian
Cynthia Marler
HQ AMC/SC, Scott AFB, Ill.

intercom special focus issues

The following is a schedule of upcoming *intercom* issues. If you would like to submit an article or photos for any issue, please contact Tech. Sgt. Michael Leonard at DSN 576-4396, or send an e-mail to intercom@scott.af.mil.

September 2000 *intercom*
Deployable Comm
Deadline is July 31

October 2000 *intercom*
Almanac issue
Deadline is Aug. 31

November 2000 *intercom*
Information Operations
Deadline is Sept. 29

December 2000 *intercom*
Closing the book on 20th Century
Deadline is Oct. 31

AF to analyze seized cyber tools

ROME, N.Y. (AFPN) — Air Force researchers are looking into the dark alleys of cyberspace to determine the technical sophistication of criminals threatening ambushes along the information superhighway.

The Air Force Research Laboratory Information Directorate has awarded a $99,908 contract to Wetstone Technologies Inc. of Freeville, N.Y., to analyze cyber weapons currently in use. The one-year agreement, "Seized Cyber-Weapon Analysis & Prediction," will be basic research funded by the Air Force Office of Scientific Research.

"Wetstone scientists and engineers will study equipment and software that have been used in criminal or other unlawful cyber activities," said Dr. Leonard Popyack, a scientist in the directorate's Information Grid Division. "The key aspect of the program is to study seized equipment and analyze it."

The U.S. Secret Service will provide seized equipment. Wetstone researchers will also collaborate with the newly established Computer Forensics Research and Development Center at Utica College (N.Y.).

"We will be seeking to answer several questions based on the analysis of the equipment," said Popyack. "Researchers will attempt to determine the level of sophistication of the technology used in the illegal activities, as well as the threat it poses to the Air Force, the Department of Defense, private industry and businesses, and the national infrastructure."

Additional questions to be answered include: who developed the technology and when was it originally designed, developed and manufactured; what was the sophistication of developers, designers and manufacturers; what countermeasures are currently being used by cybercriminals; and are hidden capabilities present in the seized equipment and software.

California Air National Guard

The 349th Communications Squadron, Travis AFB, Calif., has immediate openings for qualified individuals in the following Air Force Specialty Codes: 33S3, 2E1X1, 2E1X3, 2E2X1, 2E3X1, 2E6X3, 3C0X1, 3C2X1

For more information, contact Chief Master Sgt. Nefzger at DSN 837-2275.

Maryland Air National Guard

The 231st Combat Communications Squadron, Andrews AFB, Md., is seeking candidates for the following traditional Guard positions:

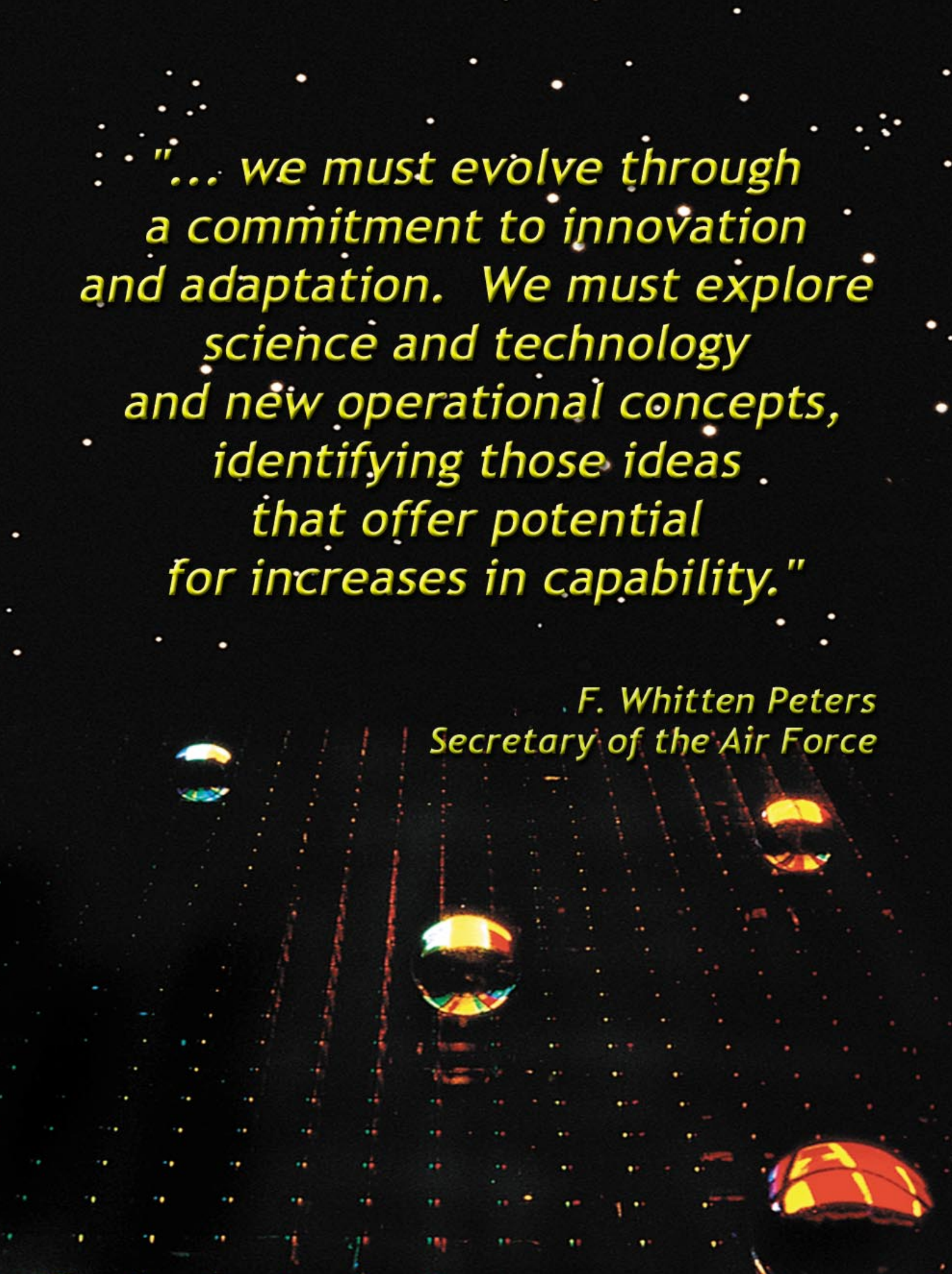
2E1X1-Satellite Wide Band Communications, 2SOX1-Supply Management, 2T1X1-Vehicle Operations.

For information on these and other opportunities, contact Tech. Sgt. Bill Quarles, DSN 857-2312/2313 or Commercial 240-857-2312/2313. E-mail: william.quarles@dcandr.ang.af.mil.

New Hampshire Air National Guard

The 157th Air Refueling Wing, Newington, N.H., is looking to hire personnel in AFSCs: 2E1X3-Ground Radio Communications; 2E1X4-Intrusion Detection System; 2E6X3-Telephone Systems; 3A0X1-Information Management; and 3V0X3-Visual Information Production.

Please contact Master Sgt. Norma Long at DSN 852-3508 or commercial 1-800-257-9368. New Hampshire offers 100 percent college tuition to state schools on a space available basis.


"... we must evolve through
a commitment to innovation
and adaptation. We must explore
science and technology
and new operational concepts,
identifying those ideas
that offer potential
for increases in capability."
F. Whitten Peters
Secretary of the Air Force