NATIONAL IMAGERY AND MAPPING AGENCY

GUARANTEEING THE INFORMATION EDGE

JUNE 1998



IVERSITY

IUNE 1998

- 5 Agency Outsourcing Study to be Conducted
- New Streamlining Process Results in Increased Production, Customer Service
- NIMA Acquisition Center Created
- 10 Josh-A Puppy with a Purpose
- Projecting the Future: New Tool Charts Strategy
- 15 WORKFORCE2
- 16 Digital Symbology Promises New Standard for Geospatial Data
- 18 NIMA Data Keeps Top Government Officials Soaring

- **EDITORIALS**
- 8 NTERVIEW John Kringen, the new director of the Imagery Analysis Office, relies on his staff's expertise to help in decision-making,
- COVER STORY 12 We Speak Your Language!

Published by National Imagery and Mapping Agency Director • Maj. Gen. James C. King Office of Congressional and Public Liaison Director • Laura B. Snow Deputy Director • Terence S. Meehan Chief, Public Liaison • Eric Berryman Editor: John Iler Managing Editor: Muridith Winder Staff Writers: Don Kusturin, Jennifer Lafley, Anne Arnold Designer: Richard Hardwick

The Edge is an authorized command information publication published monthly in the interest of National Imagery and Mapping Agency personnel. Contents of this publication are not necessarily the official view, or endorsed by the U.S. Government, Department of Defense or the National Imagery and Mapping Agency. Copy deadlines are the second Friday of each month. Articles are edited for style, content, and length. Correspondence should be addressed to:

The Edge, Public Liaison Office, 4600 Sangamore Road, Mail Stop D-39, Bethesda, MD 20816-5003

Telephone: (301)227-3089, DSN 287-3089. or in St. Louis: (314) 263-4142 or DSN 693-4142, or e-mail to The Edge.

COMMAND POST

his month's EDGE focuses on a topic of importance, not only to NIMA's workforce, but also to the nation as a whole.

Diversity. It's a term we hear a lot, but what is it and why is it so important?

We have at NIMA an immensely talented



and resourceful workforce with varied backgrounds. But diversity isn't simply about differences in race, gender and disabilities; it's not even about tolerance. It's about acceptance—about feeling comfortable working with and around people who are different than you. It's about breaking down barriers. And, it's about treating people the way you want to be treated.

I'm unequivocally committed to teamwork. I ask that each of us dedicate ourselves to achieving a diverse workforce and a climate of mutual respect and trust. In so doing, we will truly achieve the teamwork necessary to face the future and the challenges that lie ahead.

All of us should strive to have NIMA recognized as the agency which continuously pursues progress and excellence with — one mission-one vision-one voice.

MG James C. King

EDITORIALS

Buckle Up NIMA by Safety Office Staff

Last year, the world was stunned by the tragic car accident that took the life of Princess Diana. Later it was learned that the only survivor had been wearing his seat belt.

How many nonbelievers in wearing seatbelts took note of that fact?

The first thing we were told when we took driver's education was to "buckle your seat belt." Yet many drivers seem to have forgotten those four simple words of wisdom.

Every state has laws on seat belt use and, as citizens, we are obligated to obey them. Regulations state that federal employees occupying any seat of a motor vehicle on official business, whose seat is equipped with a seat belt, shall have the seat belt properly fastened at all times when the vehicle is in motion.

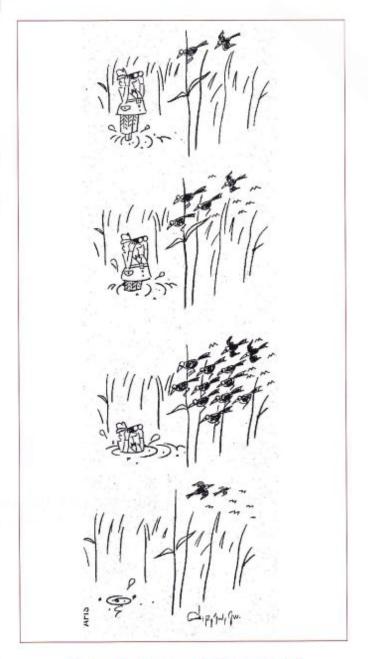
Seat belts do make a difference. It's a fact that drivers wearing seat belts have more control over their vehicle in an emergency situation and are more likely to survive an accident.

Why can't we carry that obligation out of the gate?
Under the right circumstances, motor vehicles can
become as deadly as guns. The latest statistics show that
almost twice the number of people die in vehicle crashes
per year than by all other forms of homicide combined.
Traffic crashes are the leading killer of young adults,
accounting for about 29 percent of all deaths for people
between 15 and 24 years.

Seat belts do make a difference. It's a fact that drivers wearing seat belts have more control over their vehicle in an emergency situation and are more likely to survive an accident.

With summer approaching, more employees and their families will be on the roads. Remember, you are our most important asset on or off the job. Driving is a privilege, but wearing a seat belt is the law.

Buckle up, NIMA, and don't forget the kids.



Submissions to The EDGE

When making submissions to The EDGE, please avoid the use of acronyms and abbreviations, and include the first and last names as well as the titles of all people referenced. A point of contact and a phone number also should be included for each submission.

Copy may be submitted via e-mail to The EDGE, computer diskette to The EDGE, Mail Stop D-39, or by fax to 301-227-5287 (DSN 287).

For further information, call 301-227-3089/2057.

QUEST FOR EXCELLENCE

Creativity, Customer Service Abound at NIMA

by Mary Ellen Seale Plans, Programs and Analysis

The NIMA workforce continues to excel in the area of customer service, creativity and innovation.

The Integration/Installation Team for NIMA standard personal computing products, for example, was formed to create products that could be easily installed at any NIMA site with minimal bench time following delivery.

One of its earliest accomplishments was devising a way to install software which in fiscal 1997 saved NIMA approximately \$514,000 and increased the average number of computer installations per month from 100 to 240. It also decreased the installation cycle time from nine months to five, and a customer comment mechanism was instituted to gather data on its customer service. Congratulations to the SN Integration/Installation Team for a job well done!

Plans, Policy and Analysis (PA) also recently surveyed quality management within NIMA. Reporting business units have processes and programs in place to support several quality elements. Offices also identified their top three quality and process improvements this fiscal year. PA plans to highlight these efficiencies in upcoming Edge articles.

In the area of "recommended next steps," offices provided excellent ideas on how they plan to improve their organization. PA will continue to monitor these and other efforts as a result of the workforce survey. The responses indicate offices continually seek to improve their business practices and have excellent ideas to improve quality across NIMA.

Improvements will continue to be highlighted in upcoming articles. For nominations, contact NIMA's Performance Metrics and Improvement Team, CA/PA, (703) 275-8583 or the team leader, Mary Ellen Seale at sealme@nima.mil.



Agency Outsourcing Study to be Conducted

by Muridith Winder

A n Agency outsourcing study will be conducted this year to examine the costs and benefits of contracting out several functions in fiscal 1999, according to a letter released by Maj. Gen. James C. King.

The Director requested the study because of a congressional mandate to reduce NIMA civilian employment levels in fiscal 1999. This reduction can't be achieved through normal attrition alone. Even so, he emphasized that these are just studies.

"No decision has been made," he said in the letter, "nor will it until facts are available to support a sound decision."

The study will look at in-house functions that are readily available in the commercial marketplace. It also will determine whether there is sound rationale for contracting them out.

Those functions include:

- · Hardware maintenance and telecommunications
- Conventional "wet" photography supporting Mapping, Charting and Geodesy functions
- Hardcopy imagery libraries
- Material management services
- Imagery requirements, assessments, publications and graphics support.

"If a decision is made to outsource one or more of these functions," King said, "I pledge to give you as much prior notice, information and assistance as possible, so that you can make informed choices about your future."

The Director has already taken these steps in announcing his decision to contract out custodial operations in St. Louis and Bethesda. That decision affects 66 employees and will save approximately \$1 million annually after first-year implementation costs.

The employees have been notified and the current schedule calls for implementing a contract in the first quarter of fiscal 1999.

NIMA plans a full program of transition assistance including separation incentives; internal priority placement in jobs for which impacted employees qualify; priority consideration for vacant DoD positions; transition services; and workshops on interviewing, resume writing and retirement. NIMA also plans to require prospective contractors to offer jobs to impacted NIMA employees before hiring outsiders, an approach that has proven successful in past contracting actions.

New Streamlining Process Results in Increased Production, Customer Service

by Don Kusturin

Pollowing NIMA's admonition to streamline operations, increase responsiveness to customers and eliminate needless processes, one organization has literally stumbled on a way to do just that.

The Geospatial Information Services Division (GIDA) has been nominated for the Secretary of Defense's Team Process Improvement Award and the Federal Executive Board Awards Program.

"The effects of eliminating GAYCA from our process flow have been significant." It began when the U.S. Central Command (CENTCOM) required a large number of 1:100,000 topographic line maps for an initiative in Southwest Asia. The problem: it needed them at a rate twice the normal production capacity of the Digital Production System's (DPS) Product Generation Segment (PG/S).

Hardware and network limitations forced cartographers to look for process improvements to meet CENTCOM's needs. A team of DPS experts from NIMA's production sites in Reston, Bethesda and St. Louis were gathered to determine what could be done.

"We recognized a possible redundant process being used in the standard DPS production flow," said project member Jeff Redinger, "and set out to prove that by eliminating this process, a substantial time savings could be realized."

The redundant process, known as GAYCA or Task 31, made final edits and inputs to the Mapping Charting and Geodesy (MC&G) database. It also performed data maintenance or "clean-up" functions, such as feature merging, topology validation and resolution of data integrity problems and data mismatches. In the end, GAYCA's output would assure a seamless database, include the latest names and boundary information and contain all attribution required to finish a digital or hardcopy product.

However, for this customer, was it necessary?

"During the past several years of DPS production, I think we thought all data had to go through GAYCA before it could be retrieved from the MC&G database and before any hardcopy finishing could take place," said Redinger. "By accident, we fetched raw data from the MC&G database about a year ago and started looking at it and evaluating its contents.

"It proved two things: we could retrieve raw data from the MC&G, and we could make a hardcopy product from this data by updating attribution and performing the names and boundary input ourselves."

This refined process was implemented at St. Louis, Bethesda and Reston. By eliminating the GAYCA process and inputting the names and boundary information at the end of the cycle, the GIDA office was directly responsible for projected savings to the Agency of more than 56,000 workhours over fiscal 1997 and 1998. The Reston CENTCOM production and system support personnel actively participated and supported the "Skip GAYCA" testing and implementation effort.

"The GID teams at Reston will be able to nearly double the number of 1:100 TLMs they are able to complete for CENTCOM," said Bob Wisner, CENTCOM project leader. "Last fiscal year, 75 sheets were completed at Reston. So far, 82 sheets have been completed this year and we're on target to complete 146 sheets by the end of the fiscal year."

"The effects of eliminating GAYCA from our process flow have been significant," he continued. "The number of integration attempts into the MC&G database has been cut in half. The database lockout problem has been virtually eliminated [and] resource availability has greatly improved. Workstations no longer need to be configured for GAYCA, and this has increased the flexibility in scheduling jobs for finishing."

This improvement, said Ron
Dexter, GIDA acting deputy department chief, "shows we can indeed cut
through the red tape and take prudent
risks. And it has an energizing effect
on the workforce."

NIMA Acquisition Center Created

by Deborah Donnellon and Ken Pischel NIMA Acquisition Center

ith the recent creation of the NIMA Acquisition Center (NAC), a host of acquisition policies and procedures were placed under the auspices of a single organization.

"It standardizes, streamlines and enhances the acquisition process within the Agency," said Steve Carroll, chief of the NAC. "NIMA inherited several acquisition programs from various agencies and each agency had its own acquisition policies and procedures."

The streamlining of any process to increase efficiency and cut costs is a major element of NIMA's strategic plan, he added, and the center was created to "ensure that NIMA acquisitions achieve high quality results through the application of sound, defined and repeatable processes tailored to the needs of the specific acquisition." Available to assist all program managers, it can be a valuable resource in the planning and execution of acquisitions consistent with applicable Department of Defense, NIMA, national and other appropriate policies and procedures.

"The center provides acquisition support and consultation to assist all program managers in structuring a sound acquisition strategy and developing a tailored management plan," said Steve Reichert, deputy chief.

"It will help all program managers take advantage of acquisition lessonslearned from prior NIMA acquisitions." And, he said, it will make available acquisition expertise within NIMA, the intelligence community, DoD and other government agencies.

Although established to support all NIMA acquisitions, Carroll noted that some of the center's functions will be mandatory for programs that cross the thresholds established in NIMA Policy Directive 5000. "Whenever a program, because of dollar value or other special interest, has a milestone decision authority above the immediate program manager," she said, "its milestone review planning and scheduling must be coordinated through the NAC."

Not only does the center serve as a source of acquisition expertise for strategy development and planning, and as a facilitator for source selection-related services, it manages NIMA's Defense Acquisition Workforce Improvement Act (DAWIA) implementation. It also provides management for NIMA-wide contracts and other assorted contract activities. Program managers can use these contractor resources.

Through its role as secretariat to the NIMA Acquisition Review Board (NARB), Reichert said, the center supports NIMA acquisition oversight. "It assists program managers in their preparation for formal NARB reviews, if required, and maintains a repository of current information on the status of all NIMA acquisitions."

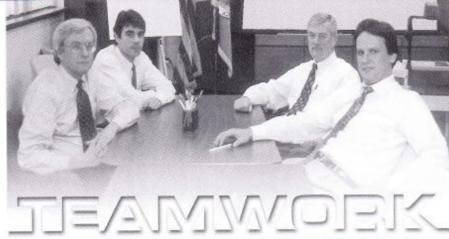
Of particular concern to NIMA program executive officers and program managers, he said, are the DoD thresholds that trigger the review of Automated Information System (AIS) acquisitions. Acquisitions that exceed \$30 million in a single year, \$120 million over the total program, or \$360 million lifecycle cost (fiscal 1996 constant dollars) require review.

Current acquisition trends,
Federal Acquisition Regulation (FAR)
changes, budget limitations,
downsizing and emphasis on
outsourcing have, Reichert said,
"reemphasized the need for disciplined NIMA processes and a trained
acquisition workforce."

Related initiatives, such as the United States Imagery and Geospatial Information System (USIGS), will provide a requirements focus for improved acquisition efficiency.

Carroll and Reichert said all NIMA program managers are encouraged to utilize the center, take advantage of their resources, expertise and reference materials. For more information, call Steve Carroll, chief of NAC at (703) 808-0873; Steve Reichert, deputy, at (703) 808-0733; Ken Pischel, Acquisition Services, (703) 808-0789; Debora Donnellon or Army Lt. Col. Wilbur A. Parker, Acquisition Strategy and Planning, and DAWIA at (703) 808-0970.





John Kringen, Tom Conaway, special assistant to the director, Rick Harris, deputy, and Peter Usowski, executive officer.

MAKES THE DIFFERENCE

by Jennifer Lafley and Anne Arnold

wo heads are better than one," may be an old cliche, but to John Kringen, it's a time-honored philosophy that's just common sense. And as the new director of the Imagery Analysis Office, he relies on his staff's expertise to help in decision-making.

"We work as a team here," he said in an interview in his office at the Washington Navy Yard.

The team, made up of Richard Harris, Peter Usowski, Tom Conaway and Kringen bring expertise in varied areas to the Imagery Analysis Office. Usowski, with a doctorate in history, has worked for the CIA since 1981 and has been with NIMA since standup. Harris provides the Department of Defense balance to the team and had a long career with the Defense Intelligence Agency. He's also held several imagery exploitation and management positions.

Kringen, also from the CIA, has a doctorate in political science and Asian studies. His expertise was gained through his positions in a variety of intelligence issues, including counternarcotics, regional analysis and the international arms trade. Early in his career, he was selected to participate in the Director of Central Intelligence Exceptional Analyst Program.

The new director, who has been in his present position since January, sees his challenges on several fronts. "The challenge of managing on several levels," he said, "keeps this job fascinating—the day-to-day operations, planning for the future and working in a technology-driven business."

Culture

Although culture may be rarely discussed elsewhere, it's routinely used among employees whose experience has been with intelligence agencies.

"The differences in culture within Imagery Analysis, in part, relate to the customer base and specific requirements that had been associated with the legacy organizations of CIA and DIA," Usowski said.

However, as Imagery Analysis has grown as an organization, differences have lessened with all analysts supporting a broader range of customers. The main

"We have a highly-skilled workforce and they should be proud of their accomplishments."

John Kringen

difference in the past between the cultures. Harris said, is that the IA workforce usually works in small groups, producing customized products.

The nature of the work for IAs makes certain skills necessary. Imagery analysts may have varied educational backgrounds, but the key to their success on the job, team members agree, lies in good cognitive ability, spatial awareness and the ability to translate information from a

"We have four competencies that have been identified as areas in need of further development: in-depth research, sensor exploitation skills, database integrity and issue-oriented area exploitation," he said.

Workforce Survey Inspires Change

In response to comments made in the workforce survey, Kringen is considering several changes.

A major concern is keeping experienced analysts.

"We're concerned about retention," he said. "The survey showed that some employees are considering outside opportunities. We want them to stay and will try to address their concerns."

Communication and separate locations remain problems for IA. The workforce is divided among several sites and frequently employees are online on different systems and unable to share projects or input. "We're addressing the computer problems and trying to consolidate offices in fewer locations," he said.

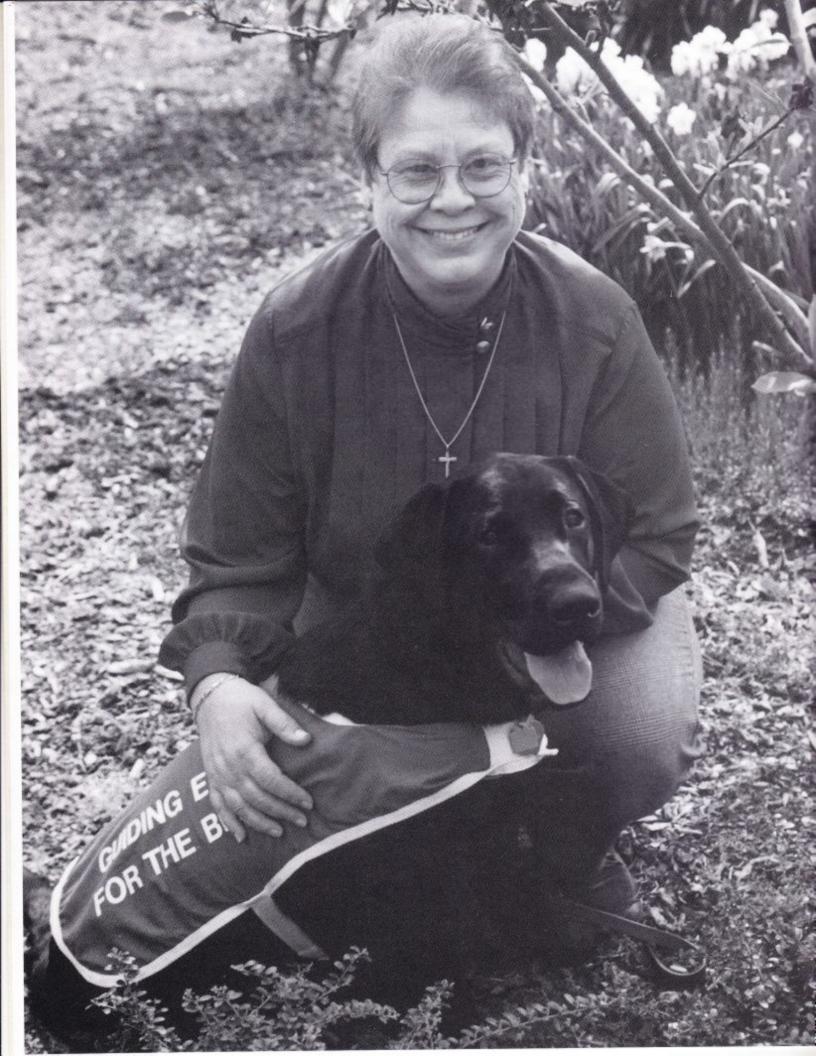
To improve communication, Kringen already has taken steps to engage the IA workforce. In late January, a "Meet the Corporate Board" meeting was held in the auditorium with booths manned by branch chiefs. It was much like a career fair.

Another area of concern is employee recognition. Kringen wants to develop an awards program that recognizes people for their accomplishments.

"We have a highly-skilled workforce and they should be proud of their accomplishments."

But, he said, "the best is yet to come."

Anne Arnold, who coauthored this article, is the new Public Affairs liaison at the Washington Navy Yard. If you have a news tip or story idea, she may be reached at (202) 863-3175.





by Joan Mears

yes shining and tail wagging, the 6-month old Labrador retriever eagerly greets everyone he meets. Handsome, friendly and a little unsteady on his paws at times, the lumbering 75-pound pooch is embarking on a new and very promising career.

Josh temporarily belongs to Cheryl and Don Matczak—Mission Support employees at NIMA Bethesda. He joined their household just before Thanksgiving. Like all pet owners, the couple is proud of their pup and quick to provide a safe and secure home, establishing the allimportant human bond critical to his future role.

The Matczaks are volunteer puppy raisers for Guiding Eyes for the Blind, a nonprofit organization founded to promote the dignity, security and independence of those without sight. Established in 1954, it is one of the foremost guide dog training schools in the United States.

For many years the Matczaks supported Guiding Eyes through the Combined Federal Campaign. However, Cheryl's interest peaked last fall when she learned a friend's nephew had been matched with a dog from Guiding Eyes. Shortly thereafter, she spotted a Guiding Eyes exhibit at a local mall. Before she knew it, she had signed up for the group's next meeting. It didn't take long for the couple to decide this was a project they should support. After a home visit

from Guiding Eyes, the couple was approved to serve as puppy raisers.

Then they settled back and waited.

"It happened on a Thursday,"
Cheryl remembers. "The area coordinator called and said a puppy was
ready for placement and asked me if
we were ready. I said, 'Absolutely!'
The following Monday, we were on
our way to Oakton, Va., to pick up our
puppy. Josh was so cute: he had such
big feet! He was only 8 weeks old, and
I cradled him in my arms all the way
home."

"At first we were a little concerned about Sydney, our 9-year old Australian shepherd," Don said. "We didn't want her to feel like an outcast, but she took to Josh right away, kind of mothered him." Cheryl added, "Our girls—Jennifer and Meredith—were very excited about what we were doing. Home from college, they were a big help during the Thanksgiving and Christmas breaks."

Josh settled right in and soon began going everywhere with the Matczaks. Cheryl said that under the Americans with Disabilities Act, guide dogs (and potential guide dogs) are permitted to go anywhere. "We take him to malls and restaurants, on buses and to school to visit the girls. He has to experience many different situations." If he ever got lost, the tag he wears, the tattoo on his left ear and the microchip implanted between his shoulders can identify him. Each identifies the organization, his date of birth and order of birth within his specific litter.

"We're teaching him the basic commands—sit, stay, come," Cheryl said. "But we can't teach him how to heel because some day he'll be expected to lead."

"An evaluator visits us every three months to see how Josh is doing and to monitor his health, disposition and socialization skills," Don said. The pup's response to surprise noises and sudden movements is carefully noted. Does he cower, appear fearful or move away? Or, does he investigate the situation—see what's going on? "The last response is a good sign for a potential guide dog," explained Don.

At approximately 18 months, Josh will leave the Matczaks to begin his formal training in Yorktown Heights, N.Y.

If by chance he proves unsuitable as a guide dog, Josh could make a career change to search and rescue, drug sniffing or bomb detection. Or he could be adopted by the Matczaks.

If Josh is successful as a guide dog, the Matczaks also will have the chance to adopt him when he retires from service.

When asked how they'll feel when Josh leaves for Yorktown Heights, Don admits it will be very difficult.

"Recently, he was away from us for two weeks. We were asked to trade with another puppy raiser so the dogs would get used to being away from home. Even though we knew he was coming back, we had a real hard time. One day I was down, the next Cheryl was down."

Cheryl, who frequently refers to Josh as "my baby," added, "I always try to remember that Josh is a puppy with a purpose. Of course, he'll always have a home with us, but we both hope he'll succeed in the program and make a blind person's life a lot easier."

"Some day he'll be expected to lead...."



by Bea Oviedo Human Resources

What language is that?

It's the language of diversity, alternative dispute resolution (ADR), Equal Employment Opportunity (EEO), Disabilities Program, special observances, affirmative action, reasonable accommodation, unlawful discrimination—the list



Every work day, employees, including managers and supervisors, contact NIMA EEO officials to inquire about some aspect of the EEO or diversity programs. As a result, the Diversity Management and EEO Division (HRO) wants you to know, "We speak your language and we want you to speak ours." And the language associated with EEO, won't change when NIMA's WORKFORCE21 human resources management system is implemented.

The EEO program is really comprised of three subprograms: Special Emphasis Program (SEP), Affirmative Action Program (AAP), and the discrimination complaint process. NIMA's goal is for the first two to work, so we have less activity in the complaints processing area.

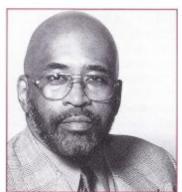
Special Emphasis Program Managers serve as conduits to heighten communication between management and particular groups, such as women, African-Americans, Hispanics, People with Disabilities, Asian-American/ Pacific Islanders and American and Indian/Alaskan Natives. They assist and advise employees and management officials, conduct awareness training, participate in the affirmative employment program including recruitment, and may serve on special observance committees.

The Affirmative Action Program, (administered by the Equal Employment Opportunity Commission), assists Agencies leaders in developing initiatives to ensure qualified minorities and women are competitive for employment. Our agencies monitor activities in various program elements, such as organization and resources, workforce profile, discrimination complaints, recruitment and hiring, employee development, promotions, separations and program evaluations, to identify any problems or barriers which could limit the progress of certain groups.

The discrimination complaint process is the third EEO subprogram. Participation begins when individuals allege discrimination because they believe an Agency official took an unfavorable action against them because of their race, color, sex, religion, age, national origin or disability, or in reprisal/retaliation.

Initially, employee concerns are addressed through counseling during an informal phase. This gives EEO counselors the opportunity to facilitate a resolution before more formal action is taken. If the informal attempt fails, the complainant has the option of filing a formal complaint, which could go all the way to an U.S. District Court.

Depending on the circumstances, the aggrieved may elect to participate in an ADR process. Counselors are available in Bethesda and St. Louis for consultation with employees, applicants for employment, and management officials.



Clyde Williams

Diversity: How Does it Relate to EEO, NIMA's Mission?

Diversity strives to create a culture that promotes trust, mutual respect and open communications for everyone. Diversity is about the business of valuing the differences between all people! By valuing the diversity of NIMA's employees, we put the Agency in the best competitive posture while minimizing the need for programs designed to remove barriers, or to respond to concerns about equal opportunity.

Although related to EEO, it is not the same. Diversity is defined as all of the ways in which we differ. Some of these dimensions are race, gender, age, language, physical characteristics, disabilities, religion, sexual orientation and other differences relevant to one's capacity to perform a job. America's success is largely based on the fact that our country is a "laboratory," - one continuous experiment run by our diverse populace.

To respond to our customers we will follow up with more detailed articles on each of the programs presented above. "Give the program a chance," says Clyde Williams, acting chief, HRO, "while we are building it." To focus on total service, he adds, "we need the support and participation from the entire NIMA community. That's how we'll be successful on our journey to true diversity." |

The HRO staff is available for briefings to your organization or simply for information on various EEO programs. In Bethesda, contact Harry Salinas (AEP), Peggy Etheridge (Diversity and Special Emphasis), Gail Clarke, Deborah Harrison, Doris Jackson and Bea Oviedo (EEO) at (301) 227-5800. In St. Louis, call (314) 263-4234 to contact Marie Golden-Twine or Gene Potts for EEO.

Projecting the Future: New Tool Charts Strategy, Requirements and Analysis

all it the "big picture" or a "consolidated view of the future," but to NIMA's Studies and Analysis Division (PAS), projecting future customer needs and agency assets is just good business sense.

"As the functional manager for imagery, NIMA has the responsibility to provide an integrated system of collection, tasking, processing, exploitation and dissemination," said U.S. Army Maj. Rockie Hayes, an imagery intelligence requirements analyst. One tool to carry NIMA into the next century, he said, is the Capability, Strategy and Requirement Analysis Tool (CSTRAT).

CSTRAT draws on other NIMA databases, such as the Community Imagery Needs Forecast (CINF), which identifies imagery and geospatial needs, and the Baseline U.S. Imagery and Geospatial Information System Database, which deals with system and resource information. It's also tied into Defense and Intelligence Community Planning Guidance, where high level strategies are defined.

"CSTRAT allows analysts to rapidly change strategies," Hayes said. "And changes in strategies also may include changing collection platforms/sensors, processors, exploitation organizations and communications systems." This allows NIMA to optimize the usage of resources available and satisfy the maximum number of information needs in the shortest possible timelines.

The two-month initial concept, design and use of the CSTRAT prototype began in 1996 with the former Central Imagery Office (CIO) Global Broadcasting

System (GBS) Study.

"It was initially envisioned to



same time, NRO [National Reconnaissance Office] was completing the final stages of the Imagery Architecture Study (IAS). The IAS study led to a decision by the Director of Central Intelligence (DCI) to begin planning for the replacement of the current constellation and thus the Future Imagery Architecture (FIA) Program Office was born." As part of its charter responsibility, NIMA was directed by the DCI and the Secretary of Defense to coordinate the requirements upon which FIA would be based.

CSTRAT's basic design fully uses available commercial software, including Microsoft Access, Excel and Power Point; MapInfo's MapX, and Visual Basic. "In its final form, it will present the data in a clear and understandable query format within specific modules and display information geographically on a map background."

The "module" concept allows for maximum flexibility in constructing data requirements for study issues. The eight module topics include requirements registration and management, collection, processing, exploitation, delivery, communications, storage and resources. The user can maximize CSTRAT's flexibility by running a variety of "what ifs" in any module or combination of modules within the end-to-end process.

"This allows users to focus in the areas being studied and not have to look at everything at once," Hayes noted. "If exploitation is the topic being studied, a user would work within the exploitation module. He or she could then address the study issues by manipulating numerous factors within that module, such as work/exploitation rates, analyst availability and workstation effectiveness to determine the appropriate solution."

It also allows users to visualize needs and resource availability in various modules. The user interactively manipulates the tool to determine courses of action and "what ifs."

CSTRAT is currently supporting NRO's FIA Program and the NIMA Tasking, Processing, Exploitation and Dissemination (TPED) Assessment Process (TAP). It recently underwent a major face-lift that supports a Windows-like, click and drag environment that enhanced users' ability to manipulate data within the tool.

CSTRAT will undergo intensive verification and validation testing and is scheduled for release to selective users within NIMA and throughout the community later this year.

WORKFORCE 21 Plan Calls For **Annual, Agency-Wide Promotions Process**

articles by Tim May Workforce21 Team

An annual Agency-wide promotions process under WORKFORCE21 will replace the standard General Schedule promotion process now in place.

Under the current system, employees apply directly for higher grade-level vacancies to be considered for promotion. Under Workforce21, the annual promotion panel would be held during the third quarter of the fiscal year, and all those meeting the skills-based eligibility requirements would be eligible. Employees will apply, or "self-nominate" for available positions.

Since the Agency also is moving to a broad band pay system (see "Pay Under Broad-Banding," April issue), promotion will be defined as being selected to move to the next higher pay band.

One of the key innovations of Workforce21 will be the central role occupation councils play in promoting the general health and welfare of NIMA's 28 broad occupations. Under Workforce 21, that's down from the current 650 different position titles.

Each council chairman will be a senior manager nominated by the directorate with at least a plurality of the members of the occupation. The chairman will select three or more knowledgeable members with diverse backgrounds who are representative of the jobs and bands within the occupation.

The councils, in conjunction with senior leaders and the strategic workforce planning group, will guide the promotion process. They will define basic promotion eligibility criteria and share the guidance with occupation members. The councils will form promotion panels that will further refine the promotion criteria.

The promotion panels will make selections based on employees' skill acquisition and job performance, ensuring that applicants receive feedback about areas where they need to improve. Those selected for promotion will move to the next higher pay band and receive a pay increase.

No assignment changes will automatically result from a promotion. The number of employees promoted in their respective occupations and at their pay band levels will depend on the Agency's strategic plan and available

Implementation is subject to completion of the Agency's labor relations' obligations.

During the coming months, additional information, orientation and training will be made available to employees and supervisors about how the assignments, promotions, and other key WF21 processes will work.

Assignments to be Centered on Open Competition

Open competition will be the preferred way to fill assignments under Workforce21.

Since assignments play such a large role in career development, officials opted for open competition. Their reason: it's during assignments that employees have the opportunity to demonstrate their skills and, through experience, develop beyond current skill levels. Stretch assignments require employees to research new areas and learn new skills to be productive in the new environment.

The present method of filling assignments is for management to either direct the assignment without competition, or to announce a vacancy for a position with very specific duties and qualifications requirements. For instance, to fill a GS-12 vacancy, employees can apply at their current grade levels and hope to be selected for an assignment that will develop new skills. Alternatively, GS-11 employees who meet the qualification requirements may apply for the assignment and, if selected, be eligible for promotion.

Assignments under Workforce21 will be distinct and separate from the promotion process. Directed assignments will be used only when necessary to meet mission or timecritical requirements.

"Competition" is the operative word. Competitive assignments will be open to the widest possible numbers of NIMA employees. Instead of seeing a GS-12 position announced with narrowly defined duties, employees might see an announcement briefly outlining the skills needed for an assignment at a particular pay band level. Anyone (including those in a lower pay band or different occupation) with the skills required for the assignment would be eligible to apply.

From reading the assignment profile and published occupation guides developed by occupation councils, employees can determine if their skills and experiences have prepared them for the assignment and if the duties offer career enhancing experiences to fit their needs. Assignment panels will choose from among the applicants based on the requirements of the assignment.

Even if an employee is selected from a lower band, the selection will not result in an increase in pay. The selectee will bring his/her skills and current pay level to the assignment and be given the opportunity to demonstrate higher level skills. Higher pay levels may later be gained through the separate performance pay and promotions processes.

Digital Symbology Promises New Standard for Geospatial Data

by Colby Harmon VPF Prototype Development Manager

IMA customers are reviewing improvements that may lead to the standardization of symbols found in both land maps and nautical charts. This and other improvements are part of the recent third digital symbology prototype released recently by the Technology Operations Support Office, Directorate of Systems and Technology.

The first two prototypes were distributed as the "Vector Product Format (VPF) Symbol Set." Its name, and the name of the military specification that describes it, were changed to "Geospatial Symbols for Digital Displays" or GeoSym. The new name highlights the fact that these symbols may be used to display many types of digital data, not only VPF. This undertaking required the review of hundreds of symbols from existing hardcopy and digital symbology standards, selecting the appropriate symbol and then rendering it in a standard Computer Graphic Metafile (CGM) format.

One Look for Many Users

The evolution of map symbology within the domains of topographic, hydrographic and aeronautical information has often resulted in the same feature being represented differently on maps or charts created by each of these communities. For example, topographic maps depict a church with the familiar "cross on a square" symbol, while nautical charts use a single cross. Centering the symbol on the steeple's position allows a mariner to use the point to triangulate his position at sea.

Many types of digital data are now routinely overlaid on a single display screen. If the same symbology is not used for all of the data, then different parts of the display could portray the same types of features The evolution of map symbology within the domains of topographic, hydrographic and aeronautical information has often resulted in the same feature being represented differently on maps or charts....

with different symbols. The possibility even exists that the same symbol could be used to represent completely different things within the display's graphic window. Therefore, the Geospatial Symbols for Digital Displays development has attempted to standardize the representation of all geospatial information across the entire VPF family of products.

Despite this, there was such a strong tradition for each of the church symbols in their respective communities that this became one of the rare cases when both symbols were implemented in GeoSym. When there was a choice of different commonly used symbols for the same feature, then usually only one of the symbols was included in the symbol set. Symbols from the most widely accepted source were ordinarily given preference.

You Can't Tell the Players without a Program

In the same way that a program tells a fan which player occupies each position on the field, GeoSym uses nearly 3,000 rules to assign one of more than 750 symbols to a particular feature. These rules also specify default display characteristics for any VPF attribute, such as a depth sounding value, that may be displayed as text. These include font, text size,

color and justification, as well as the text's offset position from the attributed feature.

GeoSym Goes to Sea

One of the most important changes in the new prototype is that symbols for nautical and hydrographic features now conform to the International Hydrographic Organization Colour and Symbol Specifications for Electronic Chart Display and Information System (ECDIS). This is a critical step in NIMA's effort to have Digital Nautical Chart (DNC) data recognized under the Safety of Life at Sea (SOLAS) Convention as suitable for use in ECDIS systems. This will allow the Navy and other DNC users to roll up their paper charts and navigate in a completely digital environment.

Sperry-Marine, Inc., and NIMA entered into a cooperative research and development agreement (CRADA) to adapt Sperry's Integrated Bridge System to use DNC data directly and to use the standard symbology developed by NIMA for its display. Plans are to have GeoSym symbols and rules integrated into NIMA's Full Utility Navigation Demonstration (FUND) software as well as the Joint Mapping Tool Kit (JMTK) module of DoD's Common Operating Environment (COE) which will be used in many DoD systems currently being developed.

The ECDIS display standard requires that each symbol be rendered with different colors depending on the various lighting conditions that exist on a ship's bridge throughout the day. Bright, highly contrasting colors are required when the display is bathed in bright sunlight. Subdued tones are used to help maintain the night vision of those keeping the watch overnight on a dimly lit bridge.

Web Sites Estimate Retirement Annuities

by Lisa E. Stafford American Forces Press Service

With all the hoopla about downsizing and buyouts these days, many federal workers are confused about their retirement pensions.

Two federal World Wide Web sites may make things clearer. One is the Department of Defense's Human Resource Center at http://www.hrsc.osd.mil/benfits.htm. The site contains valuable overviews of both the Civil Service Retirement System (CSRS) and Federal Employees Retirement System (FERS) and software DOS-compatible software for the former that easily converts to Windows.

The other site (www.finance.gsa.gov/csrs2.htm is maintained by the General Services Administration. And despite a banner that announces use for CSRS employees, it features a downloadable Microsoft Excel spreadsheet that allows off-line calculations for the CSRS or FERS, and combined FERS and CSRS.

Users need to know the average of their highest three years' salary, the number of service years and the sick leave balance they will probably have when they retire. In seconds, they'll know their estimated annuity at retirement—or how many more years they'll have to work to earn the annuity they want.

The web site calculators are quick and easy to use.

Actual annuity will depend upon several factors, such as
step, merit increases, cost-of-living increases and elections
for survivor and life insurance benefits. Consult your
personnel office for these exact figures.

Thrift Savings Plan Runs Through July 31

The semiannual open season for the Thrift Savings Plan is running through July 31.

During this open season, Civil Service Retirement System (CSRS) and Federal Employee Retirement System (FERS) employees hired before Jan. 1 are eligible to make a first time election to participate, to increase or decrease contributions, to allocate contributions among three investment funds, or to cease participation elected during a previous open season.

Elections should be made by completing Form TSP-1, Thrift Savings Plan Election.

For NIMA Department of Defense affiliated employees, election forms for this open season must reach HRRC, Mail Stop L-28, by close of business July 31. For CIA affiliated employees, forms must reach the Thrift Division, Room L017, by close of business July 31. Forms received after July 31 will be returned to the employee unprocessed.

IN MEMORIAM

Michael G. Platter, a planner/ estimator with NIMA's Mission Support in St. Louis, died April 10 after a brief illness.

He spent 25 of his 29 years of federal service with NIMA and its predecessor organizations in St. Louis.

Platter began his career as a security guard and worked through many positions before becoming a member of the Mission Support Space Management team.

"Mike was one of the most customer-oriented people in MSW," said Rich Flauaus, chief of the Space Management Branch, St. Louis. "He lead the Tiger Team that was responsible for the successful consolidation of [Human Resources] from the North Annex leased facility to the Second Street complex. This consolidation saves \$72,000 in annual lease costs. Mike will be missed very much."

Platter was married for almost 27 years. He is survived by his wife, Patricia, and three children, Amanda, Jennifer and Matthew.

Leonard A. Washington, a retired NIMA employee, passed away recently after a long illness. Washington had served as the pest control manager in the St. Louis Facilities Engineering Branch.

Gregory F. Luig, 73, who retired in 1981 from a NIMA predecessor Defense Mapping Agency, passed away recently. A cartographer for 30 years with the DMA Aerospace Center, St. Louis, he spent the majority of his career in Geodesy.



Michael G. Platter

NIMA Data **Keep Top Government Officials Soaring**

by Jennifer Lafley

or pilots who plan flight routes, revising plans at a moment's notice is part of the job. And according to one Air Force navigator, NIMA data accessible by a commercial software package have more than proved their value.

"Diversions are easier to do using FalconView," said Maj. Joel Carlson, a mission navigator and Global Positioning System (GPS) project officer for the 89th Airlift Wing. Based at Andrews Air Force Base, the 89th's duties include flying the president, vice-president, cabinet members and

other high-ranking delegations.

The software provides air crews with detailed maps, imagery and other critical data supplied by NIMA. Using a laptop computer and FalconView, pilots can quickly access Compressed ARC Digitized Raster Graphics (CADRG), Electronic Chart Update Manual Data, Controlled Image Base (CIB), Digital Terrain Elevation Data (DTED) and Digital Aeronautical Flight Information File (DAFIF).

"I see FalconView as a bridge from hard copy maps to digital geospatial information," said Nick Bekanich, a cartographer in the Geospatial Information Management Division (GIM).

FalconView provides customers a low-cost way to use NIMA data and signals from the GPS's constellation of satellites for flight planning and in-flight moving map

display.

At NIMA, the team responsible for CADRG production uses FalconView to review the final compressed images before a new CADRG dataset is sent for replication and distribution. The CADRG production system allows the review of individual image frames, however, with FalconView, quality reviews can be made on the entire frame dataset.

"It is easy to use and provides the user with multiple layers of geospatial information quickly," Bekanich said.

"What was once a paper aeronautical chart is now scanned, digitized, georeferenced compressed and copied to a CD-ROM"

Carlson found FalconView to be a valuable tool to help with flight plans for a high-ranking delegation that was part of the President's recent trip to Africa. "Africa's lack of suitable fields that can be diverted to is notorious to aircrews," said the navigator, who needed to divert to another airfield during the

"Once we set the FalconView to display any suitable field with 7,000 feet of runway, we immediately found several within range," he said. "The approach to unfamiliar airfields was easy, thanks to the big picture view of the surrounding terrain provided by CADRG and FalconView.

"With this system, we can filter out unsuitable runways immediately," he added. "Normally, that process could take hours." Another feature that has proven a real time saver is the ability to use microcomputer workstations for quality review for the

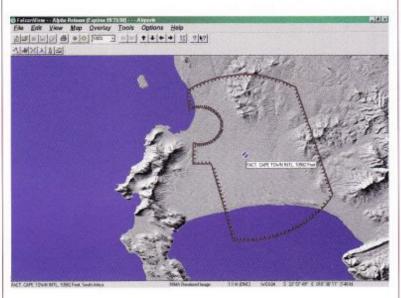
CADRG production team, said Bekanich.

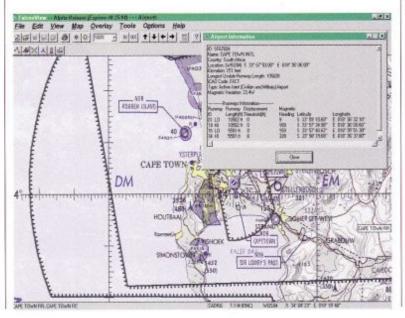
The CADRG data used by FalconView is actually compressed from ARC Digitized Raster Graphic (ARDG). ADRG is a digital raster format of NIMA hardcopy maps and charts.

"What was once a paper aeronautical chart is now scanned, digitized, georeferenced compressed and copied to a CD-ROM for use by customers with FalconView," Bekanich said. NIMA's customers now have the option of ordering the data on CD-ROM. If those data are needed to support crisis operations, users can download the data from NIMA's Open Source Information System (OSIS) file transfer site and have the data ready for use in minutes.

"FalconView is now the Air Force standard for cockpit moving map display," Carlson said. |







FalconView provides the ability to layer different NIMA geospatial information giving customers a custom view of their areas of concern.

Top Photo: Digital Aeronautical Flight Information File Aeronautical Boundary (DAFIF) and airfield information layers overlay a Tactical Pilotage Chart.

Middle Photo: DAFIF Aeronautical Boundary and airfield information lavers with rendered Digital Terrain Elevation Data.

Bottom Photo: DAFIF Aeronautical Boundary with Airport Information Text Data overlay an Operational Navigation Chart.

NATIONAL IMAGERY AND MAPPING AGENCY SALUTES



FLAG DAY JUNE 14