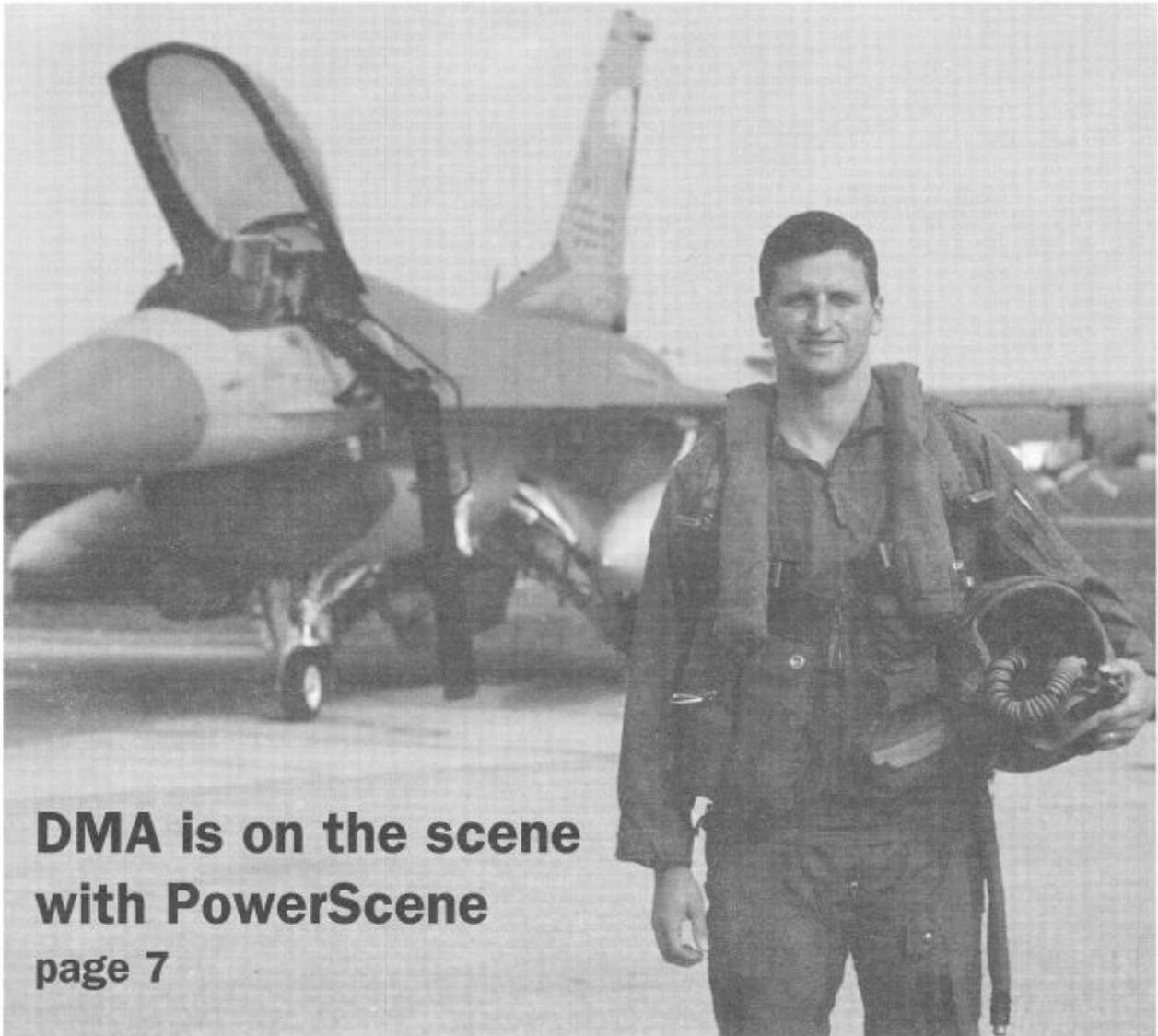


DEFENSE MAPPING AGENCY

LINK

October 9, 1995



**DMA is on the scene
with PowerScene
page 7**

DEFENSE MAPPING AGENCY
LINK

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Reengineering update: Help desk ready to implement	4
Employees help reinvent	5
DMA garners FWP awards	6
Cover story: DMA and PowerScene are on the scene	7
You: 'Old Stuff' is 'good stuff'	13

On the cover

Air Force F-16 pilot Maj. Bob Beletic is using PowerScene to prepare for successful flyover missions in Bosnia. For him and other aircrews, PowerScene is making a difference. DMA took PowerScene to the flight line to support NATO forces involved in Operation Deliberate Force. This and more DMA initiatives begin on page 7. *Photo courtesy of U.S. Air Force.*

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UP FRONT

DMA launches CFC drive

In 1961, President John F. Kennedy created the Combined Federal Campaign to be the only authorized agency to solicit donations from federal employees. The program has raised money for numerous charities locally, nationally and internationally.

Agency services are geared toward helping people regardless of their income level. CFC-supported organizations help the physically and mentally challenged, the elderly, the disaster stricken, as well as many others. Everyone benefits, by ensuring that we are living and working in a healthier, more content world.

Employees can get a real feel of how their donations help by participating in arranged tours of CFC-supported agencies.

The St. Louis area campaign kicked off Oct. 4 and the theme is "The Power of One." Keyworkers will be seeking contributions through Nov. 17.

"It's Up to You" is the Washington area theme. The kick off is scheduled for mid-October.

For more information, contact Vicki Brewster in Washington at (301) 285-9150, DSN 356-9150 and Kelly Stohl in St. Louis at (314) 263-4309, DSN 693-4309.

—by Don Kusturin



DMA 1995 Campaign

BITS AND BYTES

Air Force Maj. Gen. Philip Nuber

I have just received the feedback from all the CINCs [Commanders in Chief], who are our most important customers, and I thought I would let you know what they said. I will use some quotes that reflect how we are doing and some other quotes that will let you know where they want us to continue to focus attention. In general, the news or "Report Card" is very good.

I received many comments like "You are doing a great job. ... We have relied on DMA ... and have always received timely, professional responses, which facilitated mission accomplishment." Further, "We applaud your customer support concept. ...Your organization has a great attitude and positive approach to satisfying your customers."

Moreover, another CINC said it this way, "Up front, you should know my service components and subunified commands are pleased with DMA's support to their daily operations, exercises, and planning efforts. ... Although the Bosnias, Haitis, and Iraqs of the world constantly challenge your agency's ability to satisfy mapping commitments, DMA's support ... is consistent with worldwide operational priorities." From another CINC, "DMA's quick on-time filling of routine and emergent product requests has been instrumental in our ability to support the warfighter. ... Technical support has been the key in the development..."

Some others reported "Good to know that an organization which is vital to the effectiveness of every warfighting commander is on a sound track. ... Customer support team concept is especially useful." Another view was, "Applaud the reinvention and global geospatial information and services efforts. ... glad to see DMA exploiting digital

mapping ... expect an increase in the interest and use of digital mapping as more people become aware of capabilities and uses." A final comment was "Involvement in developing international mapping agreements ... will provide the most up-to-date products available to support our mission."

All of you should take great Pride in the views of the CINCs, and we should listen just as hard to their words on where they would like us to be in the future. This is what was said: "[The] method by which we identify and submit the command's MC&G requirements lacks definitive policy guidance. ..." And, "[We] solicit your [DMA's] support and leadership for standardizing manipulation (toolkit) software. ..." Another said they, "Often operate where the map coverage is poorest ... Completion of worldwide 1:250,000 scale coverage and implementation of a rapid means to provide larger scale coverage will be major steps in addressing this problem" Others listed requirements for "an accurate worldwide controlled image base ..., high resolution digital terrain elevation data and other digital products"

These are some examples of what our customers want. We must figure out how to do that with the resources we have now and will have in the future. A team practicing our Core Values, which I wrote about earlier, can and will deliver. When we do that, you can expect the next feedback will be just like the first part of this article.

In my next article, I will address ideas on how you can learn about your customers at home – self-help professional education. ■



Help Desk Team gets go ahead, implementation begins



A DMA core value – putting the customer first – was the focus of the seven-member team charged with reengineering the external customer help desk. The team presented their implementation plan to DMA Deputy Director Doug Smith, Sept. 26.

Smith, acknowledging the agency's need to improve its customer help process, said he is encouraged that the course plotted by the team will get the agency from here to there. He gave the plan a thumbs-up, congratulated the team members and passed the baton to the Operations Group for action.

As the owner of this action, OG will assemble an implementation team that will include a full-time integrator, membership from multiple business units, part-time work teams and matrixed support.

Phase one of the plan calls for agency standardization by Jan. 1, to include the initial operation of the DMA customer help desk. Paramount to this phase is the establishment of a single 1-800 telephone number and postal address for customers. Officials indicate that this information will be printed on all DMA products. Team members said this will give customers a standard way of contacting the agency and will be especially valuable to customers without a pre-established DMA account or those without a Customer Support Team representative.

These types of inquiries will go to the Customer Help Desk where they will be answered by a customer agent or forwarded to the appropriate functional expert. The plan includes training initiatives to ensure customer agents are well equipped to answer general questions and have the knowledge to determine where to find the answers within DMA.

Phase two, with full implementation planned by April, will focus on refining the customer help desk process to include

installation of a knowledgebase that will be accessible by all agents and functional experts. The Automatic Call Distributor will be reconfigured to prequalify calls based upon their need. The idea is to get the customer to the right person the first time.

The plan cites the "as is" example of one handoff with a possible 14 steps currently necessary to get requisition status information to a customer. The refined process, in a similar situation, will require zero handoffs and only four steps. Phase two also capitalizes on the agency's use of the Internet as another customer entrée to the agency's help desk.

Phase three is a further refinement of the population of a knowledgebase and database to implement additional capabilities. Phase three will also identify future improvements and evaluate the overall success of the new process. This phase is scheduled for completion by September 1996, according to the plan.

Team members are adamant that the new Customer Help Desk will allow for greater information sharing and increased consistency, agencywide, as well as increasing the agency's ability to meet customer requirements.

None of these improvements will preclude a DMA customer from seeking assistance from a Customer Support Team representative or another functional expert, said Smith. These customer help desk improvements will simply complement the agency's Customer Support Teams and enhance DMA's responsiveness to its customers, he said.

While the agency may never have all the information to customer questions in one place, Smith said the agency can go a long way to having 90 percent available, and he is confident the agency can get there in the next year.

—by Kathleen Neary

Employees help reinvent

DMA employees aren't shy and many don't mince words, discovered officials who handled nearly 400 comments on the agency's reengineering efforts.

Separate from the agency's employee suggestion program, senior leaders asked employees to voice their comments, suggestions, and ideas through the Goin' Fishin' program, the 1-800 A NEW DMA telephone number and e-mail. Throughout the stages of the agency's reinvention and reengineering, the calls came, and officials report, they are still coming.

"The real significance here is that the agency saw the need for employee involvement," said Air Force Col. Joe McNichols, chief, Reinvention Implementation Office. Senior management tasked his office with managing the retrieval system that made it easy for employees to comment during the period of organizational change.

McNichols said reinvention literature and statistics report that successful organizational change reflects grassroots-level participation. The work force, in most cases, is management's best resource for how business is being done and how it can be done better, he said.

RIO officials took the calls and forwarded the comments to the appropriate business unit for action.

With an employee base of approximately 7,500 strong, 400 calls may seem slight, but business unit officials responding to the calls stressed that many calls were multi-faceted. Calls often had multiple suggestions and a host of questions or concerns, some of these requiring action by several business units, according to Liz Barrer, Operations Group.

For example, 135 calls were passed to the Operations Group for action. From those calls, about 275 suggestions surfaced, said Barrer. She said all the calls were taken



Dave Sedlak • Woody Mood • Matt Gonsalves • Tom Becherer • Ed Greiving • Bob White • Brenda Walsh • Charles Heyda • Sean Tracy • Alan Hugley • Mike White • John Froid • Henry Taber • George Rauch • Ed Smith • Tim Clayton • Robert Ducheminédu • Jim Locke • Dan Miller • Jane Dickerson • Ron Timmer • Richard Salmon • Marilyn Francisco • Frederick Johnson • Fred Foltz • Barbara Giffner • Fred Johnson • Joan Sun • John Ryder • Pat Dickens • Mari Reger • Janice Schiff • Gary Kewin • Bob Perry • Dan Bevelley • Donna Petry • Mele Biggin • Kelly Berner • Adele Haas • Lory Franklin • Ron Timmer • Sylvia Landy • John Bukaski • Penny Latham • Bruce R. Berry • Lori Ferguson • Rubie Manson • Jordan Rubinovitz • Lewis Richardson • Audrey Zapka • Doug Dupin • Paul Pekarek • Denise Anderson • Christine May • Dennis Morgan • Robert J. Coombes • Carol Brockner • Sonia Jardine-Lucky • George E. Higgins • Charles Jacobs • Ira Kroll • Juanita Susse-Williams • Mary Ann Bourbon • Mike Weaver • Bryan Blank • Martha Plammons • Laura J. Thompson • Pamela Battle • Felicia Organ • Dore Rensing • Kelly Stahl • Ivy Buck • Bev Lindecker • Eileen Finwell • Kathy Strickland • Lenora Mason • Kathy Weaver • Cindy Taylor • Jackie Hopkins • Rich Haggart • John Tamasovitch • Sue Robinson • Lynn Martin • John Dady • Tina Pinkard • Judy Fenen • Jan Lewis • Marilyn Raul • Judith Baran • Fern Cooper • Gary Kenen • Jim Mohan • Ava Bradshaw • Lynn Thompson • Gregory Piper • Pat Smith • Bill Curtis • Tom DeCicene • Nina Powers • Stewart Pagenstecher • Sharon Smith • Jeffrey W. Mittek • Danell Sharick • Karen Stoessel • Robert Edwards • Al Frank • Steve Neville • Kenneth Crist • Elean Strwell • Beth Mayer • Evelyn Feibel • Ms. Casseta • Allen Sowder • Irene Lano • Sharon Hawk • Doyle O. Bailey • Sara Christian • Paul Kohnen • Barbara • Mike Cebutski • Michael Todd • Donnie Burts • Marilyn Francisco • Chris Jarvis • Kelly Waymire • Barb Bick • Guy Kangas • Peter Hovis • Matthew B. Warrick • Jstf Kline • David Jones • Helen Sullivan • Tom Aldred • Don Meier • Penny Dunn • Brenda Phillips • Ed Salkowski • Mike Wagner • Robert Campbell • Clifton Duke • James Unger • Thomas Troy • Debbie Fugas • Mike Rodriguez • James Ayres • Roger Mitchell • Barbara Willey • Lary Wilman • William J. Moran • Helabieder • Jim Ayres • Eric Torun • Russell Pickup • Mary Berg • Dale Skinner • Mary Phillips • Carol Rauh • Cecil VanReenen • Mary Staloch • Peter Krueger • Jeanne Thackrey • Lawrence Marsh • Jerry Rah • Dan Reimler • Shirley Ray • Paul Kahntoff • Rich Johnson • Jim Smith • Dan Rusco • Philip Hwang • Connie Meyer • John Rees • Bret Duncan • Steve Lowe • Jerry Dunbar • Bill Pryor • Beverly Mitchell • Richard Rice • Norm Spencer • Tom Coghlan • Lee Wielgos • Bob Farcht • Linda Sullivan • Ken Burke • Susan Riley • Jay Harden • Water Voelt • Kim Diffendal • Tim Jamison • Dan Hinchberger • Sandra Townsend • Lynn Covey • Jacqueline Pfaffon • Greg Anderson • Dick Marino • Conley D. Phipps • Nancy Ramsey • Phyllis Farris • John J. Koenig • L. Kase Johnson • Ron Mordhorst • C.H. Cook • Steve Vogel • David Murvhill • Bob Vol • William Brawn • Tony Gregory • Jim Ericson • Anthony Jeric • P. Krause • Ron Brock • Gary A. Hacker • Keith Brown • Debbie Loudon • Douglas Dupin • Charlene Gamet • Ernie Peters • Mary Weidner • Gerald Hammond • Bill Brown • Lary Plunant • Jerry Eplington

The people above submitted suggestions through the Reinvention Implementation Office. Thanks to them and many more for helping to reinvent the Agency.

seriously and received a response. She calculated that OG adopted 24 percent of the suggestions as part of the reinvention implementation efforts. Approximately 34 percent of the suggestions have been referred to OG's various reengineering teams for further action, while about 36 percent were rerouted to other offices for action.

Additionally, she said some suggestions were passed to more than one reengineering team for study due to the depth and breadth of their scope. Each team will review the suggestion as it relates to their respective efforts, she said. Given the suggestion's complexity, each effort could evolve into multiple applications.

Human Resources officials said that they adopted approximately 63 percent of the suggestions they received. Suggestions like establishing a training calendar on the

continued on page 14

DMA garners St. Louis metro FWP awards

DMA and two employees earned three awards in the St. Louis Metropolitan Federal Women's Program Council's Awards Program held recently in St. Louis.

Sandra J. Standeford won FWP's Supervisor of the Year Award (first level); Margaret Spezia was named Federal Women's Program Manager of the Year; and DMA was selected for the Agency Award.

DMA's deputy director for Source Management West, Barb Ivery was a featured speaker. Focussing on the FWP theme "75 Years of Women Making A Difference," Ivery provided many examples of women throughout history who have made a difference; and then posed the question, "are you making a difference?"

Standeford, an accounting technician who manages 11 employees, was selected "in recognition of (her) exceptional performance, leadership and initiative in systems implementation and special assignments throughout the past year in the Finance, Cost and Economic Analysis Office," according to the award citation.

During the past year, Standeford was transferred to the Travel Pay Branch and "has met or exceeded every production metric." She achieved these outcomes while at times short-handed and with a staff

partially made up of trainees or temporary workers.

She has "had an immeasurable impact on the morale and attitude of the staff;" and was praised by them for her ability to provide "only positive, constructive criticism."

Spezia is an equal employment specialist and a part time FWP manager.

She "is commended for her leadership abilities and her commitment to the improvement of education and issues concerning women ... is conscientious and imaginative in her efforts to celebrate the many achievements of all women ... has proven her capabilities in both her work environment and her extensive community service ... communicates the positive image of both DMA and the Metropolitan FWP Council," reads her citation.

Her achievements include coordinating various programs promoting the contributions of women, such as organizing DMA in St. Louis' program for Women's History Month; providing historical information concerning women throughout the month; and completing several training courses advancing herself and her knowledge of women's issues.

DMA "is commended for its total commitment to the improvement in the status of women and women's issues. Positive proof of this commitment is evident by the promotion rate of it's female employees, dedication to quality and education of its entire work force." ■

— by Don Kusturin

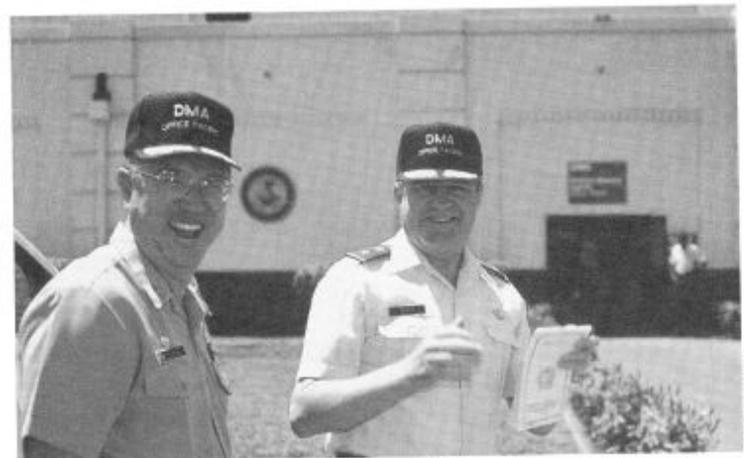
DMA director Maj. Gen. Philip Nuber recently visited DMA's Pacific Office, Hickam Air Force Base, Hawaii for a tour of the facility and to meet its new commander, Navy Cdr. Mike Pind, who assumed command July 21.

The general visited U.S. Pacific Command primarily to discuss the upcoming transition of Tokyo datum products to newer WGS-84 products in Korea.

Nuber was presented a baseball cap reading "DMA - Office Pacific." It is a Navy tradition normally reserved for aboard a ship. He was given a full tour of the facility by Sid Ikehara, Distribution Branch chief. ■

—submitted by Richard E. Draper,
Pacific Office

Nuber visits Pacific Office



Navy Cdr. Mike Pind escorts Air Force Maj. Gen. Philip Nuber during a tour of the agency's Pacific Office.

Pilots 'fly' over Bosnia before takeoff

by Paul Hurlburt

Customer support took a flying leap when DMA provided a "hit" computer system on the flight line for Operation Deliberate Force.

The system, PowerScene, which won quick acceptance by the pilots flying missions over Bosnia, enabled them to visualize the terrain as if they were flying over it.

One of several initiatives undertaken by DMA to support NATO forces, PowerScene was so successful that, in a matter of days, no pilot took off without using the system to rehearse their mission.

"It was like a student riding a bike to school for the first time," said Vic Kuchar, DMA customer support officer to the Joint Staff.

"The more times the child rides the bike there, the better the child knows the way. In this case, though, the pilot could fly the mission over and over without ever leaving the ground."

Installed by DMA at Aviano Air Base, Italy, in early August, PowerScene processes imagery and elevation data to create — on the fly — perspective views chosen by the user. By changing heading, altitude and speed with toggles and a joystick, users can simulate, in real time, the moving scene from the cockpit for their unique mission. As the user changes parameters, the computer recalculates the view.

"PowerScene enables us to see something close to what we're going to see in the air; it helps us identify targets better and get the bombs on target," said Air Force Maj. Bob Beletic, an F-16 pilot. Beletic's unit, the 555th Fighter Squadron, known as "Triple Nickel," is one of two U.S. Air Force fighter squadrons home-based in Aviano.

"We come at some targets at six to seven hundred miles per hour. We have seconds to identify the target or we don't drop," Beletic said.

"PowerScene helps us to recognize the target better. It gives the angle we'll be looking from and makes us faster at identifying targets. That can make the difference between dropping and not dropping. It has helped me personally, and the bottom line is

a higher percentage of our bomb runs have been successful."

Runs on DMA Data

The PowerScene software drapes digital imagery from 8 mm tape over DMA's Digital Terrain Elevation Data to show the continually changing perspective terrain scenes the user requires. The imagery, at different levels of resolution, is obtained from DMA archives and processed by DMA cartographers. In processed form, the imagery is geo-referenced and orthorectified. The latter process provides control points to correct distorted distances on an image caused by differences between a sensor's height and the uneven ground.

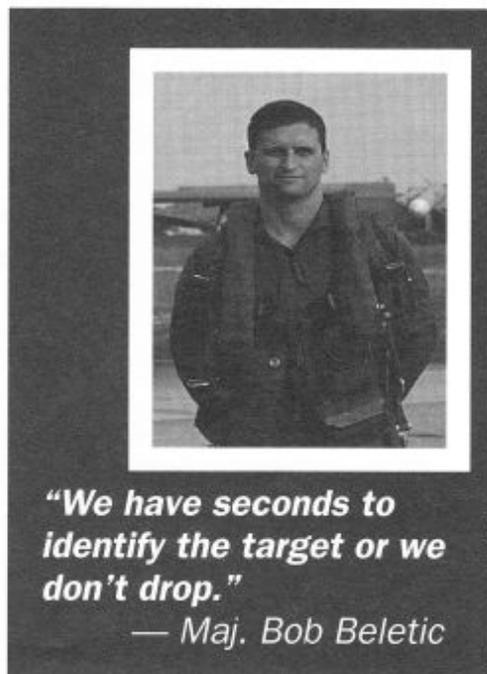
The imagery and DTED covered all of Bosnia and the surrounding region, Kuchar said.

One of four DMA customer support officers assigned to the Joint Staff, Kuchar and his colleagues operate a PowerScene workstation used in high-level planning at the Pentagon. He returned from Aviano last month after 32 days with the NATO provisional wing, where he and other DMA personnel worked up to 20 hours a day helping aircrews and mission planners from all the U.S. services and several NATO countries use the system.

Kuchar's efforts were part of DMA's support to the U.S. European Command through the agency's EUCOM Support Team.

User Friendly

According to Air Force Col. Dorin Balls, EUCOM Support Team leader, PowerScene



"We have seconds to identify the target or we don't drop."

— Maj. Bob Beletic

Photo courtesy of U.S. Air Force

continued on page 10

A view from the front

“I wish everyone in DMA could have just five minutes of my experience,” said Vic Kuchar, DMA customer support officer to the Joint Staff. Kuchar who was deployed to Aviano Air Base, Italy, said his close proximity to the warfighter, who is using DMA products in Bosnia flyover missions, strengthened his belief that the troops value the agency.



A 510th Fighter Squadron F-16 flies with a German MIG 29 off the coast of Sardinia during a joint training exercise.

Kuchar introduced PowerScene to the NATO warfighters embroiled in the Operation Deny Flight/Deliberate Force effort. He was later joined by DMA physical scientist Dave Rogers and both were there for the launching of NATO's largest airstrike in the organization's history.

"We want to support the warrior," he said. "I can't see any way of getting closer to the warrior than to actually be in the field unit."

Accustomed to giving PowerScene demonstrations at the Pentagon, Kuchar was certain the system could assist the NATO mission, even though its uses in Washington were different than in a field environment. It proved to be such a success that pilots are not airborne until they've used it for mission rehearsals, according to Kuchar.

PowerScene uses digital maps, orthorectified imagery and Digital Terrain Elevation Data, all produced by DMA. This data is the result of the entire DMA team, Kuchar said. He called himself "the guy that simply handed over all the work."

For 32 days he was temporarily located just across the Adriatic Sea from Bosnia. Shoulder to shoulder with the warfighters, who were sometimes less than two hours from deploying, Kuchar said he saw DMA products everywhere, from a pilot's vest pocket to a posting on a wall used in pre-deployment mission briefings.

"I was really gratified to know that I had contributed in some way in helping these guys go into harm's way, do their job and get out successfully."

Kuchar returned to the States Sept. 2. Rogers, who has also returned to Washington, was replaced by Steve Hux, DMA physical scientist from the St. Louis area.

Kuchar said he will never forget seeing the anxious faces of the aircrews before deploying for hostile territory. He described an overwhelming sense of pride in being a part of the DMA team that was helping crew members perform their best.

—by Kathleen Near

DMA develops PowerScene database



photo by Larry Franklin

Vic Kuchar and Army Lt. Col. Lloyd Carmack, both customer support officers to the Joint Staff, demonstrate PowerScene at their Pentagon workstation. The database for PowerScene was developed in DMA's Enhanced Prototyping Product Environment.

The database for the PowerScene workstation used in Operation Deliberate Force was designed and built in DMA's Enhanced Prototyping Product Environment. PowerScene lets aircrews "fly" their missions before leaving the ground. It was used in support of combat flights for the first time during the NATO operation in Bosnia.

EPPE built the database of Bosnia as one of several prototype products for PowerScene. The system runs on imagery and elevation data to create – on the fly – perspective views chosen by the user.

The first operational use of PowerScene at the Pentagon occurred in December 1994 after North Korea shot down a U.S. Army helicopter over the demilitarized zone.

Vic Kuchar, DMA customer support officer to the Joint Staff, said an EPPE prototype database of Korea was used in PowerScene to visualize the area where the helicopter went down.

Imagery from the PowerScene workstation, located in the Pentagon's National Military Joint Intelligence Center, was transmitted to South Korea during a video teleconference with the commander of U.S. forces in Korea.

The imagery gave policy makers a clear picture of what had happened, so they could better deal with it, Kuchar said.

Whether PowerScene is used for intelligence briefings or mission rehearsals, officials say the system promises to become an integral part of military preparations. Routine production for PowerScene is scheduled to begin this fall in Bethesda and St. Louis. ■

—by Paul Hurlburt

Warriors put DMA training to quick use

When Navy Lt. Cmdr. Richard Reece and Air Force Capt. Wesley Baker went to Italy, little did they know that the training they provided warfighters would be used so quickly.

DMA products and training proved useful when NATO forces started airstrikes in Bosnia.

"We went to Aviano [Air Base],

Italy, to conduct MC&G training for the warrior," Reece said. "We were there in late August just before the airstrikes. The training coincided with real-world events."

Baker, who also traveled to Vicenza, stayed in Italy a little longer and was on hand when the

French Mirage 2000 aircraft was shot down. With military people at the Combined Air Operations Center and using PowerScene, Baker was able to pinpoint where the aircraft went down.

"I've been getting their people to use the PowerScene system to help with their mission," Baker said.

Both Reece and Baker are instructors with the Defense Mapping School. Assigned to the Warrior Support section, they routinely travel to various units briefing their audiences on DMA products.

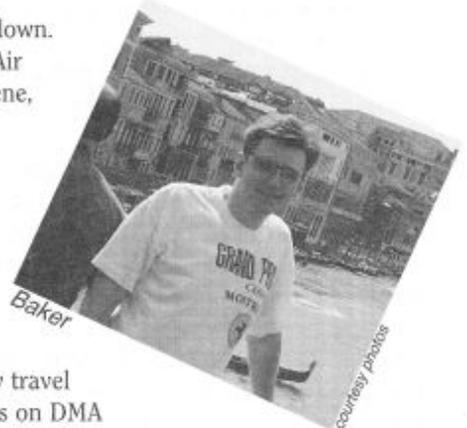
"We taught them how to use our products and answered questions concerning real-world use," Reece said.

Baker said much of their instruction involved how coordinates work in conjunction with the Global Positioning System. ■

—by Muridith Winder



Reece



Baker

courtesy photos



A pair of F-16s from the 555 Triple Nickel, 31st Fighter Wing, prepare to take off on a routine training mission.

Pilots fly over Bosnia

continued from page 7

has varied applications, though it is intended to complement, not replace, existing mission planning systems.

"Besides mission rehearsals, PowerScene can be used for target area study to select the best axis of attack. For example, in the rough terrain of Bosnia, your line of sight might be blocked by a mountain. PowerScene will allow you to visualize that," Balls said.

"PowerScene can be used to refine target location. Because the imagery has been orthorectified and laid over DTED, the pilot can pull coordinates off it.

"In Bosnia, the targets are difficult to locate; they could be individual artillery guns, underground ammunition dumps and so forth."

Planners in Aviano also videotaped flyovers of the combat zone to orient rotating squadrons with the area before their arrival, Balls said.

Other uses included target verification and identification of potential threats before setting out on a mission and post-strike review upon completion of the mission.

"Intelligence personnel can show you individual photos all day long but that doesn't give you the broad area coverage you get with PowerScene, where you can 'fly' around and see what's there," Kuchar said.

Developed by Cambridge Research Laboratories in a combined effort involving the Air Force, Navy and DMA, PowerScene is still a prototype system. Routine database production is scheduled to begin later this year.

A demonstration of the system at the Pentagon to a group of senior military officials prompted the decision to deploy PowerScene to NATO, Kuchar said.

Air Force executive officer, Lt. Gen. Ralph E. Eberhart, who saw the demonstration, contacted Lt. Gen. Michael E. Ryan, commander of Allied Air Forces in Southern Europe. Ryan, in turn, consulted DMA Director Air Force Maj. Gen. Philip W. Nuber. Upon the recommendation of these three Air Force generals, Air Force Chief of Staff Gen. Ronald R. Fogleman agreed to test the system in theater for a 30-day evaluation period. That trial period ended just as Operation Deliberate Force was beginning.

For Deliberate Force, another DMA product, Arc Digitized Raster Graphics, were viewed on a second PowerScene display monitor. The ADRGs showed the location of the aircraft, as indicated by a moving icon, for the corresponding perspective view on an appropriately scaled DMA map.

On the main monitor, a heads-up display of pertinent data can be superimposed on the screen. Features in the perspective view can also be labeled, including cities, weapon sites, boundaries and many more. To help aircrews stay out of the range of surface-to-air missiles, a "threat dome" showing the parameters of all SAMs in an area can be overlaid on the perspective view.

Personnel from DMA's Acquisitions and Technology Group and Cambridge Research Associates and Kuchar provided on-the-scene assistance at Aviano. The AT personnel were Rick Dilley, Steve Hux and David Rogers. AT's Enhanced Product Prototyping Environment played a key role in developing prototype databases for PowerScene, including the database of Bosnia.

Support Milestones

Besides PowerScene for Operation Deliberate Force, DMA, through its EUCOM Support Team, assisted customers with several special initiatives.

"While he was there, Vic found other areas where they needed help," Balls said.

As a result, the Defense Mapping School deployed a mobile training team to Aviano to assist with datum conversions. Instruction was given at the unit level to more than 100 personnel, Kuchar said.

"I made the contacts and lined up the unit locations, and they came over and held school. That was a real milestone for DMA to

continued on page 14

Wing commander credits PowerScene with airstrike success

The commander of the 31st Fighter Wing at Aviano Air Base, Italy, had some dramatic testimony about the effectiveness of PowerScene during Operation Deliberate Force.

"I've reviewed the tapes from every target," Air Force Col. Charles Wald told a *Defense Week* reporter. "We haven't had one guy from Aviano hit the wrong target. Period. I can absolutely tell you that at Aviano we haven't hit a non-military target."

Wald attributed this operational success to pilot skill and PowerScene, which uses DMA imagery and elevation data to assist in target identification. Wald commands all U.S. and NATO aircrews in the provisional wing at Aviano and is an F-16 pilot who has used

PowerScene extensively in previewing sorties. The provisional wing has flown over a thousand missions during Operation Deliberate Force.

"For those who haven't flown against targets they haven't seen before, the fact that you can take a screen like that and actually fly the aircraft around your run-in heading, at various roll-in headings and actually look at it from different altitudes and on a zoom-in basis is the difference between night and day," Wald was quoted in the publication.

"From the altitudes and distances we are flying at, we can break out individual buildings; the fidelity of this thing is outstanding," he was quoted. "We are using it on every mission we can." ■



Courtesy photo

Gaffney visits DMA

At left, Navy Lt. Cdr. Ed Nelson, commander of DMA's Atlantic Office, discusses the agency's remote replication with Navy Rear Adm. Paul G. Gaffney II, Commander of the Naval Meteorology and Oceanography Command. Gaffney recently visited the Norfolk office, where he met staff, toured the warehouse and received briefings from Nelson on the agency's MC&G support and future initiatives.

Old Newsboys Day gears up

Rick Williams, a previous "Old Newsboy" volunteer trades a Suburban Journal for a donation as part of Old Newsboys Day.



Old Newsboys Day has been a St. Louis tradition for 38 years. Since 1957, "Old Newsboys" and "Newsgirls" have sold papers to raise funds for children's charities in the St. Louis area of Missouri and Illinois. This year, the event is being held earlier than in the past in hopes of better weather.

Volunteers are being sought to sell the *Suburban Journal* from 6 to 9:30 a.m., Nov. 2, at DMA's Second Street and North Annex locations. Volunteers will accept donations in return for the newspaper.

For more information or to volunteer, call Sharon Smith at 314-263-4142 or DSN 693-4142 by Oct. 19. ■

NEWS CLIPS

DMA installs automated directory

DMA's Central Examining Team installed a "Names Directory" that makes it easier to call DMA employees in St. Louis.

The directory offers access to all St. Louis extensions, 24-hours a day, seven days a week and can be accessed by calling (314) 263-4460 or DSN 693-4460.

Callers will be asked to enter the name of the person they are trying to reach - last name followed by the first. For example, if you are trying to reach John Doe, dial 3-6-3-5-6-4-6. The call will be routed to the person being called. For the letter "Q", use the number seven and for the letter "Z", use nine.

Officials say the system is new and some problems may be experienced initially; however, they are asking employees using the system to remain patient. Individual changes to the

directory should be made through each office administrative assistant, who will initiate the action.

Currently only the St. Louis area is connected to this system. The Washington area may be eligible for connection in the future.

—submitted by Sandy Wallace, Human Resources

Discounted hockey tickets offered

DMA's Civilian Welfare Council in Bethesda, in conjunction with the Washington Capitals, will offer a discount on admission prices to the Nov. 17 hockey game. The Washington Capitals take on the Pittsburgh Penguins at 8 p.m. Ticket prices that normally run from \$28 - \$41 will be discounted to \$14 - \$35 each. For order forms, contact Bubba Sinnott at (301) 227-2087, or Bob White

(301) 227-1912; or to order tickets by phone, contact Byron Hudtloff at (301) 336-2277 ext. 2560.

Pind accepts command of Pacific Office

Navy Cdr. Michael D. Pind accepted command of DMA's Pacific Office, July 21 at Hickam Air Force Base, Hawaii. He succeeds Navy Cdr. Michael C. O'Loughlin.

Pind is most recently from the staff of Naval

Meteorology and Oceanography Command at Stennis Space Center, Miss.

O'Loughlin is attending the National War College at Fort McNair, Washington, D.C.





Whether it is in the genes or something acquired through osmosis at an early age, collecting is as much a part of Keith Littlefield as an arm or a leg.

A native Virginian, he grew up near Charlottesville collecting coins and stamps with his twin brother. The family moved to Fredericksburg, Va. in 1967, and began attending country estate auctions every Saturday. People would ignore the restless and inquisitive 10-year-olds, with little sister tagging along.

"We would rummage through old dressers, trunks and attics looking for stamps, buying stuff like doughboy helmets for 50 cents each and hauling our parents' purchases of antique furniture and farm tools back to the trailer.

"By the time we were 14, our parents had taught us how to refinish antiques and much to our surprise stopped giving us an allowance. We began refinishing and repairing furniture for all the local antique dealers and neighbors in our two-car garage outfitted with a complete woodworking shop," says Littlefield.

With money in his pockets from refinishing, he focused on his coin collection and joined the local coin club. However, his real "monetary enlightenment" came in 1972 when he read about a Fredericksburg man who collected Virginia Obsolete Currency from the Civil War period.

He realized that here was the perfect match between his numismatic (coin and paper) interest and Civil War artifacts — paper money. He sold his coins and plowed it back into paper money, concentrating on Virginia issues. He became fascinated with researching the individuals and businesses that put the money into circulation.

"Not only did the Confederate States issue paper money but so did each state, most counties, cities, banks and individual merchants in the entire United States. Needless to say the monetary system was chaotic back then, not being controlled at the Federal level until 1863," says Littlefield.

A past president of the Virginia Numismatic Association, he is still active on their board of directors, organizing their yearly coin shows.

After graduate school, he served two years as a city planner in Fredericksburg; and married Ellen Erskine after she passed his "antique auction test," sitting for three hours on the trunk he wanted to buy.

Littlefield came to work at DMA in 1983 and is today a lead systems engineer for the migration of the Digital Production System. His wife works in the Operations Group.

'Old stuff' is 'good stuff'

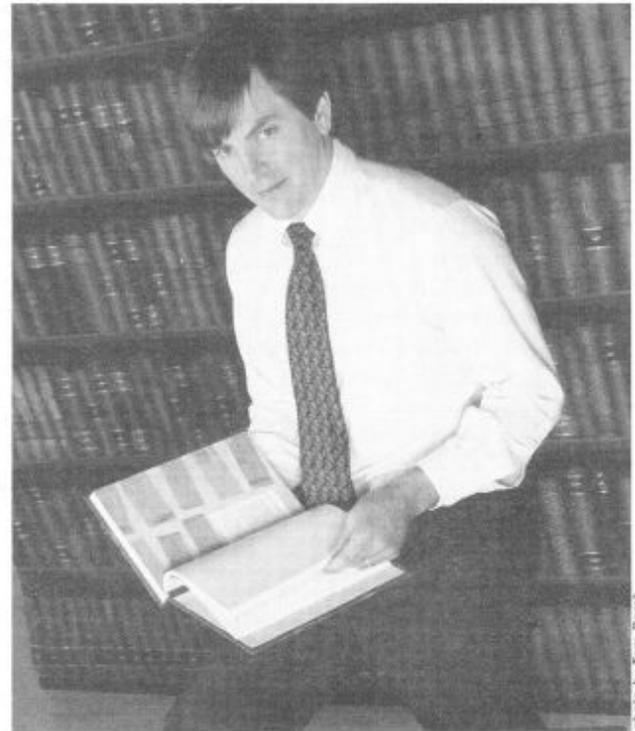


photo by Tom Barsh

He continued his research on issuers of Virginia currency, which led to an eight-year effort as co-author of the comprehensive book *Virginia Obsolete Paper Money*, published in 1992.

Littlefield later sold his entire Virginia paper money collection, focusing now on Fredericksburg notes, where he began.

His interest has since expanded to collecting just about anything that is "19th century Fredericksburg," particularly period stoneware, furnishings and ephemera (paper and printed matter). His next book is to be on Fredericksburg's 19th century commerce and mercantile activity.

"My wife recognizes my cultivated character flaw some call 'compulsive collecting,' tolerating my eccentricities and rogue collecting interests such as cigar tokens/boxes, tobacco tags and Virginia oyster tins," he says.

When you enter Littlefield's office in the Acquisition and Technology Group, keep your fingers safely at your side — old and unusual mouse and fly traps are "at watch" on a cabinet near the door.■

—by Susan Gonchar

NEWS CLIPS

Employees donate school supplies to needy children

More than 2,400 school supplies have been donated to the Federal Kid Help '95 program through the efforts of DMA employees, along with other federal agency employees in the St. Louis area.

The supplies were distributed to school-age children who are homeless or severely impoverished. The federal contributions assisted nearly 300 children. Forty boxes of the supplies were donated by DMA employees.

"School supplies from Federal Kid Help '95 were distributed through the Homeless Resource Bank to 27 participating homeless shelters and agencies for needy children," said the program's director Sheila Andruska. "The Homeless Resource Bank collects and distributes in-kind contributions to participating agencies free-of-charge.

Participating agencies receiving school supplies praised the efforts of

federal employees and gave thanks for their generosity and involvement.

"Thank you for your kind assistance and continued support, and for making a difference in the lives of children during this special time of year," said Andruska. —*Sharon Smith*

Software gets new name

DMA software formerly known as MUSE — Mapping, Charting and Geodesy Utility Software Environment — will now be known as DMAMUSE.

The name was clarified because of a trademark dispute, according to General Counsel.

DMA is now seeking trademark protection for the names of its products, officials said.

DMAMUSE provides standard software for exploiting DMA digital data sets on a variety of workstations.

Applications extend from strategic planning and decision aid capabilities to tactical, operational execution.

Without DMAMUSE, it was possible that users could arrive at answers that varied significantly when computing geographic coordinates for the same location using different workstations and different projection/datum transformations.

DMAMUSE automates and standardizes projection and datum transformations in IBM, Macintosh and UNIX operating environments.

Correction

The photo of Reston employees learning self-defense techniques in the Sept. 4 *Link* was incorrectly credited. The photo was taken by Minnie Smedley.

Pilots fly over Bosnia

continued from page 10

get that involved in training that many people," he said.

Personnel from DMA's Office Europe in Zweibrucken, Germany, visited Aviano to help identify and requisition needed products. The Office Europe personnel also reorganized and restocked the on-site map depot.

Besides the special initiatives, DMA produced mensurated points, Point Positioning Databases and over 500 new maps to support operations in Bosnia. The new maps included hundreds of large-scale Topographic Line Maps covering the entire region. DMA supplied many more maps, including reprints to customers from DMA and non-DMA stock. ■

Employees reinvent

 continued from page 5

network, using e-mail for DMA vacancy announcements and using the teleconference for on-site training are just a few examples, reports Jerry Pittman, HR. Pittman said some suggestions and inquiries concerned personal issues or those that were out of HR's control. He said those issues were forwarded to the appropriate business unit.

Most callers left their names, but McNichols said that the system was a nice anonymous way of making suggestions during this period of agency change. He believes that if the agency wants to remain adaptive, employee feedback is essential.

Tom Coghlan, director of Planning and Analysis, agrees. His office took responsibility for managing this program on Oct. 1, and will manage the agency's suggestion program, as well as all other quality initiatives. His group intends to make the response to employee suggestions less of a paper work exercise and focus instead on encouraging good ideas for implementation in the agency.

"We are going to reduce the accounting process and work with the Business Units to increase our responsiveness to suggestions," he said. ■

—by Kathleen Neary

IN MEMORIAM

Anthony P. Burk

Anthony P. "A.P." Burk died Sept. 10, in his home. He is survived by his wife Mary, daughter, Bridget and son, Sean Burk.

A.P. was a former employee in DMA's Geopositional and Scientific Data Departments in St. Louis. Mary is a program manager for Source Management West.

Promotions

Alexander, Eric
Archibald, Cheryl L.
Barr, Phyllis M.
Byas, Richard T.
Cook, Michael W.
Cox, Donald F.
Dukes, Eddie W.
Dupin, Douglas P.
Elliott, Carl H.
Harris, William S. Jr.
Kaufman, Amy J.
Klepper, Virgil R. Jr.
Lindroth, Marvin M.
Martin, Bertha
Mason, Barbara L.
Mcintosh, John L. Jr.
Moore, Sally J.
Murvihill, David A.
Oviedo, Basilia A.
Piening, August H III
Reasor, George E.
Shapiro, Roger Wolfe
Smith, John F. Jr.
Ukishima, Mark K. K.
Wood, Richard A. Jr.

Performance Awards

Acord, Richard L.
Ade, Stephen F.
Aldridge, Kenneth A.
Alger, James E. Jr.
Allen, Elizabeth B.
Allen, Joseph A.
Alvestad, Peter A.
Andersen, Michael J.
Andersen, Robert S.
Anderson, Dale F.
Anderson, Gregory S.
Anderson, Steve E.
Armacost, Virginia L.
Artis, Louis
Atkins, Paul F.
Austin, Arthur E.
Barnes, Suzanne E.
Bastian, Joseph J.
Beauchamp, Lois J.
Beaulieu, Bertram R.
Becker, Roger A.
Bennett, Robert T.
Besecky, Edward J.
Bockelmann, Frederick J.
Boose, Terry E.
Boyce, Cornelius L.
Boyle, David A.
Bradley, David D.
Branch, Darlene S.
Brandenburg, Craig N.
Brittle, Emily W.
Brodley, Irene M.
Brooker, Rachel W.
Brown, Mary J.
Brown, Susan E. M.
Buckley, Janet O.

Burley, Lisa R.
Burns, Cynthia Q.
Burnside, Arthur S.
Burroughs, Richard A.
Buschbacher, Scott W.
Bush, Timothy J.
Butterworth, Robert D.
Cardosi, Elizabeth L.
Carr, Michael D.
Caswell, William H.
Caulk, William R.
Cecere, Josephine A.
Chamberlain, Frank P.
Chiodo, Philip III.
Chiodo, Theresa Ann
Chippeaux, Faye R.
Chiusano, Dale A.
Christian, Sara L.
Clark, Elise E.
Clem, James E.
Clevestine, Robert H II
Coambes, Robert J.
Cohen, David B.
Collazo, Eva L.
Combs, Michael J.
Cooke, Dennis Dean.
Cooper, Ferne G.
Corbett, James J.
Crawford, John A.
Crites, John V.
Cronin, Jo Ann
Crown, George T.
Cummings, Craig L.
Dalton, Eddie G.
Damschroeder, David F.
Daniels, Clifton E.
Daut, Diana O.
Davis, Gregory M.
Davis, Jimmy D.
Davis, Stephen P. Sr.
Debrecht, Steven J.
Decker, Mary E.
Dedert-Schuld, Mary A.
Dickerson, Lebron E.
Diffendal, Kim J.
Digiiovanni, Bruce A.
Doll, Thomas H.
Donner, Michael L. Sr.
Donner, Raymond G.
Droneburg, Denise E.
Duncan, Bret C.
Erdmann, John E.
Ericson, James E.
Erpenbach, Charles A.
Evans, Johnnie L.
Everhart, Thomas W.
Ewing, Howard J.
Eyes, Douglas J.
Fahey, John T.
Fasold, Elwood S.
Faulkner, Michael C.
Fergus, Daniel J.
Fischer, William T.
Fluke, Linda R.
Forbes, Joyce E.
Ford, Mark D.

Frank, Allen D.
Frazer, Joel C.
Gabrielson, Scott D.
Galan, Henry F.
Garren, William R.
Gelino, Richard L.
Gesckermann, John B.
Geyer, Charlton D. Jr.
Gillis, Jeanne A.
Giovannetti, Stephen M.
Goebel, Jefferey S.
Goines, Joe Jr.
Goodrich, Robin N.
Grady, Scott D.
Griffin, Mark W.
Haag, Stephen L.
Haas, Adele R.
Hahn, James A.
Hair, Robert G. Jr.
Haladay, Martin F.
Hall, James M.
Hall, Johnny C.
Hall, Lynn L.
Hanes, Richard K.
Harbaugh, Michael W.
Harbor, Nelson C.
Harding, Gail Y.
Harmon, John R.
Harrison, Carrie J.
Hart, John Patrick
Hartman, Patrick E.
Hayek, Bradley R.
Hayes, Kevin F.
Haynes, Heidi H.
Haynes, Stephen M.
Headrick, Randall E.
Heady, Barry C.
Henderson, Larry W.
Herbert, Barry F.
Hild, John H.
Hill, Charles W.
Hilliard, Aljason
Hirshenson, Ilene J.
Hobaugh, Glenn E.
Hodge, Judith P.
Hodges, J. H.
Hoffmann, Donald A.
Holmes, Garry L.
Hopkins, Jacquelyn J.
Hunter, Marc A.
Huseman, William J. Jr.
Hutchison, Martin S.
Irvin, Mary M.
Isringhaus, Theodore H.
Iverson, Richard A.
Jackson, Andrew A.
Jagim, Ross K.
Jarvis, Christopher A.
Jensen, Robert M.
Jeric, Anthony N.
Johnson, Timothy R.
Johnson, Walter G.
Jones, Donald R.
Jordan, Anne K.
Jungewaelter, K. R.
Kaldor, Kim E.

Kalinowski, Robert W.
Kanis, Michael D.
Kaufman, Jeffrey W.
Kazmaier, Michael W.
Kelch, Frederick W.
Kemp, Leslie R.
Ketron, David A.
Kinstler, Dennis M.
Kirwin, Gary A.
Kreysa, Henry J.
Kudrna, Gloria A.
Kulis, Mark W.
Lackey, Gary N.
LaFontaine, Donald L.
Lamon, Robert W. Jr.
Larson, Donald L.
Lau, John Benedict
Leboeuf, Paul F.
Lee, Peter
Leiman, Bruce B.
Letosky, Mark S.
Levendoski, Richard J.
Lillegard, Kelley B.
Lippy, Scott W.
Locke, Barbara J.
Looney, Francis Xavier
Lusby, James F.
Madden, Theodore S. Jr.
Manfre, Louis E.
Mann, Thomas R.
Marsh, Christopher J.
Marshburn, David A.
Martinez, Dale E.
Martinez Sergio P.
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McAtee, David A.
McCormick, Wayne J.
McCoy, Paul O.
McCaugh, Charles L. Jr.
McGaughran, James
McWhorter, Ronald
Meece, Michael W.
Meinhardt, Robert L. II
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Miller, David Earl
Milne, Warren C.
Minnick, John K. Jr.
Moad, Woodrow W.
Moore, Martha J.
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Moss, Caesar L.
Moss, Nancy E.
Muse, Ronald M.
Myers, Samuel S.
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Nash, Allen R.
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Neville, Stephen M.
Newsome, Charles A.
Nichols, Thomas W.
Norgaard, Rickey G.
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Norman, William E.
Norris, Robert J.

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Walker, Jon Park
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Wallach, Steven P.
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Weed, William H.
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Zimmerman, Marjorie V.
Gillett, David N.
Folluo, Dorothy A.
Wood, Kimberly Jo

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