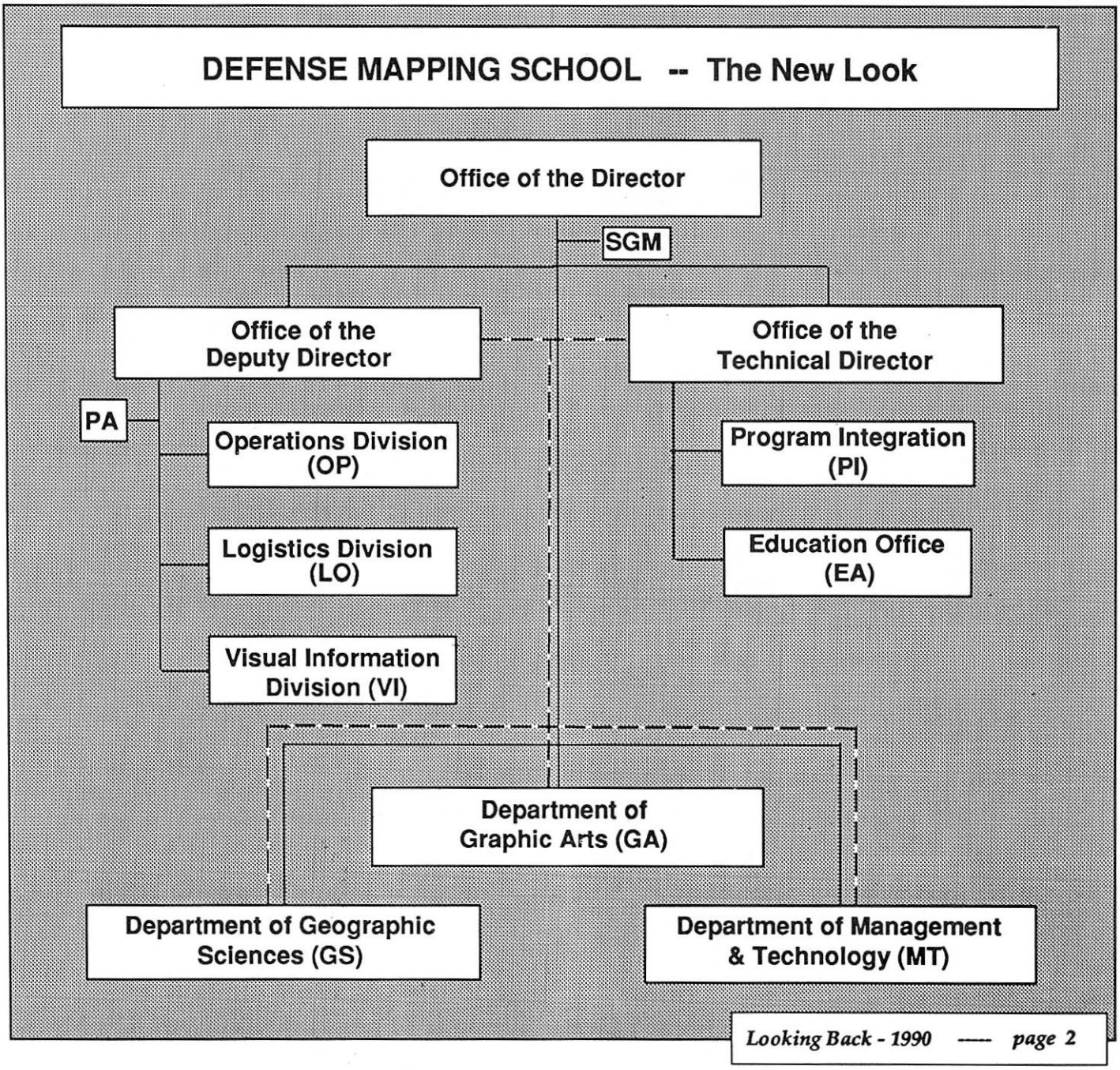
Defense Mapping School

CONTOUR

Volume 18, Number 4 January 1991

DEFENSE MAPPING SCHOOL -- The New Look



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Looking Back - 1990

Major military task revisions, the fuel which drives course development, have begun flowing in from service training proponents. These task revisions have already generated formal changes to terrain analysis and geodetic survey courses, which will be closely followed by broad cartographic course changes. The new year will see completely revised basic entry and advanced curricula in terrain analysis, survey, and cartography, much of it driven by technological upgrades to the basic MC&G tools used by soldiers, sailors, Marines, and airmen.

The virtual explosion in the use of digital data has generated a demand from commanders for personnel better trained in computer applications.

DMS has wrestled with rapid implementation of technological changes into the curriculum, major training task revisions, fluctuations in student load and, like everyone in DoD, support to the Desert Shield operation.

A most significant addition to the DMS mission has been the assumption of the Inter-American Geodetic Survey training. With the start of bilingual classes in April, DMS' cultural diversity has been enriched with students from Guatemala, Venezuela, Bolivia, Peru, Chili, and Ecuador arriving to take advantage of many of the 23 courses offered.

In May, GS hosted the DoD Terrain Analysis Conference, which had over 165 attendees.

Courses

Driven by needs of the Services, DMS has begun development of a new course in geodetic survey applications of the Global Positioning System (GPS). It is expected that this will initially be a short stand-alone resident and offsite training course, and GPS training will be injected into both the basic and advanced survey courses as course revisions progress. As spinoffs of the GPS course, short blocks of instruction will be available to assist senior commanders and staffs in gaining an understanding of GPS and its advantages and limitations.

The Navy/Air Force Basic Lithographer (NAAFBL) course was significantly enhanced with receipt of six desktop publishing systems on long-term loan from the U.S. Navy. Desktop publishing is a wave of the future with which our students must be familiar.

DMS also received, compliments of the U.S. Army, two Heidelberg GTOZ/P offset presses. For those unfamiliar with Heidelberg's coding, these are two-color, convertible/perfector presses and are the new standard presses for the Army Modular Print System. The presses will support the Basic Offset Printing course and the Reproduction Equipment Repair course.

Technical instruction and Senior Executive Overviews to senior leaders, was in great demand. Our Multispectral Imagery (MSI) course increased in popularity, and additional Geographic Information Systems (GIS) software was added to our capability to keep pace in this rapidly evolving application. The GIS course was so popular, DMS doubled the number of scheduled resident courses and began planning to expand the course length to two weeks. Increasing requirements for understanding accurate and precise coordinates and positioning continued demand for our Analytical Photogrammetric Positioning Systems (APPS) course.

Supporting new MC&G techniques, the Introduction to Digital Mapping, Charting, and Geodesy Data (IDMCGD) course acquaints program/project managers and system developers involved with weapons or C3I systems with uses of DMA digital mapping data. To enhance IDMCGD and move from concepts to hands-on, DMS introduced digital lab experience to demonstrate digital data.

Advanced Lithography has shown a significant increase in requirements. We are now teaching it four times annually instead of the previous one time per year.

MTTs - On The Road

With all the excitement of course changes, new equipment, and Middle East deployment ongoing this year, DMS has also continued its robust Mobile Training Team activities.

DMS offered unique training to units in Europe in support of REFORGER and participated as evaluators in the exercise. Desert Shield support included APPS MTT to TAC HQ, Langley AFB, numerous trips to Fort Bragg in support of the Topographic Battalion, and classes on datums to numerous units experiencing difficulty with position and azimuth determination.

The MC&G Impact on Combat Operations (MICO) course was the most asked for DMS course from the operational community. Our teams took MICO to Forts Campbell and Bragg; Nellis Air Force Base; Naval Weapons Station China Lake, and Naval Stations Norfolk and San Diego; Overseas MTTs took MICO to units in Schwetzingen, Germany; RAF Mildenhall, England; to an all-British audience at London and RAF Honington, UK. On the other side of the world, MICO swung through the Pacific with stops in Hawaii, Okinawa, and Korea.

This year also saw DMS instructors supporting the U.S. Air Force in Cheyenne, WY; the USMC in Camp Pendleton, CA, and Gulfport, MS; and the U.S. Army National Guard and Reserve in Dothan, AL, Corpus Christi, TX, and Long Beach, CA.

Instructors traveled worldwide to provide the new APPS laptop computer upgrade training as well as training for the new DMA Point Positioning Data Base (PPDB)

Facility improvements

1990 was the year for the completion of the Wheeler Hall remodeling. Returning alumni will scarcely recognize the building, which is sporting new windows, paint, carpeting, tile, and classrooms, not to mention a functional heating and air conditioning system. Monumental efforts have truly been able to change a "sow's ear into a silk purse."

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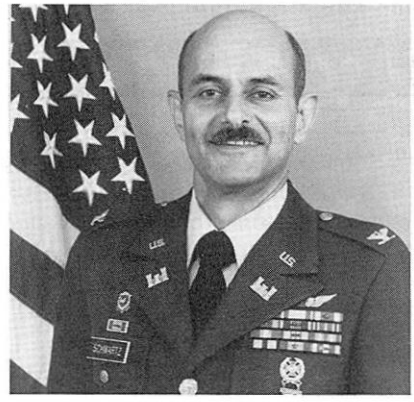
The Director's Corner



COL Samuel R. Schwartz

It seems that we in the MC&G field are hearing more and more about geographic information systems (GIS) and GIS technology. Both are being heralded as one of the biggest boons to managers and planners of spatially related functions since the advent of the computer. New levels of productivity, efficiency and decision support are only a few of the benefits reported by those organizations choosing to employ GIS. Applications suitable for both military and civilian needs proliferate. I'd like to address some issues which impact on or result from GIS and what is happening at the Defense Mapping School concerning this technology.

What is a GIS? In its most elementary form, a GIS is a computer-assisted system designed to capture, store, retrieve, analyze, and display spatial (geographic) data. Using data bases, it creates catalogues of position-related data by assigning numerical attributes (qualities, if you will) to referenced locations. Deriving information, by applying relational and spatial data searches in a problem-solving mode, the GIS becomes a decision support system. As a tool for planners and analysts, a GIS can provide rapid, accurate responses to questions that demand a high degree of comparative analysis. Can I move a military unit through this area? Is this site suitable for a new facility? What kind of sub-surface preparation will a new road bed require? These are the types of applications easily handled by GIS.

A relatively young technology, GIS has the potential to fundamentally influence mapping and how it is used. To reach our full effectiveness, we must understand the impact GIS has upon the future MC&G training needs of the services in their application of this technology and be prepared to include GIS in our planning. There is an increasing demand for GIS applications. Base developments and military operational planners and analysts appear to be viable consumers of GIS growth. Several trends appear on the horizon affecting surveyors, cartographers and graphic artists as well as computer scientists.

Surveyors will learn to anticipate GIS trends in order to adapt their products to new uses of position-based information. GIS and other technologies like Global Positioning Systems become mutually supporting because of the tremendous survey informational requirements demanded by institutionalized GIS users. Cartographers will find new applications for photogrammetric mensuration from conventional and satellite sources. Image-based mapping will provide the foundation for future military MC&G needs. Graphic arts specialists will become proficient in preparing combined image and line map products. Rapid production of custom-designed hybrid maps in digital and printed form will become the norm. Consumers of these new map products must be made aware of their utility. Computer specialization will become standard fare throughout the MC&G profession. Low cost, microcomputer-based GIS will become available which will run the sophisticated GIS applications, leading to further expansion of the technology. Data bases will propagate. Military mapping will certainly be different!

Today, we see universities offering degrees in programs specializing in GIS. We have a shortage of trained people familiar with GIS and military MC&G. Computer-aided Drafting and Mapping (CAD), (CAM), and Data Base Management System (DBMS) skills are needed. Training implications for the DMS are significant and will impact upon force structure and system planners as well as prepare a nucleus of trainers to institutionalize the new military mapping throughout the services. Anticipating this need, DMS offers several select courses. Running from four to 10 academic days, we offer Introduction to Digital Data, Multispectral Imagery and Geographic Information Systems courses. A Global Positioning System course is under development for surveyors. Our MC&G Impact on Combat Operations course takes MC&G directly to the operational staffs and units that need current information. Our planning staff remains current in all these areas. Under development is a "total" program that links the widely disparate components that comprise GIS. We will do our best to watch these and other trends and to interpret them in light of the educational needs of military MC&G professionals.

BREAM APPOINTED ASSISTANT DEPUTY DIRECTOR FOR ACQUISTION, INSTALLATIONS & LOGISTICS

Air Force Colonel Joseph R. Bream has been appointed assistant deputy director for Acquisition, Installations and Logistics at Headquarters DMA. He was previously assigned as chief of the Aerospace Warfare Systems Division in the Plans and Requirements Directorate. Air Force Colonel James M. Collins has been named to succeed Colonel Bream as chief of the Aerospace Warfare Systems Division.

"The universe is full of magical things patiently waiting for our wits to grow sharper."

—Eden Phillpots

Looking Back from page 2

Accreditation

A major event for DMS was our once-every-five-year evaluation by the Southern Association of Colleges and Schools (SACS). The SACS evaluators were greatly impressed with the educational programs and personnel of DMS and reaffirmed the School's accreditation.

Desert Shield

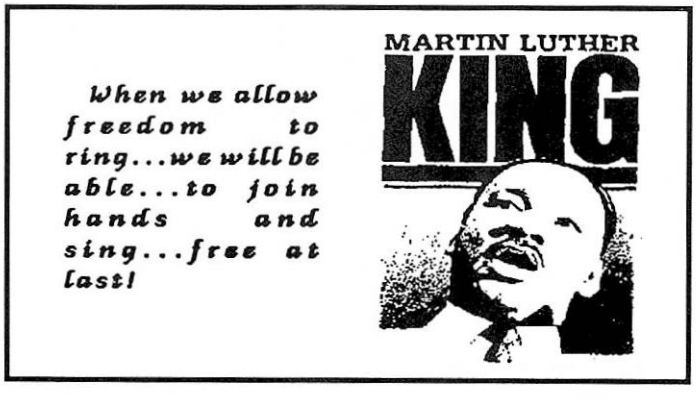
In August, Iraq invaded Kuwait, triggering several key events which helped DMS pay its rent for the year. We provided training in repair and calibration of a process copy camera and expertise in printing of four-color process image maps to the 30th Engineer Battalion (TOPO) at Fort Bragg.

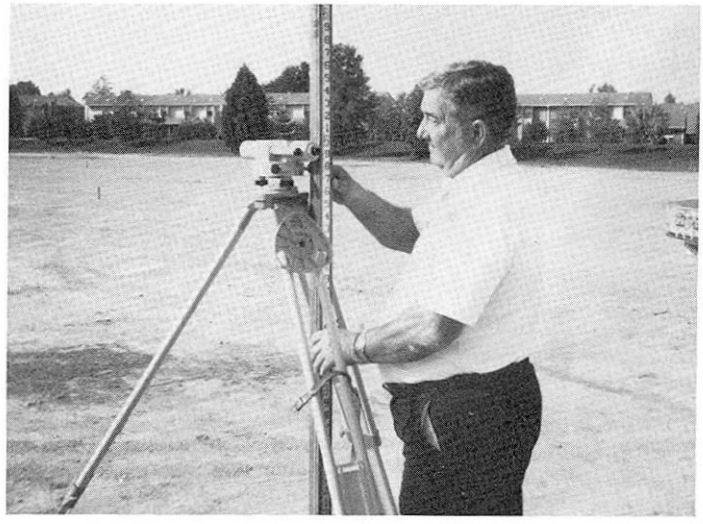
In late summer, the Hydrographic/Topographic Center was deluged with printing requirements in support of Operation Desert Shield. DMS immediately provided a two-shift, 10- person print crew to assist HTC press operators. To date, our military printers have provided in excess of 3900 man-hours worth of labor to assist our sister component.

While the active military members twist in their chairs and chomp at their bits to deploy with their fellow service members in support of Desert Shield, it is the lot of DMS to serve in the support tail of the Persian Gulf effort. Beyond training the students, many of whom are moving directly to deployed units, DMS instructors have supported the U.S. Army Engineer Topographic Laboratory in providing digital data reformatted for use by field topographic units. In addition, DMS has provided MTT support in hydrographic survey in overseas locations. Almost daily, instructors provide information on new equipment and terrain analysis to individual requestors.

As a result of Desert Shield operations developing new military MC&G applications, we anticipate a growing requirement for color process training and a need to integrate this skill into DMS courses. When and if integrated, the whole complexion of graphic arts courses will change.

To the menbers of the Desert Shield Operation who may read this issue of CONTOUR, while we cannot be beside you in the heat and sand, DMS is there in spirit and providing whatever support we can to ensure your sucess.





Andy Bradley measures the height of instrument, which is needed to determine elevation. (Photo by SSgt D. K. Jones)

ADOPT, OVERCOME, IMPROVISE

by SSgt Michael J. Kocheran

As part of the Defense Mapping School Adopt-a-School Program, instructors from DMS took to the field—baseball field, that is. The task at hand was to lay out a new baseball diamond for the Fort Belvoir post community. DMS provided the manpower and equipment to support the project, which was headed up by Major Jerry Thompson, with SSG Dale Crossett as the chief-of-party.

DMSers at the job site established grade for the culverts and drain tiles to handle the drainage from the diamond and surrounding area, and channeled it to a nearby wetland area. From plans provided by SGM Gary Williams at the Fort Belvoir Directorate of Engineering & Housing, which showed existing and proposed elevations, SSG Crossett calculated where the field had to be raised or lowered.

The first phase consisted of laying out a grid over the entire area with survey stakes positioned every 50 feet off a center line. The stakes were aligned with the use of a level and by "stretching" tape.

Once the grid was laid out, elevations at each survey stake were observed with the level and were recorded in the field book. The difference between the existing and proposed elevation was then computed and noted on the stake. This procedure, known as "cut and fill", will tell the heavy equipment operator moving the dirt around whether he/she has to add dirt to the area, take it out, or leave it as it is.

This whole process took the better part of a day. A day which turned out to be a rather pleasant one and afforded the survey crew a chance to get out from behind their desks and enjoy the outdoors, something we surveyors love to do.

Although construction of the ball diamond is still ongoing, DMS adoptees at Cheney and the surrounding community will soon have a very nice, new field on which to carry out our national pastime and "PLAY BALL"!

The ball field is only one phase of the project. The entire project will include basketball and tennis courts, which should be completed by April, weather permitting.

Good food -- Good fun -- Good cheer

by SGM Carlos L. Sellers

A good summary of our annual Defense Mapping School Christmas party is — good food, good fun, good cheer, as can be affirmed by the 106 who attended. The food was bountiful and prepared to perfection; our cups ran over with drink; Santa's gift selection was generous and obviously selected to coincide with personal idiosyncrasies; and the music was a perfectly orchestrated harmonization of sharps and flats. Special music was provided by Master Sergeant Herbert Schmeling as he vociferously conducted his own rendition of The Twelve Days of Topo. The Christmas decorations were almost perfect (no mistletoe)!

Many accolades are due to all who contributed to the overall success of the event. A special "thank you" is due the Department of Geographic Sciences. Through individual and collective efforts, GS earned and contributed over $1000 in support of our Christmas party.

Yes, it was an "almost perfect" party. Sergeant First Class Stuart Lobel needed only 8953 hours more practice singing MY LITTLE DRADEL; no one brought a bucket for the Deputy Director (no one knew he was going to sing); and we failed to provide a definition of a "suspense for a quarter past 3."

Ho? Ho?Ho?

"Has he been a good boy? You gotta be kiddin'!"

"...and one for Mrs. Jingle Bells!"

"What do you mean, you didn't get me the Porsche?"

Photos by Paulette Kommes & SGM Sellers

HEALTH BENEFITS AND THRIFT SAVINGS PLANS CHANGED

The Work Force Management/Services Division, Human Resources Management Office, is advising DMA employees of the following changes in the Federal Employees Health Benefits Plan and the Thrift Savings Plan:

Health Benefits: The Federal Employees Health Benefits Plan (FEHB) changed this year and some DMA employees' pocketbooks could be affected. Employees enrolled in FEHB fee-for-services plans in 1991 could experience significant increases in health care costs if they do not observe the new requirements related to hospital admissions.

A fee-for-service health benefit plan is a plan like Blue Cross/Blue Shield where the employee or the employee's health care provider is reimbursed for covered medical services, as opposed to a health maintenance organization or other prepaid plan where the employee is not normally involved in reimbursements or individual payments.

Employees in fee-for-service plans in 1991 must obtain pre-admission certification from the health insurance plan for all hospital admissions. If the employee fails to get such certification, the employee will be responsible for the first $500 of hospital costs regardless of any other provisions of the plan. Each plan also has provisions for emergency hospital admissions where the employee is not able to obtain pre-admission certification. Information about pre-admission certification is being sent to all current enrollees in fee-for-service plans.

The 1991 Enrollment Information Guide and Plan Comparison Chart also contains information about the requirement. Read about the pre-admission certification requirements carefully and remember to observe them when you or a covered family member is planning a hospital stay.

Thrift Saving Plan: The Thrift Savings Plan (TSP) is opening all investment options to all participating employees. The TSP has three kinds of investments: the Government Securities Investment Fund (G Fund); the Common Stock Index Investment Fund (C Fund); and the Fixed Income Index Investment Fund (F Fund). Until now, employees covered by the Civil Service Retirement System (CSRS) could only invest in the G Fund. CSRS employees can now invest in any combination of the three funds. Any CSRS employee who wants to invest in other than the G Fund must complete a TSP-1 form during a TSP open season. The current TSP open season ends January 31, 1991.

Previously, employees covered by the Federal Employees Retirement System (FERS) could invest their contributions (but not DMA's contribution) in any combination of the three funds. FERS employees can now invest both DMA and their own contributions in any combination of the three funds. Employees who recently elected either C or F funds or both, had to complete a new TSP-1 form prior to January 12, 1991 in order for their election to continue without interruption. FERS employees who did not submit a new TSP-1 by January 12, 1991 will have all contributions invested in the G Fund for the pay period which began January 13, 1991 and all future pay periods until a different election is made.

If you have any questions about your TSP benefit options, call the Work Force Management/Services Division, Human Resources Management Office. For the Washington area, call (301) 227-5800.

The Cub Scout follows Akela

by Captain Henry Schneider

Akela is the term given to the adult who assists a boy in Cub Scouting. Defense Mapping School (DMS) has several of its members who earn this title by lending valuable off-duty time to this effort. SSgts George Hamblin (GA) and Clinton Newbold (GA) are Webelo Den Leaders, Chief Builder Thomas Kidney (past LO, now HQ) and CMSgt Gerald Smith (GS) are Pinewood Derby Committee Members, and Capt Henry Schneider (OP) is Cub Master and a Webelos Den Leader. Pack 118 is sponsored by Fort Belvoir with 114 registered boys. To be a member, the family must live or work on Fort Belvoir.

The pack has actively supported Fort Belvoir through its participation in the annual Scouting for food in November, 1990. The two Cub Scout packs and two Boy Scout troops on Fort Belvoir combined efforts to collect well over 1200 pounds of canned goods for Army Community Services. The Cubs delivered food bags and the Boy Scouts picked up the bags the following weekend.

These and other activities would be impossible without the support and example provided by Akela. Many times, the thanks provided to Akela is the smile of a boy who just completed a task he thought he could never accomplish. That smile alone makes everything worth the effort.

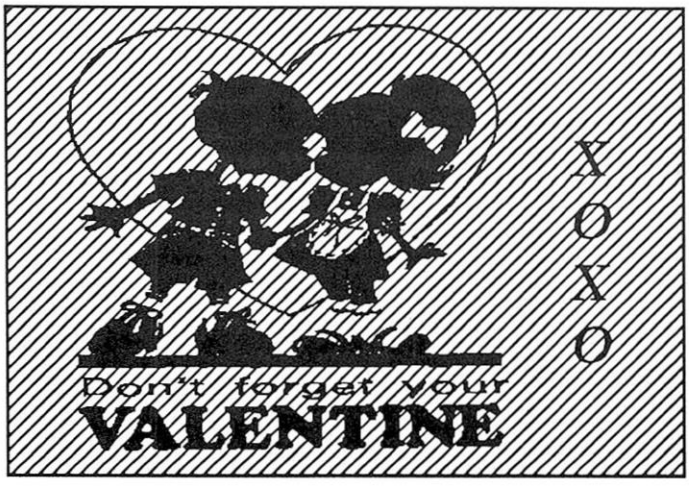
Upcoming events include the annual Pinewood Derby Race on January 19, 1991 at the Youth Center and the annual Blue and Gold Banquet on February 10, 1991 at Markham Elementary School.

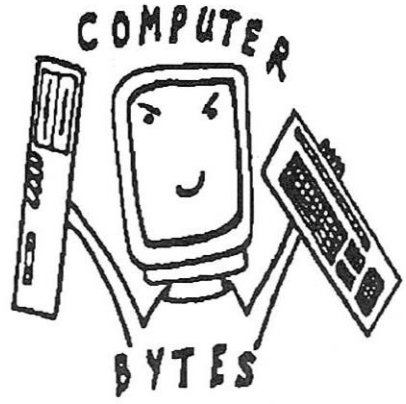
A tip of the hat to those DMSers who are actively helping in this program.

American Red Cross assists one of DMS' own

The American Red Cross came through with flying colors recently for the daughter of DMS' Public Affairs Officer, Joyce Beck. During a hospital stay in Texas, Joyce's daughter, Sue Lewett, needed a number of units of blood when her condition became life threatening. DMS' blood drive coordinator was made aware of the situation and made one simple telephone call to the local Washington Area Blood Donor office. With that single act, Sue was guaranteed one-for-one replacement for all units of blood used. Joyce expresses the family's sincere appreciation and asks that during its next blood drive at DMS (tenatively planned for March 13), you consider the good the Red Cross does. Call Dave Miller, Blood Drive Coordinator, 355-7391, for exact time and location.

As part of DMS' participation in the Fort Belvoir Adopt-A-School Program, Jeff Hamn, Mark Lane and Dennis Roberts (l to r) prepare flats for the Cheney Elementary Christmas program. (Photo by Lt. Col. Erwin Williams)





by Jim Davidson

Identifying Your Automated Information System Requirements

(Explain why you need, not what you want)

Sometimes it seems almost impossible to get new computer equipment using the government acquisition system. It can take up to a year from the day you first request a microcomputer to the day it magically appears on your desk. Why is this?

The main obstacle to speedy AIS acquisition processing is that requestors do not identify their requirements. It is important to think in a mindset in which you:

a. Identify a deficiency.
b. Describe why that deficiency needs correcting.
c. Suggest how to correct the deficiency.
d. Resist the urge to name the product and vendor you believe will solve your problems.

It is difficult for many of us to refrain from telling the approving authority exactly what hardware or software we know will do the job. The government tries to give everyone a fair chance to supply us with products and services. Thus, DMA usually contracts our hardware and software needs in a full and open competitive atmosphere.

Fortunately, two DMA manuals are available to help you get that computer on your desk faster. DMAM 4245.21, Planning and Preparing a Purchase Request Package; and DMAM 7920.1, Life-Cycle Management for AIS, include flow charts explaining the planning and acquisition process. The manuals show where the paperwork goes and in what order.

An important element of any AIS request is the Information Resources Request Document (IRRD). An IRRD must be prepared for each AIS requirement. The requestor works jointly with our Information Resources Manager (John Wood) to describe the need, proposed alternatives, recommendation of the best alternative, identification of funds, and development of integrated logistics and security plans. Sounds like a lot just to get a computer on your desk? Not really; it gets easier each time. Contact your Information Systems Security Officer (ISSO) or me for assistance. I will be glad to help you get that computer as long as you have a valid requirement.

Major Jerry Thompson gives his wife, Judy, a piece of cake at his going-away luncheon. MAJ Thompson, chief of the Department of Geographic Sciences from March 1988 to December 1990, was sent on TDY to Saudi Arabia in early January. (Photo by SSgt D. K. Jones)

Do you know

Number of states in the United States that have some oil or gas production?

31

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CONTOUR

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PROJECT MAGNET: End of One Era; Beginning of Another

by John M. Quinn, Geophysicist
Geopotential Division

The U.S. Naval Oceanographic Office carries out a broad range of MC&G activities. One of these activities is the collection of magnetic data using ships, aircraft, and recently, spacecraft. This geomagnetic survey effort is designated Project Magnet. Following are extracts from an article in the NAVOCEANO Bulletin which discuss the origin and evolution of this unique program.

This year, the Project MAGNET aircraft will cease its role as an exclusive magnetic surveys platform to be reconfigured as a multimission platform, with gravity, acoustic, and oceanographic surveying capabilities in addition to the standard vector and scalar magnetic surveys it has always done. During reconfiguration, the aircraft is likely to receive a new name; while the Project MAGNET Program itself will continue, much as before but under the newly reorganized Gravity and Magnetics divisions that have merged to form the Geopotential Division within NAVOCEANO. Therefore, reflections on the past history of the Project MAGNET Program seem fitting at this time. Until the launch of the Polar Orbiting Geomagnetic Survey (POGS) satellite last April, the program was synonymous with the Project MAGNET aircraft itself; consequently, it is also the time to briefly preview what may be the future of the Project MAGNET Program.

The Project MAGNET Program was established in 1951 at the Naval Hydrographic Office (now the Naval Oceanographic Office) after the development of vector magnetic measurement capability in 1949 by the Naval Ordnance Laboratory under the sponsorship of the Office of Naval Research. This vector magnetic surveying capability was a spin-off of antisubmarine warfare research conducted during World War II. The need for continuous global geomagnetic surveying was a result of navigational chart deficiencies that became evident during the course of World War II and the realization that the earth's magnetic field changes slowly, but erratically, with time. The magnetic variation maps of World War II were based priarily on data collected by the

See MAGNET page 9

The Direct Line

Maj Gen William K. James (USAF)
Director, Defense Mapping Agency

Maj. Gen. William K. James

Spirits Are High

I recently visited the men and women of HTC and AC, and I am happy to report that in spite of (or perhaps because of) the enormous amount of work spent in support of DESERT SHIELD/DESERT STORM, spirits are high and a genuine sense of accomplishment is prevalent. Admittedly, I hardly touched the surface of those who have contributed to this effort. Thus, I want to take this opportunity and say thank you to every man and woman who has pitched in and supported our military forces in the Arabian Gulf.

What you have done, in such a short period of time, is provide the greatest MC&G support in the history of warfare. What we must do is continue to give our warriors that same level of support until this war is won. Then we will have to regroup and reorient ourselves to meet the demands and priorities of our other customers.

Let me assure you that I understand and appreciate the sacrifices that each of you has made and must continue to make in order to guarantee the successful outcome of this war. Long and irregular hours, missed family time, and lost vacations have been and will continue to be a fact of life for all of us. But no matter what our sacrifices may be here at home, I'm sure you all realize they pale in comparison to what we are asking of our combat warriors and their coalition partners. The men and women of this Agency are a great American team and I'm proud to be your Director at this critical time in our Nation's history. God bless you all, God bless America.

Communication with non-DMA attorneys

The General Counsel, HQ, DMA has given the following directions regarding communications with non-DMA attorneys.

Under certain circumstances, attorneys from outside DMA find it advantageous to bypass discussions with DMA attorneys about ongoing matters that are in dispute or are expected to be in dispute or litigation and seek information directly from DMA employees. They seek information not available to the public and use this information to propose or take positions that are detrimental to DMA.

DMA employees should not give information to non-DMA attorneys on matters affecting DMA which are or may be in dispute, without first consulting with the DMA Office of the Associate General Counsel from which they normally receive legal advice. If there is any doubt whether a matter is in dispute, consult. Generally, however, DMA attorneys will handle all communications with outside or non-DMA attorneys.

Should you need additional information or guidance concerning this matter, the following Associate General Counsels are prepared to assist you.

Mr. Howard S. Bishop, Jr., DMAAC (CO)
(314) 263-4501 or AUTOVON 693-4501

* Mr. Kermit Sande, DMAHTC(CO)
(301) 227-2268 or AUTOVON 287-2268

Mr. Andrew Deranger, DMAHTC (KL)
(301) 227-4143 or AUTOVON 287-4143

Mr. Paul Kelbaugh, DMASC(CO)
(703) 285-9315 or AUTOVON 356-9315

*Supports DMS

SAFETY DOES PAY!

by Ronald E. Fitzgerald
HQ Director, Safety and Health

Work safe. Be safe. Don't take short cuts. We hear those phrases all the time—safety, safety, and more safety. What good does it do?

In FY 90, it did some good because 21 fewer DMA personnel were hurt on the job compared to FY 89. And those that were hurt lost less time due to their injury (an improvement of 16 percent).

It's nice to brag, but the real meaning of the numbers is that DMA continues to become a safer place to work. Even with all the extra effort at the end of the year in support of Desert Shield, DMA got better. That's because DMA employees made it better!

When a job is done in the right way, it's the safe way. We don't need to make safety a special job. All we need to do is pay attention to what we are doing and have a concern for our fellow employees.

Let's make FY 91's safety record even better than FY 90.

Not just for a record's sake, but human's sake.

The Director's Corner

COL Samuel R. Schwartz

Ah, the good old days. I can remember vividly that, just a few years ago, the data base carried by a corps terrain analysis team could be measured in units of thousands of pounds and several hundred cubic feet. It was cumbersome at best with data and information for a particular area of interest broken down into multi-scale map products, books, notes, charts, lists, photographs, films, etc., all carefully cataloged and filed in cardboard map boxes which were secured with rubber bands cut from old jeep inner tubes. When a mission was received, the terrain team would spring, well, actually, lumber, into action, sorting through these materials and producing (manually, of course) overlay upon overlay registered to whatever map base was available. It was only after herculean effort that the overlays were completed sufficiently to be combined into a crude analysis, which, with a little experience on the part of the team leader, was presented to the chief of staff, staff principals and perhaps the commander. Time being of the essence (remember those factors of METT-T), the terrain analysis products remained in a relatively crude, unrefined state, growing in quantity to answer the never-ending stream of questions coming from the operational planners. Only those products deemed necessary for contingency planning or Intelligence Preparation of the Battlefield (IPB) saw refinement, update and maintenance. The rest were placed back into those bulky cardboard boxes (in the truck), hopefully not to be scattered along some roadside at night, in the rain, by being blown out of an open box (the real reason for the rubber bands). Certainly not a pretty picture.

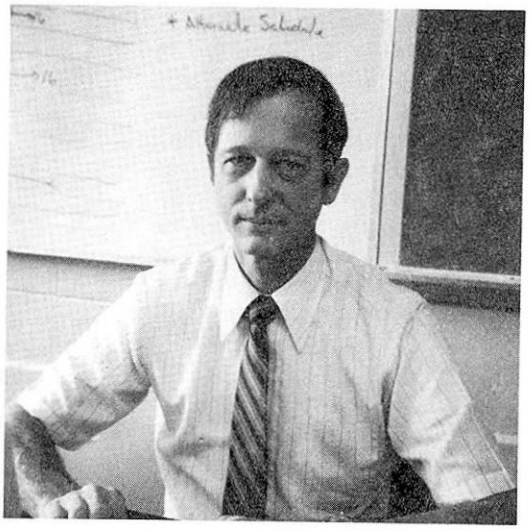
But, wait! Do I see a glimmer of hope? Has modern technology come to the aid of the terrain analyst. Last month, we spoke about Geographic Information Systems (GIS), a computer-based system designed to serve as a management tool for all phases of geographic data handling and manipulation. The GIS is, partly, hardware and software components which, in turn, draw from and support a data repository and information bank. It is also people, an organizational structure, resources, training, and vision. It may or may not include that deuce and a half ton truck. Obviously, that data base is essential to perform any meaningful operation. Whether it is built piecemeal over a long period of time or, more often, created in its entirety to support a military need, (the result of a significant prehostilities construction effort), its content and accuracy (currency) drive the success of the system. The data base will, in the long run, consume resources far in excess of the front end costs associated with all other GIS components. Its characteristics must be clearly defined early on. And how large is the new tool? For most corps-sized operations, the entire package can be one or two compact disks and a handful of floppies that can easily fit into a briefcase. Given the tools of the GIS with relevant data base, the terrain team can produce better, more accurate analyses to support the force.

Our joint doctrine calls for a unity of effort between Service forces. This is realized only when the theater commander and his major subordinate commanders have sufficient geographic decision-making support to satisfy their critical information needed in time to influence the planning and execution of their operations. An initiative in geographic information systems and surveillance technology, supported by multispectral systems and multiband imagery that gives the commander dedicated, enhanced decision-making support, can increase his ability to accomplish his mission.

Colonel G.F.R. Henderson pointed out the same needs of the General In Chief almost 100 years ago. "The explanation of the brilliant successes that the great generals gained in spite of rules and against enormous risks is to be found in the fact that they looked not only on the physical side - on the numbers and armament of the enemy - but they saw his weaknesses; they played upon his susceptibilities and apprehension; every movement that they made was calculated to destroy the morale and confidence of both general and soldier..." The successful commander "looks across the enemy's lines until he comes to the quarters occupied by the enemy's leader, and then puts himself in that leader's place, and with that leader's eyes and mind looks at the situation; and learns the weaknesses, presupposes the enemy's action and plans accordingly." (Henderson, G.F.R. "Lessons from the Past For the Present." Old Look - New Subject: The Operational Level of War. Carlisle Barracks: U.S. Army War College, Department of Military Strategy, Planning and Operations, April 1987 P. 24.)

Reservists stand ready

With the current military activity, some members of the Defense Mapping School family have reason to follow events very closely . We have four drilling reservists filling civilian positions at the School who are just a phone call away from returning to active service. Included are reserve representatives of the Army, National Guard, Air Force, and Coast Guard. Specialist Karen King, USAR, was recently mobilized with her unit. Her active duty orders are for one year. By the time this article is published, more DMS reservists and guardsmen may have been called to serve.



Dennis Dodson, Inter-American Geodetic Survey Division Chief (GSI), is also Lieutenant Colonel Dennis Dodson, USAFR. Lieutenant Colonel Dodson received his commission through the ROTC program in 1966 and served on active duty until May of 1977. Lt Col Dodson has had a long and distinguished career flying in Vietnam, as an intelligence officer at the Defense Intelligence Agency, and fighting division chief in GS. He served tours in Vietnam, Korea, and Panama. His most significant military decorations include the Meritorious Service Medal, Air Force Commendation Medal with three oak leaf clusters, Expeditionary Forces Medal, National Defense Service Medal, Vietnam Service Medal with four devices, and the Republic of Vietnam Campaign Medal.

A newcomer to DMS, Jim Bowen lends clerical support to the Education Advisor's office. Private First Class James M. Bowen, joined the Army in October of 1985. After Basic and Advanced Individual Training, he was assigned to the 7th Data Processing Unit, located in Kaiserslautern, Germany. While there, his efforts earned him the Army Achievement Medal and the Army Good Conduct Medal. At the end of his two-year enlistment, Bowen chose a European Separation from Service and was transferred to the Individual Ready Reserves (IRR). In October of 1989, he returned to the United States with his wife (who was on Permanent Change of Station orders to Fort Belvoir). In August of 1990, PFC Bowen enlisted in the Virginia Army National Guard as a 71L, Administrative Specialist. He was assigned to the 29th Light Infantry Division at Fort Belvoir where he serves as the G-1 shop's Modern Army Records clerk.

Union soldiers escort ex-slaves during the Civil War, protecting them from recapture by marauders. The scene is typical of convoys to the "freedman's villages" created by the federal government.

Former slaves, black troops buried in Arlington

by Rudi Williams
American Forces Information Service

All my friends and their families have moved away. Our home isn't the same, it feels barren and lonely. Often my mother has the saddest look on her face. They have begun tearing down the other houses and it feels like my heart's being torn down along with it. I suppose nothing good lasts forever. I wonder what they'll do with this land next?

—From a letter by a former slave who lived in Freedman's Village overlooking the Potomac River and the nation's capital.

"They"—the federal government—made the land part of what is perhaps the most famous cemetery in the nation—Arlington (Va.) National Cemetery.

More than 200,000 veterans and their dependents are buried on the 612 acres of land, from such famous Americans as five-star General of the Army Omar N. Bradley to World War II hero Audie Murphy to President John F. Kennedy to heavyweight boxing champion Joe Louis.

Each year, nearly 4 million visitors walk the tourists' path past rows of headstones bearing the names of service members known only to their loved ones. But that path doesn't lead to Section 27.

Located near the Iwo Jima Marine Memorial, Section 27 is where the names on some 5,000 tombstones read: "citizen" or "civilian" or "USCT," for U.S. Colored Troops. It's the burial site of more than 3,800 former slaves who lived in Freedman's Village and some 2,200 members of the U.S. Colored Troops who fought in the Civil War. At least three of them are African Americans who received the Medal of Honor for bravery on the battlefield during the Civil War.

The first military man buried in Arlington National Cemetery was William Christman—he was white. He was buried in Section 27.

In 1863, Contraband—the name for black refugees or escaped slaves—Camp was established on the Arlington estate of Confederate General Robert E. Lee. It sprawled north from what are now the amphitheater and the Tomb of the Unknowns to Section 27. It was renamed Freedman's Village in 1865. More than 1,000 people lived there. The federal government gave each family a plot of land to farm and $10 a month. Their rent was $3 per month.

See FORMER SLAVES pg 10

DMSer, spouse honored for volunteer work

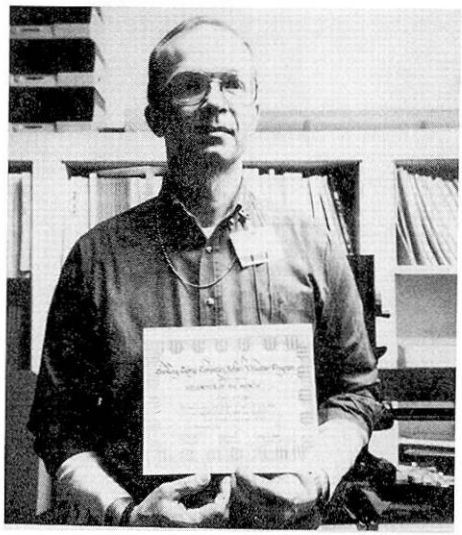
photo and story by SSgt D. Jones

Defense Mapping School employee Terry Murphy and his wife, Bonnie, recently received the Volunteer of the Month Award from the King George Elementary School Parent Teachers Association. The award was presented to the Murphys for their outstanding contributions to the school.

With little direction or guidance, and no experience, Bonnie coordinated with the 25 parents who signed up and implemented the At-Home Volunteer Services. This program allows parents who cannot volunteer during the day to use their evening hours at home to help the teachers and staff share the burden of work. Bonnie receives the work, then distributes it to the volunteers, who complete the work and return it to Bonnie via their students. She then takes the work back to the school and delivers it to the appropriate teacher or faculty member.

As you may have guessed, Terry is an At-Home Volunteer. Much of his evenings are spent helping with the program. One project was to make wooden signs for use in the school cafeteria. Along with that, he used his computer skills to create graphics for use on the Volunteer Bulletin Board and Volunteer Room door.

Terry also formatted and loaded the graphics on the disks for each student in the Writing to Read Program, a program that enables each student to get hands-on experience working with the computer. The program starts in the 1st grade and continues through the 5th grade. It consists of four work stations, beginning with spelling and punctuation, and progresses up through developing and writing their own stories.



Terry Murphy displays the Volunteer of the Month Award he and his wife, Bonnie, received for their work with the King George Elementary School.

Education to Terry is a very important part of life. Not only does he possess a degree in Science, he earned another in Education, for Kindergarten through 3rd grade. Terry encourages his two sons, Daniel (1st grade), and Tyson (3rd grade), to do their best in school. Tyson, a Distinguished Honor Roll student, recently won 2nd place in the Reflections Visual Art Contest.

Along with their Certificates of Award, the Murphys were presented with gift certificates from a local lumber store (which he used to buy a new hammer), and a local pizza parlor, where they enjoyed the fruits (or pizza) of their labors.

Recognition and Incentive Awards Motivate Employees

It's been said that we don't always appreciate what we've got until we lose it. Oftentimes we lose good people because they believe their achievements go unnoticed or unrewarded.

An organization's success is dependent upon its ability to retain knowledgeable and productive employees. Recognition and awards are excellent ways to motivate and retain employees, and increase their productivity, efficiency and creativity.

DMA has an extensive Recognition and Incentive Awards Program which provides a variety of ways for supervisors to recognize their employees for a job well done. Saying "Thank you" or "Well done" is one of the quickest, simplest, and effective means of recognizing and rewarding employees. Letters of Appreciation and positive feedback through the performance appraisal process are also excellent ways to recognize employee's achievements.

Supervisors should contact their servicing personnel office to find out more about the various ways to recognize an employee, and the procedures and forms used in the process.

The Retired Officers Association announces Scholarship Loan Program

The Retired Officers Association scholarship loan program provides $1,500 annual, no-interest loans to unmarried undergraduate students, under the age of 24, who are dependent children of active, reserve, and retired service personnel. The loans are awarded for up to five years of undergraduate study.

This current school year, 680 students were awarded loans, totaling over $1 million. From this group, based upon their academic records and participation in extracurricular and community activities, 106 students received special $500 grants in addition to the loans. All those who apply for the loans are automatically considered for the grants.

The TROA Scholarship Program was established in 1948 for the sons and daughters of retired officers and their widows. It has expanded to include the children of active duty, reserve and retired officers, warrant officers and noncommissioned officers of the Army, Navy, Air Force, Marine Corps, Coast Guard, U.S. Public Health Service, and National Oceanic and Atmospheric Administration. Since this program was initiated, over 3,700 students have received interest-free loans, totaling more than $8 million.

Applications for the 1991-92 school year are available; deadline for submission is May 1, 1991. For more information, write to TROA Scholarship Loan Committee, 2 Washington Street, Alexandria, Va. 22314-2529.

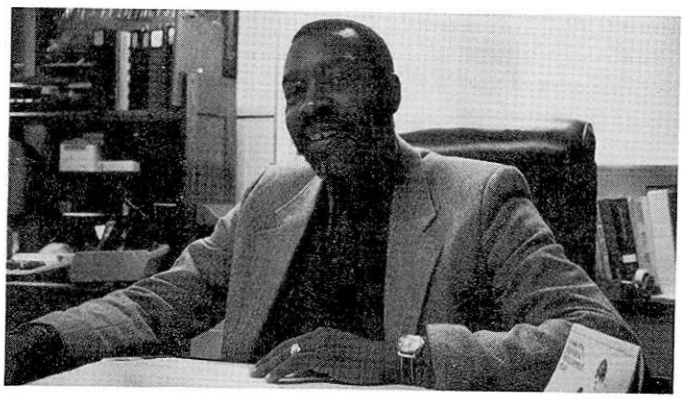
Karen King, the secretary (and wit) of the Department of Management and Technology, is also Specialist Karen King, USAR. She joined the Army in 1984 after working several years as a nursing home activities director. SPC King served all three years of active duty as an administrative specialist at Fort Sam Houston, Texas. Her current reserve assignment is with the 97th ARCOM in Rockville, Maryland. King's military decorations include the Army Good Conduct Medal and Army Service Ribbon. Specialist King was mobilized for active duty on 1 February and reported for further assignment to Walter Reed Army Medical Center. Everyone at Defense Mapping School wishes her well and looks forward to her rapid return.

Jim Davidson, our Computer Systems Analyst, is sometimes called Senior Chief Petty Officer James Davidson, USCGR. He first joined the Navy in Honolulu in 1975. His enlistment contract included a clause that assignments must be near tropical beaches (or so he claims). The Navy obliged, assigning him to Diego Garcia, Guam, and Taiwan. After turning down a reenlistment assignment to Kauai, Hawaii in 1979, Davidson transferred to the Coast Guard Reserve. Besides drilling with Puerto Rico reserve units, his assignments included Coast Guard small boat stations in Florida and headquarters offices in Washington, D.C. Senior Chief Davidson now drills at the Coast Guard Yard in Baltimore. His active duty for training assignments have included tours at Coast Guard air stations in Puerto Rico and North Carolina, six periods with the National Defense University's Reserve Components National Security Course staff, and assignment to the Coast Guard Information System Center. Davidson's military decorations include the Coast Guard Achievement Medal, Coast Guard Reserve Good Conduct Medal with two bronze stars, Armed Forces Reserve Medal, and the Humanitarian Service Medal. YNCS Davidson was mobilized for active duty once before. He served several months in Key West, Florida (that's right, on the beach!) during the 1980 Cuban Refugee Boatlift Operation.

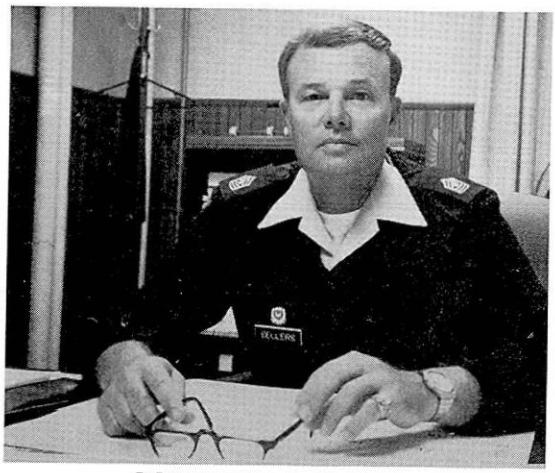
We also have two members of the Individual Ready Reserve at the School—Captain William Polk, USAR, from the Department of Graphic Arts and Staff Sergeant Dale Cuave, USAR, of the Department of Geographic Sciences. They are not currently in a drill status but are subject to recall during a general mobilization.

What does Black History Month mean to you?

"I feel Black History Month is necessary. It provides the opportunity to recognize black history that has been submerged for so long."



Mr. Lylton Jackson



SGM Carlos L. Sellers

"Our society has finally recognized the African American in a perspective that has been overlooked for many years. Black History Month gives the American people an opportunity to become educated as well as providing a vehicle with which to recognize an important culture within our society."

TSgt Peggy Cantey

"When I think of Black History Month, I think of Dr. Martin Luther King. A man who was willing to risk everything for an idea, a thought, or a principle that he believed in."

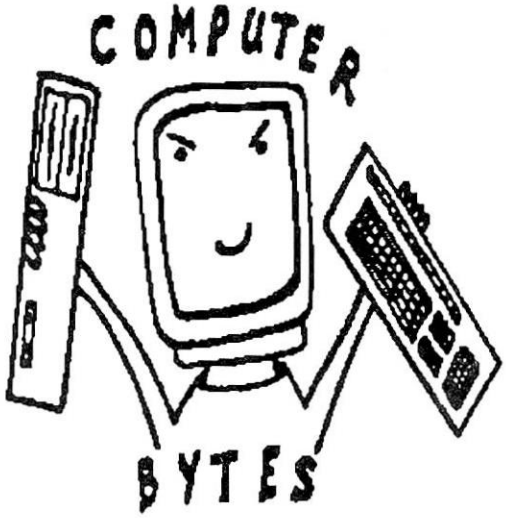
Captain Henry J. Schneider

"Everyone is entitled to be free and do whatever they want to do. I feel that by having a Black History Month, it gives young black Americans the opportunity to learn a lot about their heritage that they would not normally learn in today's school systems."

"It is a month set aside to pay special attention and really focus on African American achievements. I feel it is a very small portion of Dr. Martin Luther King's dream realized."

-photos by SSgt D.K. Jones

MSgt Richard Johnson



by Jim Davidson

Q. How do I format a high density floppy disk in a 1.2MB disk drive for use in 360K disk drives?

A. Type "/4" after the format command. This will format a high density disk for use in a 360K disk drive. Example:
C>FORMAT A:/4. To format a 3.5" high density disk for use in a 720K disk drive, type "/n:9" after the format command. Example:
C>FORMAT A:/n:9

Q. I am concerned about using the personal computer in my office with the new security requirements. How do I know if it is accredited?

A. Check with your department or staff Information Systems Security Officer(ISSO). If the computer in your office has been accredited for processing sensitive unclassified information (the minimum requirement), the ISSO will have a verification letter from the DMS Director. You should keep a copy for insurance.

Q. When are we going to get the laser printers I keep hearing about? I just printed a 70-page document on our dot matrix printer and my ears are still ringing!

A. Yes, it is true, there are five laser printers on order for the School. Three will be distributed in the teaching departments and two will go to staff offices. The printers were ordered last summer (FY90), but a hold on part of DMA's new office automation contract has delayed delivery. Maybe we will have them when this is published.

Q. Now that you have moved to a new office, how can I order maps using GETAMAP?

A. The dedicated line, modem, and computer went with me. Contact MSgt Leatham, MTD, with DMA stock numbers and quantity and we will order your requirements for DMA products using GETAMAP. Turnaround time from order transmission to tube arrival from the Combat Support Center is averaging six working days.

Personal Calling Card Usage

As a result of new guidelines from the Office of Personnel Management, DoD has revised its policy related to unofficial telephone calls from official government telephones. Therefore, effective 30 November 1990, telephone lines in the Defense Telecommunications Service-Washington CENTREX system with direct dial long distance access also have access to the commercial long distance carriers via personal calling cards.

Calls placed on government telephone lines via a personal calling card will be billed to the individual's home telephone bill. Though the capability to complete long distance calls using personal calling cards is available, it will be the responsibility of each organization and office to ensure the service is not abused.

Official government calling cards are NOT to be used to place official calls from government telephones. The official government calling cards are for use while away from the office on TDY where a government telephone is not available.

When it is necessary to place a personal long distance call on a government telephone, special dialing instructions apply. The long distance carrier access code must be dialed depending upon which carrier issued the card. The following are the three major carriers and the dialing sequence necessary with each:

AT&T Personal Calling Cards:
9 + 10 + 288 + 0 + Area Code + Telephone Number

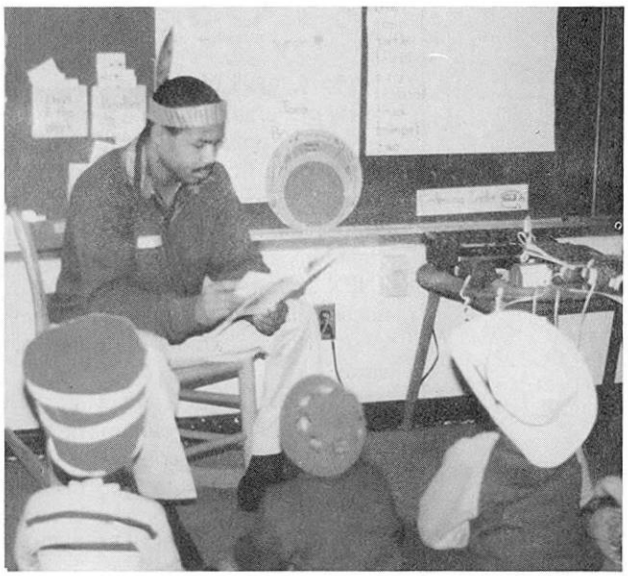
MCI Personal Calling Cards:
9 + 10 + 222 + 0 + Area Code + Telephone Number

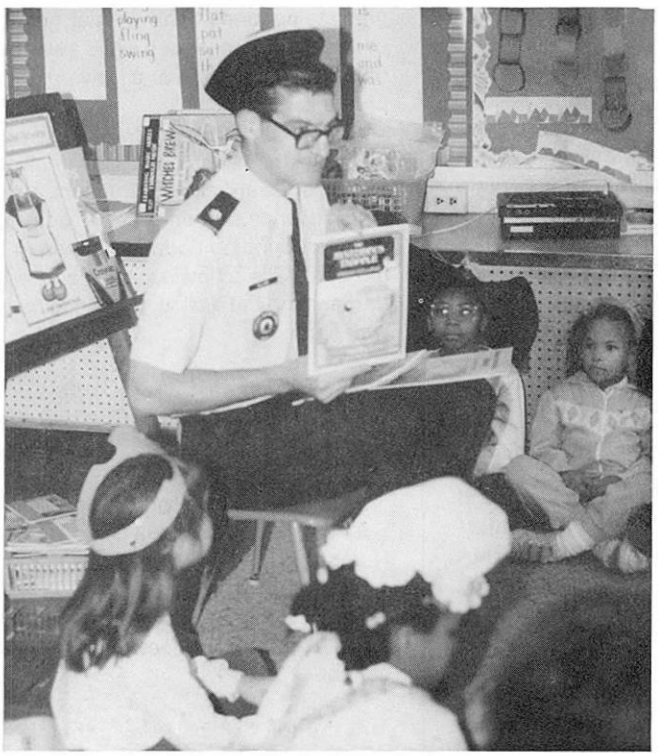
Sprint Personal Calling Cards:
9 + 10 + 233 + 0 + Area Code + Telephone Number

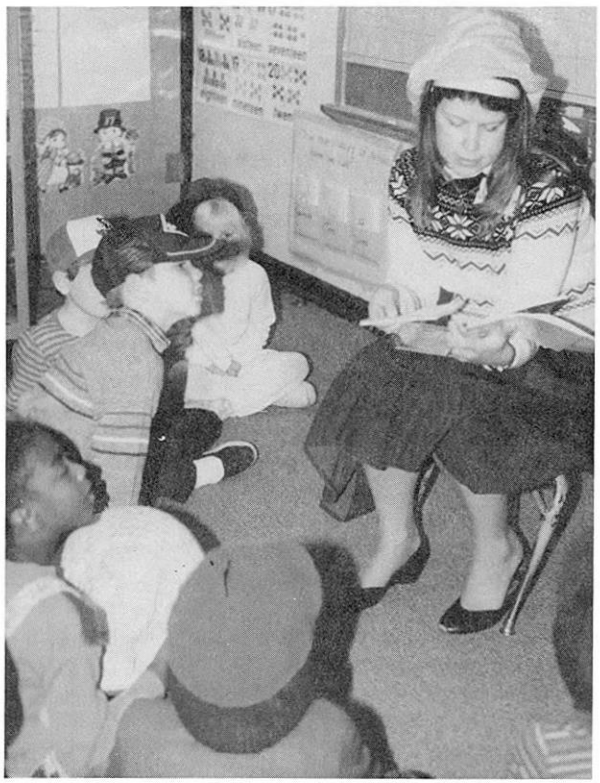
At the tone which follows the dialing sequence, enter your personal calling card number. At present, the only DMS telephone exchange which has this capability is: (703) 355-XXXX.

Adopt-A-School

Reading Day At Cheney







Jeff Hamn (top left), Lt Col Erwin Williams (bottom left), and Jean Battles (right) take time out to participate in Cheney's "Reading Day". Readers were asked to wear special hats or headpieces.

--photos courtesy Cheney Elementary School

The WV-2 Super Constellation prior to its crash in Antarctica in 1970.

MAGNET from page 1

nonmagnetic ship CARNEGIE (named after the Carnegie Institution of Washington which operated it) during surveys from 1909 until 1929 when it burned.

The Project MAGNET Program became operational in 1953 and its first assigned task was to survey the North Atlantic Ocean from 25 N to the Arctic Circle at a 200-nautical mile survey line spacing, using a P2V Neptune aircraft. This aircraft, because of altitude and range limitations, was replaced in 1954 by the R5D Skymaster, followed by the WV-2 Super Constellation in 1957. These early flights were conducted at night, since celestial navigation using a Kollsman periscopic sextant was the only reliable means of navigation in remote ocean areas. In the early 1960s, a C-54 aircraft was also used in the Project MAGNET Program.

The WV-2 Super Constellation finally crashed in Antarctica in 1970, when it landed 1,000 feet short of the runway during a "whiteout". Although eight individuals were injured, no one was killed.

The RP3D aircraft that has now been in service 20 years replaced it.

Worldwide circumnavigations of the globe commenced in 1959 and were completed in 1965 in time to create the first International Geomagnetic Reference Field IGRF-65 by the International Association of Geomagnetism and Aeronomy (IAGA), an organization in which NAVOCEANO members are still active participants.

The launch of POGS this year marks the beginning of a new era for the Project MAGNET Program as attention focuses on satellite surveying. POGS is operating well at this time and will supply a major geomagnetic data set to the geomagnetic community at large and to NAVOCEANO for generating the Epoch 1995 World Magnetic Model. Follow-on satellite project plans are in process to ensure availability of data for the Epoch 2000 model, and beyond, through the Defense Meteorological Satellite Program (DMSP).

Worth Repeating

"No sane man is unafraid in battle, but discipline produces in him a form of vicarious courage."

--Gen. George S. Patton Jr.,
U.S. Army

Fort Belvoir Women's History Month March 1991

The Fort Belvoir Federal Women's Program (FWP) will present the programs listed below in celebration of Women's History Month. Everyone is invited to attend these events.

5 March - 1000-1100 Wallace Theater - Women's History Month presentation with guest speaker

Week of 11 March (Exact date, time and place to be announced) — 30-minute "Brown Bag" session on women's health

19 & 21 March (Exact time to be announced) — Two 30-minute sessions on "Satellite to Success"

27 March - 0900-1230 SOSA Recreation Game Room — Workshop by Carol Chase Association, "Pushy vs Positive"

For further information, contact Cathy McCloskey, DMS FWP Manager, 664-3098.

New Defense Mapping Agency Mission Statement

As of 12 February, the DMA Director has approved a new Mission Statement as follows: The Defense Mapping Agency shall provide support to the Office of the Secretary of Defense (OSD), the Chairman, the Joint Chiefs of Staff and Joint Staff; the Unified and Specified Commands, and the Defense Agencies (hereafter referred to collectively as "DoD Components") and other Federal Government Departments and Agencies on matters concerning mapping, charting and geodesy (MC&G).

Dennis T. Roberts (l), Logistics Division, is presented the DMS ASAP (Accomplished Skillfully and Promptly) Award by the School Director, Colonel Samuel R. Schwartz, for his rapid action in identifying and reporting a major safety hazard on 10 January 1991. Roberts detected fuel oil fumes in the warehouse wing of Building 215, which led to the discovery of approximately 100 gallons of fuel on the basement floor of Building 214 from a ruptured external fuel pipe. The proximity of this fuel to the boiler in Building 214 resulted in a significant potential fire hazard and the building was evacuated until repairs were completed. (Photo by SSgt D. Jones)

Army Blood Program

Fort Belvoir has implemented the Army Blood Program under the provisions of Army Regulation 40-2, Chapter 12. This implementation precludes civilian agencies, such as the American Red Cross, from sponsoring blood drives on Army Installations until further notice.

In support of Operation Desert Storm, Fort Belvoir's Medical Department Activity has set up a Blood Donor Center in the basement conference room of DeWitt Army Community Hospital. Volunteer donors are urged to call 664-4827/6336 for an appointment.

If you have any further questions, contact Dave Miller, DMS Blood Drive Coordinator, at 355-7391 or Bagley Hall intercom #39.

FORMER SLAVES from page 7

Union soldiers occupied the area for more than two years before the village was built. The village existed for more than 30 years, providing housing, education, employment training, medical care and food for former slaves who had migrated to the capital area.

Today, the grass is kept trimmed, the trees pruned and prim, but no one has paid much other attention to Section 27 over the years. Now former members of the famous World War II "Triple Nickels" 555th Parachute Infantry Division, the first all-black parachute outfit, are trying to preserve and beautify the area as part of American military history. Their plans call for annual ceremonies at the site in honor of the former slaves and soldiers.

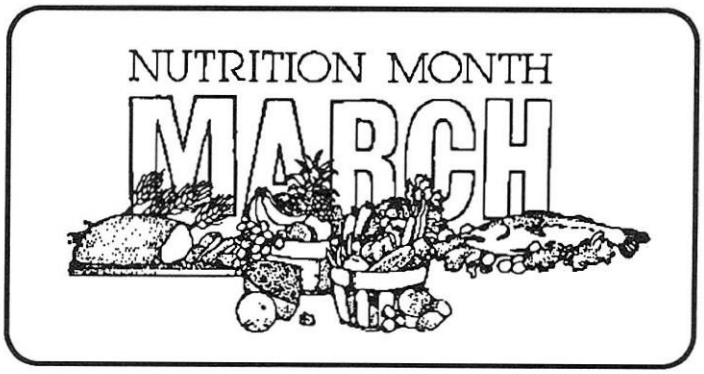
The Arlington County school system seems to have done more to highlight the historical importance of Freedman's Village than any other organization. Most of the credit goes to Arlington teacher Bobbi Schildt.

"I'd heard about Freedman's Village, but I hadn't seen anything written about it. I talked to some people about it. Some said there wasn't anything written or anything to find out, and they didn't really encourage me to go further," Schildt said. "I sensed that there was a story someplace, so I did some research at the Library of Congress, National Archives and various other historical museums and began to uncover a whole slew of documents.

"I wrote some curricula for the county school kids because many teachers and the supervisors felt we needed to integrate more black history," she continued. "We developed a teaching unit for students using some of the documents, newspaper and magazine articles and sketches. We also found a photograph of the Freedman's Village school. It was called `Contraband School'". Schildt's research and writing consumed countless hours, weekends and summer vacation time. She took copies of the documents and letters she uncovered to the classroom. As a class project, her 1984 7th graders produced a book entitled *Freedman's Village.*

"Sojourner Truth, a black Civil War heroine and abolitionist, worked there teaching the villagers housekeeping skills, skills to earn a living," said Schildt. "She helped integrate the streetcar line in Washington, D.C., and taught the villagers to stand up for their rights. She couldn't read or write, but she understood the system and how to go about changing things.

"I wanted the students to see and understand things about local history, including black history," said Schildt. "Arlington became a Civil War cemetery, but part of black history that was there was virtually wiped off the map. I guess my ultimate goal for the students was to preserve history and find out about it."



alive and well!

Editor's note: As part of the Adopt-A-School Program, DMS assisted Cheney Elementary in preparing props and helping with costumes and make-up for the school's Christmas celebration. Following are some thank you notes from the school--just as they were written.

January 10, 1991

Dear L.T.C. Williams and the Defense Mapping School,

Your help with our "Winter Musical was greatly appreciated. The scenery "flats" worked beautifully and really added to our production. We also appreciated your help on production night with makeup and costumes. Our bears and snowmen looked especially cute with their painted noses.

Thank you again and we look forward to working with you in the future. Cheney School is very pleased that you adopted us.

Sincerely,
Cynthia Cole
Music Teacher

• •

Happy Valentines Day

Thank you chief Kidney for helping us in the play. I hope you have a happy valentines day. good luck in the war.

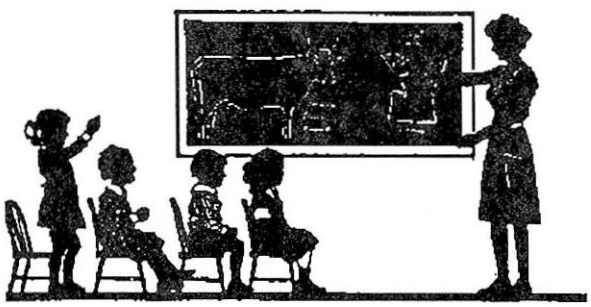
your frind,

Jason Vandergriff

• •

To Ltc Williams
from Peter

I'm glad That you came to our Play. I hope you hade a nice time to. Will you come to our next play. Did you like the music.



Thank You Letter to Mr Roderts

Dear ,Mr Roberts

Thank you for Making the plays seenere and The flats for us to finsh the play at 19 of December at 7:15. Have a nice day

Your friend

Thomas Gier

• •

To: Miss Battle

I'm glad you could come to our play, to put on our make-up and our costumes. Thank you. Thank you for coming. The things about you 1. You are nice. 2. You are pritty 3. You are thotful and care about other people, And thats why you came to are play. thank you.

Help wanted!

Barden Elementary School needs tutors for fourth, fifth, and sixth graders to help from 3:00 to 4:00 p.m. on Tuesdays, Wednesdays, and Thursdays, in subjects such as mathematics, reading, and history. Approximately 40 children require tutoring. Also, approximately 30 children need mentors to have lunch with them between 11:15 a.m. and 1:00 p.m.; mentors perform a "big brother" or "big sister" role.

The AIMS program at Hayfield identifies seventh grade minority students having potential to go to college and assigns volunteers to serve as long-term mentors. Mentors meet with students either during or outside of the school day to provide an external influence to encourage them to stay in school.

Navy's globetrotting campers battle beasts, boredom

By PH1 Ted Salois

Precise location of the hydrographic surveying ships in the coastal environment is provided by a network of navigation stations established by the U.S. Navy Navigation Aids Support Unit, home ported in Gulfport, Mississippi. Portable navigation stations are maintained in remote locations for as long as the ship requires such precise locations and are resupplied by means of helicopter flights from the ship. The following story recounts some of the hardships endured and challenges faced by the courageous and innovative sailors who deploy to these remote stations.

A camping trip far from city lights, noise and conveniences may be many people's idea of a vacation.

But for sailors assigned to Navigation Aids Support Unit in Gulfport, Miss., camping is a full-time job that often includes battling sweltering heat, isolation and savage beasts.

"Navaiders," as they are called, routinely make six-month deployments from CBC to remote locations around the world, supporting survey operations conducted by Oceanographic Units four and five.

The "Navaiders" operate and maintain electronic signal emitters, which allow the oceanographic units and their ships to pinpoint their locations while measuring the ocean's depth.

Defense Mapping Agency takes the collected data and produces navigation charts for the Navy's fleets and merchant ships of the world.

Although most say they enjoy their time "on site," the daily duties of cooking, cleaning, pampering generators, baby sitting electronic equipment, caring for injured natives and warding off wild animals can erase any hopes for a festive, vacation-like outing.

Every Navaids electronics technician, engineman and mess specialist has a story to tell of battling the elements in faraway lands.

EN2 David Garfield, a five-deployment veteran, told of a night of interrupted boredom on an island in Indonesia, where Oceanographic Unit Five and USNS Harkness (T-AGS-32) recently operated.

"We didn't have anything to do," Garfield said, "so we radioed the other sites in the area and challenged them to a rat-trapping contest."

One "Navaider" kept the microphone keyed open as the competition got underway in earnest.

"We heard `SLAP!' then `flap, flap, flap,'" Garfield said while flipping his hand over and over mimicking the rodent's struggle on the tent's wooden deck.

"Everybody got real excited as they tried swatting him with brooms. The rats get up to about 18 inches long (excluding tail) and usually carry the traps off into the jungle.

"They finally blasted the rat with a CO2 fire extinguisher and froze him to death."

That may have been a fleeting moment of revenge for the "Navaiders."

Usually, according to Garfield, the site area is an exclusive, after-hours playground for the locals.

"At night the rats climb up a tree, drop on the tent and slide down the canvas to the ground," Garfield said. "Then they climb up and do it again.

"They have a blast."

When Mank felt the second sting, he leaped up in time to see a sea snake scurry away.

Some bouts with the indigenous population are more trying. ET1 Brian Mank, a five-deployment veteran and survivor of malaria, had company as he tired to bathe in a thigh-deep tidal pool.

"I was squatting down, splashing water on myself when I felt something under my arm," Mank said. "I stood up and asked (MS2 Dennis) Harrison if he had seen anything in the water.

"He hadn't so I kept washing."

When Mank felt the second sting, he leaped up in time to see a sea snake scurry away.

"Harrison was going crazy," Mank said. "And I was getting really sick. I just figured that if God had decided it was my time..."

Mank's recovery proved the snake was of the non-deadly variety.

"But at the time, we didn't know that," said ETC Fred Roberts, officer-in-charge of that recent NAVAIDS team in Indonesia. "And there was a considerable amount of concern for his future."

Roberts said the African continent has offered its own set of oddities to amuse and challenge NAVAIDS detachments as they supported Oceanographic Unit 4 and USNS Chauvenet (T-AGS-29).

"One guy discovered a tarantula on the deck," Roberts said. "He went to stab it with his knife and the spider jumped in the rack with him.

"The guy was gone in a flash. And I'm not sure how he got out of the tent because he didn't go through the open flaps.

"On another occasion, a group of baboons chased a guy back to camp after they found him wandering around in their neighborhood."

Although times on site can get tough for "Navaiders," Roberts said their maturity and training have prepared them well.

"They all know their jobs," Roberts said. "They're all professionals and can handle any situation that arises."

So it was probably no surprise to see a detachment of "Navaiders" returning from their site to the ship after a 40-mile trek across land on camels. Transportation was needed. And they used what was available.

The "Navaiders" training is also valuable when it becomes necessary to treat minor injuries.

See NAVAIDS page 15

NAVAIDS from page 14

"The ship may be two or three days away from the island," Roberts said. "If there are any problems, the guys on the site have to handle them.

"And they don't just take care of each other. They have a medical kit so the villagers automatically consider them doctors.

"In one year, along with the corpsman aboard Harkness, I think they handled close to 2,000 cases. The Indonesians come to them for help with everything from headaches to cancer."

What makes Navaiders so willing to take on such a lifestyle? Roberts said the sailors' motivations range from the total independence on site to the infrequent port visit to places like Bali, Singapore and Australia during a deployment to Indonesia.

It was during a port call that some "Navaiders" took on what may have been their toughest challenge.

"We were having a party in a hotel in Sarabaya (Indonesia) and one of the guys called to order a pizza—from the United States," Roberts said.

The well-known restaurant chain's representative didn't believe the "Navaiders" sincerity or their location. So he returned their call.

"We're serious," the "Navaiders" replied. "We want 12 large pizzas with everything. And we want them free of charge if they're not delivered in 30 minutes."

--Courtesy of the Naval Construction Battalion Center Seabee Courier

Captain Robert J. Forcht is the point of contact for the new MT library. (Photo by SSgt D.K. Jones)

Management and Technology establishes library

by CPT Robert J. Forcht

Management and Technology has established a technical library in Room 202, Building 220. The goal of the library is to provide DMS personnel with literature to support technical and personal interests. In the technical area, the library currently has books dealing with such subjects as cartography, geodesy, navigation, photogrammetry, remote sensing, and surveying. There are numerous computer-related periodicals and catalogs as well as magazines on photogrammetry, Geographic Information Systems, and Global Positioning Systems. There are also several reports of proceedings from conferences held in these subjects.

For personal interests, the library has the ARMY, NAVY, AIR FORCE, and FEDERAL TIMES, various service magazines, and a recreation paper.

Currently, the library is fairly small. As users identify books and periodicals which would help in their work, they should notify MT for possible purchase. By meeting users' needs, the library will grow into an even more valuable resource.

All instructors and staff in DMS are welcome to use the library. For more information, stop by Room 202 or call me at 4-3972.

In Memoriam

John Connor, former Army NCO and civilian employee of DMS and the Department of Topography, died on 18 January 1991 at his home in Fort Meyers, Florida. His many friends here at DMS are grateful to have seen John during his visit this past fall. Our deepest sympathy goes out to his wife and family members.

Director's Call

NEW ARRIVALS

Military

Capt Dominic G. Gabaldon (MT)
CPT Robert J. Forcht (MT)
LTJG Paul J. Baldauf (MT)
1LT Harry L. Cunningham (MT)
MSgt Carl D. McMurtry (GA)
GySgt John T. Krause (OP)
SSG Richard S. Unterreiner (GS)
TSgt Michael W. Hill (GA)

Civilian

James M. Bowen (EA)

DEPARTURES

Military

Capt Andrey Aristov (MT)
Capt David A. Brumbaugh (MT)
ISC Scott E. McDonald (MT)
SFC Lawrence P. Tydingco (GS)

Civilian

Karen King (MT)

PROMOTIONS

SSG Carlos M. Dizon (USA)
to Sergeant First Class

SSgt Jerry A. Owens (USMC)
to Gunnery Sergeant

AWARDS

SFC Lawrence P. Tydingco (GS)
Joint Service Commendation Medal

SSG Richard S. Unterreiner (GS)
Army Commendation Medal

CERTIFICATES/LETTERS

Letter of Congratulations

CPT William P. Smith (MT)
SSG Howard E. Wright (GA)

Master Instructor Certificate

Capt Rickey I. Durkin (MT)
CW3 Michael F. Weir (MT)
SFC Kenneth J. Klopp (MT)
SSG Susan L. Fortune (GS)
SSG Theodore W. Mohn (GS)
TSgt Michael S. Mustard (MT)

Senior Instructor Certificate

CPT Scott A. Wilson (MT)

The **CONTOUR** is published monthly by and for the Defense Mapping School. Contents are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Defense Mapping Agency. Editorial content is edited, prepared and provided by the Public Affairs Office of the Defense Mapping School.

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Defense Mapping School

CONTOUR

Volume 18, Number 6

March 1991

TERRAIN ANALYSTS TO STEP INTO SPACE -- *See story page 2*

POLICY STATEMENT ON EMPLOYEE WELLNESS PROGRAM

DMA recognizes the benefits of a healthy and fit work force. Positive lifestyle habits, such as good nutrition, not smoking, weight control, and stress management, integrated with the benefits of structured exercise, can significantly enhance both the physical and mental health, and well-being of employees. To provide all employees the skills and opportunities for needed voluntary lifestyle changes, funds will be provided for Component health promotion efforts.

In addition, all DMA workspace will be made smoke-free by 1 October 1991, at which time, smoking will only be permitted in smoking lounges (where available) or outdoors.

Promoting a healthier work force is an investment in our people and our mission readiness. I expect your direct involvement in supporting the quality of life of our people.

WILLIAM K. JAMES
Maj Gen, USAF
Director

COLONEL CHARLES M. ROSE NAMED ACTING CHIEF OF STAFF

Air Force Colonel Charles M. Rose, former Reston Center deputy director, has been named acting chief of staff, replacing Air Force Brigadier General Stanley O. Smith, who retired on March 1. Colonel Rose will serve as acting chief of staff until the arrival of the permanent selectee scheduled for May.

Before his current assignment, Colonel Rose served as chief of the Mapping, Charting and Geodesy Division of Headquarters Air Force Intelligence Service. He also was previously assigned to the DMA Geodetic Survey Squadron at F. E. Warren Air Force Base, Cheyenne, Wyoming, and to the DMA Office Pacific, Hickam Air Force Base, Hawaii.

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TERRAIN ANALYSTS TO STEP INTO SPACE

by MAJ John C. Jens

With the recent selection of two Army engineer officers for a military member in space experiment, terrain analysis took a step closer toward low earth orbit. (Many fellow topographers think that terrain analysts are spacey anyway!)

The acronym for the program, Terra Geode, comes from Terra—earth, of course—and Geology from Earth Orbit, Demonstration and Evaluation. Geology is the study of the earth, not just the minerals and rocks of which it is made. A geode is a rock formation which is spherical, rather ordinary looking on the outside but once cut open, generally has a very spectacular array of quartz or calcite crystals on the inside.

Great commanders have always sought, even personally, to hold the high ground, the key to field of view, field of observation. From key terrain, the commander could hold his area of influence. Often this was also the high ground since what went on could be observed and what could be seen could be influenced. Yet view was often obstructed or obscured. Commanders then looked for ways to see past these and, indeed, over them to see what the enemy was doing in his rear area to prepare for battle. Tethered balloons were used with human observers, but they could not move about to avoid being shot at or change field of view easily. Then airplanes carried observers; again some drawbacks were overcome. Cameras were carried to record the observations so that the commander (and analysts) could see for themselves, keep a reference, and even make a map so that subordinate commanders could have the benefit of the observations as well.

We have gone higher and become more advanced—satellites have afforded us opportunities never before realized. But until now, the one element that was there at the beginning, the observer himself with his personal assessment, has been missing.

The identification of landforms and surface conditions from low earth orbit, coupled with military experience, will allow the observer to determine the significance of what is seen with regard to military operations. The thrust of Terra GEODE is to evaluate human capability, not equipment.

Originating in 1986 under the Chief of Engineers, Terra GEODE shifted to the U.S. Army Engineer School, which, in 1988, accepted responsibility for developing the project. Army Captain John Karpiscak, Directorate of Combat Developments, is the space action officer responsible for administration of Terra GEODE. It is a four-phased experiment within the DoD Military Member In Space (MMIS) program. Phases I and II deal with the gathering of geological information for evaluation and input to the third phase—putting an Army Engineer geologist in space. Phase IV is to develop an experiment and then conduct it onboard the planned space station.

Phase I was part of the space shuttle mission flown in April 1990. Dr. Kathy Sullivan, NASA's current flying astronaut-geologist, collected required information on 28 sites during that mission. She viewed the selected ground sites, determined soil color, recorded her observations, and then made mobility predictions. The data was reviewed after the shuttle flight by terrain analysts from the Engineer

---

See SPACE page 6

SMALL REWARDS

From Michael Perryman

Sincerely, Kellen Jones

Sincerely Jessica Lytle

Your Friend Lisa

You Friend, Patricia Day

your Friend Jason Smith

Your friend: Jackie Wilson

Love Tierra Conley

Your Friend, Amanda

Love Angela Keller

Happy Valentines, Bobbi Green

Your Pal Joshua Villeneuve

Your Best Friend, cameron Brown

Nikki Iriarte

Yours Truly, Michael Gerbert

Your Friend, Theresa

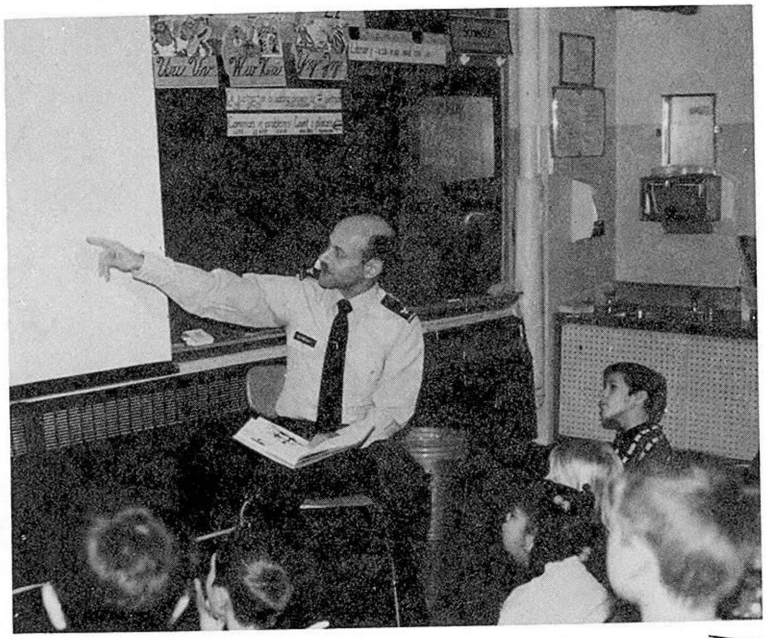
Your Best Pal Kean!

Yours Sincerely Sarah Behl

Yours Sincerely, Mike Watson

Tyree Carr

Sincerely, Amie R. Holder



Your Best Friend, Tracy Andrews

your friend Shelly Lane

Your Friend, Shawn

Sincerely, Kristine Polastre

Your Pal, Edmund

Your Friend, Amy Reigle

Sincerely T a m m y

Sincerely, Nicholas Paulas

Your Dude, Steven Smith

Fomr JB Holder

Love, Michele Parenteau

from Karl

Love Tiffany Snetting

your Friend Brent Lawers

Yours Truly, Stephanie Wilson

Love Joshua Key

Love, Heidi Dean

Your Best Friend, Melissa Howell

Love Erin Fackler

Love Janina Patterson

Love, Jared Koger

Mike Hoover

Federal Women's Month

DMS Women at Work

Barbara Windland
Training Specialist

SSG Maria Vigil
Cartographic Instructor

Sue Kersey
Cartographer

SGT Patti A. Wilbanks
Reproduction Equipment
Repair Course Instructor

"Nurturing Tradition, Fostering Change"

LT Rebecca E. Stone
MC&G Management &
Technology Instructor

Annie Wakimoto
Visual Information Specialist

-Photos by SSgt D.K. Jones

Opportunity knocks for GA Instructor

by SGT Patti A. Wilbanks

I recently found myself in a very opportune situation—attendance in the Basic Noncommissioned Officer Course (BNCOC) at Fort Leonard Wood Mo. With only two days notice, I was asked if I could be ready to go. So, with a clothing check list from the Basic Noncommissioned Officer Course and the help of my Noncommissioned Officer In Charge and SSG Juliio Escobar, I prepared myself for three weeks at Fort Leonard Wood. One of the better parts of the whole situation was that I would be attending the course with three other people from DMS—SSG Jackie Brown, SSG James Murphy and SSG Vel DeBerry.

On the morning of 10 January 1991 at 0800 hours, the trip began. We had a three-hour flight from D.C. National Airport to St. Louis, Mo., and then a 40-minute flight from St. Louis to the Army airfield on Fort Leonard Wood. Sounds simple, but what was to be a one-hour and 30-minute layover at St. Louis turned out to be a six-hour wait; then our flight to Ft. Leonard Wood was cancelled. We were then scheduled to take a bus. Due to the long wait, the airline issued each of us a $9 meal ticket, which almost covered the cost of a meal. Well, after six long hours of watching SSG Murphy eat most of the donuts in the USO lounge, it was time to meet the bus, which, of course, was late.

We arrived at the reception center at Ft. Leonard Wood at 2300 hours. From there, it was a cab to the BNCOC barracks. When we arrived, the men received their linen and a bed; I, on the other hand, was not that lucky. The assistant in charge of quarters was not sure what to do with me. I was sent to the next building to see the CQ (just what I needed after 15 hours of travel!) and wait. After a phone call or two, they found me a room (there were other females there) and I was given paper and tape and told to cover the windows. We spent the next day (Friday) in-processing and then were given time off until Monday.

Monday morning it began. A student platoon sergeant was appointed and classes on common military subjects were given. They informed us that we were going to get a lot of physical fitness training but I didn't know it was the walk from the barracks to the classroom (approximately 3/4 mile each way) and back to the barracks. I enjoyed the indoor classes except for the Army Physical Fitness Test (APFT). Due to the weather, we were required to take our APFT indoors. It was not fun running around a gym 31 times. We all survived the APFT only to go out in the cold and start Basic Rifle Marksmanship. After we got past the zeroing and grouping of the M16A2, it actually turned out to be fun. I hadn't had experience on shooting at pop-up targets and this area turned out to be the most challenging for me. But, with a little will and a lot of prayer, I qualified with the weapon.

Once we were qualified on the M16A2, it was on to the ever-loved land navigation course (a personal favorite). Even with the pouring rain and mud, it turned out to be a learning experience. We completed the course the first time out. I'm not sure if it was the good instruction or the fact that it's winter and there were no leaves on the trees (this made it a lot easier to see your points). But, whatever the reason, I made it through in three hours, 17 minutes and came in No. 2 of 12.

Then, two written tests to go. I think I feared the Combat Leader Training (CLT) test the most. With Panama in 1989 and now Iraq, combat training is a MUST! Because of the ever-changing world situation, CLT was very serious and took on a whole new meaning for me. I spent a great deal of extra time studying for the exam, which resulted in a passing grade. Having completed most of the course, we had only one block of instruction remaining—Army Physical Fitness Training. With a lot of studying and some good notes, we all moved on to the APFT written test, which included some Master Fitness Training and some good circuit training techniques using sandbags for weights. I guess this was to prepare us for the Middle East. Overall, it was very informative.

With the high standards of today's Army, the Basic Noncommissioned Officer Course is essential to all NCOs. It was a very good experience for me and I am thankful I had the opportunity to attend. With the training I received, I know I will be a better training instructor and NCO..

Who was the first woman elected in 1925 to the National Academy of Sciences? Her field: anatomy.

Florence Rena Sabin (1871-1953)

When no female students were allowed at Princeton, what woman was invited to teach nuclear physics there?

(Chien Shiung Wu (1912-)

In 1847, an American woman astronomer sighted the first comet ever discovered by telescope and was awarded a gold medal by the King of Denmark. Her name?

Maria Mitchell (1818-1889)

--National Women's History Month, Community Organiztion Guide

Accredited Institution

This certifies that

Defense Mapping School
21st Street & Belvoir Road, Ft. Belvoir, Virginia 22060-5828

is accredited by the
Southern Association of Colleges and Schools
Commission on Occupational Education Institutions
and is entitled to all the services, privileges, and professional recognition resulting therefrom.

Effective Date:
January 1, 1991

Expiration Date:
December 31, 1991

H Dean Ward
Chairman
Commission on Occupational Education Institutions

Kenneth W Sidwell
Executive Director
Commission on Occupational Education Institutions

(This certificate remains the property of the Commission on Occupational Education Institutions and may be revoked for just cause at the request of the Commission.)

Date Issued: January 10, 1991 Identification #: 140500

ACCREDITATION CERTIFICATE RECEIVED

The Defense Mapping School recently received its accreditation certificate for 1991 from the Southern Association of Colleges and Schools (SACS). This document represents certification of the high quality of training at DMS as well as the overall excellence of the School. Accreditation through SACS is a tremendous help to individuals who complete courses at DMS and wish to continue their education at institutions of higher learning throughout the United States. Colleges and universities award credit for courses completed at accredited schools such as DMS. For more information, contact the DMS Education Office at (703) 664-3673.

DMA SOLDIER, AIRMAN, SAILOR/MARINE OF THE YEAR AWARDS ANNOUNCED

"There were many high quality nominees and competition was close. While not everyone could be a winner, the accomplishments and achievements of all nominees deserve high praise." So said Major General William K. James, DMA director, as he announced the Soldier, Airman, Sailor/Marine Awards for 1990. General James urged the other nominees to continue their pursuit of excellence and dedication to accomplishing the DMA mission.

Congratulations to:

Lt Col Jon S. Powell, USAF, HQ DMA, DMA Outstanding Senior Officer of the Year.

LT Raymond M. Sampson, USN, DMA Combat Support Center MacDill Office, DMA Outstanding Junior Officer of the Year.

MSG Joachim P. Mazur, USA, DMA Combat Support Center, MacDill Office, DMA Outstanding Soldier of the Year, Senior Enlisted category.

SSG Theodore W. Mohn, USA, Defense Mapping School, DMA Outstanding Soldier of the Year, Junior Enlisted category.

SMSgt Craig P. Freeland, USAF, DMA Combat Support Center, Europe Office, DMA outstanding Airman of the Year, Senior Enlisted category.

SSgt James R. Levering, USAF, DMA Hydrographic/Topographic Center, DMA Outstanding Airman of the Year, Junior Enlisted category.

GySgt Brian K. Henderson, USMC, Defense Mapping School, DMA Outstanding Sailor/Marine of the Year, Senior Enlisted category.

QM1 Billy A. Ferguson, Jr., USN, DMA Combat Support Center, Latin American Office, Outstanding Sailor/Marine of the Year, Junior Enlisted category.

SPACE from page 2

School. In addition to Dr. Sullivan who has taken pictures for various geology experiments on several shuttle flights, Dr. Harrison Schmidt, NASA's first astronaut-geologist, is famous for his field work on the moon.

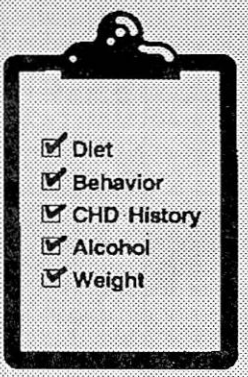
The crewmen to perform Phase III were selected in June 1990. LTC Palmer K. Bailey (MCGOC 3-75) and COL Robert H. Clegg, both professors of geology at the U.S. Military Academy, West Point, New York, were selected as the primary and alternate payload specialists, respectively. Two additional alternates were selected from the eight finalists who were originally picked in a screening of almost 30 applicants. Bailey is an associate professor of physical geography with an advanced degree in geomorphology. (Geomorphology is the study of the shape and evolution of landforms.) He is a certified professional geologist. Clegg is course director of astronomy and space operations, holds advanced degrees in physical geography and civil and environmental engineering, and specializes in geomorphology.

While stationed as the military geology advisor to the astronauts at the Johnson Space Center in Houston, LTC Bailey worked on the beginnings of the Terra GEODE concept drafts. Now, LTC Bailey will have the privilege every engineer dreams of conceiving a grand project, then carrying out the most critical steps to bring it to fruition. In several years, it is hoped that the Terra GEODE mission specialist will finally get off the ground and bring terrain analysts closer to the ultimate in support to the commander.

(Information for this article is taken from the author's notes and articles appearing in the USAES Essayons and UASCE Engineer Update. The author was a classmate of Bailey in MCGOC 3-75 and is also a member of The American Institute of Professional Geologists as well as a certified professional geologist in the Commonwealth of Virginia.)

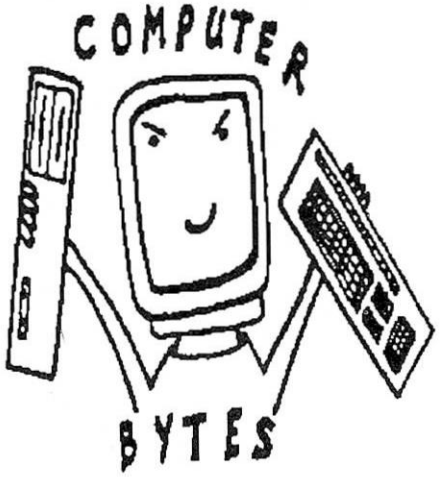
HOW HEALTHY ARE YOU?

Editor's Note: Compiled below are the results of the Defense Mapping School, Health Risk Assessment. The individual sub-groups were added together to reflect the overall results by branch of service or civilian.



	ARMY		MARINES	NAVY	AIR FORCE	CIVILIAN	
	M	F	M	M	M	M	F
1. WEIGHT OVER ARMY STANDARD	30%	17%	27%	13%	27%	9%	38%
2. RARELY/NEVER EAT TWO WELL-BALANCED MEALS PER WEEK	9%	0%	6%	25%	0%	10%	0%
3. DAILY/ALMOST DAILY EAT FOODS HIGH IN SATURATED FATS	24%	14%	44%	0%	18%	14%	18%
4. DAILY/ALMOST DAILY EAT FOODS HIGH IN SODIUM	20%	14%	13%	0%	0%	9%	0%
5. DON'T GET AEROBIC EXERCISE 3+ TIMES PER WEEK	44%	57%	44%	75%	73%	82%	82%
6. RARELY/NEVER EXERCISE FOR MUSCLE STRENGTH	64%	86%	63%	75%	82%	86%	94%
7. SMOKE CIGARETTES	18%	43%	31%	25%	36%	45%	18%
8. SMOKE 2+ PACKS PER DAY	0%	0%	0%	0%	0%	0%	0%
9. SMOKE A PIPE OR CIGAR	4%	0%	13%	0%	0%	5%	0%
10. USE SMOKELESS TOBACCO	0%	0%	19%	0%	0%	0%	0%
11. CONSUME 13 OR MORE ALCOHOLIC DRINKS PER WEEK	0%	0%	0%	0%	0%	0%	0%
12. CONSUME 30 OR MORE ALCOHOLIC DRINKS PER WEEK	0%	0%	0%	0%	0%	0%	0%
13. DRIVE AFTER DRINKING ALCOHOL	18%	29%	33%	50%	45%	32%	12%
14. RIDE WITH DRIVER WHO HAS BEEN USING ALCOHOL	9%	29%	56%	63%	55%	36%	44%
15. SOMETIMES/NEVER WEAR SEATBELT	7%	29%	19%	13%	9%	14%	18%
16. EXHIBIT FOUR OR MORE INDICATORS OF STRESS	9%	0%	13%	13%	18%	14%	12%
17. SERIOUSLY CONSIDERED SUICIDE IN THE LAST TWO YEARS	0%	0%	0%	0%	0%	5%	0%
18. DON'T HAVE PEOPLE TO TURN TO IN BAD TIMES	4%	29%	19%	13%	9%	5%	6%
19. SLEEP LESS THAN 5 OR MORE THAN 9 HOURS PER NIGHT	4%	0%	0%	13%	0%	9%	0%
20. HAVE HIGH BLOOD PRESSURE	14%	0%	0%	0%	0%	9%	0%
21. HAVE BORDERLINE BLOOD PRESSURE	14%	0%	0%	25%	0%	9%	18%
22. HAVE A BLOOD CHOLESTEROL LEVEL OVER 200MGs	27%	29%	19%	0%	18%	45%	35%
23. DON'T DO BREAST/TESTICULAR SELF EXAM MONTHLY	87%	57%	88%	100%	73%	77%	82%
24. WOMEN WHO TAKE BIRTH CONTROL PILLS AND SMOKE	N/A	0%	N/A	N/A	N/A	N/A	0%
25. WOMEN WHO HAVEN'T HAD A PAP TEST IN PAST TWO YEARS	N/A	14%	N/A	N/A	N/A	N/A	6%

WELLNESS CHECK SCORE (AVERAGE)	78.2	71.7	66.3	80.9	80.3	73.0	69.9
CHOLESTEROL LEVEL (AVERAGE)	201.8	163.6	177.7	179.3	218.2	209.4	208.7
BLOOD PRESSURE - SYSTOLIC (AVERAGE)	134.8	118.7	128.8	140.8	139.8	132.6	129.6
BLOOD PRESSURE - DIASTOLIC (AVERAGE)	77.4	68.1	72.0	78.6	78.7	80.5	66.2
NUMBER OF CASES	45	7	16	8	11	22	17



by Jim Davidson

HOW TO ORDER SOFTWARE AND HARDWARE AT DMS

A typical question I have been asked lately is, "Now that we have a couple of DMA microcomputer contracts, will it still take a year or more to get a mouse for the personal computer in my office?" My answer is, "Not if you identify your requirements and follow the procedures outlined below."

First, determine the need for new equipment or software. With today's tight budget constraints, you must have a justifiable requirement for all DMS hardware and software requests. Ask yourself (and others):

*Is it truly required to perform assigned duties?

*Do you have alternatives currently available that will meet mission requirements (do the job) just as well?

*Can you use existing resources, share equipment or software with other DMS departments or DMA components?

Before you exert too much effort on paperwork, check with the Program Integration (PI) Office to ensure your request meets DMA and the School's overall ADP goals, i.e., DMS Automated Information Systems Master Plan. Tell us your plans and we will try to ease the paperwork flow. It is important to keep PI involved in all automation planning. We may be working on duplicate requests.

Once you are satisfied that the questions above have been answered satisfactorily, identify your requirements. To do this, DMA personnel should use the Information Resources Request Document (IRRD). An IRRD must be prepared for each Automated Information System requirement to describe the need, proposed alternatives, recommendation of the optimum alternative, identification of funds, logistic and maintenance support, and security plans.

Keep the IRRD as simple and easy to read as possible, following the format in Appendix B of DMAM 7920.1, Life Cycle Management of Automated Information Systems. (DMAM 7920.1 can be found in the Program Integration Office, Room 116, Bldg. 214.) Concentrate on why a need exists for your request. Although the IRRD format is three pages long, not all parts are applicable to every request. Several single-item requests have been approved that were thorough but less than a half-page long. You may even combine several items of related hardware and software on the same IRRD.

Forward the IRRD through your division and department chiefs to PI. We review IRRDs and discuss them with the management staff periodically and during Equipment Review Group meetings. The IRRD receives final approval by the DMS Information Resources Manager (IRM), Technical Support Center, Reston Operations Division. Our IRM reviews each request for compatibility with overall DMA goals. If approved, he will return the IRRD to be included in the purchase request package.

The other item required in the purchase request package is a completed DMA Form 4140-8, Customer/Supply Action Request. DMA Form 4140-8 (May 1990) combined and replaced three forms: DD 1348-6, Non-NSN Requisition; AF Form 601, Request for Purchase; and AF Form 2005 Issue/Turn-In Request. The Logistics Office includes the IRRD with DMA Form 4140-8 and any other pertinent information (you may want to add technical information or suggested sources) and sends the package to HTC for acquisition processing.

Additional planning and approvals are required for software purchases exceeding $20,000 and hardware purchases exceeding $50,000. The procedures described above are minimum requirements that apply to all requests for software and hardware.

Tighter control of our automated information resources is now a fact of life. All new software, hardware, and associated peripherals must conform to DMA security, acquisition, configuration, and life-cycle management guidelines. Increasing your awareness of how a request, no matter how small, fits into the total automation goals at the Defense Mapping School is essential to fulfilling your requirements.

Editor's Note: This is Jim's last column for the Defense Mapping School. He became so expert at using the SF 171 software program that he worked himself into a new job with The Information Resources Management Service, U.S. General Services Administration. Jim's column was a real plus to the CONTOUR and he will be greatly missed.

Congratulations to Mr. & Mrs. James M. Bowen on the birth of their daughter, Bridget Louise, who weighed in at 6 lbs. 15 oz. on 9 February 1991. The proud father is employed in the DMS Education Office.

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Fort Belvoir
Virginia 22060-5828

Official Business

Defense Mapping School

CONTOUR

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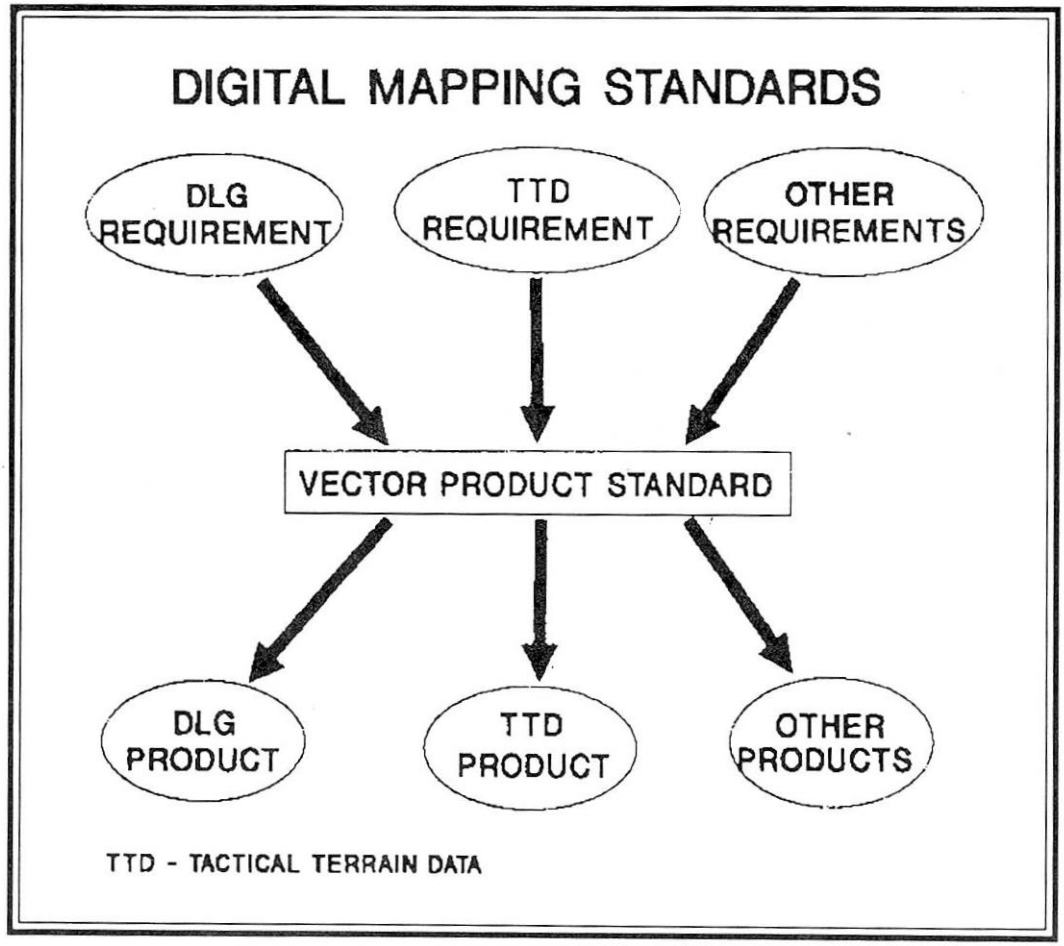


Digital Chart of the World Project

by CPT William P. Smith

How effective could we be in our jobs if different makes of computers and typewriters each had a completely different arrangement of keys on the keyboard?

We take for granted the standard layout of the keyboard. There are no standards for some things, though, one of which things is how to build databases to generate computer maps (spatial databases).

If there are no standards, it means that DMA, other Federal agencies, and contractors may create spatial databases to meet their own needs, and in different ways. Because we often cannot share these databases between organizations, we are experiencing the same frustrations that one would experience if all keyboards were made differently.

The primary goal of the DMA Digital Chart of the World (DCW) Project is development of a standard by which computer maps are created. This standard is called the Vector Product Standard (VPS).

The project began in October 1989 with

See DIGITAL page 2

Nice-to-have Items Costly to Supply

Did you know the General Services Administration (GSA) manages a wide variety of common use office supplies, industrial products, tools, and furniture through its depots and Federal Supply Schedules (FSS)? They do, and GSA is the primary government source of supply for the standard items they manage.

Supply customers should be familiar with the wide range of items available through GSA sources and should be requesting these items in lieu of "nice to have" nonstandard commercial items which are expensive to process (approximately $250 per action), time-consuming to get, and slow down the small purchase process from getting the things you need that are not otherwise available.

A GSA catalog is an absolute must for supply representatives, and if your representative does not have a copy, contact DMS LO for particulars on how to obtain one. The GSA catalog is a simple product to use and contains both an alphabetical and a stock number index to assist customers with identification of required items.

DMA supply activities will be placing increased emphasis on ensuring that standard items are requisitioned whenever possible, so if you still insist you must have the "nice to have" item, be prepared to justify it!

DIGITAL from page 1

Environmental Systems Research Institute (ESRI) being awarded the contract. The intent of VPS is to provide a standard customers will readily use. DMA used a number of guidelines in developing VPS, to include: (1) The standards must be designed to work on PCs (80286 processors or larger) with a minimum of 20 MB of hard disk storage. Since most users have these processors available, they could readily use the products produced from VPS. (2) The standards must be designed for data distribution on CD-ROM, which is cost effective and efficient. (3) The standards must support interactive use of the data on the CD-ROM, so small computers can use the medium as on-line storage. (4) The standards must be user-oriented by supporting geographic modeling, analysis, and graphic display. A database access software program will be produced to query the VPS data. (5) The standards must be compatible with DMA's Digital Production System (DPS).

A secondary goal of the project is to develop the first product in accordance with VPS. This product is called the Digital Chart of the World. It will contain 270 digitized Operational Navigation and six Jet Navigation Charts to provide a digital database covering all of the world landmass at a scale of 1:1,000,000.

Why use these sources for DCW? There are several reasons: (1) They provide a highly demanded global database for international users. Military users can conduct strategic and operational planning; other users can conduct global or regional resource and environmental monitoring. (2) Using the large ONC/JNC global database, the issue of tiling must be addressed. Tiling divides the global data into manageable units. This allows a user to display a fairly large chunk of terrain with one unit; on the other hand, the unit is not so small that many units must be displayed at each query. This would be time-consuming because of hardware and software constraints. For DCW, the tile size has been narrowed down to a unit from 3 x 3 degrees to 5 x 5 degrees.

The DCW will contain several independent layers of data, to include, terrain elevation contours at 1,000 foot intervals; major transportation routes, including roads, single and multi-track railroads, and canals; populated places with city outlines; major drainage systems and coastlines; and international boundaries. Each feature in a layer has many descriptions or attributes. For example, a road feature can be described by its width, surface type and number of lanes. With all features in each layer fully attributed, this allows for complex queries in a GIS environment. These layers are in a topologic vector format, meaning that any or all layers can becombined to produce new layers of data.

DMS has been one of many organizations evaluating DCW, and, from a military and technical viewpoint, has provided input since its inception. Through a series of prototypes and workshops, all of the guidelines for VPS have been met and DCW is now in full-scale production. The entire DCW global database will be about 1.5 gigabytes and is expected to fit on 3-5 CD-ROMs. Production should be complete and DCW available to all of us by early 1992.

A front-end software program to display DCW is now complete. Anyone wishing to view prototype DCW can stop by or call MT; we'll be glad to show it to you.

Acknowledgements go to Mr. David Danko, DMASC/SGC, who is the COTR of the Digital Chart of the World Project.

DMA Deputy Director tells National Convention about Desert Shield/ Storm MC&G Support

"As a combat support agency, DMA provided the soldiers, sailors, Marines, and airmen with a greater volume and with more accurate maps, charts, digital and precise positioning materials than in any previous U.S. military operation," said DMA deputy director Brigadier General Joseph Pratt about the agency's MC&G support to Operation Desert Shield/Desert Storm.

The general made his comments to the opening session of the American Society of Photogrammetry and Remote Sensing and the American Congress on Surveying and Mapping national convention in Baltimore, MD March 25.

"Prior to the invasion of Kuwait on 2 August 1990, our requirements were for very limited coverage of Kuwait and, frankly, were oriented toward a different potential war in the Middle East," commented the general. "What we found in our initial assessment of the crisis was outdated coverage or no coverage at all in deployment areas."

Referring to a newspaper report that "Maps stink" because recently built infrastructure was not shown on a 1982 product, the general pointed out that action was being taken to fix the soldier's problem and others as the story broke. "Within seven days of initial deployment, we had updated with added information depicted in a magenta overprint."

The Topographic Line Map at 1:50K scale was the priority production item, according to the speaker. Production time was compressed from six months to six weeks. An Army commander referred to the potential lack or shortfall in topographic products as "an absolute war stopper."

The air version of the Joint Operations Graphic was also updated to provide current aeronautical data. "Before everything was over, we had revised the entire inventory of air combat charts to support the combined allied air campaign. In peacetime, this would have been a two-year effort," said General Pratt.

He commented on the flexibility of production--as requirements began to mount, the agency looked to interim products which could be rapidly built or existing products which could be modified to satisfy the needs of the field.

"Advanced delivery of some of our new digital production system gave us the opportunity to rapidly exploit Landsat data and create 1:100,000 scale image maps as an interim product."

Citing other products, the deputy director indicated the importance of digital data in the form of terrain contour matching maps for the Tomahawk Cruise missile as a high priority. Over a year's worth of digital and TERCOM products were produced to support advanced weapon systems.

ARC Digitized Raster Graphics on CD-ROM were used for mission planning. Hydrographic charts for combat, coastal, and harbor and approach were produced. "Our nautical products were in fairly good shape as a result of the recently conducted exercise, Operation Earnest Will, in the area," related the general.

A new product—Interim Terrain Data—used by both Army engineers and combat units, as well as Marines, was produced for battlefield terrain analysis.

During the offensive stage, more than 8,000 tactical target locations were determined and precision target products produced in direct support of the air war. "Much of the data was determined and sent to the user within two hours."

Video Point Positioning Data Base development was accelerated during Desert Storm. This system uses a personal computer and analog videodisc technology to allow real-time coordinate readout.

"DMA deployed people to three overseas field locations," related the deputy director, "where they used Digital Terrain Elevation and Feature Data to support the advanced radar prediction and mission-planning systems used by the Strategic Air Command."

Several products were accelerated in development and became first-time operation production items, according to the general. These included Interim Terrain Data, Landsat Image Maps and Video Point Positioning Data Bases.

"In six months, the agency produced over 12,000 individual products, more than 100 million sheets and over 600 digital products," General Pratt emphasized.

He indicated the accomplishments were the result of 24-hour, seven-day-a-week operation, overtime, holidays becoming regular work days and, most importantly, dedicated people working at their best to meet the requirements.

Brigadier General Joseph Pratt

Once the products were produced, the logistics of moving massive amounts to the Theater depot were complex. More than 55 C-5 loads of maps were moved from the States to the DMA map depot in theater.

The general concluded with some observations...

"We relearned Geodesy isn't necessarily for the layman. With the advent of the Global Positioning System and some of the advanced weapon systems, there was considerable confusion about the variety of grids, datums and ellipsoids in use in the Theater.

"We learned rapid deployment of modern warfare requires a relook at our storage and inventory management.

"We learned image maps were a valuable adjunct special combat tool to DMA standard products but they do not meet the needs for tactical warfare.

"We found that our new automated equipment could do the job under crisis production.

"We reaffirmed that DMA people are dedicated and responsive to their profession.

"We saw the results and learned the importance of DMA MC&G data in operational use of advanced weapons systems."

The general's remarks were well received. One convention official commented, "Learning what great accomplishments were done by the Defense Mapping Agency gave everyone in the MC&G community reason to be proud."

National Secretaries Day - April 24

Marjorie K. Kelley has had a very interesting and varied secretarial career. Her initial positions were in the private sector, which included working for Newsweek Magazine during World War II and with the Marietta College administrative office immediately following the war.

Returning from a tour in England with her husband, an Air Force officer, Marge entered the Federal Civil Service, working for the Census Bureau. During her husband's tour at Clark Air Force Base in the Philippines, she served as secretary to the 13th Air Force Chief of Engineers, then spent five years working at Barksdale AFB, Louisiana for the 2nd Air Force. Upon her husband's assignment to Korea, Marge and her children relocated in New York state where she worked for the Internal Revenue Service. When her husband returned from overseas, and subsequently retired, they moved to Alexandria, Virginia. She joined the Army Materiel Command in 1968 and then, in July 1972, joined the newly formed Defense Mapping Agency. In January 1974, Marge became the secretary to the Director of the Defense Mapping School and has served with all eight Directors of the School. She considers her position with the School the most rewarding of her career.

Marge has a son, Jerry, who lives in Los Gatos, CA, with his wife, Joannie, and the little man in Marge's life—grandson, Jeremy.

Marjorie K. Kelley

Her daughter, Kathy Spicer, is married and lives in Falls Church.

After working for the government for 34 years, Marge is looking forward to retiring in the near future and spending more time at her home at the beach in Hampton Bays, New York.

Charlotte Faehn

Charlotte Faehn started working as a secretary in the School's Office of Mission Support in the fall of 1986. She was promoted to Secretary to the Technical Director when that office was re-established in March 1988.

Charlotte has worked for all the different Services during her government career. In December, she will have 20 years service with the Federal Government. Her career also includes work in the private sector for a law firm and a bank.

After a 10-year absence to raise her children, Charlotte returned to work in 1980 only to find that, with the advent of computers and word processors, stenography was a "fading skill".

"I was fascinated with the technology and had to catch up", she says.

Charlotte and her husband, Don, have two grown children and have called Springfield, Virginia, home for the last 26 years. They enjoy biking on the many bike trails in the metropolitan area and are active in the local chapter of the American Theater Organ Society.

-Photos by SSgt D.K. Jones & Joyce J. Beck

They make the difference...

Gloria Tomita

Gloria Tomita was born in Hawaii and lived there until she was in her 20s. After her marriage, she spent the next few years traveling with her husband to duty stations in Europe, Japan, and in the United States. While her husband was doing a tour in Vietnam, Gloria returned to Hawaii where she taught 2nd and 3rd grade and also taught English as a second language to adults.

After moving to Virginia from New York in 1986, Gloria started working for the government. She held positions as Awards Clerk and Secretary for the S-1 section of the 4th Engineer Brigade until it was deactivated in 1988. She also worked at the Communication Electronic Command Center for Night Vision and Electro Optics as a secretary to a team of physical scientists, electronics and mechanical engineers, and technicians.

Gloria joined the Department of Geographic Sciences in August 1989.

She and her husband, Ralph, live in Alexandria with their children, Keith and Sharyn.

Chris Becerra

Chris Becerra has been with the School since 1984. She started with DMS as a temporary clerk-typist in the Department of Management and Technology, moving progressively to a more demanding assignment as a permanent floater clerk-typist in the Office of Mission Support. Chris is now the secretary for the School's very busy Operations Office.

In 1986, Chris was selected as one of DMS' Personnel of the Year.

Some of Chris' previous experience includes working as a clerk-typist in Germany, as a secretary for the Health Department in Georgia, and in the civilian sector in Texas.

Chris was born in Mexico, and calls Texas her home. She presently resides in Alexandria, Virginia with her husband, Ray, and their daughters, Korina and Jessica. On her days off, Chris likes to go dancing and out to eat. She also enjoys reading and relaxing at home with the family.

Charlotte Bernard

The Defense Mapping School was no stranger to Charlotte Bernard since her husband, Jake, was assigned to the school for over 16 years during his Army career. The Bernards didn't move around a lot but when they did, they always came back to Fort Belvoir and DMS. Charlotte and Jake enjoyed assignments to Fort Hood, Texas; Frankfort, Germany; Seoul, Korea; and a hardship assignment to Honolulu, Hawaii.

After working part-time several years for AAFES, Charlotte decided to go to work full-time. She started working for the Defense Mapping Agency in 1984. After two years with DMAHTC, she transferred to DMS, Logistics Division, as the Procurement Clerk. A year later, Charlotte was promoted to Secretary for the newly-formed Department of Component Training. Two years and a reorganization later, CT was gone and she was detailed to the Office of Mission Support (MS). In MS, Charlotte assumed the duties of DMS Payroll Liaison and POC for Civilian Personnel. Another reorganization, and the Program Integration (PI) Office was established. Her position and duties were transferred to PI in October 1990. Since then, she has been busy helping get PI established before another reorganization comes along!

Charlotte has four children (two of whom are still at home) and a 4-year-old granddaughter. Her leisure time is spent with her family and remodeling their home.

DMS welcomes new clerk-typist

by Lt Col Erwin L. Williams

February 1991 not only brought warmer weather to the Defense Mapping School but also a new member to the Office of Logistics and Facilities—Ms. Tanya McIver, clerk-typist. When asked to provide background for this human interest article, Tanya wrote such an interesting, thorough response that it follows below almost verbatim.

"I was born in Washington, D.C. in 1970 to Mollie and James McIver. I have four sisters and two brothers. From the oldest to the youngest, they are: Jackie Flood, Linda McIver, Jeanette Cobb, Nellie McIver (a former member of the DMS staff), James McIver, and myself.

" Shortly after my birth, we moved to Fort Bragg, N.C., at which time my father retired from the Air Force at Pope Ai r Force Base. Our family then moved to Spring Lake, N.C. in 1972. I attended kindergarten, Oakdale Elementary School and Spring Lake Junior High in Spring Lake, and Pine Forest Senior High in Fayetteville, N.C. I lived in Spring Lake until I graduated in 1988. (My sisters and brothers were lucky enough to travel to different countries during the time my father served in the Air Force!)

"In the future, I hope to own an architectural engineering firm, and also have my own independent law firm."

"I moved to Woodbridge, VA in June 1988 and worked in a summer program in D. C. for the (Federal) government. When the program ended, I sought a permanent job with the government.

" D uring my three years working for the government, I have held the position of clerk-typist and course director's assistant. I have worked for the Defense Communication Agency in Arlington, Va; the Department of the Navy at the Hoffman Building for Naval Facilities Engineering Command in Alexandria, VA; the Department of Defense at Fort Belvoir for Defense Systems Management College; and now the Defense Mapping School. In the future, I will try to gain experience working in an architectural and law office and any position dealing with computers.

Tanya McIver

"I am currently attending night school at NOVA, working towards a degree in architectural engineering. After receiving my degree, I look forward to going to Law School, followed by a degree in electrical engineering. In the future, I hope to own an architectural engineering firm, and also have my own independent law firm. Or I will settle for the chance of being a prosecutor only in the area of criminal law.

"My hobbies in order of preference are: swimming, weightlifting, tennis, basketball, skating, scary movies, window shopping, surfing, water skiing, and canoeing. I love more than anything to draw clothing and floor plans, and put together models (cars and planes mostly because boats are too time-consuming).

"When I want to really relax, I lie and watch TV or read educational books—any book that's informative. I don't read love stories or mysteries."

If the high productivity Tanya has already demonstrated at DMS is any indicator, she is sure to succeed in achieving her plans for the future. As you see her around campus, please take the opportunity to introduce yourself and welcome the newest member of the DMS family.

-Photo by SSgt D.K. Jones

IS IT TIME TO GET HELP?

It used to be that people had to work through tough times on their own. Professional help wasn't widely available, and getting advice was seen as something you did when you were really "going under".

Today people are urged to get counseling early—before small problems mushroom into big ones.

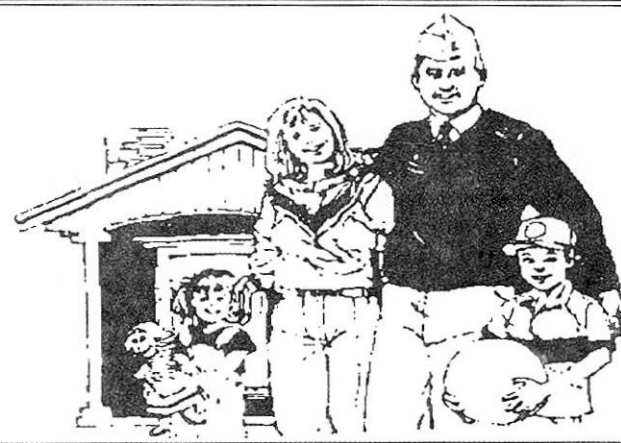
Have you said this to yourself?

- ☐ My job has me stressed out. I used to be a good worker, but now I'm always making mistakes
- ☐ I get angry for no reason at all; I hate being this way.
- ☐ My life seems to be going no place; I feel trapped.
- ☐ I just lost the best relationship I ever had; I don't know what's wrong with me
- ☐ The only mail I get is bills.
- ☐ Since my mom died, I can't seem to pull myself together.
- ☐ He drank before we got married; I thought he would change.
- ☐ My mother is coming to live with us; it's going to turn our family upside down
- ☐ Our teenager is scaring us.
- ☐ Being a single parent is the pits; I don't know how I'll make it.
- ☐ Being a stepparent is harder than I expected; I feel like a failure.

If you need help, contact either Guy Ross or Cary Cook, counselors in the DMA-EAP Office, tel. (301) 227-5187. Making the phone call is the first step toward feeling better.

(This article was abstracted from the Hope Health letter.)

April



Month of the Military Child

Director's Call

NEW ARRIVALS

Military

LI1 Roger C. Perry (USN)
SGT Verlelia D. Ricks (USA)
LI1 Kevin Tobin (USN)

Civilian

Tanya McIver (LO)

DEPARTURES

Military

SFC Franklin A. Quiros (USA)
LIC Robert Sowards (USN)
LI1 Joseph Leach (USN)

Civilian

Paula Croisetiere (VI)
James Davidson (PI)
Mark Lane (LO)

PROMOTIONS

Military

SGT Dorothy M. Hernandez (USA)
to Staff Sergeant

AWARDS

Military

SFC Carlos M. Dizon (USA)
Joint Service Commendation Medal

Capt Dominic G. Gabaldon (USAF)
Air Force Commendation Medal

Civilian

Arturo Camacho (GS)
Outstanding Performance

CERTIFICATES/LETTERS

Senior Instructor Certificate

Military

SSgt George M. Hamblen (USMC)

Civilian

Carlos A. Angel (GS)
Eduardo Elinan (GS)
Milda R. Stone (GS)

Letter of Commendation

SGT Patti A. Wilbanks (USA)

CFC Certificate

Capt Timothy McCaig (USAF)

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CONTOUR

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May 1991

May 18

ARMED FORCES DAY

"Eternal Vigilance: The Price of Liberty"

General Powell praises DMA Desert Storm support

"I come to you today to say thank you. You saved the lives of young men and women who went out to accomplish their mission for the nation. You preserved the independence of a free country that had been overrun by aggression. You were an essential part of the Department when we put this effort together. Each and everyone of you should have a deep sense of pride in your personal accomplishment as well as the accomplishment of the Defense Mapping Agency. So I would now like to end my brief remarks by saluting you and returning your applause."

With that concluding remark, the Chairman of the Joint Chiefs of Staff, General Colin L. Powell, USA, stepped back from the podium, saluted, and applauded several hundred members of the DMA work force assembled in Brookmont, Maryland April 29.

The Chairman spoke to employees after touring the DMA Hydrographic/Topographic Center production facilities. It was the first time in the history of DMA that the Chairman of the Joint Chiefs of Staff had visited the agency.

General Powell aimed his remarks toward all DMA employees. "I regret that I couldn't get all of DMA in one location but I hope that my remarks today will not only be for the group here but for the group out of Reston, and the group in St. Louis, and at Fairfax, and Washington, and all the other places where DMA employees are working hard to support our Armed Forces and support our nation.

"In all the euphoria of homecomings and troops coming home and planes landing...and yellow ribbons, I wanted to come out here and let you know that I recognize the contribution you made to all those successful homecomings. It was your work that got us there. It was your work that made sure the troops were able to accomplish their mission on the ground; that our pilots were able to perform their mission so successfully; that our ships were able to perform their mission so successfully."

The Chairman of the Joint Chiefs of Staff, Army General Colin L. Powell, tries his hand with a scribing tool during his visit April 29 to Washington-area DMA operations.

He indicated the Chiefs' (Joint Chiefs of Staff) understanding of the challenges faced by DMA to meet the requirements of Desert Storm. "I watched with interest as the messages flew back and forth, first between Tampa and here, and then between Riyadh and here as the screams went up 'Send us maps!'"

He spoke of the overtime worked and the feeling of pride exhibited by DMA employees. "Pride that you were part of a great team. A team that extends across this entire land, a team that was supporting every last soldier, sailor, airman, Marine, and coastguardsman that was sent in harm's way to carry out the interest of his nation, and to resist aggression."

He told the audience the contributions of the defense agencies, such as DMA, DIA, DCA, were extremely important in the overall success of the operation.

"The Nation was united behind that effort," he said of Desert Storm. "A sense of national pride has come back."

During his tour of the Hydrographic/Topographic Center, the Chairman had the opportunity to see production equipment in operation and receive briefings on total DMA support to Desert Storm.

The Director's Corner

COL Samuel R. Schwartz

Change, change, change! Where would we be without change? There would be no improvement or degradation. A sense of sameness would begin to prevail in our daily existence. Complacency would set in. But not here at the Defense Mapping School. Change is alive and well. Its energies are directed, for the purpose of this report, to upcoming planned changes and modifications to our existing curriculum and a peek at where we are looking to change for improvement in the support we give to the Service components and DoD.

The School has retained the three teaching departments that specialize in offering families of courses along traditional and emerging MC&G disciplines.

Graphic Arts (GA), led by Mr. Dave Miller, concentrates its efforts in multiservice training of photolithographers and printers. Navy students enjoy training on the desktop publishing system, along with their standard camera plate duplicating machine and large presses. Dave's Advanced Lithography (ALITH) course has been extended to allow students to produce multi-image combination form flats and work is nearly complete on standardizing the procedures for printing four-color process image-based topographic products, using LANDSAT data.

The Department of Geographic Sciences (GS) has been headed up for the past several months by Major John C. Jens, who arrived at DMS via the Engineer Topographic Laboratories. GS teaches the traditional cartographic skills to Army 81C MOS, as well as classical geodetic surveying to the Air Force, Marines and Army students. The Survey Instrument Maintenance course is under review, while a totally new global positioning system surveying techniques module is completing its development phase. Both the Basic and Advanced Terrain Analysis courses are facing a task analysis review cycle with the Army Engineer School. A rigorous schedule addressing the Latin American coproducer resident and exportable training programs is now in place and instruction in subjects such as photogrammetry, cartography, geodesy, and field surveying is being offered at Fort Belvoir as well as in Guatemala, Peru, Venezuela, Honduras, and Argentina.

The Department of Management and Technology (MT), led by Lieutenant Colonel Robert Alcaparras, continues to move into the new high technology areas encompassing MC&G. Multispectral Imagery (MSI) and Geographic Information Systems (GIS) courses focus on introducing automated techniques to those people who are involved in the MC&G exploitation of imagery, with a bias, of course, on mapping. The GIS course is being expanded to allow additional training utilizing commercial software packages. MT's Introduction to Digital Mapping, Charting and Geodesy Data course is being merged into the one-week MC&G Staff Officer Course to eliminate duplication of training. Our key block of officer training, the Mapping, Charting and Geodesy Officer Course (MCGOC) has received a major update which incorporates several new proponent requirements. Intensive training has been developed to prepare budding MCGOCers for service in the topo battalions. Realistic situations, time and personnel constraints, and briefing requirements all interplay to give the graduates a taste of what they will experience when they reach their follow-on assignments. More GIS training is being included, and for the first time, a Navy track is being developed. This will allow a real joint core curriculum of MCGOC to be presented with Service-specific exercises given to the multiservice students. The Mapping, Charting and Geodesy Impact on Combat Operations (MICO) course has always been a high demand exportable course of instruction and is receiving a beefed-up section dealing with the global positioning system and its application in a theater of operation.

And so it's change, but not just for the sake of change. Our goal is and always will be improved training support to our customers, and for that reason, change is okay.

TQM IN THE TEACHING ENVIRONMENT

by Milda Stone

Have you seen one of the latest acronyms to come into the market? TQM. It stands for "Total Quality Management". It affects "everything that DoD does." I cite from the DoD "Total Quality Management Master Plan", dated August 1988. According to this MP, TQM is "a strategy for improving performance at every level, and in all areas of responsibility." What caught my attention in these guidelines, among other things, were the phrases "continuous improvement" and "focusing on processes that create products, and using products as indicators of process adequacy."

I said, "That does not apply to me as an instructor at DMS." Wrong: because the MP's definition of products encompasses everything and everyone, including us, the teaching community. The MP definition of "product" "means not only the weapons and systems fielded by military personnel but the result of all acquisition and logistic functions, including design, procurement, maintenance, supply, and support activities, " (emphasis added). Further on, in case I had any doubts, it says: "Every system that exists involves processes and products that can be improved or services that may be performed

----See TQM page 6

Focus on a Course

"Basic Offset Printing"

They hail from places like Los Angeles, Fort Pierce, Rochester, Detroit, Kansas City, Minneapolis, San Antonio, Whiteville and even as far away as Manila. Their educational backgrounds vary as does the purpose for their attendance. Classes are offered five to six times a year and normally have 28 students. Students are graduates from basic training (USMC, Army), service personnel for retraining, international students, and DoD civilians. The most common characteristic they share is limited experience or knowledge of the operation of printing equipment. However, once enrolled, and in spite of their varied backgrounds or experience, the students all express the same goal—to successfully complete the course work and, if at all possible, complete the course requirements with honors.

The Basic Offset Printing Course offered by the Reproduction Division, Department of Graphic Arts, is divided into three separate but related segments which are designed to provide the students with apprentice-level skills and knowledge of offset printing. These three segments consist of: offset duplicator and camera platemaker operation; medium size sheet-fed lithographic offset press operation; and power bindery equipment operation.

The course commences with an overall introduction to offset press operation and an overview of the School policies, course sequence, grading procedures and other pertinent information. Additionally, instruction is provided on the types, usage, handling, and proper disposition of hazardous materials. The course involves a series of conferences, demonstrations, hands-on practical exercises and individual performance examinations.

In the duplicator operation segment, students are required to set up the duplicator and successfully transfer sheets of paper from a feeder table through the cycle to the receiving tray. They then learn how to properly install a rubber blanket on the blanket cylinder, and mount a metal plate (used as an image carrier) on to the master cylinder. The next task is to correctly install and adjust an assembly of rollers in the duplicator which will provide the necessary moistening solution and ink to the

See BOP page 5

Senior Instructor SSgt Michael Hamblen watches carefully as BOP student positions paper in hydraulic paper cutter.

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nonprinting and printing areas of the lithographic plate to make the process of offset printing possible. Having demonstrated their ability to feed sheets of paper through the duplicator, install the blanket and plate, and adjust moisture and ink rollers, students are now ready for the final stages of the duplicator operation. They are taught the operation of the camera/platemaker which produces the paper and plastic plates. In addition, metal plates are used in the production of four-page booklets. Two hundred printed copies of four pages must be produced in such a manner as to meet the established course standards before the students can progress to the next phase in the course.

In the medium-size press operation segment, students soon discover that skills and knowledge learned during duplicator operations are applied, although on a somewhat larger scale. Consequently, the student's performance during the instruction segments of paper cycle, cylinder assembly and producing a printed product (three-color map) is tremendously enhanced on the larger equipment.

The final segment, power bindery equipment operation, includes the procedures and operations of related pieces of bindery equipment which are used to complete the previously printed press products.

Safety of personnel and equipment is stressed throughout the course. The fact that student operators are moving from small or less-threatening equipment (duplicators) to large, more challenging equipment (medium-size presses and power paper cutter) makes the need for good safety practices an even more integral part of the instruction process.

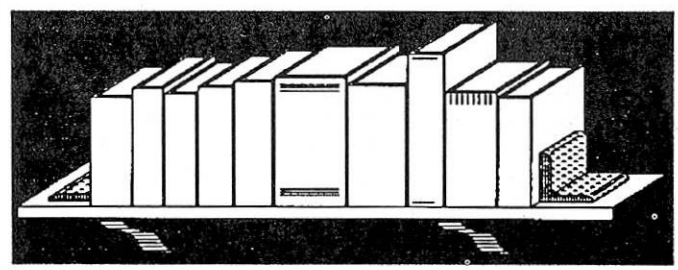
Marine graduates from the course receive the Military Occupational Specialty (MOS) 1521, Offset Press Operator, while Army graduates receive the 83F MOS, Printing and Bindery Specialist.

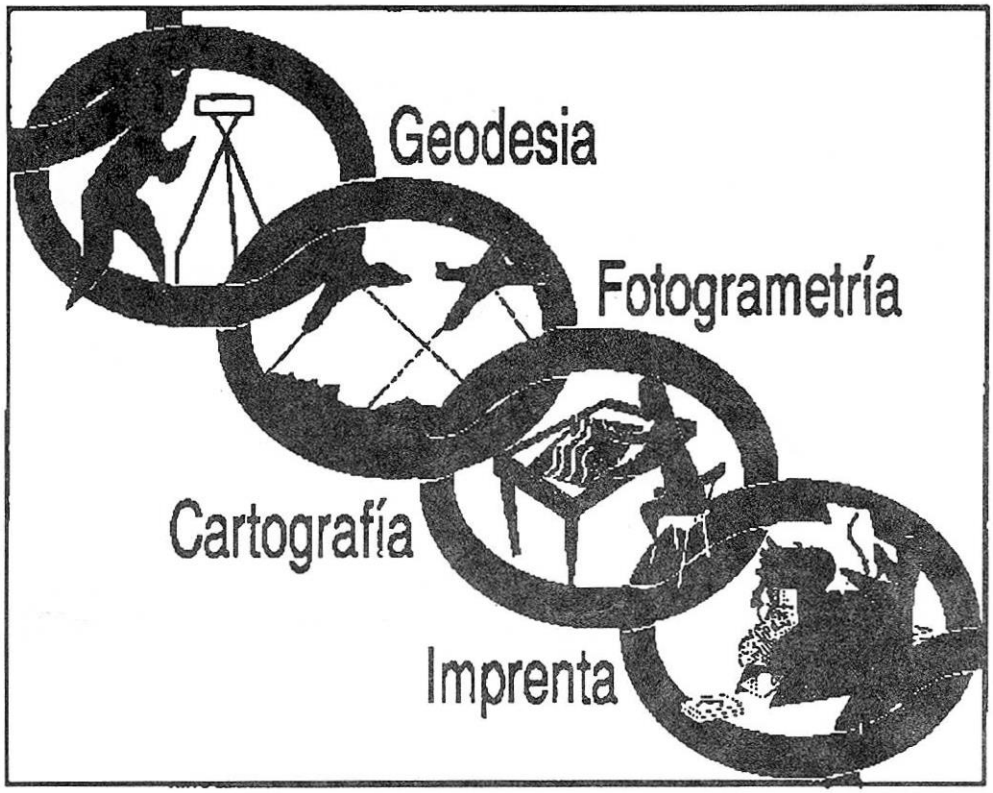
The instructor staff consists of active duty members of the Army and Marine Corps, and DoD civilians.

GySgt Henry Garcia explains to students Pvts. Reiff, Vanepps, and West (l to r) the first step in the 1250 multilith operation, the paper cycle block of instruction.

---Photos by SSgt D. K. Jones

DoD student Richard Vickers cleans the ink fountain roller on the Heidelberg SORD printing press.





TQM from page 3

more efficiently."

As an instructor I started thinking how I might improve my teaching techniques. I figured I could take some courses on how to dress better, how to improve my appearance, maybe some voice and enunciation courses, or better still, theatrics. However, none of this went to the root of my teaching—how to make the subjects I am teaching interesting enough so it will make a lasting impression on the young minds that are receiving the information. All of a sudden I was in the midst of preparing for a Mobile Training Team to Venezuela and I found my answer: visual aids.

All of you are well familiar with the expression "A picture is worth a thousand words." Never is this expression more true than in today's society where all of our information comes to us through images. We are no longer a reading or listening society (when was the last time you sat by the fireplace to tell "tall tales"?). Television has changed all that. Have you noticed that every time the commercials appear on TV, during your favorite show, you turn the sound off? Have you noticed how Madison Avenue is responding to you? By showing short written slogans among all the imagery. If you see it, you will remember it! That is the clue to better teaching: better visuals! Now, you will tell me "I have visuals, very good ones. I have used them for the last 10 years. Why should I change them?"

Again, the reason why we should change is TV. Ninety percent of our "products" ("students") were born not only in the era of television but of color television—living color. Besides, thanks to the Turner Computerized Crayon, they have probably never seen a black and white movie in their lives. Let me prove my point. Picture this: Here I am in front of an audience that is eager to find out Eratosthenes' method of measuring the diameter of the earth in the 3rd century B.C. I place the overhead in the projector, the same one that has been used for the last 10 years, (which, by the way, has all kinds of notes over the frame from all the previous instructors who have used it, plus the ones I considered important to add)... I flip the switch... wait a minute and... I can read their minds: they are screaming at me, "Com'on lady, gimme a break!"

Granted, there are only so many different ways that I can explain the same thing, but there is one that is going to make the difference for that particular overhead: COLOR. Simple, isn't it? Yes, and there are only three reasons I can think of why I couldn't add living color to all of my visual aids: Lack of facilities to do it, lack of time, lack of interest. Let's address each one of them.

* Lack of facilities — This is not a problem here at DMS; we have one of the best in-house facilities that I have seen. An in-house facility gives the faculty the added advantage of having a Visual Information Department(VI) which shares the same goals. This common mission allows both groups of people to be attuned to each other's needs and to work more efficiently together. Equipment is available to transfer an idea into any visual image, from frame-grabbers to typesetting facilities that create attention-getting, colorful slides and vugraphs. We still cannot make videos but, hopefully, we will be able to zoom in on some of our visuals in the future. Furthermore, for those of us who want to "do our own thing", we can translate our Harvard Graphics files into perked-up color renditions.

But all the equipment in the world is worthless unless it is properly manned. This is certainly not one of the shortcomings of our Visual Informations Department. The personnel are highly professional, interested, eager to help, understanding, and, from my own experience, I can tell you that they are fast, accurate and mind readers. They produced over 130 original artworks for me in a remarkably short time frame. That's what I call TQM!

* Time — Certainly, it takes time to look at your lesson plan with a critical eye. It also takes a lot of effort to translate the sulky text into colorful pictorial ideas. But it is certainly time well-spent.

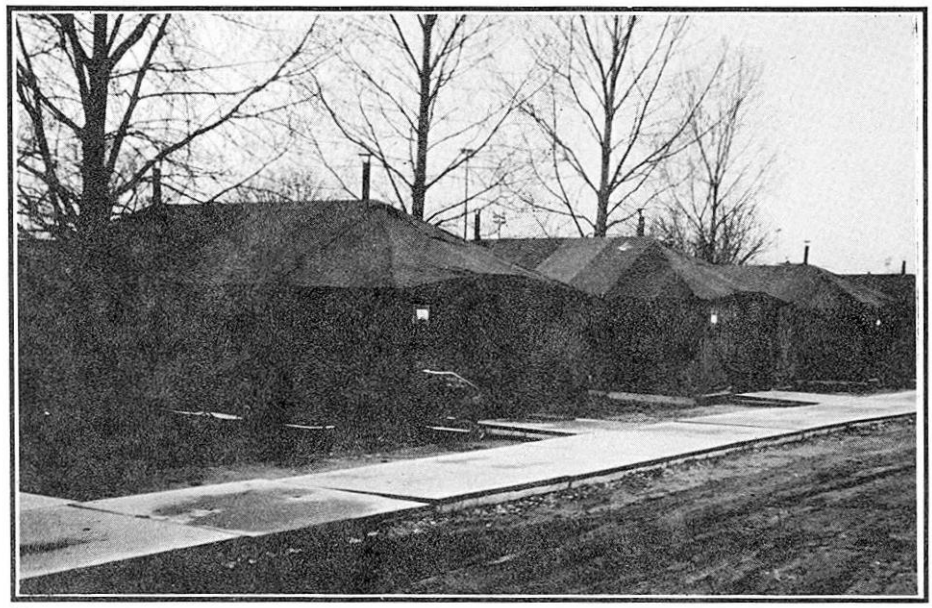
* Interest — By all means, if I am not interested in improving the quality of my teaching, or, for that matter, if it doesn't bore me to use the same visuals over and over again, I will not make the effort to improve the visuals. But believe me, if you make the effort, you will find the time to do it, and we are fortunate to have the facilities that will handle it for us.

What will we gain? For one thing, a feeling of being renovated, such as when you paint your house. That feeling will show in your classroom attitude; you will be more effective in delivering your ideas, and the audience, by seeing a vivid picture of your message, will be able to grasp the subject better and remember it longer. Then we will have accomplished our goal and done our part toward TQM.

Let The Trip Begin!

Editor's Note: This is the first in a 2-part series of one soldier's participation in Desert Shield/Desert Storm.

Story and photo
by SFC Richard E. Rivera



Tent city in Frankfurt, Germany, which was a staging area for all military going to Desert Storm.

Everyone has taken a trip or vacation at some time. Of all the travels each of us has taken, one will always stand out in our mind. It may be a good or bad experience, depending on how we tell it and who we tell it to. This is my tale. I hope you enjoy hearing it as much as I had living it. To tell it right, I should start at the beginning.

One beautiful day in the first part of March (I try to forget the exact day), I arrived at work early hoping to get through a couple of cups of coffee before the rest of the division came in and started to browbeat me. (They do this because they say they like me!) As I started on my second cup, I was interrupted by the division chief, Mr. Sutton. He informed me that there was a request from NAVOCEANO for a technician to go to one of their ships to help repair their printing press. To get more specifics on the request, he sent me to the Department Chief, Mr. Miller, who informed me that the ship was located somewhere in the Persian Gulf and the time frame for the repairs was the middle of March. Something in the back of my mind told me not to touch this trip, but, silly me, I have never been known to listen to myself. So I jumped right in, saying I wanted to go. What a mistake that was! Mr. Miller set the hook and reeled me in.

To make matters worse, I was going to Charlotte, NC for a training seminar but was told all arrangements for the (NAVOCEANO) trip would be handled by Operations. Now, don't smile, I had every confidence that things would be taken care of.

While in Charlotte, I called Mr. Miller to get a status on the trip and that's when he told me I needed to return the 9th of March so I could proceed on Sunday, the 10th. Everything was set up; the airplane tickets were on hand, the advance money was waiting, the country clearance was secured—all I had to do was hit the airport running at 1500 hours on the 10th, and get on the airplane.

Sounds good. But wait!! Things started running through my mind: I didn't have all my shots; Where was I going to cash the check? What equipment or tools did I need? In a situation like this, you do what comes naturally—you worry about it when the time comes and hope for the best.

Are you bored yet? Hope not, because The Trip begins...

I arrived at Dulles International Airport (on March 10) three hours early. I finally got on the plane and sat for another two hours. Thoughts started to go through my mind again: This was a chartered Military Airlift Command (MAC) flight, and that's why it did not take off on time; The rest of the trip will be better; etc.

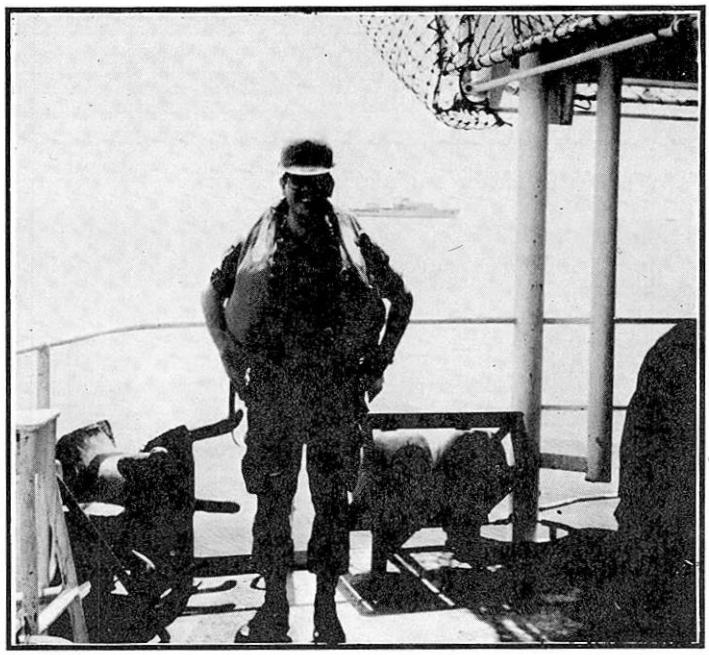
After nine hours of flying, I arrived at Frankfurt, Germany. Since my connecting flight was out of Rhein Mein, I needed to get from the commercial terminal to the military side of the base. No transportation was provided, so I hitched a ride on the bus that was taking personnel to the 21st Replacement Company. I checked in with MAC personnel, who told me that the flight was not for another 24 hours and that it would probably be cancelled. There was nothing I could do that day, so I went to the Bachelor Enlisted Quarters for a room. No rooms available—and since I was on orders to the Middle East, they would not give me a statement of non-availability. The Air Base had set up a tent city and that was where I had to stay. After a couple of hours arguing with anyone who would listen, I ended up in a tent. One night, no problem.

The next day, 11 March, I got up with a whole new attitude. I walked half-way across the airfield to take a shower in a portable trailer, got my bags together, went to the airport terminal, checked in, and was informed the flight was cancelled. The next scheduled flight was 2200 hours that night, with no guarantees.

I sat at the terminal for 12 more hours; if nothing else, I was catching up on my reading. At 1900 hours, the flight was confirmed. I got a seat and at 2200 hours, the C5A Galaxy was off to Dhahran, Saudi Arabia.

Ten hours later we landed, exited the plane and went to the MAC terminal, a converted airplane hanger. I asked the airman at the counter how to get from the terminal to the commercial airport. I got this strange look and then he said, with a smile, that I was the first person who had ever asked that ques-

See TRIP page 8



SFC Richard Rivera's smile reflects his delight at finally making it to the USNS Harkness in the Persian Gulf.

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TRIP from pg 7

tion and he did not have an answer. He did tell me that I could go to the main gate and catch a cab. That answer was too easy, so I asked how far the main gate was and "How do I get there?" Three miles down the road and "Walk" was the reply I got. I left the counter and sat on my bags outside the terminal. I must have been a sight to behold because an Army colonel walked over to me and asked if I was all right. I told him my tale and when I was finished, he must have felt sorry for me because he called his driver and told him to take me to the commercial airport. I couldn't thank him enough.

The driver got me to the airport and dropped me off at the main door. As I walked into the terminal, I knew I was in trouble. The whole place was deserted, except for a few people cleaning the area. I found the Gulf Air booth, which was closed for the day; I had missed my flight by five hours. As I looked around, I got a real empty feeling in the pit of my stomach. I was approached by one of the cleaning people who told me that Gulf Air only had one flight per day out of Dhahran. Since I couldn't stay at the airport all night, I asked him for advice. He told me to go to the International Travel Agency for a new schedule. This sounded real good, until he said the agency was located in the main lobby of the Dhahran International Hotel a half-mile away. With nothing else to do, I threw my bags on my shoulder and started the walk to the hotel. I arrived at the hotel and found the travel agency. I explained my problem and asked for a new flight. The agency employee told me that they did not handle Gulf Air flights and that I had to go to the main office located in downtown Dhahran, about 12 miles away. Now about this time, I started getting real upset and wanted to grab and choke someone. To calm myself down I called Mr. Miller at home, collect! That's right; it's about 3:00 a.m. Eastern Time and I figured this was the best way to "reach out and touch someone!" After explaining my problem to Mr. Miller, he sleepily advised me to get a room, and spend the day in Dhahran.

Great idea, you bet, but when I went to the lobby to get a room, I was informed that I didn't have a reservation and they would not know if any rooms would be available until 1300 hours. I sat in the lobby for three hours before I finally got a room. Sound good? It only cost me a $300 deposit since I didn't have a credit card. I threw my bags in the room, grabbed my plane tickets and started to beat feet to the Gulf Air office; but, wait, it's Ramadan time here in the Middle East and all businesses close from 1200 to 1700 hours.

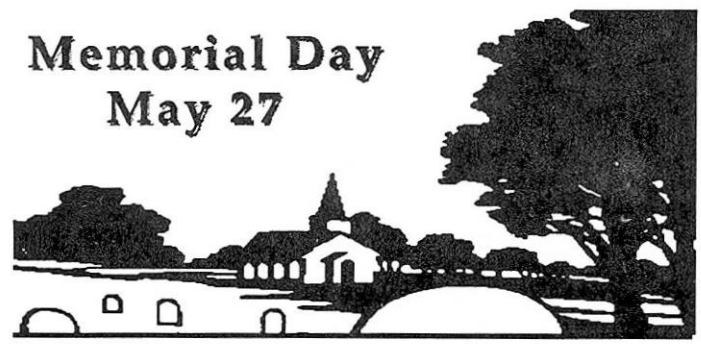
At 1700 hours, I got a cab to the Gulf Air office. At the office, it was a whole new story. They could get me a flight out of Bahrain to United Arab Emirates (UAE) but there were no flights out of Dhahran to Bahrain for the next three days. I asked, "How do I get to Bahrain?" I was politely told to take a cab or a bus, or have a friend take me. Since the bus and the friend options were not feasible, I asked about the cab. Only $160, I was told. After a couple of days in Dhahran, I finally got permission to take a cab to Bahrain.

One hour into the cab ride we rolled into the Customs checkpoint between Saudi Arabia and Bahrain. Everything was going good until the customs agent asked me for my visa. Needless to say, I didn't have one. I showed him my military ID card and orders. This didn't impress him. He informed me that my ID card did not give me permission to enter his country through commercial transportation and he didn't read English. He asked if I had an Arabic translation for my orders. Well, after a long debate with his superiors, I was finally given permission to enter his country.

I finally arrived in Manama, Bahrain and went straight to the airport. The next flight was the following day so I went to find a room for the night. All the hotels in the immediate area were full, so, with the help of a very trusting cab driver, I ended up in a part of the city where tourists normally don't go. The building was kind of run-down and there was an armed guard in front of the door, but, what the heck, it beats sleeping in the airport! The 16th of March, 0630 hours, I got on the plane out of Bahrain to UAE: that is, after I hassled with Customs because I didn't have an exit visa.

When I arrived in Abu Dhabi, UAE, I felt like I was in a loop watching things repeat themselves. I didn't have a visa to enter UAE and Customs was not going to grant me entry. Luckily, while in Bahrain, I had called the ship's agent and faxed him my schedule. The agent arrived at the airport with a special entry visa, and, after much confusion, they let me into their country. The last leg of the trip was in sight—just a short ride to the ship—and upon completion of my mission, I thought my worries would be over. I still had to get home, but that's another story.

---To be continued--

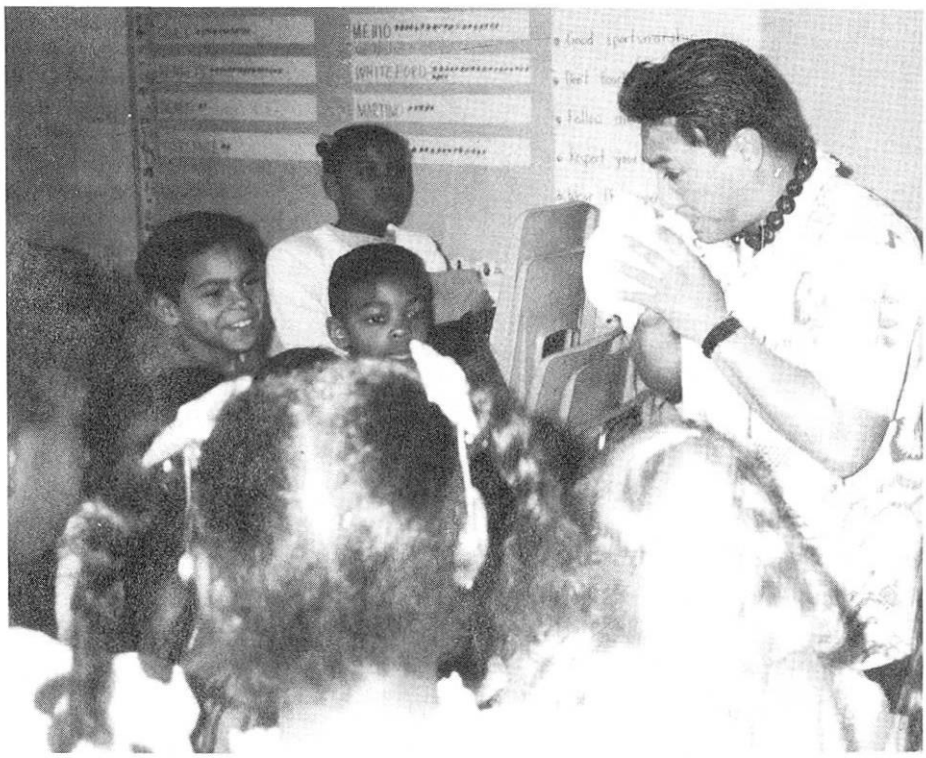


YELLOW RIBBON SUMMER

The United Services Organization (USO) and Anheuser-Busch Companies, Inc. have jointly announced the Yellow Ribbon Summer, a series of programs to benefit all active members and active duty reservists of the armed forces, and their immediate dependents. Service members and their dependents may visit any one of the company's seven family entertainment parks free of charge from Armed Forces Day, May 18, through Labor Day, September 2. The seven parks include the four Sea World parks in San Diego, San Antonio, Orlando, and Aurora, Ohio (located near Cleveland); the two Busch Gardens parks in Williamsburg, Virginia, and Tampa, Florida; and the Cypress Gardens park in Winter Haven, Florida.

A special "Yellow Ribbon Day" is also planned for military guests and their families at six of the parks. The celebrations will feature prominent entertainers as well as other special activities to honor the armed forces. The dates for these events will be announced as arrangements are completed. The Cypress Gardens park will not be participating in this celebration.

Those military members wishing to participate in the activities should contact their Recreation Services Office on base, the local USO, or one of the participating family entertainment parks.



International Day at Cheney Elementary

SFC Dwayne Ikaika demonstrates to Cheney students how the conch shell is used to summon children home from play, warn of impending danger, and call guests to luaus or other festivities. Best of all, children like to listen to the sound of the ocean through the shell.
SFC Ikaika also performed a Hawaiian fire dance; GySgt Henry Garcia sang for the children; Jean Battles talked to some of the classes about Norway; and Lt Col Irwin Williams wore a native Korean costume and treated the studentsto a taste of kimchee. (Photo by SSgt D. K. Jones)

IG NOTE

SUBJECT: FRAUD

SYNOPSIS: SUBJECT was initially arrested by local police for unrelated matter; subsequent investigation revealed SUBJECT had been receiving BAQ and VHA at the dependent rate for seven years while separated from his family and not providing financial support to his children—despite his claims of child support. He also claimed dependent travel during two cross-country PCSs, but his family did not accompany him either time.

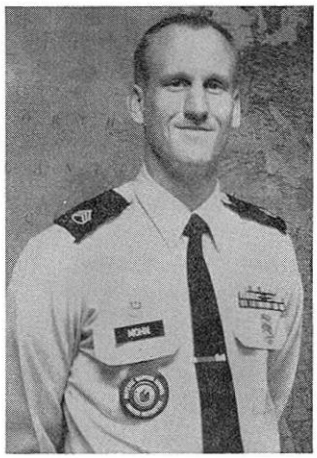
RESULTS: A general courts-martial found SUBJECT guilty. He was sentenced to dismissal, confinement for one month, forfeiture of all pay and allowances, and a $2,000 fine.

—Courtesy USAF TIG Brief-2
March-April 1991

TELECOMMUNICATIONS DEVICE FOR THE DEAF

Individuals with hearing and speech impairments can now contact the Equal Opportunity Division (HRE), through a Telecommunications Device for the Deaf (TDD) at telephone number (703) 285-6076.

DMS Personnel Receive Awards



SSG Theodore W. Mohn

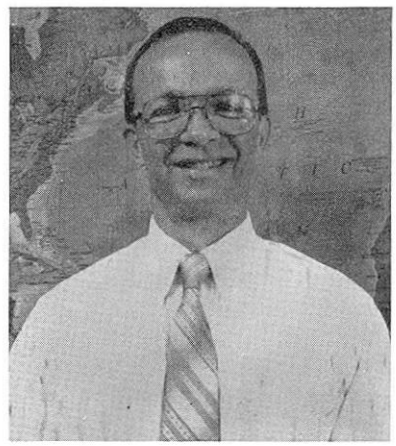
Members of the Defense Mapping School faculty and staff were recently recognized at the 18th Annual Defense Mapping Agency Awards Day Luncheon and Ceremony held at Fort Myer Officers' Club on 10 May 1991.

Receiving awards were: Ms. Gloria H. Tomita, Defense Mapping Agency Administrative Support Staff Excellence Award; Mr. Dale A. Cuave and Mr. Robert T. Murphy, Special Act Awards.

Also presented were the Defense Mapping Agency Soldier, Airman, Sailor/Marine of the Year (SASMOY) Awards. Two of the School's instructors from the Department of Geographic Sciences received these awards: SSG Theodore W. Mohn, USA, Outstanding Soldier of the Year, Junior Enlisted Category, and GySgt Brian K. Henderson, USMC, Outstanding Sailor/Marine of the Year, Senior Enlisted Category.

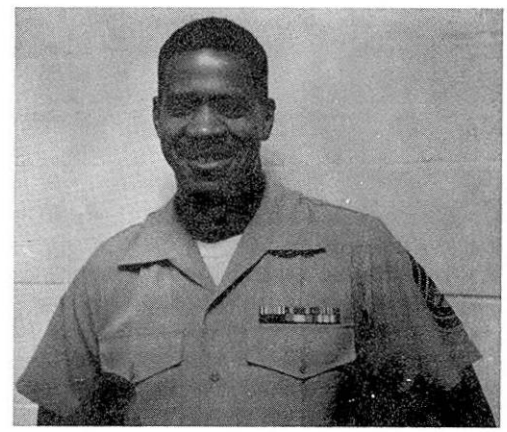
Our congratulations to these individuals for their outstanding performance and dedication to duty.

Mr. Robert T. Murphy



Ms. Gloria H. Tomita

Mr. Dale A. Cuave



GySgt Brian K. Henderson

--Photos by Joyce J. Beck

WHAT "IT" IS

by John H. Harden, Jr.
DMA Quality Principal

NOTE: This the first in a series of articles written by the new DMA Process Improvement Office (PIO). This series will deal with what DMA is doing in process improvement.

I continue to get the question: What is **it**? A lot of organizations in government, not to mention the private sector, are doing **it**. **It** is the "in" thing to do and DoD is leading the way in the Federal sector. **It** has been the "in" thing to do in other countries for some time.

It is being driven by the need to change. The world is rapidly realizing that past wastefulness cannot continue. We must make changes to stop our wastefulness through more efficient and productive use of resources, both environmental and human. **It** is one particular change mechanism. You may agree **it** is the preferred mechanism, or believe another is better.

By the end of this article, I hope you will be interested enough to find out for yourself what **it** is (the attached reading list is a good start); after all, what you read here is really only my understanding of **it**. To support **it**, you need to make **it** meaningful to your own experience.

It is Total Quality Management or TQM. But this is only a name (TQM, the sobriquet, is falling out of favor from overuse and other abuses). Names are useful tags for ideas, but they are not the same as the idea itself! In DMA, let's call **it** something more descriptive, say continuous process improvement (CPI), and cease with the bold type, too.

CPI is new to DoD, but not totally new to us. CPI improves on current DMA practice. In the past, the DoD objective was to meet the specification at least cost. Exceeding the specification invited charges of gold plating, mismanagement, and waste. This objective was clearly understood and sounded good, but became an obstacle to continuous improvement (If it ain't broke, don't fix it).

CPI is not so simply explained. Depending on the experience base of the listener, CPI can be explained in several fundamentally different ways. If you understand it in only one way (which is common), you have misunderstood.

CPI is a strategy to stay in business, a way of doing more with less. From this viewpoint, it is an investment, not an expense. Given that CPI actually works, it follows that we are negligent if we don't use it, for no better strategy is known *at this time.* (No doubt our successors will find something better to replace CPI, but then, isn't that what CPI is all about?)

CPI is also a structured methodology, i.e., customer driven, based on teamwork, problem prevention, measurable goals, statistical tools, and specialized training.

CPI is also a set of management principles, a leadership philosophy if you prefer, that empowers the working level.

CPI can be summarized best with the following sentence: *CONTINUOUS IMPROVEMENT OF THE PROCESS FOR WHICH THEY ARE RESPONSIBLE IS ONE OF THE MOST IMPORTANT MEASURES OF AN EMPLOYEE'S VALUE.*

CPI is a significant change, a long-term effort, not for the fainthearted. And it doesn't start with your boss; it starts with you.

RECOMMENDED READING LIST

These references further explain continuous process improvement. Your Process Improvement Office can recommend additional readings.

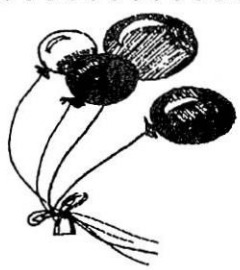
Federal Total Quality Management Handbook, June 1990, How to Get Started Implementing Total Quality Management - Part 1. Department of Defense Total Quality Management Master Plan, August 1988.

Navy Personnel Research and Development Center Technical Report 89-3, December 1988, subject: A Total Quality Management Process Improvement Model.

G.O.A.L. (Growth Opportunity Alliance of Greater Lawrence), The Memory Jogger: A Pocket Guide of Tools for Continuous Improvement, 1985

Walton, Mary, The Deming Management Method, Perigee Books, 1986.

Deming, W. Edwards, Out of the Crisis, MIT Press, 1986.



Congratulations to Peter and Karen Williams on the new addition to their family, son Cody Nathaniel.

Advance Notice

Golf returns to DMS
July 15, 1991 Fort Belvoir

POC: Bill Sutton
664-3098

Director's Call

NEW ARRIVALS

Military

CPT Valerie Conerway (USA)
SSG Stanley C. Martin (USA)

Civilian

Beverly Stitt (OP)
Christopher Semkow (DD)

DEPARTURES

Military

CPT William P. Smith (USA)

Civilian

Ron Bigger (GA)

AWARDS

LI1 Kevin Tobin (USN)
Navy Achievement Medal/Gold Star

SSG Dorothy M. Hernandez (USA)
Meritorious Service Medal

CERTIFICATES/LETTERS

Certificate of Achievement

Capt Michael R. Reading (USAF)
MSgt Richard L. Johnson (USAF)
GySgt Tommy D. Williams (USMC)
TSgt Michael S. Mustard (USAF)
SFC Kennith Harvey (USA)

Master Instructor Certificate

CW3 John A. Stokes (USA)
CMSgt Gerald A. Smith (USAF)
GySgt Brian K. Henderson (USMC)
SFC Kennith Harvey (USA)
SFC Roger Hausmann (USA)
William Polk (GA)

Senior Instructor Certificate

LI1 Carl Holloway (USN)
TSgt Bradford W. Clark (USAF)

SSgt Michael J. Kocheran (USMC)
SSG James Murphy (USA)
SSG Herman J. Van De Vaarst (USA)

Course Completion Certificate

CPT William P. Smith (USA)

Letter of Appreciation

CPT Michael R. Mason (USA)
CPT William P. Smith (USA)
SFC Kenneth J. Klopp (USA)

Commendation for Suggestion

LI1 John E. Curtis (USN)

Tuition and Textbook Scholarship Check

SSG Richard Unterreiner (USA)

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CONTOUR

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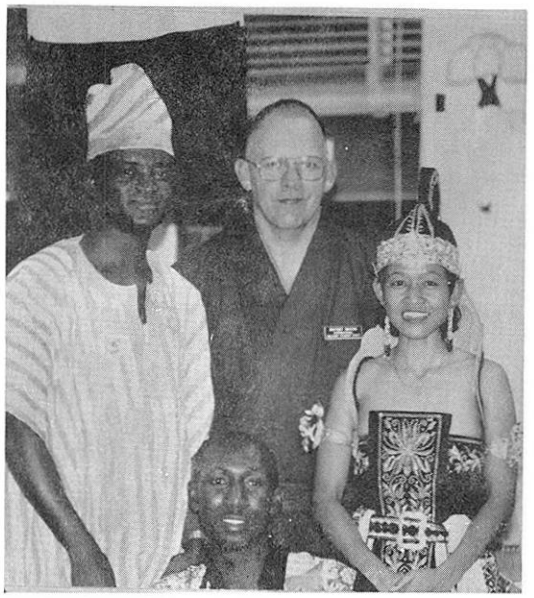

International students participate in the Hayfield High School Heritage Festival. They are (left to right): PFC Raymond Nweke (Nigeria), MGySgt Paul Mason, Assistant Chief IMSO, MSgt Sri Sumarmi (Indonesia). Kneeling in front is: PFC Presley Francis (Jamaica).

International students and IMSO staff on IP tour in front of the U.S. Capitol.

SUPPORTING INTERNATIONAL STUDENTS

by Capt Henry J. Schneider

The Defense Mapping School conducts a DoD-mandated Informational Program (IP) for international students training at the Defense Mapping School and Fort Belvoir. The IP is an integral part of the international student's training, second only in importance to the military objectives for which the student is training. The purpose of the IP is to allow international students to experience the American way of life, demonstrate our democratic ideals, and give them a balanced understanding of American society, institutions, goals and values. Activities can be as simple as a summer barbecue at a sponsor's home to visiting local industry, cultural and industrial exhibits, farms, schools, historical points of interest, sporting events and civic events. All IP activities are conducted with frank explanations and free discussion of: U.S. government structures, U.S. judicial system; U.S. political party system; role of free press and other communication media; minority problems; purpose and scope of labor unions; U.S. economic system; U.S. educational institutions; and how all of these reflect the U.S. commitment to basic principles of internationally recognized human rights.

United States government institution discussions/events include governmental systems at local, state, and federal levels and the relationships among them. The principle of checks and balances and the effect of executive initiative are explained.

Local government officials are introduced to emphasize that they are locally elected and are responsible to local people rather than to a central authority. Visits to state governments stress the autonomy and independence of governors, state legislatures, and judicial systems. At the federal level, the U.S. Constitution, separation of church and state, and civil rights are all areas open for display and discussion.

Judicial system topics include the federal and state judicial systems, the doctrine of judicial review, and the constitutional and legal status of the U.S. Armed Forces, with a strong emphasis on the Armed Forces non-political character. Visits to jails, correctional facilities, and municipal, state and federal courts provide forums to discuss functions and responsibilities of these institutions and the rights of prisoners and defendants under the jurisprudence system.

The American political parties and electoral procedures allow the international students to understand the roles of opposition parties. Representatives of political parties explain the ideas behind political party organization, means by which candidates are chosen, use of publicity and other ways to gain support, and the relationships between local, state, and national party organizations. IP visits show international students the nature of the U.S. "loyal opposition" or the idea of "grass roots" political movements. But most of all, they stress that, despite differences, the "opposing" parties are, in fact, more unified than divided on the most basic problems facing American society.

A free press truly amazes many international students. This is a very unique institution. IP visits allow international students to discuss

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with media management and news-gathering personnel how a free press works. Also, how editors and publishers define their responsibilities to the public.

Historical sites, national/state parks, sporting events, and religious institutions all demonstrate the diversity of American life. Visits acquaint international students with geographic, racial, ethnic, religious and social diversity, pointing out effects of technology and urbanization. Parks and monuments demonstrate our nation's commitment to preserving and commemorating American history and our dedication to clean air and a natural environment. Sporting events show the multiplicity and international character of American athletics interests. Religious freedom is demonstrated by visiting a vast array of religious institutions which exist freely and openly. The balance and separation of church and state is also demonstrated. Discussions about minorities point out the continuing progress in applying American ideals to all groups and current steps underway to improve the opportunities of minority groups.

The U.S. economy has changed from one based on agriculture to industry. Tours dealing with agriculture highlight the factors underlying agricultural productiveness and the changing life and role of today's farmer. Farms provide opportunities to discuss marketing procedures, farmer credit facilities, and the kinds of aid farmers receive from federal, state and other agricultural services to combat pests and diseases, to control breeding stock and to improve varieties of crops. Agricultural experiment stations permit international students to view development of new and hybrid plants, animals and fish stock and experiments in controlling local soil conditions, pests and diseases.

Discussions of the material economy should center on the diversity of industrial and business enterprises. Significant interest is paid to the roles of the U.S. government and private and commercial credit.

Visits to industrial enterprises illustrate the range of industrial enterprises in the American economy. Company and institutional officials are encouraged to discuss the relationship between ownership and management of the company; management-union relationships; decision-making procedures in the field of product research and development; production scheduling; marketing, quality and cost controls; and character and effect of government controls over operations. The range of credit available to average Americans is underlined by visits to banks, credit unions, savings and loan associations, Federal Housing Administration offices, and agricultural cooperative credit facilities. The principles on which American financial investment is based and the procedures for investment are discussed on visits to brokerage houses.

As a tie-in to industrial visits, union officials are introduced to international students. Stress is placed on the independent roles of labor and management in negotiating pay, work hours and conditions, and other benefits associated with employment. The scope of union organizations, objectives of their leadership, and their political and financial independence is explained.

Discussions and visits to U.S. educational institutions allow an interesting exchange between the international student and American students. International students participate in school cultural days and other events, and provide information about their countries while

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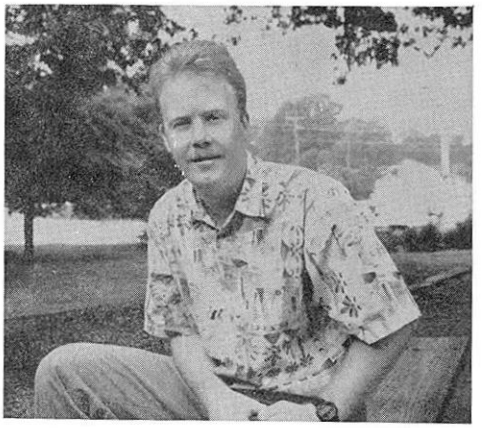
MY WIFE WEARS COMBAT BOOTS



by James E. Bowen

My wife and I were in the Army, stationed in Germany, when we wed. Shortly thereafter, I separated from the Army and became what is termed a "dependent husband." I figured at the time that life as a dependent husband would be easy, that my daily routine would not change. I found out in a few short months, however, that it was not going to be as easy as I had expected.

I find that the hardest part of being a dependent husband is getting a suitable, career-building job. It is hard to advance up the company ladder when I have to move every two or three years. I had a friend who suggested that maybe I should stay home with the children until they are school-age and, in turn, save the $600 a month that we pay in child care. My response was that "society" doesn't look favorably on a man who does not work, or worse yet, a man who doesn't hold the same job for at least two to three years. A good example of this general attitude is this: my wife and I tried to buy a house when we came to the Fort Belvoir area. We found a house that we liked, and then sat down with the realtor and the banker. The banker did not care how much money my wife made or how long she had been in the service. His main concern was how long I (the man) had been working. To make a long story short, we were disqualified for the loan, not because we didn't make enough money (we did), but because I had not worked at my present position long enough.

It is funny to see people's faces when they find out that my wife is the military member. A common response is "Oh, so you're the one that's in the Army; that's interesting!" A question I often get asked is "Why didn't you stay in and let your wife get out?" I usually respond to that one by saying something like "Well, it was time for me to ETS and if I had re-enlisted, the Army would have made me PCS without her." That statement usually confuses people enough that they don't pursue the question any further.

Some of the best things about being a dependent (as most of us know) are...the health care benefits, recreation activities, and a wife that puts up with military life so that we can enjoy everything the military has to offer! One plus for moving all the time is the opportunity to travel to countries we would never get to unless the military sent us. We loved Germany; Fort Belvoir is nice; but we really want to go to Hawaii!!

In all, my experiences as a dependent husband have been good ones. I have finally settled into a Career Conditional position with DMA, and my wife is debating whether or not she is going to be a 20-year-to-lifer with the Army. God only knows what is in store for us in the coming years. Like anyone else, we can only take it one day at a time.

Focus on a Course

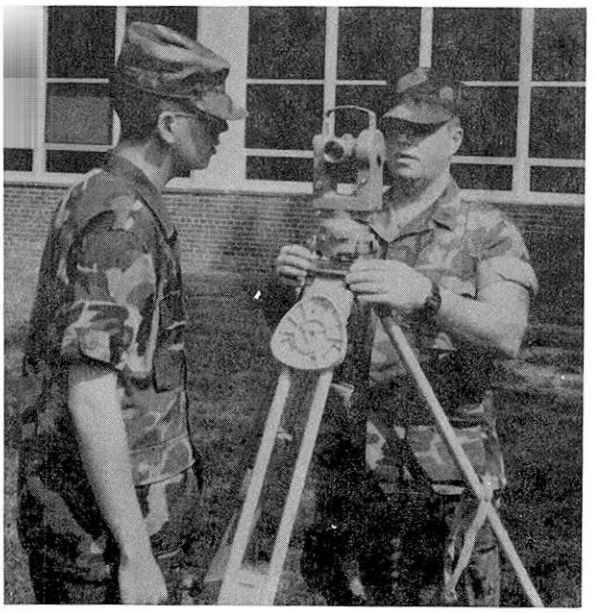
"Basic Geodetic Survey"

Learning to Measure the World

by Capt James D. Reed

Surveying... art and science combined to measure distances and angles on or near the surface of the earth. It is an art in the sense that a high degree of technical skill and experience is required to determine the most efficient methods of obtaining desired goals, i.e., positioning information. Survey is also a science to the degree that complex and rigorous mathematical methods are used to analyze and adjust field observations into a form required by the final user. Thus the quality of the end product depends not only on the surveyor's expertise, but also on his understanding of the scientific principles inherent to all forms of survey measurement.

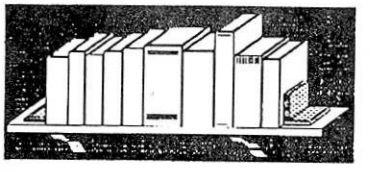
The military geodetic surveyor begins his trade in the Basic Geodetic Survey (BGS) course located in the Department of Geographic Sciences. For 16 weeks, three times a year, this course imparts scientific knowledge to and develops technical skills in graduates who are able to establish ground survey control under the guidance of experienced leadership. Typical classes include "Operation of the Precise Differential Level", "Electronic Distance Measuring Devices", "Map Reading", "Introduction to Azimuth Determination", Use of a Programmable Calculator" and a host of others. These lessons provide the instruction of basic Skill Level 1 tasks where the student receives extensive "hands on" field training of survey instrument operation and data observations. In addition to the extensive field work, classroom instruction provides the knowledge to perform various mathematical operations crucial to the gathering and final reduction of the survey data. Capped off by an on-post field training exercise (FTX), the BGS course permits the student to realize the practicality of all previously learned skills by tying them together in a real life scenario, by far the student's most enjoyable part of the course.



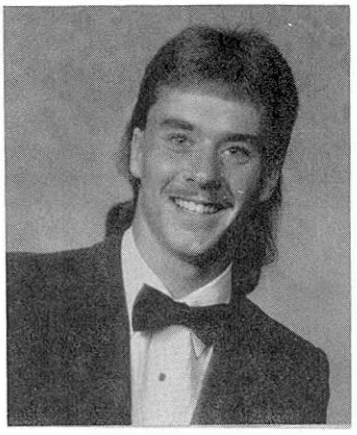
BGS student Private Patrick J. Herrmann looks on intently as Instructor SSgt Michael Kocheran demonstrates how to level a Wild T-2 Theodolite. (Photo by SSgt D.K. Jones)

Being an instructor in BGS is a unique challenge in itself. Because it is an entry-level course, each class is comprised of a widely divergent group, consisting mainly of USAF, USA, and USMC enlisted students, most awaiting their first assignment. In addition, each class usually includes a minimum of two allied students from places such as Nigeria, Indonesia, Morocco, Saudi Arabia, Jordan, and Taiwan. This presents an extremely interesting situation as instructors acclimate these students to our culture while acknowledging and respecting theirs. The students are extremely eager to learn and get on with their careers, which provides the instructors with a sense of purpose and accomplishment. Substantial remedial training in math is required for many of the students. In addition, most of them are brand new to their service, sometimes lacking the maturity and judgement required of a professional soldier.

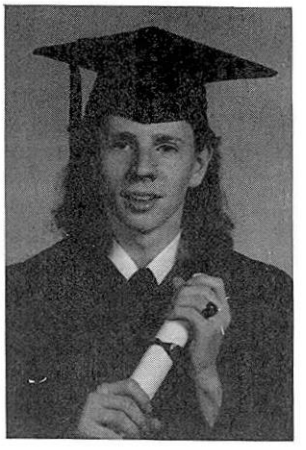
Looking toward the future, BGS will be undergoing a number of changes. Reorganization in the USAF MC&G career fields is expected to eliminate future USAF students in BGS. There is only one USAF student in the current class with no others projected for the future. A revised USA task list with forthcoming revised standards will mean a new look for the BGS course. New technology, such as Global Positioning System and Automated Integrated Survey Instrument, will be added. However, the same users have also asked us to expound on old technology by teaching longhand survey computations currently performed on programmable calculators. Perhaps the most important note of all, however, is that BGS enrollment is projected to increase. BGS has normally instructed 65-75 students per year. Although enrollment was down during Desert Storm, it is currently at its full capacity with plans being drawn up to host an additional course in FY92. All in all, it looks like a demanding, yet promising, future for the training of the art and science of geodetic survey.



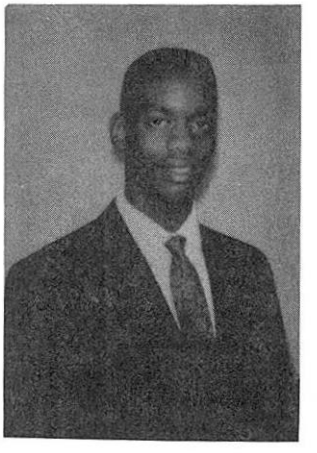
Graduates



Charles B. Gifford, son of Paulette and Larry Kommes, is a graduate of Courtland High School. He will attend Ferrum College in the fall. Charles was historian for the Future Business Leaders of America and was on the Courtland varsity football team, serving as the punter, defensive cornerback, and kicker.



John Emory Batt, son of Jack and Mary Batt, graduated with an associate's degree in Applied Science from Germanna Community College. John is presently working but looking for employment in the business administration field.



Darryl Christopher Jackson is the son of Mr. and Mrs. Lylton B. Jackson. Darryl attended Woodbridge High School where he received numerous academic awards , including English Honor Society and Delta Sigma Theta Award for Academic Excellence (1990-91). He was a member of the varsity basketball team where he served as captain his senior year. This fall, he will attend the University of Virginia on a full tuition and fees scholarship.

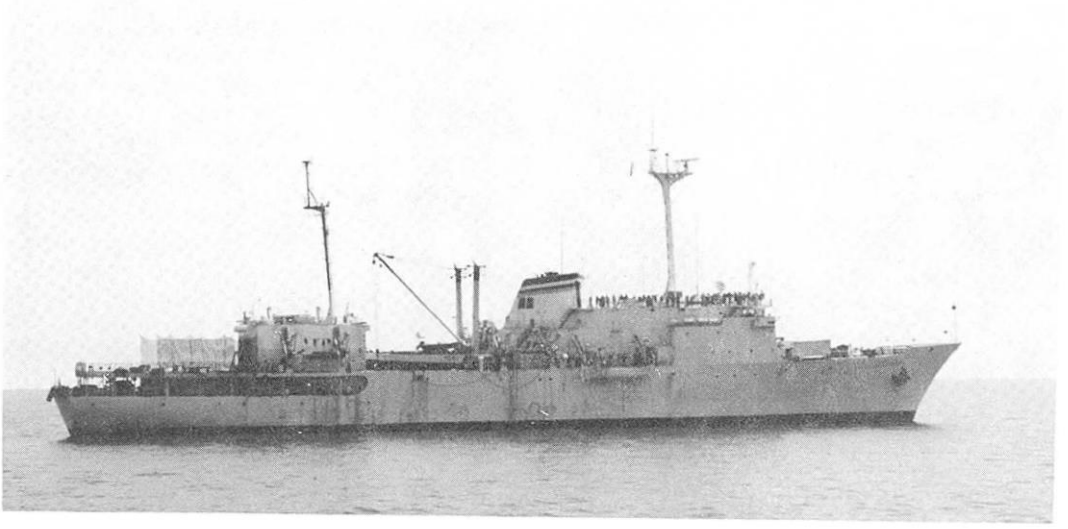
Military Parade Season

With the arrival of summer also comes the military parade and concert season. Each Wednesday evening from now through September 4 (except July 24), the U.S. Navy Band will present "The American Sailor" Navy Summer Pageant at the Willard Park, Washington Navy Yard, Washington D.C. The 60-minute program celebrates the history and traditions of the United States Navy and features the U.S. Navy Band, Ceremonial Guard and Precision Drill Team. Also available to the public are the Navy Museum and Display Ship Barry. During the parade season, guests and visitors are invited to the historic Navy Yard Chapel at 8 p.m. on Wednesdays to experience the naval tradition of prayers at sea. For free individual and group reservation call (202) 433-2678/2218.

Other concerts and parades that shouldn't be missed are the U.S. Marine Corps Sunset and Evening Parades. The Sunset Parade commences at 7 p.m. each Tuesday, June through August and at 6 p.m. on July 4. Featured in the parade are Marines from the Marine Barracks, Washington, D.C., in their blue-white dress uniform. There is a concert-in-motion by the Marine Drum and Bugle Corps and a precision drill by the Silent Drill Platoon. At the conclusion of the ceremony, a lone bugler sounds Taps. The parades are held at the Marine Corps War (Iwo Jima) Memorial, located just north of Arlington Cemetery and are open to everyone.

On Friday evenings from now to 30 August, Marine Barracks, Washington, D.C. located at 8th & I Streets S.E. will host the Evening Parade. Featured are the U.S. Marine Corps Band, "The President's Own", the Drum and Bugle Corps, and the Silent Drill Team. The parade commences at 8:45 p.m. and reservations are required. Reservations may be obtained by writing to: Adjutant, 8th & I Streets, S.E. Washington, D.C. 20390 or by calling (202) 433-6060.

The Trip Continues!



The USNS Chauvenet in the Persian Gulf

Editor's Note: This is the conclusion of the two-part series of one soldier's participation in Desert Shield/Desert Storm.

by SFC Richard E. Rivera

It has been a while since you read about the first part of my trip. I will try to refresh your memory without going into too much detail.

The Department of Graphic Arts was tasked to send a technician to support the Navy in repairing a printing press on board a naval ship in the Persian Gulf. Of all the qualified people in the department, I was the only one who violated the first rule they teach in the military—"Don't volunteer for anything." Well, I did, and I went. The trip getting to the ship was an adventure in itself and what should have taken a full day lasted eight days. With thousands of miles behind me and every mode of transportation taken, the end was in sight. I had just cleared Customs in Abu Dhabi, United Arab Emirates (UAE), and was in a cab on the way to the ship with Mr. Diogo Soares, a representative of the Abu Dhabi Maritime Mercantile International (the ship's agent). I did not realize it at the time but this individual was going to be very important to me when leaving the country.

Once aboard the USNS Harkness, I breathed a sigh of relief. I had made it and didn't get lost. Since I hadn't been in touch with the School for some time, I asked the ensign to call Mr. Sutton at home to let him know I had arrived. As luck would have it, it was 3:00 a.m. Eastern; at least it wasn't a collect call! After a welcome aboard and an introduction to everyone, I was taken to the area where the press was located. With an initial inspection of the press completed, I knew we had a problem. Damage was more extensive than estimated and I didn't have all the parts that would be needed to repair it. As it was already getting late, I decided to call it a day and head for the hotel. I checked in, got to the room, kicked back and popped a top on a cold beer. That's right, folks, don't believe all the stories about not having alcohol in the Middle East.

The following couple of days consisted of a more in-depth analysis of the press and completing a technical report. Now don't get the wrong idea. It wasn't all work. I did manage to set aside some time to visit Abu Dhabi to buy souvenirs. On the third day at 2200 hours, we pulled out of port. Since this was a new experience for me, I decided to sit on the fantail and watch Abu Dhabi go by. It wasn't the "Love Boat", but I wouldn't have missed it for the world.

The next day, we approached the USNS Chauvenet and anchored about a mile away. Now, this whole thing with ships and being out in the middle of the Gulf was okay with me, but I am a land person at heart. I knew I was supposed to be transferred over to the USNS Chauvenet, but I thought the two ships would have a big boat take me over. What was I thinking? As I stood on the deck and watched the ship personnel lower a little bitty rubber boat (LBRB), I knew I was in trouble. They gave me a life vest, a hard hat and pointed to the ladder hanging over the side. Since everyone was looking and waiting, (and I really didn't have anywhere to hide), I put on the best act I could and went over the side. I got in the boat without falling in the water and after a few minutes of holding my breath, we reached the USNS Chauvenet. I climbed up the ladder and boarded the ship—I made it! Oh, what a feeling!

The time spent on the Chauvenet was used to look over the printing press and make sure it was operating properly. The only problem they were having was with the platemaker. The problem was identified and corrected, the print shop was operational. That night, I sat out on the fantail with a few people and did some fishing. Don't worry, I won't get into any fish stories! With the visit to both the USNS Harkness and Chauvenet completed, it was time to head home.

The next day I got up early to get on a boat that was going to take me back to land. After

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See TRIP page 7

Survey site from the Oceanographic Unit--SFC Rivera's last stop before heading home.

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a three-hour ride through some of the most beautiful water I had ever seen, we arrived at the site. The tide was out and the boat could not get too close to land. They dropped anchor and told me to start walking. I threw my bags on my shoulder and jumped out into chest-high water. By the time I got to shore, I knew this was not my idea of swimming in the Persian Gulf. Looking like a wet cat, I must have been a sight because even the camels started to leave. The ship's agent was there to meet me, so with my bags in the back of the truck and a warm soda in hand, we started our four-hour trip through the desert to Abu Dhabi.

With the temperature about 101 degrees and the salt from the water starting to itch, I began to shed some clothes. The driver must have thought I was crazy.

We arrived in Abu Dhabi and I was taken to a hotel where I got cleaned up and had a wonderful meal. All arrangements for my return were made by the ship's agent and all I had left to do was wait for my flight.

That night, Mr. Soares picked me up at the hotel and took me to the airport. He had worked out all the details for my return and escorted me through Customs. I couldn't believe it—no problems. I made it home. Returning should be the end of this tale, but if you really want to know the whole story, stop by the office for a cup of coffee and give me a few moments of your time.

Report from Sunny Italy

by LtCol Louis R. DeSanzo

Hello to all my friends at DMS, DMA, and the broad readership that the Contour enjoys. Almost a year has passed since I left DMS, and an event today caused me to want to jot a quick note to all of you. I have been reading the Contour and getting verbal updates on DMS. Keep up the good work.

Today, April 24th, 12 people from the Logistics Division of AFSOUTH climbed a mountain on the Amalfi Coast of Italy (you'll never guess who dreamed up that idea). The hike covered 12 kilometers and over 800 meters of elevation. As the day grew nearer, I couldn't help but wonder if DMS would be on OLD RAG on May 1st. The hike brought back many great memories, and I took the opportunity to wear my Old Rag tee shirt and tell my friends about our two expeditions. I certainly hope that some of you hearty souls returned. *(Editor's Note: See the July issue of the Contour for this year's "Old Rag" story.)*

The job here in Naples is a unique opportunity to participate in multinational mapping programs. It is giving me a perspective on mapping that would have been impossible to obtain anywhere else. Being in NATO and Europe as so many changes are taking place is a tremendous opportunity. Mapping support to multinational forces looks like the biggest challenge we will face in NATO as the century ends.

The really wonderful thing about this assignment, however, is the people. Within the Geographic Community, even though we cannot always get the nations to agree, the people are always professional. Within our Logistics Division, people are much the same as DMS. There is a closeness and fellowship that makes it all worthwhile.

We are all doing fine. Italy is great; Naples is something else; and the pasta is out of this world. Drop a line to HQ AFSOUTH, Box 137, FPO NY 09524 when you can.

Ciao.

INTERNATIONAL from page 3

learning from American students. The relationship between education and responsible citizenry is also explained. Visits to nearby schools, colleges, and universities show the general range of education, laboratories and research facilities, extension course programs, agricultural experiment stations, and athletic and cultural activities. These visits underline the role of schools and universities to teach and learn, not to function as political instruments, and to show the diversity of American educational institutions, including privately endowed colleges, state or city colleges, land grant universities, and church-affiliated institutions.

Last, all IP trips reflect the U.S. commitment to the basic principles of internationally recognized human rights.

The Information Program can bestow a wealth of positive experiences on the international student. These people are the future leaders of their nations. The impressions they form of the United States, our people and our way of life may have a dramatic effect on our future relations with that country.

Director's Call

NEW ARRIVALS

Summer Hires

Kristin Griffith (GS)
Roger Maier (PI)
Mary Oliver (PI)
Chris Swisher (MT)

DEPARTURES

CW3 Michael F. Weir (USA)
MSG James A. Mayer (USA)
SFC Dollen J. Garrison (USA)

PROMOTIONS

SSG Herman J. Van De Vaarst (USA)
to Sergeant First Class

SSG Maria L. Vigil (USA)
to Sergeant First Class

AWARDS

CW3 Michael F. Weir (USA)
Defense Meritorious Service Medal

MSG James A. Mayer (USA)
Defense Meritorious Service Medal

CERTIFICATES/LETTERS

Master Instructor Certificate

CPT Michael R. Mason (USA)
CW3 John A. Stokes (USA)
CMStgt Gerald A. Smith (USAF)
GySgt Brian Henderson (USMC)
GYSgt James A. Rawllins (USMC)

Senior Instructor Certificate

LI1 Carl Holloway (USN)
SSgt Michael J. Kocheran (USMC)
SSgt Clinton W. Nowbold (USMC)

Certificate of Achievement

Capt Michael R. Reading (USAF)
TSgt Michael S. Mustard (USAF)

Certificate of Appreciation

Military

CPT Valerie B. Conerway (USA)
MGySgt Paul C. Mason (USMC)
GySgt Jerry A. Owens (USMC)
GySgt Tommy D. Williams (USMC)
SSG Richard A. Green (USA)
SPC Bernard Harrison (USA)
MAJ John C. Jens (USA)
1LT Harry Cunningham (USA)
SFC Kenneth Klopp (USA)

Civilian

Beverly A. Stitt (OP)

Area Winner in Fort Belvoir's Yard of the Month Program

MSG Herbert C. Schmeling (USA)

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Volume 18, Number 10 July 1991

Colonel David H. Ingram, USMC, G-2 of the 2nd Marine Air Wing, addresses the DoD Terrain Analysis Seminar held at DMS on 10-12 June 1991. (Photo by SSgt D.K. Jones)

In this issue

DMS sponsors DoD Terrain Analysis Seminar

by CW3 Edwin Huth

The 1991 Department of Defense Terrain Analysis Seminar was held at Fort Belvoir from 10 to 12 June. The annual event, hosted by the Defense Mapping School, was attended by more than 150 personnel of the uniformed services, Department of Defense activities, and Canadian military topographers. The ninth in a series of annual seminars dating back to 1983, this year's event focused on terrain analysis and Operation Desert Storm. It provided an opportunity to capture lessons learned in tactical terrain analysis.

The keynote speaker, Colonel David H. Ingram, USMC, is the G-2 of the 2nd Marine Air Wing. He served as the MARCENT assistant G-2 during Operation Desert Storm. Colonel Ingram covered both phases of the operation and reminded terrain analysts of their mission to assist intelligence personnel in identifying and exploiting enemy vulnerabilities. He described Desert Storm as an "imagery war", and stressed the need for terrain analysts to be aware of and have access to the broad area high resolution and multispectral (MSI) imagery needed to accomplish the mission. He challenged terrain analysts to do two things: one, make their capabilities known to tactical commanders; and, two, understand and exploit new technologies.

Following the keynote address, warrant officers from the Marine Corps and the Army provided an overview of tactical terrain analysis operations. Personnel from the Canadian Mapping and Charting Establishment stressed commonality of issues and purpose with U.S. military analysts.

The tone of the first afternoon session was set by Brigadier General Joseph Pratt, Deputy Director of DMA. He addressed resources and production, Desert Storm lessons learned, and the problem of data collection. General Pratt stated that the agency had been able to accomplish its mission throughout the first year of reductions, but that new concepts were under consideration to meet future requirements. He pointed out the initial success of the digital production system. The general mentioned three specific lessons from Desert Storm. First, given time, DMA met requirements. Second, the transportation system worked, but in-theater distribution of MC&G products was broken. Third, imagery availability is a problem. He assured the audience that DMA is working hard to resolve these issues. Following Brigadier General Pratt, other speakers from DMA addressed standardization, future data bases, production schedules, and other initiatives.

The second day of the seminar was held in two concurrent sessions. The Marine Corps session, chaired by personnel from the Marine Corps Intelligence Center, focused on issues relating to the reorganization of USMC topo assets. These included mission definition, organization, equipment, training, reproduction multispectral imagery, and hydrographic survey. Particular attention was paid to the task selection of the new MOS 0261, Mapping Specialist.

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COLONEL JAMES K. SLUIS assumes position of DMA Chief of Staff

Air Force Colonel James K. Sluis has assumed the position of DMA chief of staff, replacing Colonel Charles M. Rose, who has returned to the DMA Reston Center.

Colonel Sluis' previous assignment was commander of the 7100th Combat Support Wing, Lindsey Air Station, Wiesbaden, Germany, a post he held from July 1989 to May of this year.

He was born in Chicago, Ill., but moved to Texas where he graduated from Weslaco High School in 1962. He earned a bachelor of arts degree in economics from Texas A & M University in 1966, and later a master of business administration degree from Auburn University, Auburn, Ala., in 1978. He is also a graduate of the Squadron Officer School, the Air Command and Staff College, and the Air War College.

Colonel Sluis was commissioned into the Air Force in May 1966. After undergraduate pilot training at Laredo Air Force Base, Texas, and F-100 training at Cannon Air Force Base, N.M., he was assigned as an F-100 pilot to Toy Hoa Air Base, Vietnam in May 1967.

He returned stateside in June 1969 to serve as a flight commander and T-37 instructor at Sheppard Air Force Base, Texas. From June 1972 to June 1973, he participated in the ASTRA Program at Headquarters U.S. Air Force, in personnel plans. In 1973, he was again assigned overseas and began flying F-111s at Royal Air Force Station, Upper Heyford, England, as an F-111 instructor pilot and assistant chief of standardization and evaluation, before his reassignment in June 1977.

In June 1978, after completing Air Command and Staff College at Maxwell Air Force Base, Ala., he was assigned to Korea as the air liaison officer with the 2nd Infantry Division, Camp Casey, and later as the assistant operations officer with the 19th Tactical Air Support Squadron, Osan Air Base.

Returning to the Pentagon in November 1979, Colonel Sluis served as chief, A-10 and OA-37 Operations Branch, Current Operations Division, Air National Guard Bureau until 1982, when he became commander of the 522nd Tactical Fighter Squadron, Cannon Air Force Base, N.M. In August 1984, he was appointed chief, Contingency Plans Division, Headquarters, Tactical Air Command.

Colonel Sluis returned to England in May 1987 as the 48th Tactical Fighter Wing deputy commander for operations. He became vice commander, 48th Tactical Fighter Wing, in June 1988.

He is a command pilot with more than 4,500 flying hours, including 441 combat hours. His military decorations include the Legion of Merit; Distinguished Flying Cross with one oak leaf cluster; Meritorious Service Medal with three oak leaf clusters; and Air Medal with 12 oak leaf clusters.

Colonel Sluis is married to the former Nancy Elliott of Clovis, N.M., and lives in Fairfax, VA.

Colonel Samuel R. Schwartz presents a map of Fort Belvoir to retiring post commander, Brigadier General Arvid E. West. SGM Carlos Sellers is in the background. (Photo by SSgt D. K. Jones)

Pilot course for DMA Leadership Development Program called a success

On June 21, 1991, DMA director Major General William K. James addressed senior management attendees of a special one-day Executive Pilot of the DMA Leadership Development Program-First Level Supervisors Course. The pilot, which served as an intensive one-day walk-through of the course, was well-received, and the subject matter and learning methodology supported by attendees.

The genesis for the program was the DMA Work Force Survey conducted in 1989, which identified the need for improved leadership skills throughout the Agency, and particularly at the first level of supervision. An initial meeting with an ad hoc senior level management advisory group determined that the Agency wanted an integrated, DMA-based program of courses targeted to each leadership level (supervisors, mid-level managers, and senior executives).

Subsequently, the first full 40-hour course was piloted successfully at the Defense Mapping School, Fort Belvoir, Va., on June 3-7. Twenty-four persons attended the course. Assessments of the course were quite positive. The second pilot was presented in St. Louis on June 24-28.

The course was developed over the past four months and included interviews with virtually every senior-line manager in DMA, focus group discussions with groups of supervisors, and a random survey of 300 supervisors and managers throughout DMA. A DMA Leadership Framework was developed composed of eight major dimensions (e.g., Directing and Motivation of Others; Coordination and Teamwork; Ethics, Self-direction, and Motivation, etc.) There are 42 Leadership Areas defined under these dimensions.

Each course is pegged specifically to the needs identified for each level of supervision. Data collected in advance of the training

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See LEADERSHIP page 11

(L to R) Robert Short, Mary Oliver, Roger Maier, Charlotte Bernard, and Helga Yovorsky (Photo by SSgt D. K. Jones)

Program Integration Office services support functions

by Robert Short

On 1 October 1990, the DMS Program Integration Office (PI) was established to continue servicing a combination of many critical support functions that had previously been provided by the Office of Plans, Programs, and Operations (PP), and by the Office of Mission Support (MS). This change was one of the actions resulting from the FY 1992 Defense Management Report Initiatives to centralize DMA support functions.

PI is responsible for a wide range of program activities involving the planning and utilization of equipment, funds, and personnel to enssure that resources are available to accomplish the School's training mission. In addition to gathering information, conducting studies, preparing reports and responding to headquarter requirements, the office is the point of contact for management improvement actions as well as civilian personnel and payroll activities and problems.

The office is managed by Robert Short, a physical scientist, who is strongly supported by two longtime DMS employees, Helga Yovorsky, a program analyst, and Charlotte Bernard, a program assistant. Our currently vacant computer specialist position will be filled within the next couple of months. We were also able to recruit two bright and capable college students, Mary Oliver and Roger Maier, to assist us this summer.

In the eight months PI has existed, we have accomplished numerous significant actions:

- An out-of-cycle Joint Manpower Program (JMP) document was submitted to support all DMS mission and function requirements and was approved by headquarters.

- The FY 91 program for operation and maintenance expenditures was developed and initialized.

- The database and software required to generate monthly program status reports was updated to reflect our new organizational makeup.

- As a result of an analysis, additional reimbursement earnings were gained from the Foreign Military Training Program.

- Documentation was developed for the Procurement Defense Agency (PDA) Program and DMS' requests for capital equipment for FY 92 - FY 97 were approved.

- The office provided input for the Phase II Digital Products Study and coordinated a review of training proposals for the DMA Quality Productivity Improvement Program (QPIP).

As we enter Fourth Quarter FY 91, our focus is upon two primary goals: (1) to complete and submit the Information Resource Requirement Documents and the requisitioning forms required to obligate all of our FY 92 PDA spending authority, and (2) to further update and refine the JMP to support FY 92 manpower requirements. Perhaps the most challenging part of the remaining procurement actions will be the development of a detailed concept of operations document as a functional description and operational responsibility guide for the DMS office automation program. This document, combined with the inventory listing of currently owned ADP equipment, will enable us to identify hardware and software shortfalls in order for DMS to receive the maximum benefit from PDA resources.

Focus on a Course

Mapping, Charting and Geodesy Officer Course

by Capt Scott Wilson and LT Rebecca Stone

The Mapping, Charting, and Geodesy Officer Course (MCGOC), is expanding its audience! The MCGOC audience has previously been just Army and Marine Corps students, while Air Force students attended the Cartographic Geodetic Officers Course (CGOC). When the Navy stated a requirement for a similar course, MCGOC absorbed the training requirements of all the services. The first class, 001/91, commences on 14 August.

MCGOC continues as the foundation training for commissioned Army officers entering the topographic science career field and for Marine Corps warrant officers who, after many years of experience, are transitioning to become topographic leaders. MCGOC also replaces CGOC, and will serve as entry-level MC&G training for Air Force commissioned officers. MCGOC will pipe mid-grade Naval officers aboard the MC&G field, and will continue to serve as the senior course for Army Terrain Analysis warrant officers. To meet these diverse training needs, the MCGOC Course Content document (CCD) is being rewritten. DMS' aim is to provide a common base of MC&G instruction as much as possible, and when service-specific requirements mandate, provide service-specific training tracks.

Students begin MCGOC by studying MC&G products with which they will be dealing and/or producing. All product types--topographic, hydrographic, aeronautical, digital and special purpose, both classified and unclassified--are analyzed. Once an understanding of both the information to be portrayed and the intended uses of each of the products is gained, students are introduced to administrative and managerial aspects of MC&G, such as requisitioning, distribution, and requirements cycles. The structure of the military MC&G hierarchy, especially the Defense Mapping Agency (DMA), is examined in detail. With this foundation, the students are now prepared to study how MC&G products are produced and distributed.

Study of production techniques commences with rudimentary instruction in the principles of error theory, geodesy and precision time concepts. Here students gain insight regarding mathematical and other problems encountered when trying to depict a spheroidal earth on a flat piece of paper and how these problems have given rise to the various projections and grids commonly used to produce maps, charts and digital products. Navall students are introduced to gravity and magnetic fields and their significance to naval weapons systems and platforms.

Geodetic Survey is studied next, as the first step in the cartographic process and as a source of direct weapons system support, for precise positioning and trigonometric control points. Students study classical military survey techniques for horizontal and vertical control. They also apply lessons concerning effects of errors on accurate measurements and they actually do a net adjustment (or even two) to see how error effects may be minimized. Naval students are introduced to various hydrographic survey systems and hydrographic survey planning procedures. Instruction is also presented regarding recent survey technological developments, specifically, the Global Positioning System.

With a firm understanding of positional accuracies under their belts, students now turn their attention towards the high-tech aspects of MC&G through studies of Remotely Sensed Imagery (RSI), Terrain Analysis (TA), and Geographic Information Systems (GIS). During the RSI block of instruction, concepts of multispectral image formation, manipulation, and specific MC&G applications are presented. Once the potential for information extraction from imagery is understood, students learn to recognize and assess militarily significant features and to evaluate the effects of these features on military operations.

Naval students explore RSI applications relevant to hydrography and naval operations, and look at acoustically collected digital bathymetric data. This knowledge then serves as a base for the students to rigorously examine the structure and applications of a GIS. During the GIS block, all aspects of a GIS are presented and exercised, ranging from data modeling and data base design, through automated methods of analyzing terrain and hydrographic attributes, to selection of areas with tactically useful characteristics.

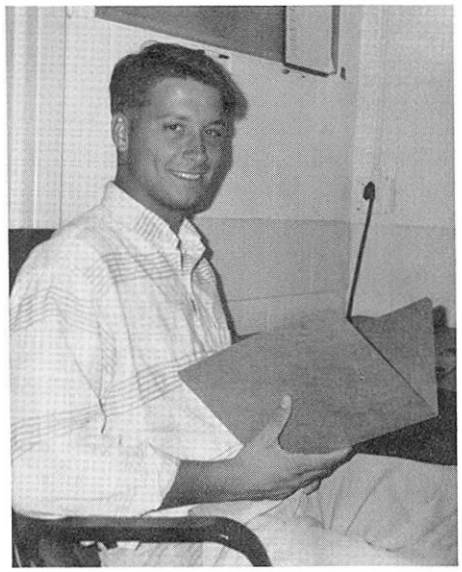
After completing this GIS block, students turn to an examination of conventional production techniques in Cartography and Reproduction blocks. Students split and follow individual service tracks; Navy and Air Force students receive demonstrations that present them with a broad overview of these subjects, while Army and Marine Corps students receive detailed, extensive instruction in military field production techniques. Classical cartography, employing color separation by scribing and peeling methods, and offset press lithography, which reproduces maps and charts by a series of single color runs, remain the primary means by which MC&G products are produced by military tactical units.

Following this instruction, students reconvene as a joint class for instruction in newly added lessons. The MC&G Management and Programs blocks address managerial considerations, such as International Mapping Agreements, the Defense Hydrographic Initiative, Crisis and Exercise Support, the role of the military MC&G Officer, and roles of the Services in MC&G, as well as overviews of selected DoD, DMA, and U.S. Navy programs. After completing the MC&G Programs block of instruction, the Navy and Air Force students graduate, while the Army and Marine Corps students press on to MC&G Operations.

See MCGOC page 11

DMS welcomes Summer Interns

Story and photos by SSgt D.K. Jones



Charles C. Swisher

As summer arrives, it brings with it not only hot, humid weather, thunderstorms, and trips to the beach, but also new faces to the Defense Mapping School. Who do these faces belong to? To the summer interns who were selected from a number of applicants by the Defense Mapping Agency Recruiting Office. The Recruiting Office screens the applicants and recommends them to the various Components, which have the final word on whether or not they are hired. DMS is fortunate to have five of these individuals working with us. Let's meet and learn a little about each one of them.

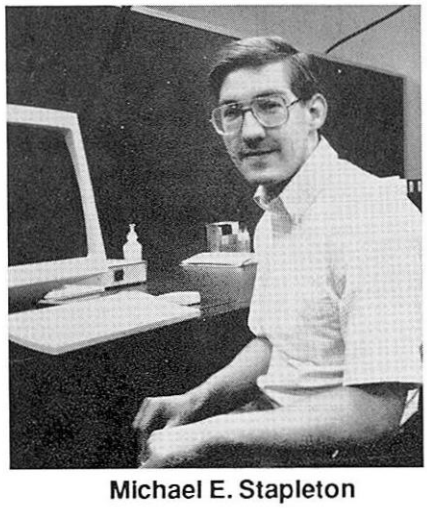
Michael E. Stapleton (Mike) is working in MT as a computer clerk. Mike is married and has one daughter. He will be graduating this fall from Saint Cloud State University with a double major in math and statistics. When not working or attending school, Mike enjoys fishing, hunting, and cooking. As for his future plans, he would like to pursue a career in statistics. Also in MT is Charles C. Swisher (Chris) who will be a junior at Elon College this fall. Chris, who is majoring in accounting and finance, hopes to attend graduate school at the University of Maryland and become a Certified Public Accountant. He enjoys snow skiing, fishing, golf, softball, and riding his mountain bike.

Two of the summer interns are assigned to the Office of Program Integration (PI), one as a clerk typist and one as a computer clerk. Mary C. Oliver (Mimi), clerk typist, attends George Mason University, where she will be a junior this fall. Mimi is a member of the Crew Club, and plays the flute in the band. She is a Geography and Russian Studies major. She enjoys swimming and listening to music. Mary's future plans are: "To graduate and find a job!" Roger K. Maier II (R.K.), is a senior at Old Dominion University, where he is currently working on a degree in Geography. Roger enjoys playing his base guitar, basketball, tennis, and drawing. When asked what his future plans were, he said that he would like to work at the Defense Mapping Agency as a cartographer.

Assisting the IAGS Division of the Department of Geographic Sciences is Kristin A. Griffith. Since Kristin speaks some Spanish, she is especially helpful with the international students--something she enjoys very much. She will be a junior this fall at Virginia Tech, where she is majoring in International Studies. Kristin enjoys reading and playing her keyboard, and loves to travel. In the future, she would like to work in development projects in Latin America and become fluent in Spanish.

Kristin A. Griffith

Mary C. Oliver



Michael E. Stapleton

Roger K. Maier II

The "Old Rag Rag"

by Sue Kersey

"Wonder what Herb has in here to eat?"

Leaping tall buildings is one thing, but never, NEVER in my wildest dreams did I ever think I'd go to such heights to see Jeff Van de Vaarst pin on E-7. He's a nice guy, but to scramble over humongous boulders, endure endless gnats, heat and humidity interspersed with only occasional giggles and lots of gasps for water...get a grip! What a rocky third annual Director's Call. It was said by the birthday boy himself, "We'll have to do this again!"

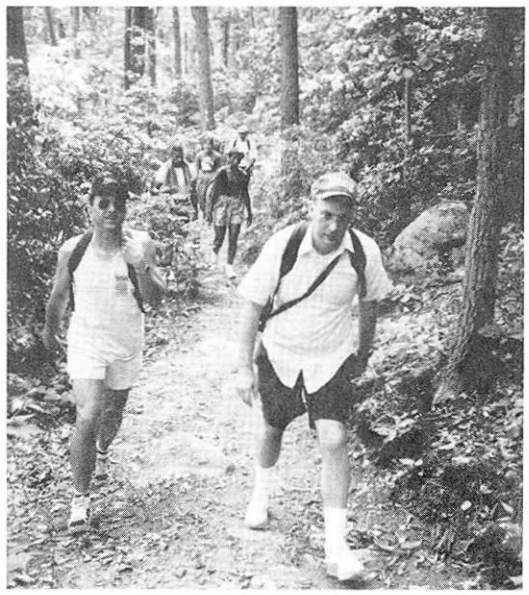
The climb, made by over a hundred of us, to include the international students, got started with a "bear" briefing as well as a rather pertinent safety briefing given by two enthusiastic warm-blooded hospital medics. Next thing I knew, the parking lot was empty as most DMS troops, armed with gallons of water and fruit juice, headed for the hills. Only SSGs Bromback and Fortune started down the valley.

All of the three mountain climbs will be remembered for something extraordinary. The first, for the "mailman" weather--where we were gonna get to where we were destined despite the monsoons. The second, just because we were now experienced trekkers and the day was so pretty. But this one...yaba daba do! Quotes memorable for you!

Match the quotes with the quotee:

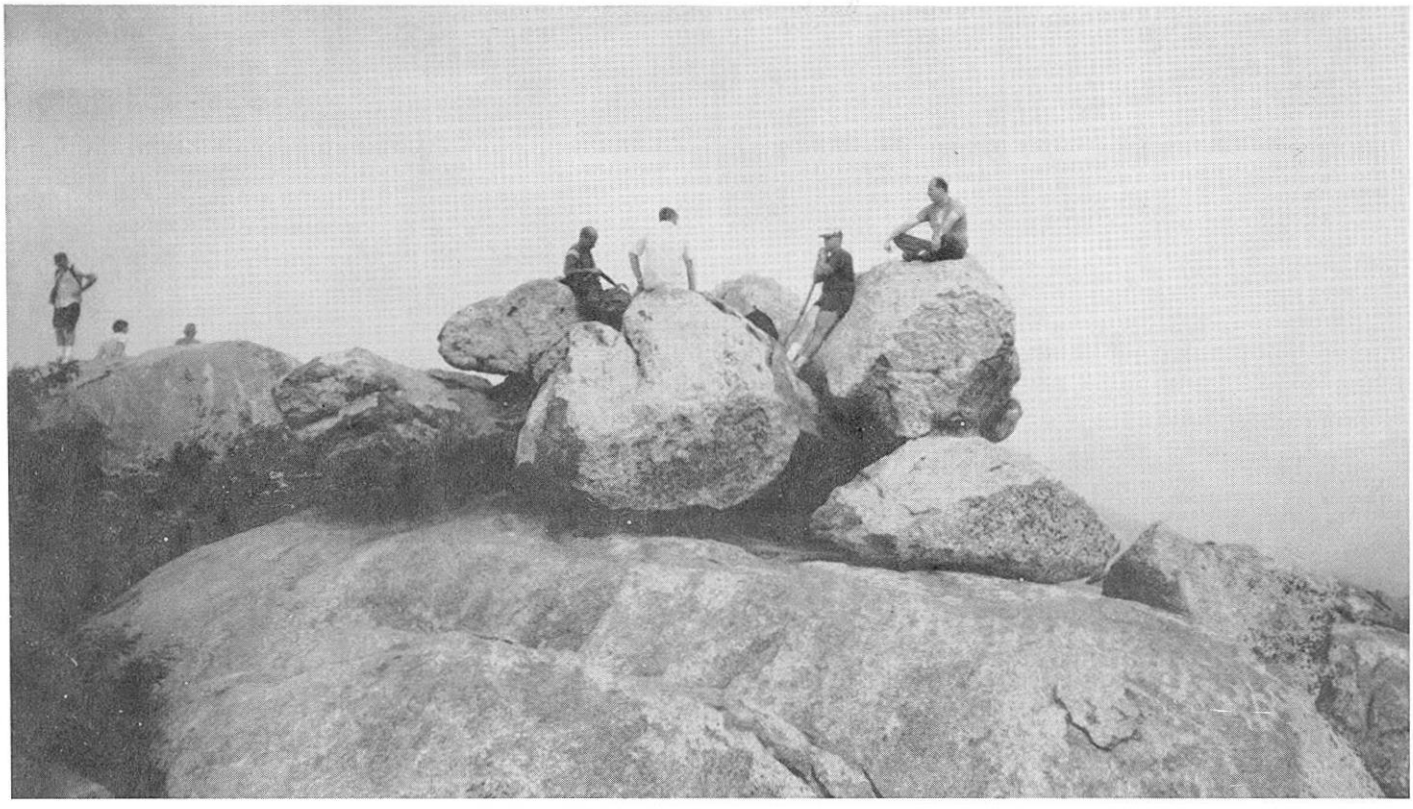
1. Put your left foot here, put your right foot here, and put your buns here.	a. Jim Rawlins
2. Next year, if my job requires that I make this hike, I'll find another job!	b. Larry Brombach
3. If you feel a heat stroke coming on, call 911.	c. COL Schwartz
4. AaaaaaGggggggg-Yipes, that hurt.	d. Bev Stitt
5. Just 'cause I print 'em doesn't mean I can't read 'em. (maps)	e. Dwayne Ikaika
6. Yes, it is my birthday. And, of course, they can have a day off.	f. Herb Schmeling

There is no prize, but if you think you got all the answers, call the Colonel and let him know. He'll appreciate hearing from you.

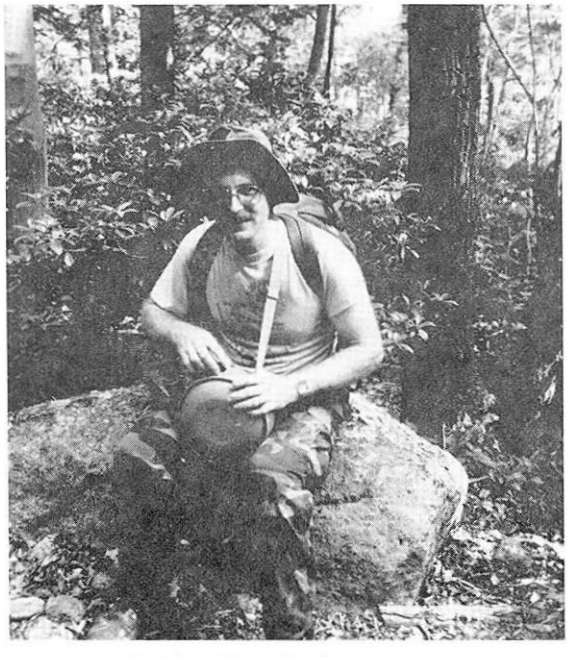


Hi ho, hi ho!

--Photos by SSgt D. K. Jones



Now that's a summit!



Major, I hardly knew ya!

"Was it worth it?

Graphic Arts Instructor William I. McCray talks with DMA Management Interns during their tour of DMS on 7 June 1991. Approximately 30 people, most of them newcomers to DMA, are involved in the Intern Program. (Photos by SSgt D. K. Jones)

SEMINAR from page 1

The Army session was chaired by personnel from the U.S. Army Engineer School. Representatives of the Engineer Topographic Laboratories, soon to become the U.S. Army Topographic Engineering Center (USATEC), addressed digital data and equipment support to Desert Shield/Desert Storm. Topics from the Field Support Office, the Terrain Analysis Center, and hardware support to the 101st Air Assault Division were covered. Other presentations were made by terrain analysts supporting the 6th Infantry Division, the 24th Infantry Division, and the U.S. Military Academy. Attendees were introduced to the Maneuver Control System (MCS), MCS E-MAP, and MCS ENG, all of which will impact on the way Army terrain analysts do business. A discussion ensued on data base accuracies and product standardization. The day ended with terrain analysts from Europe discussing their support in Operations Desert Storm and Provide Comfort.

The final day of the seminar summarized issues and provided a starting point for future terrain analysis efforts. An informative discussion of topographic operations at the unified and specified commands focused on CENTCOM MC&G operations. Personnel from Headquarters, DMA, offered their congratulations to Desert Storm "operators". The seminar concluded with the reminder that "WE WON!", and the resolve to continue to work for improvement.

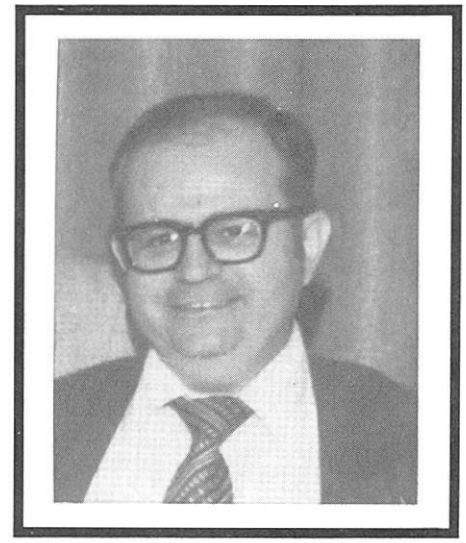
New rating cycle for GS-12s and below

All DMS Performance Management System (PMS) civilian employees, GS-12 and below, will have a new cycle for annual performance ratings. Instead of the Service Completion Date (SCD) being used, as has been in the past, all future ratings will close out 30 November 1991. The new cycle will begin on 1 December 1991 and end 30 November 1992.

July 1991 ratings will be the last annual ratings based on the SCD. Everyone (GS-12 and below) will receive a rating 30 November in order to reconcile into a standard cycle, giving many employees a short-term rating. Those employees due to be rated in September, October, and November 1991 will receive an extension to 30 November 1991, at which time they will be rated for their performance for the past year.

All GM (PMRS) civilian employees continue to be rated 30 June with no change in their rating cycle.

Individuals should discuss additional details with their supervisor.



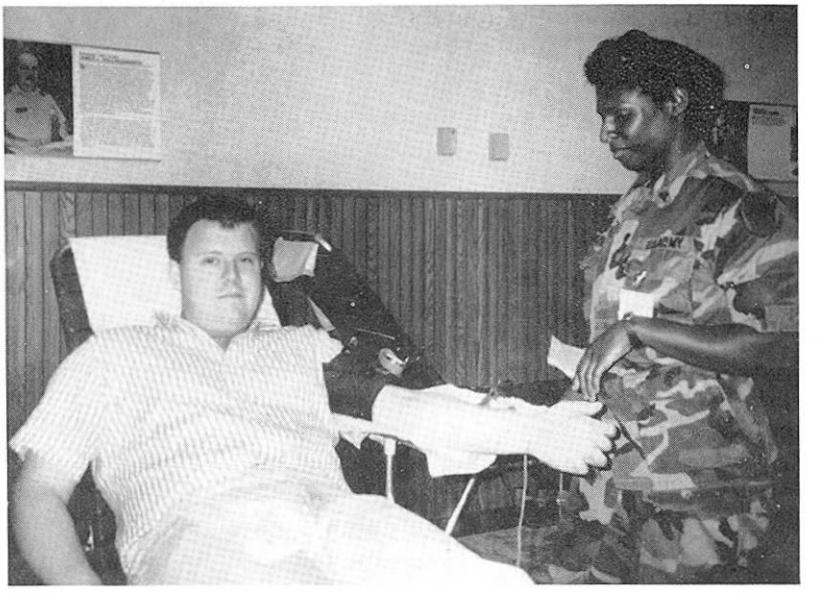
Mr. Thomas J. O'Brien, department training specialist/photolithographer of the Defense Mapping School, passed away on 16 June 1991, at Fairfax Hospital. A Memorial Service was held on 20 June at the Fort Meyer Memorial Chapel, with interment at Arlington National Cemetery with full military honors.

Mr. O'Brien served 23 years in the Army and retired in 1975 as a Chief Warrant Officer Three. He served tours of duty in Japan, Vietnam, Hawaii, and Fort Belvoir, Virginia. He was employed at the School from 1978 until the time of his death.

Mr. O'Brien is survived by his wife, Sumie, of the home address in Springfield, Virginia.

Answering the Call

Chris Semkow, of the Public Affairs Office, takes his turn as, once again, the faculty and staff of the Defense Mapping School answer the call for blood. Personnel from the Walter Reed Army Medical Center arrived on 3 June 1991 to collect for the Army Blood Program. A total of 42 DMSers participated, contributing 41 units of blood. Well done, DMSers! (Photo by SSgt D.K. Jones)



The DMA Way: Continuous Process Improvement

Note: This is the second in a series of articles written by the new DMA Process Improvement Office (PIO). This series will deal with what DMA is doing in process improvement. The first article introduced continuous process improvement and this article expands on how DMA will implement it.

by John H. Harden, Jr.

WHAT'S DIFFERENT?

DMA implemented a number of organizational changes in October 1990 to accomplish our mission better and more efficiently. During the reorganization, DMA management realized simple downsizing was only part of the solution. Feedback from throughout DMA, (notably through the Work Force Survey and the Leadership Development Program Training Needs Survey), attrition rates, our conversion to an all-digital production capability, and other internal indicators, made it clear it was also time to reexamine our basic approach to day-to-day operations. To meet these new management challenges, DMA needed more emphasis on continuous process improvement. The establishment of Process Improvement Offices (PIOs) at the Headquarters and Production/Distribution Components was the result.

Our timing was fortunate, for it complemented a new federal strategy for productivity improvement known as Total Quality Management (TQM). Under TQM, DoD will measure productivity based on the total cost per unit of output, not, as in the past, on labor costs alone. This method gives DoD managers an incentive to consider all costs, much like a private business. DMA will carry out these new DoD changes with the new DMA Quality and Productivity Improvement Program (QPIP).

After almost a year of cooperative effort, DMA Headquarters and the Components finished a concept of operations to guide the implementation of the QPIP. This article summarizes the key points of this 28-page document so that all DMA employees understand the QPIP objectives, organization, and our related roles and responsibilities.

TOTAL QUALITY MANAGEMENT (TQM)

1. The primary DoD strategy for productivity improvement.
2. A statistically based methodology of continuous process improvement.
3. A set of management principles based on customer satisfaction, teamwork, problem prevention and measurable goals.

Comment: The DMA Quality and Productivity Improvement Program (QPIP) is DMA's version of TQM.

The Quality and Productivity Improvement Program.

The primary objective of the QPIP is to ensure DMA creates products and services that meet internal and external customers' needs in the shortest possible time at a cost that represents value to the taxpayer. These objectives will be met by making incremental and continuous improvements in all DMA MC&G production and support processes so the improvements gained can be measured.

In addition, we want to satisfy increasingly higher expectations of our customers and the taxpayers by continually showing how we are improving everything we make and everything we do. This includes all our operations, such as Headquarters and Component staff responsiveness, MC&G production, technical management, MC&G distribution, specialized training, support functions, base operations, and custodial services, to name a few.

See DMA WAY page 10

Process Improvement Teams	Quality Circles
● may cross functional areas	● Single functional area
● assigned project by council	● pick own projects
● assigned duty	● voluntary participation
● single improvement project	● may have consecutive projects

DMA WAY from page 9

SUCCESS FACTORS

Several things are crucial for the QPIP to succeed. The most important ingredient is employee participation, from top to bottom, under the leadership of top management that is personally involved. The QPIP opens new avenues for initiating changes at the levels in the organization where you find the expertise for solving problems. Agency-wide, this means QPIP ownership by everyone.

The QPIP establishes a formal structure to set goals and direct improvement efforts. A key element of this structure is teamwork. Components will have a Process Improvement Council to direct successful daily operation of Process Improvement Teams (PITs) and Quality Circles in identifying and overcoming barriers to improvement wherever they may be found. Employee participation in PITs is essential and is part of their normal job responsibilities. PITs exist for the duration of the improvement project. They may be cross-functional, with representation from different organizations and levels depending on the particular assignment. The PIOs will be the technical support staff of each council.

QPIP is a new way of approaching our work. Extensive program awareness training will be necessary. Proven improvement tools and methods appropriate for DMA already exist and additional specialized training in these will be required. In FY 1991, DMA has set aside funds for Agency-wide start-up training. The Components also have discretionary training funds for their own unique training requirements.

Successful efforts at improvement must stand the test of objective evidence. We need to track our progress so we can tell where we need improvements and what actions get results. The organization affected will, in most cases, manually display and track meaningful indicators it has identified, so everyone will know how it is going.

Perhaps nothing is more important in the QPIP than giving credit for improvement efforts. Methods of recognizing employees already exist and the QPIP will make maximum use of them. The Performance Appraisal Process and Incentive Awards Program, for instance, will place high value on continuous process improvement efforts.

HOW DOES IT WORK?

QPIP unleashes the cooperative power of the total DMA population by focusing on customer expectations. QPIP customers are internal and external. The external customer is the operational end user: the pilot, navigator, or infantryman. Of equal importance is the internal customer in DMA. Whatever we do, each of us has a process for which we are responsible. This means our output goes to the next person in the DMA process--our internal customer. And as customers ourselves, we take input from someone else. So each of us is both a producer and a customer. Institutionalizing this customer approach as the routine way DMA operates is the strategic goal of the QPIP.

The QPIP approach prevents problems by building quality into the process. In simple terms, this means doing the right things right the first time, every time, on time.

WHAT IS EXPECTED OF ME?

All DMA employees have a vital role in the identification of system improvements and impediments to quality and productivity. Process improvement ideas may come to a council from any source--individuals, groups, management, organizations. These candidates will be used by the council to target PIT efforts. You may be assigned to the PIT based on your particular expertise.

The PIOs are developing a mechanism that can be used by any DMA employee for identifying improvement candidates to the council.

As the QPIP matures, supervisors will find their roles changing for the better. As decision participation flows to lower levels, the supervisor will act more like a coach or facilitator of improvement. This should result in a work atmosphere that promotes greater enjoyment of the job itself.

IF IT AIN'T BROKE, IMPROVE IT

Process improvement is not new to DMA. With a successful history of MC&G in-process checks, Quality Circles, the DMA Effectiveness/Productivity Program, and the Suggestion Programs, for example, we already have some fundamentals in place. In addition, the mandated DPS conversion includes enhancements added by DMA for significantly improving MC&G quality, productivity, and timeliness. Now we are at the threshold of a better way of doing business that includes a structured management method of continuous improvement across all organizations and activities in DMA. The QPIP is not costly though there are start-up costs. It is, instead, a long-term investment that will pay back tangible savings for DMA to invest in better mission performance. To quote the DMA Director, Maj Gen James: "Together we can make it work."

Chief Scientist position established; Daugherty named first incumbent

"We are committed to ensuring DMA develops and maintains the technical skill base needed to support the sophisticated new weapon systems, battle management systems, and intelligence analysis systems now in existence and being planned for the future."

With those words the DMA Director, Major General William K. James, USAF, announced the addition of ten scientific and technical (ST) positions, established an ST career path within DMA, and named Dr. Kenneth Daugherty as the agency's first chief scientist.

The primary purpose of this key position is to serve as scientific advisor to the director of DMA and to lead the agency's effort in exploiting state-of-the-art scientific applications to MC&G technologies. The chief scientist will be responsible for looking to the future by investigating scientific breakthroughs, assessing their potential for application to the MC&G processes and products, and recommending the broad direction to be taken to better serve our military customer.

Lon Smith has been selected to replace Daugherty as director of the Systems Center. Both selections are subject to final approval by the OSD.

"The creation of the scientific and technical career ladder is extremely important to the future of the agency," stressed the director. "It is our intention to pursue, through internal research and development activities, the emerging technologies and capabilities; capitalizing on those developments as they apply to the MC&G community. To accomplish this, we must have a cadre of knowledgeable scientific and technical personnel who look to the future unencumbered by day-to-day production issues. The important chief scientist position represents the top of the ST career ladder within the Agency."

During the past few years, as the modernization program was being implemented, many employees moved out of the technical "hands on" development arena into either production supervision or program management positions, shrinking the agency's truly technical staff.

The establishment of ten additional ST positions above the GM-15 level improves the agency's ability to attract and retain high quality scientific personnel and provides a career ladder for advancement without requiring a change over in the management track of the Senior Executive Service.

LEADERSHIP from page 2

pinpoints specific areas of need for each individual. The data is used confidentially as part of the learning process to allow each attendee to work on targeted areas of need.

The course will be made available to all DMA supervisors over the next year and a half. The mid-level Managers Course will be piloted in September of this year, also based on the detailed needs assessment and focused specifically on the DMA mid-manager. Courses will also be offered for DMA senior executives based on the results of the overall needs assessment process, thus targeted to their needs and requirements as senior Agency managers.

Representing the four Services that are taught MCGOC are (l to r) CWO3 David W. Hooper, Captain Scott Wilson, Captain Timothy McCaig and Lieutenant Rebecca E. Stone. (Photo by SSgt D. K. Jones)

MCGOC from page 4

MC&G Operations is devoted to intensive training regarding the managerial aspects of successfully leading a military topographic production unit. It consists primarily of a comprehensive practical exercise wherein the students must demonstrate their proficiency in project planning/scheduling, production techniques, quality control, and logistical management. This exercise closes with a brief of a product prepared by student teams. Students must defend their project design, accuracy, and techniques to the satisfaction of a panel of experts. Upon successful completion of the Operations Exercise, Army and Marine Corps students graduate from the course.

While MCGOC is coordinated by the Department of Management and Technology's Mapping and Charting Division, and much of the instruction is conducted by its staff, a great deal of assistance is received from the Departments of Geographic Sciences and Graphic Arts. The comprehensive nature of this course requires the combined efforts of the three teaching departments, and the result is a well-rounded officer ready to serve in the MC&G field. We feel that this approach, using a joint core with service-specific ancillary tracks, is a significant positive step to providing well-trained military MC&G officers versed in all MC&G technical areas, their unique service applications and joint MC&G programs and management.

Former DMS employee James Ferguson dies

James S. Ferguson, former DMS employee in the Logistics Office, died on Friday, 28 June 1991 at Fredericksburg Nursing Home. Memorial services were held on 3 July in Fredericksburg with interment in Glenn Haven Memorial Gardens in Stafford. Mr. Ferguson is survived by his wife, Mrs. Mattie Frye Ferguson, and numerous relatives.

Director's Call

NEW ARRIVALS

MILITARY

CW2 Kenneth E. White (USA)

CIVILIAN

Karen King (MT)
Robert Urban (GA)
Eva Roman-Vasquez (GS)

DEPARTURES

MILITARY

Capt Henry J. Schneider (USMC)
CW3 Edwin Huth (USA)
MGySgt Paul C. Mason (USMC)
GySgt Brian K. Henderson (USMC)
MSgt David L. Miller (USAF)
GySgt James A. Rawlings (USMC)
SFC Gary L. Sperger (USA)
GySgt Tommy Williams (USMC)
TSgt Peggy A. Cantey (USAF)

CIVILIAN

John Gates (GS)
Rebekah Wilfong (GS)
Annie Wakimoto (VI)

AWARDS

Joint Service Commendation Medal
MSgt David L. Miller (USA)
TSgt Peggy A. Cantey (USAF)
CWO3 David W. Hooper (USMC)

Master Instructor Certificate
LI1 John E. Curtis (USN)
SSG John F. Getshall (USA)
SSG Lowell W. Haskin (USA)

Senior Instructor Certificate
TSgt Peggy A. Cantey (USAF)
SSG Vel V. Deberry (USA)
SSG Rickey O. Lang (USA)

Commendation for Suggestion
SFC Kennith Harvey (USA)

Memorandum of Commendation
SSG Dale Crossett (USA)

Letter of Appreciation
LT Rebecca Stone (USN)

Certificate of Achievement
MAJ Lloyd Carmack (USA)
MAJ John Jens (USA)
CPT Robert Forcht (USA)
CPT Scott Wilson (USA)
MSG Herbert Schmeling (USA)
SSG Lawrence Brombach (USA)
SSG Rickey Lang (USA)
SSG James Murphy (USA)
SSG Howard Wright (USA)

Operator Badge-S
SGT Patti A. Wilbanks (USA)

The **CONTOUR** is published monthly by and for the Defense Mapping School. Contents are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Defense Mapping Agency. Editorial content is edited, prepared and provided by the Public Affairs Office of the Defense Mapping School.

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CONTOUR

Volume 18, Number 11 August 1991

Picnic '91

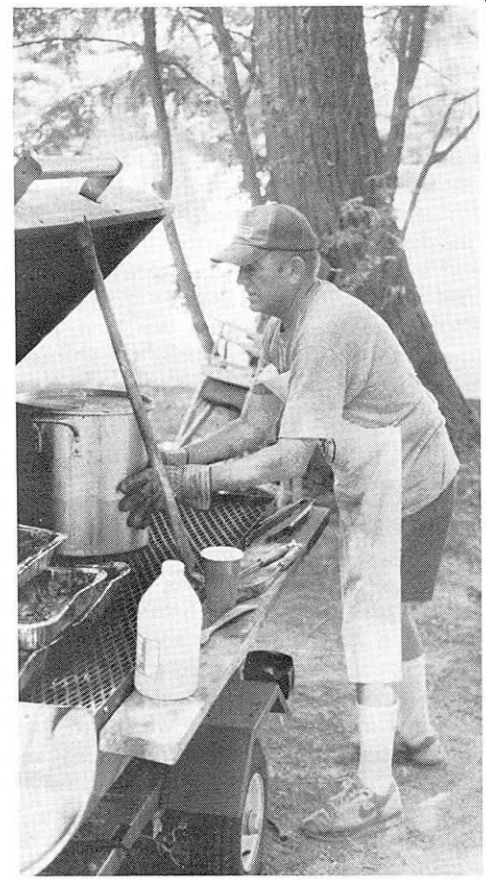
by David E. Miller

The Defense Mapping School held its 19th annual picnic on 24 July at Castle Park in the basin area of Fort Belvoir. We were blessed with a beautiful day for all of the activities.

The balloon and egg toss contests held for little DMSers resulted in many ribbons being awarded--too many to name each little person. Other contests held were the horseshoe and volleyball tournaments. The horseshoe award was won by Bill McCray and Bill Sutton of the Department of Graphic Arts. After a grueling afternoon of game after game, the Department of Graphic Arts also came away with the volleyball trophy for 1991. It may seem that Graphic Arts cleaned up this year--but it's only right, since that department was responsible for the fund raising to support the picnic and for the overall conduct of the event.

The draw of the day was the dunking booth. Donated by the Noncommissioned Officers Association, the booth provided an outlet for a lot of individuals who took their "shots" at their senior adversaries on staff and the three department chiefs. The menu for the picnic was the traditional ribs, chicken, hamburgers, hot dogs, potato and macaroni salads, plus baked potatoes and corn on the cob.

Everyone seemed to have enough to eat and a good time. Now it's time to begin preparing for next year's 20th Anniversary Picnic! That should be one to remember.



Too hot to handle, MSgt Schmeling?

I did, too, see a bee in your burger!

--Additional picnic photos page 5--

From the past....

by COL Ed Wintz (USA Ret)

Editor's Note: Col Wintz served as DMS Director from 23 June 1975 to 10 April 1979.

Two events recently suggested that your faithful correspondent get on the ball and tap out a message to the good folks at DMS. Jim Harnden came through Tucson a while back and brought us up to date in the brief time we had. Jim's son is a sportscaster for one of Tucson's network TV affiliates. His visage always elicits a cry of "Hi, Danny!" in the Wintz household. A short time later, Bill Locke gave us a call and was stopping briefly during what appeared to be The Great American Safari. We had just finished a trip to Santa Barbara and I was in the midst of a really ugly summer cold. As a result, Boomer and I had to limit our dialogue to a half-hour on the phone, but it was great. Both of these visits brought back a lot of memories-and it was then that the resolve to write broke forth.

And immediately subsided. A recent edition of the Contour confirmed the dreadful truth: I DON'T KNOW ANYBODY AT DMS! Well, except for Harnden, Barbara Windland, Bill Revell, and Marge Kelley. Ah, and as that particular Contour revealed, Bill McCray! There he was, giving guidance to some sort of young people's group. Yes, a few streaks of grey in his hair, but I knew it was Mac (he was talking).

One of the changes I've noticed at DMS through the years is a tendency to form large groups and attempt to climb very tall mountains in the area. Way back in what I like to call The Golden Years, we devoted our energies to a much more challenging mental and physical exercise--softball. It was our custom in those days to run a couple of laps around the field before a game to prevent subsequent cramps and sprains. McCray and I always ran together. We ran together because we each knew how close the other was to barfing and were not embarrassed. Later, I saw Mac carry a full-sized refrigerator (mine) on his back down a narrow basement stairs (mine, also), and began to wonder if perhaps he never was as close to barfing as I had thought. He and I had an awful lot of fun on the ball diamond and in Bagley Hall.

I suppose the noontime bridge games are also no more. Lunch always used to mean whist in what was then PPO (across the hall from Marge's office) and bridge in PRT (closest office to the parade field). About once a month, the latter group would LET ME PLAY! This usually consisted of Locke, Harnden, and a temperamental whiz named Major Jay McClatchey. Harnden usually got stuck, er, played as my partner. When playing with Jim, one needs to know one important fact--he doesn't arrange his hand at all. The first time I was dummy (a bridge term, meaning you lay out your hand and don't get to do anything but watch), I sauntered around behind Jim to see how he would play our contract. HE HAD NO TRUMP CARDS! Oh, wait. There's one. And another. And more. At that time, McClatchey and Locke were developing an unnatural affection for something called a transfer bid. Jim and I had to endure our opponents' childish squeals when they did this, but we still fared pretty well. It was also fun to kibitz the whist folks; the game was a mystery to me but the insults and banter were world-class.

DMA Director Major General William K. James listens as COL Samuel R. Schwartz makes a point during the General's annual tour of the School on 25 July 1991. Shown also are GA Chief Dave Miller (center) and School SGM Carlos Sellers (near right). (Photo by SSgt Michael J. Kocheran)

Christmas was always a strange time at DMS. Teaching (then) came to a full stop, and most people took leave. "Yes sir, I'm not gonna take leave and get a lot of work done during the peace and quiet!" I used to tell myself. After about an hour of 'work', the wanderlust would set in. 1) What were those tiny footsteps upstairs? 2) What's going on at Wheeler? Answer #1: Jake Jacobs giving a platemaking demonstration to school kids and LTC Sprinsky running the planetarium for a similar group. Answer #2: Absolutely nothing at all. I used to shout "HELLO!" on the second floor of Wheeler at Christmas; all I got were diminishing "hellos" and finally Bev Eppolito popping out of her office looking startled. I think all of these people have left and I know the planetarium is long gone, but I wonder if it is still the same around Christmastime at the School.

And many more memories. Ches Cummins and his assault witnesses at the 30th. Windland telling me officers were okay, but she hoped they got whupped in the annual ball game with the NCOs. The day all assigned Marines were allowed to destroy a DMS building bare-handed (the old astro shack). Squirrels that would eat a peanut out of your hand at the Wheeler back door. The tours. The classes.

Cheez, I want to write like Dave Barry and I sound like that guy who reminisces for the Belvoir paper. It was so much fun then (you only remember the good parts) that it is hard not to be nostalgic. Anyway, today the Wintz clan is all doing fine, and is enlarged by three grandchildren. I'm still teaching astronomy at the local community college for the privilege of feeling those hard-swallowing, sweaty-palmed, stomach-churning jitters just before I start my class. You know what I mean.

Winners repeat at '91 DMS Golf Tournament

by Bill Sutton

On Monday, 15 July 1991, the 16th Annual DMS Golf Tournament was held at the Fort Belvoir North 18 golf course. One hundred and four golfers from within the Agency participated in this year's event. With the temperature in the low 80s and plenty of sunshine, the golfers could not have asked for a better day. At 0730, Colonel Schwartz, director of DMS, provided the opening remarks and sent the teams out to their starting positions. After five hours of grueling competition the teams began to turn in their score cards. When the last card was turned in, all golfers enjoyed a cookout-type luncheon with refreshments on the patio of the clubhouse.

When the scores were tallied, it was as though we played last year's tournament all over again. Last year's 1st place winners were the winners again this year. The team of Jim McCallister, Jamey Lyons, Sal Soliz and Joe Carlton combined for a score of 10 under par 61, the same score they won with last year. Second place went to the team of Ed Gould, Skip Keim, Don Erickson and Paul Coakley, who challenged the winning team with a score of 9 under par. With a score of 8 under par, the team of Sue Hall (playing for two!), Jim Motsinger, Dennis Kinstler and Austin Yamata received the prize for the Low Net, Mixed team. Winning first place money was not enough for Jim McCallister as he also won the prize for Closest to the Pin on hole #7 and Ken Hunt duplicated that effort for the Closest to the Pin prize on hole #18. Longest Drive awards went to Mark Palmer for his effort on hole #1 and Steve Wallach for his drive on hole #11. The team with the prize-winning high score of +8 for a 79 went to the team of Ron Fitzgerald, Dave Black, Steve Earl and Bob Schlipp. Several door prizes were won by the following golfers: Vinnie Novatka, Virginia Armacost, Tom Dilling, Toni Noffi, Jamey Lyons, Ken Hunt and Pat Wooten.

A special thanks goes out to all who participated in the tournament and especially to the component points of contact without whose help these tournaments would not be as successful as they are. We hope to see all of you again next year.

Sue Hall (playing for two!), picks up the prize for the Low Net/Mixed Team. Other members of the team were: Jim Motsinger, Dennis Kinstler and Austin Yamata. (Photo by Chris Semkow)

Improvements in Property Accountability

by MSgt Richard L. Johnson

Property Management is the process of properly allocating, accounting for, controlling, caring for, using and safeguarding property under the control of the Defense Mapping School. The process applies to each of us, whether or not property is receipted for or issued to us individually. We all are responsible for safeguarding the use of these resources.

Managing property is an obligation shared by all personnel, military and civilian, regardless of duty assignment and level of supervision or command. Pecuniary liability may be imposed for the loss, damage or destruction of DMS property resulting from unauthorized issue, gross negligence, willful misconduct, or deliberate unauthorized use. Additionally, personnel responsible for managing property may be relieved from their duties if an unsatisfactory condition is found which is attributable to inefficiency or other causes within their control.

We all must exercise supply discipline to ensure that requests for supplies and equipment are valid and in the minimum quantity necessary to perform the assigned mission. These assets are to be protected, conserved, and maintained in the best possible condition to meet DMS commitments. Hoarding of supplies or equipment is not an efficient use of DMS resources as it increases the overall funds required to perform the DMS mission.

If you are presently assigned an additional duty as equipment custodian or assume this duty in the future, you should perform a complete inventory of all items on your equipment listing (CA/CRL) before signing for the account. If assistance is required, don't hesitate to call the Logistics Division (LO). Once all property is accounted for, sign for the account and ensure equipment accountability is maintained by conducting a periodical inventory of your account (at least semiannually).

The Logistics Division supports all DMS employees having a problem or question regarding property accountability. Please don't hesitate to contact LO for assistance. We are here to serve you.

MICO Visit to The USS Abraham Lincoln, CVN-72

(an Army perspective)

by CPT Michael R. Mason

I should have gotten a clue when LCDR Winkler and company did not take IS1 Angel and me directly from the airport to the USS Lincoln. We stopped off at one of their favorite, and quite fashionable I might add, watering holes. It seems that there was a slight shortage of officers' berthing for the night of Monday, 11 March. That night I slept in the human version of a bread rack. It was eight inches from my nose to the bottom of the bunk above me. IS1 Angel should get a medal--he stayed in one of those for the whole week. And sailors aboard those ships "live" like that for months!

The following morning, after I hauled my borrowed flight bag up to the land of "Oz" (the intelligence center for the carrier), LCDR Winkler escorted me to breakfast at the "dirty shirt." The "dirty shirt" is the place to eat where nobody cares what you wear for chow...as long as you wear something. To get from Oz to the "dirty shirt," you turn left outside of Oz's front door, excuse me, "hatch," and keep going until you are in the chow line. On a nuclear powered aircraft carrier, it is a LONG way.

By now, half of you are wondering where you eat if you have a clean shirt. I didn't eat there very often for one simple reason; I could never find it by myself. But when I was taken to the "wardroom," it was most impressive. There was silverware and china and white linen tablecloths and napkins. And, get this, WAITERS! So this is what it's like to go "to the field" in the Navy. I suppose they hide the wardroom place so that they'd never have to 'fess up to havin' waiters on a warship.

Actually, there is a coordinate system used to locate every compartment on the ship. ("Compartment" means room.) The hangar deck, the huge place below the flight deck where they store the airplanes, is labelled as "1". Decks below that are numbered "2", etc. going downward, and numbered "01", "02", "03", etc., going upward. Starting at the pointy end of the ship, which is somewhat difficult because a carrier looks flat on both ends, the frames are numbered in sequence front to rear...or is that fore to aft? Compartments are numbered from the centerline of the ship outward with even numbers on the left, "port" side and odd numbers on the right,

"starboard," side. Oz was located in 01-138-04. If you were confused, you now know why I ate in the "dirty shirt" so much. They were nice enough to give me a map as a souvenir...on the last day.

On the day that we got underway, which means we left, I did not know that we had left...yet. Ah, well, anyway, the ship is so big and accelerates so slowly that one is unaware that one is moving. LCDR Winkler asked if I would like to go on deck and see the Golden Gate Bridge. Upon stepping out on the rainswept, windy, flight deck there is an unusual sensation. Since I never realized we were moving, the feeling was that the ship was stationary and San Francisco Bay was being scrolled beneath her.

Then there was the "FOD Walk."The hundred or so dummies who go up in the bad weather to look up at the Golden Gate Bridge, get to form a line and sweep the ENTIRE length of the HUMONGOUS flight deck for any little goodies which might get sucked into a jet engine. From his perch high up on the bridge, the Captain of the ship looked down on the lineup and took a moment to wonder why he had an Army officer on his ship. He cleared this up when he had his one MICO SEO.

Lt Stone told me before I left that "no noise is not good." I woke up in my "stateroom" (read tiny compartment shared by two people) one morning to the dreaded "no noise" condition. Yep! No blowers. No fans. No air conditioning. No lights! The quiet was deafening. There was also no water pressure...as in no hot water! The ship was dead in the water (I had to be told this little tidbit). It turns out that it was an "engineering drill."

One evening I went up to "Buzzards Row." This is a balcony-like structure that looks out, from about three decks up, over the flight deck. People go there so that in case one of the pilots makes a "BEEEG" mistake, they will have a good seat for the flame and gore show. Watching those guys "land" on the flight deck makes me wonder if they didn't make a "BEEG" mistake when they signed up to do that stuff. Every landing looks like a crash; the planes do not come in at either a very gentle angle or at a very gentle speed. As a matter of fact, they bang down on the deck with engine(s) roaring at full speed and HOPE they snag one of the four or five cables strung out across the deck. That night they were doing this for credit. Three bangs and three touch-and-goes (and then stagger below for a dry flight suit?).

It's a good thing MAJ Carmack didn't go on this one. Ships are not designed for tall people. I don't know what kind of people they are designed for, but I came home with at least one head wound and my shins were destroyed. Every so often in the passageway (that's a hallway to us) there are these hatches that are sealed during "battle stations." Safe negotiation requires that you duck as you step over. It's a pass/fail activity. Same thing goes for stairs. Well, they are called ladders and each one has a skull-crushing obstruction half way down...or up. I always tried to look cool. "It's Okay, man...didn't hurt...nope,,,no, really, I'm fine...'scuse me...gotta move on...Bye!"

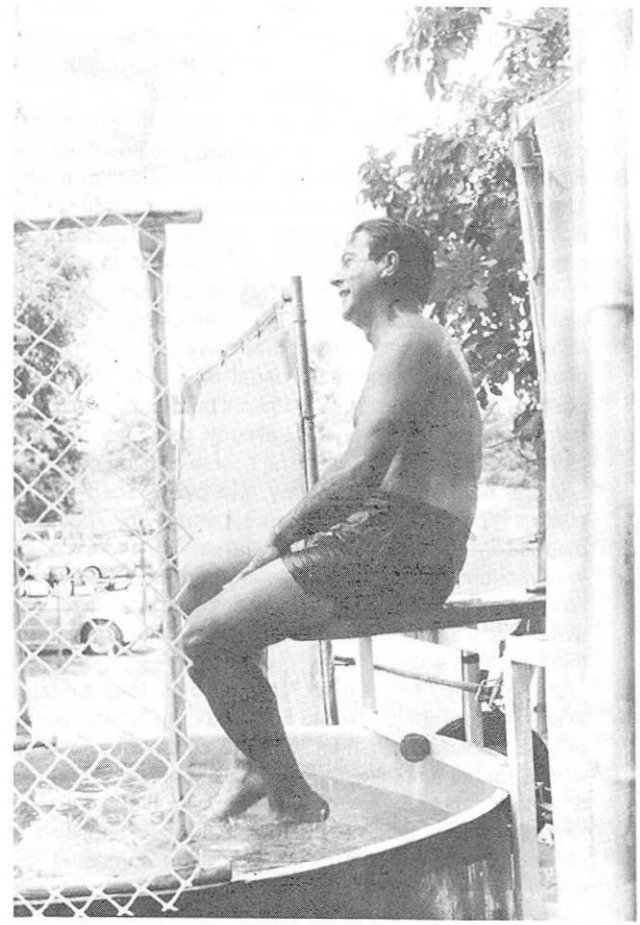
We got fired. On the last day they strapped us into our seats, facing backward, on the smallest cargo plane you ever saw. Then the crew gave us one of those knowing little smiles, strapped themselves in and WHAMO zero-to-150 in two seconds. The catapult launch was merely the parting shot, if you'll pardon the pun, in a most unusual MICO/APPS MTT. And IS1 Terry Angel? He acted like he'd done it before.

Picnic '91 cont'd

No fair hiding behind those shades, Ella!

Handing out sodas is serious business, eh, SFC Lobel?

Bob, It's not nice to dunk the Dep!



You wouldn't dare do that again--would you?

Have chair, will travel.

--- Picnic photos by Chris Semkow

Director's Call

NEW ARRIVALS

Marylee Brown (OP)

DEPARTURES

Terry Murphy (GS)

AWARDS

Joint Service Commendation Medal

SFC Herman J. Van De Vaarst (USA)
SSG John F. Getshall (USA)

Master Instructor Certificate

MSG William C. Melen (USA)
GySgt Henry Garcia (USMC)

Senior Instructor Certificate

SSG Vel V. DeBerry (USA)

Letter of Appreciation

Military

LT Rebecca Stone (USN)
CMSgt Gerald Smith (USAF)

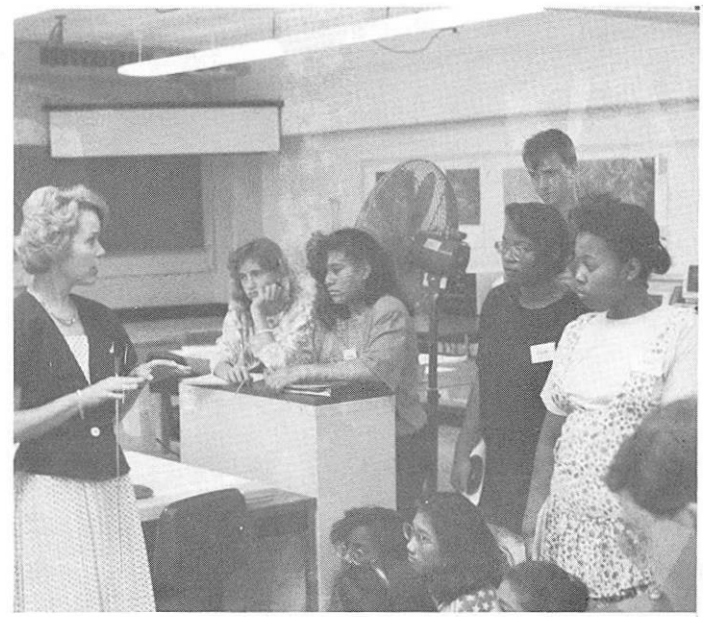
Civilian

David E. Miller (GA)
Wayne Gleason (GS)

Certificate of Achievement

MAJ Lloyd Carmack (USA)
SSG Lawrence Brombach (USA)
SSG Susan Fortune (USA)

Honorable Mention
SFC Stuart Lobel (USA)



Cartographer Sue Kersey explains how she uses math in her career to a group from the Fairfax County program Females Achieving Math Equity (FAME.) (Photo by SSgt Michael J. Kocheran)

WORTH REPEATING

"I don't know the key to success, but the key to failure is trying to please everybody."

–Bill Cosby

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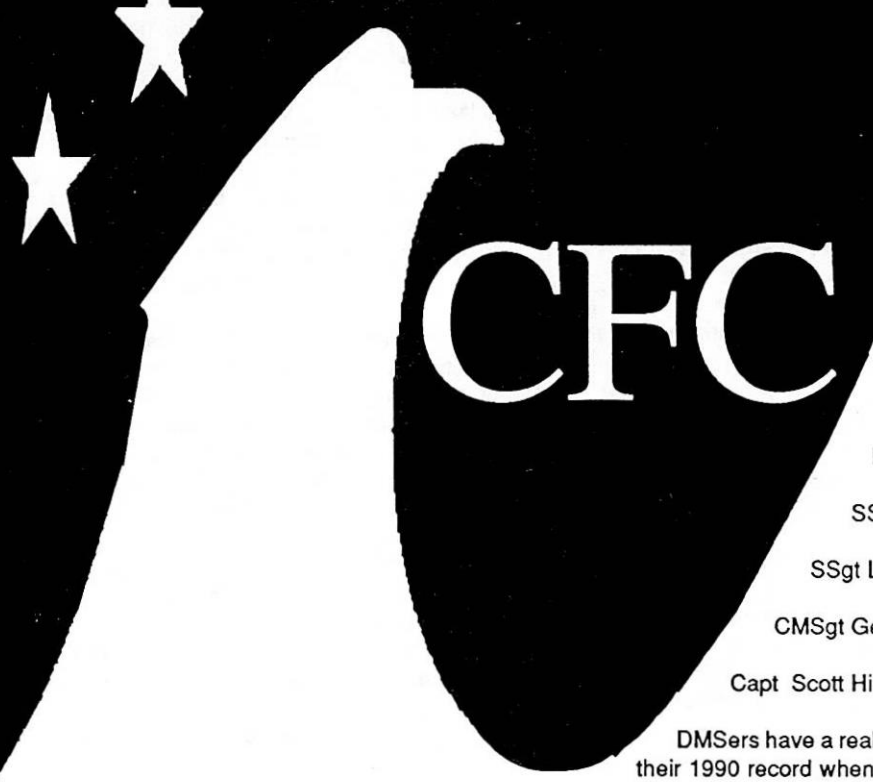
CONTOUR

Volume 18, Number 12 September 1991

Your Help is Their Hope



DMS' '91 CFC Campaign kicks off

The Defense Mapping School kicks off its CFC fund drive on 1 October 1991. Sergeant First Class Herman J. Van de Vaarst, Geographic Sciences, has volunteered to coordinate the School's efforts. Keypersons assisting SFC Van de Vaarst are:

Mrs. Cris Becerra, Program Integration

SSG V. DeBerry , Graphic Arts

SSgt Larry Johnson, Logistics & Facilities

CMSgt Gerald Smith, Geographic Sciences

Capt Scott Hirsch, Management & Technology

DMSers have a real challenge this year if they are to better their 1990 record when they not only met, but exceeded their goal before the end of the campaign.

1991 Combined Federal Campaign

Procurement Integrity

by Maj Carl Steiner
Office of Secretary of the Air Force
Fraud, Waste & Abuse

"Procurement Integrity" may seem like a fuzzy, intangible term which applies only to contracting officers. *Wrong!* Procurement integrity applies to many more people than you'd think--see below for the legal definition of a "procurement official" and you'll probably be surprised. Additionally, there are several laws specifically addressing procurement integrity, and violations of those laws are punishable by very unfuzzy, tangible fines and punishments. In 1989, Congress passed one such law, 41 U.S.C. 423, "Procurement Integrity." It was recently amended and became effective 1 Dec 90.

Besides being the law, procurement integrity is mandated by our positions of public service. *Breaches of procurement integrity cost taxpayers millions of dollars each year in both direct losses and defective products.* After all, financial gain is the prime motive whenever procurement integrity is broken. But an even worse consequence of violated integrity is the serious damage to credibility before the public and Congress. Unlike lost money which can be replaced, our damaged credibility lives with us and affects just about everything we do.

The following summarizes the pertinent provisions of 41 U.S.C. 423 which apply to those of you serving the Government as procurement officials. **The term "procurement official" refers to any federal government officer or employee who has participated personally and substantially in any of the following with respect to a particular procurement:**

- Drafting, reviewing, or approving a specification or statement of work.
- Preparing or developing a procurement or purchase request.
- Preparing or issuing a procurement solicitation.
- Evaluating bids or proposals, or selecting sources.
- Negotiating to establish the price or terms and conditions of a contract or contract modification.
- Reviewing and approving the award or modification of a contract.

Section 423 (b) prohibits procurement officials, while conducting government procurement, from

- Soliciting, discussing, or accepting future employment or business opportunity with a competing contractor
- soliciting or accepting money, a gratuity, or any other thing of value from a competing contractor
- disclosing proprietary or source selection information to any person not authorized to receive the information.

Section 423 (b) extends the above prohibitations to anyone with access to proprietary or source selection information. Section 423 (a) similarly restricts competing contractors from discussing future employment with procurement officials; giving gratuities to procurement officials; or soliciting/obtaining proprietary or source selection information.

Section 423 (c) allows some procurement officials to obtain permission to withdraw from further participation in a procurement in order to discuss future employment with a competing contractor.

Section 423 (f) imposes two basic restrictions on employees who leave Federal service. A procurement official with respect to a particular procurement may not:

- participate on behalf of a competing contractor in any negotiations leading to the award or modification of a contract
- participate on behalf of the competing contractor in the performance of such contract.

These restrictions extend to post-employment activities on behalf of some subcontractors. They generally don't apply if the subcontract amount is less than $100,000 or if participation is on behalf of a subcontractor to a subcontractor.

Section 423 (e) imposes a number of certification requirements in connection with contracts and modifications in excess of $100,000. Among them is a requirement for contracting officers to certify they have no information concerning a violation or possible violation of Section 423 a,b,d or f. Also, 423 (e) requires procurement to certify they understand the continuing obligation not to disclose proprietary or source selection information.

Integrity is the cornerstone for successful government procurement. Violated integrity results in defective products, lost money, and damaged credibility. If you question whether specific conduct violates the law or expected standards of procurement integrity, seek advice from your supervisor or staff judge advocate. If you know of a breach of procurement integrity, tell your supervisor, or call a Fraud, Waste and Abuse Hotline.

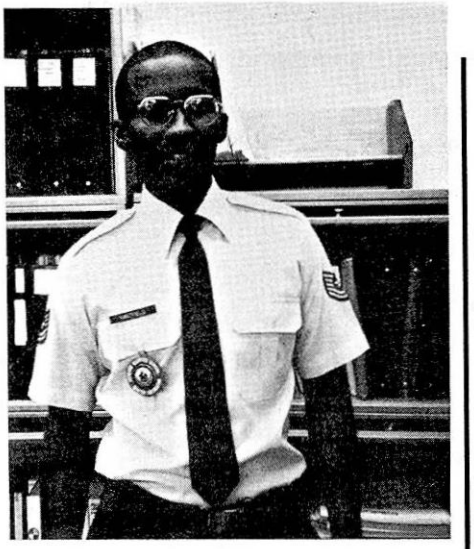
--Courtesy TIG Brief 3
May-June 1991

(Editor's Note: The above article was amended slightly to apply generically.)

Instructor's faith evidenced by works

by TSgt Kevin B. Hartfield

Editor's Note: TSgt Kevin B. Hartfield, an instructor in the Geodetic Survey Division, recently earned the honor of representing the Defense Mapping Agency in the USAF Lance P. Sijan Award competition. The Sijan award is presented annually to those individuals who not only show leadership in the workplace, but also contribute their time and skills to the betterment of the civilian community. The following article by TSgt Hartfield briefly describes his community work and provides some insight into his personality, which were key factors in his award nomination.



TSgt Kevin B. Hartfield

About four years ago, while attending Grace Tabernacle Church, I discovered that most of the people who really needed help didn't attend church at all. Those who needed help the most were out on the streets, in nursing homes, or in prison. With the help and guidance of God, many of my fellow church members and I started visiting people on the streets, those who were incarcerated, or those physically unable to attend church. Most of the people we met on the street felt they were unworthy to attend church because of the way people stared at them, so we started to go out to meet and feed them. During our visits, we always found a few individuals who wanted to change their lives. For those who showed a sincere desire to change, we helped them find jobs, drug/alcohol treatment, and homes free of negative influence.

Talking to prostitutes and drug addicts is not a very comfortable feeling at first, but after doing it for a while, I found that it becomes easier when the people you talk to realize you have a sincere concern for their well-being. Although we would like to help everyone we meet, not all people we contact are willing to become self-sufficient. But by taking a genuine interest in their welfare, they will often confide in us and relate their backgrounds from early childhood on. These individuals are often the product of an unstable home, victims of child abuse, neglect, or drug and alcohol abuse. The family unit, which should consist of a mother, father, and children who love and respect one another and make personal sacrifices, did not and does not exist for many of those we meet. Broken homes without love and discipline often produce a child, and, eventually, an adult, who is easily influenced by anyone who will take an interest in them and make them feel important. Unfortunately, the first people who show an interest in them are often child molesters and drug dealers. Soon enough, these children learn to survive in an environment of deceit and distrust, leading to the "life on the streets" as we have come to know it.

When not working with the homeless, I'm raising a 13-year-old boy whose parents were unable to properly care for him. Over the past four years, I have endeavored to give him the love, guidance and stability that I was blessed to have as a child. This is my way of saying "thanks to God" for letting me be part of the loving home that I grew up in. It is my fondest desire and goal to not only guide him as if he were my own son, but also to be an example to him of what a father and husband should be. I have learned that it is quite true that children remember more of what you do than of what you say.

At this point, you may be asking yourself why someone would go to this much trouble to help people he doesn't even know. I have a strong and fundamental belief that if you have a personal relationship with God, He will not only provide for you and your family, but He will make your "cup runneth over" and inspire you to give freely of yourself to others.

DMA Employment Assistance Program offers help to those in need

For many of us living in today's fast-paced world, there are times when everyday life seems overwhelming. Possibly there is trouble within the family—marital discord or dissatisfaction, problems with a child's behavior, alcohol or drug abuse, or difficulties with an aging parent. Maybe an isolated incident, such as the death of a loved one, triggers feelings of despair that do not go away.

When friends or family are unable to provide adequate support and solutions, frequently a wise move is to seek out someone trained to deal with problems. There are people trained to effectively guide you in sorting out the issues and assist you in making needed changes so that you feel less overwhelmed and more in charge of your life.

The DMA Employee Assistance Program can help you fill those needs. If you or someone for whom you care is experiencing problems, don't wait for things to change on their own. Seek counseling; you'll be all the better for it.

DMA (HR) counselors can assist you. In the Washington, D.C. metropolitan area, contact Guy H. Ross, M.A., and Cary Cook, M.S.W., Room 506, Erskine Hall, DMAHTC. They may be reached on (301) 227-5187. All Employee Assistance services are personal and completely confidential.

Focus on a Course

Introduction to Digital MC&G Data Course

by Maj Lloyd D.Carmack Jr.

If asked to identify products produced by the Defense Mapping Agency to support military operations, what product would you name? The typical soldier, sailor, airman or Marine would probably identify his/her favorite scale map or chart—perhaps the 1:50,000 Topographic Line Map or Combat Chart. However, it is becoming more and more likely the response would be "DTED" or "ADRG". Are these familiar acronyms? How many of the following terms can you identify?: TERCOM, FACS, VPF, WVS, PVOD, DCW, DBDB, TTD and CD-ROM.

All of the above terms are associated with digital MC&G products produced by DMA. These products are becoming more and more important for the planning and employment of our military forces and the modern, high-tech weapons that support them. In fact, many operations could not be planned or conducted without them. Simulators, mission-planning systems and many fielded weapons systems rely heavily on these products. More and more frequently, they are being used at the operational level along with the more familiar paper map and chart products.

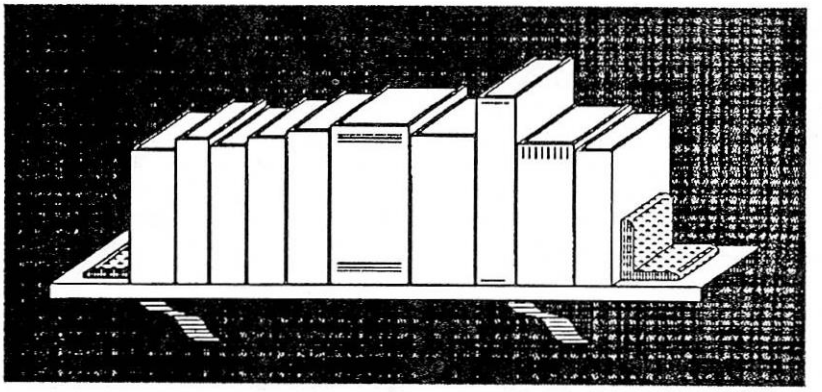
What types of digital products does DMA produce? What can they be used for? How are they distributed? What format are they distributed in? What type of coverage is available? What is the status of prototype products? If you are looking for answers to these and other basic questions about DMA's digital MC&G products, the Defense Mapping School can help you!

The Introduction to Digital MC&G Data (IDMCGD) course has been designed to provide military and other selected DoD personnel with an introduction to the fundamental concepts of DMA digital data bases. Personnel not familiar with digital data receive a broad overview to prepare them to use the products or supervise research, development and acquisition programs which might require such data. Key presentations review general concepts and provide baseline knowledge of digital MC&G production, accuracy, product considerations, formats, and distribution. Digital products which are currently available or in the prototype stage are outlined to include a discussion of sample applications in selected mapping, weapons system, and command & control equipment.

The course normally runs for four days. This includes three days of instruction and a day-long tour of DMA's Warrior Support Center and the Hydrographic/Topographic Production Center. Instructional periods include several practical exercises providing some hands-on experience with products, such as DTED, ITD, and DCW. Guest speakers representing the Army, Navy, Air Force and Marine Corps provide an update on trends in the use of digital data by their respective service. Mobile training team instruction can also be tailored to meet the needs of host units. In the past six months, the IDMCGD course has been presented at Naval Training Systems Center, Orlando, Florida; Naval Weapons Center, China Lake, California; Rome Air Laboratory, Griffiss Air Force Base, New York; and Air Force Systems Command, Wright-Patterson Air Force Base, Ohio.

The IDMCGD course is presented by the Department of Management and Technology at the Defense Mapping School. For more information about course content, the course coordinator, Ms. Karen Williams, can be reached at (703) 664-2978; DSN 354-2978. For information about course dates and registration, contact the DMS Operations Office at (703) 664-2383; DSN 354-2383.

(How well did you do identifying the acronyms listed above?— DTED: Digital Terrain Elevation Data, ADRG: ARC Digitized Raster Graphic; TERCOM: Terrain Contour Matching; FACS: Feature Attribute Coding Standard; VPF: Vector Product Format; WVS: World Vector Shoreline, PVOD: Probablistic Vertical Obstruction Data; DCW: Digital Chart of the World; DBDB: Digital Bathymetric Data Base; TTD: Tactical Terrain Data, CD-ROM: Compact Disc—Read Only Memory.)



SUPERVISORS AS LEADERS IN PROCESS IMPROVEMENT

by John H. Harden, Jr.
DMA Quality Principal

Editor's note: DMA Instruction 5010.31, approved on 25 April 1991, set up the "Quality and Productivity Improvement Program (QPIP)." This instruction formalized the essential elements of the Quality and Productivity Improvement Program Operations Concept developed in November 1990 by an Agency-wide team. Particularly important to the program's success is the role of the supervisor which is the subject of this third in a series of articles.

Leadership

Past expectations of supervisors emphasized their authority and responsibility for identifying and solving problems in the output of his or her work unit. Supervisors were trained to be product-oriented, not process-oriented. So they focused on correcting immediate symptoms of a problem, not root causes. This often resulted in assigning accountability for errors (erroneously) to the worker owning the product at the time. One rarely suspected the process as the culprit. Even more rarely was the process corrected. Supervisors were rewarded based on the number of good outputs passed to the next production phase.

The DMA Quality and Productivity Improvement Program (QPIP) takes a different approach. It expects supervisors to lead the work unit in the pursuit of continuing improvement of the processes under their control. This makes it a team effort involving everyone. Responsibility for quality is shared. Supervisors become coaches, or facilitators, of improvement. DMAINST 5010.31 requires three new techniques for this approach.

First - - - Process

Before a process can be improved, it must be accurately identified. Otherwise, each person in the work unit may be trying to "improve" what is, in fact, a slightly different process! It is absolutely necessary for everyone to agree on what process is being examined. The best way to identify the process is for the team to put it on paper for all to see. The aim is to flow out the process schematically, that is, to jointly construct a process flow diagram.

Those closely involved in the process, supervisor and subordinates, must faithfully diagram the process as they know it at the moment, not as it might be or should be. This is why official flow diagrams for your process, in configuration management or other published documentation, will not satisfy your end objective. The work unit decides the level of detail to show. They may choose to use a standard charting technique if it meets their needs, or develop one of their own. Deployment flow charting is one method which has been used with success in DMA. An excellent description was written by Marion Tribus in his book *Deployment Flow Charting* (Quality & Productivity, Inc., Los Angeles, 1989.) The resulting flow may reveal surprises to the work unit. Be prepared to hear spontaneous, incredulous comments such as: "I didn't know you did that." "Why are we still doing this"? "Does this step have to take so long?"

Some things appear on every flow chart: process input, process output, decision points, feedback loops, and organization identification. And, of course, don't forget to identify your customers and providers. Numbering the boxes and keying them to a separate narrative is a useful way to keep the diagram simple. In the narrative, you can also record hardware and software used, and reference relevant procedures.

Once the process flow diagram is completed to everyone's satisfaction, display it permanently and conspicuously in the work area for all to see and understand together. (Customers that pass through will be fascinated, not to mention Management.) This may cause changes to the diagram that adds more detail, particularly steps that were previously *assumed*.

Why study the process? You now have an agreed-on baseline process to study and improve. This valuable and original work of art stimulates questions. (Why are we doing things this way? What steps no longer add value?) Look for organizational as well as physical barriers. See if historical data exists for a feedback loop; if not, is it worth collecting? What steps involve meetings? Do these add value or waste time? Where can we save Uncle Sam and you, the taxpayer, some money? Eventually, the team agrees on a part of the process that needs improvement. You may be surprised by the power of this dynamic technique. Often, improvement is started simply because the diagrammed process is getting visual attention. So don't be concerned if the flow continues to change.

Second - - - Measures

The supervisor must lead the work unit to develop one or more meaningful measures of what is to be improved based on their intimate knowledge of the process. The local Process Improvement Office (PIO) can assist, if needed. If existing data collection systems provide the measure, then use them. More likely, a manual system will be needed to track the selected quality characteristic. Whether manual or not, the most important concern of data collection is consistent integrity of the information. Collecting invalid data obscures the magnitude of the problem as well as the effect of the improvement. Worse yet, the original problem is often replaced by another with no net improvement to the process.

Once the characteristic and collection method are selected, the work unit can begin to record and graph the data on a second display in the work area. Generally, the graphing technique shows variation of the data over time or, more simply, the effect of the improvement. Trend charts and process control charts, for example, do this in a simple, understandable way. Again, the PIO can recommend other possibilities. The charted information is a very powerful incentive to sustain the improvement effort, particularly if the information is collected and recorded frequently. It is also a fascinating demonstration of actual variation, both the good and the bad. When the chart shows a sustained, improved level of performance, it is time to consider reducing the data collection effort and targeting another improvement opportunity.

Why stress measures? Measures make you concentrate on the portion of the process having the most problems. And after having devised a process change, the measures will contribute hard proof, not conjecture, that the change provided an unqualified improvement. By now, I hope you realize that improvement is not an event but a process, too. It is the natural way for us to do our business, and it never ends. Because the process has improved, you are not relieved of the responsibility to periodically monitor the improvement to see that it remains permanent.

See SUPERVISORS pg 6

Director's Call

NEW ARRIVALS

Military

LTC William J. Watts (USAF)
LCDR David E. Pedneau (USN)
MAJ David J. Sebastian (USMC)
CPT Paul A. Aufschlager (USA)
CPT Steven D. Harmon (USA)
MSgt Raymond B. Chapman (USAF)
SSG Enrique Medina (USA)

Civilian

Jerry Megenity (PI)

DEPARTURES

Military

GySgt Henry Garcia (USMC)

Civilian

Nicholas Mosura (VI)
*Kristin Griffith (GS)
*Roger Maier (PI)
*Mary Oliver (PI)
*Michael Stapelton (MT)
*Chris Swisher (MT)

PROMOTIONS

MSG Herbert C. Schmeling (USA) to Sergeant Major

AWARDS

Joint Service Achievement Medal
LT Rebecca E. Stone (USN)

Army Achievement Medal
SPC John L. Kribbs (USA)

CERTIFICATES/LETTERS

Master Instructor Certificate

SFC Donald R. Payne (USA)

Senior Instructor Certificate

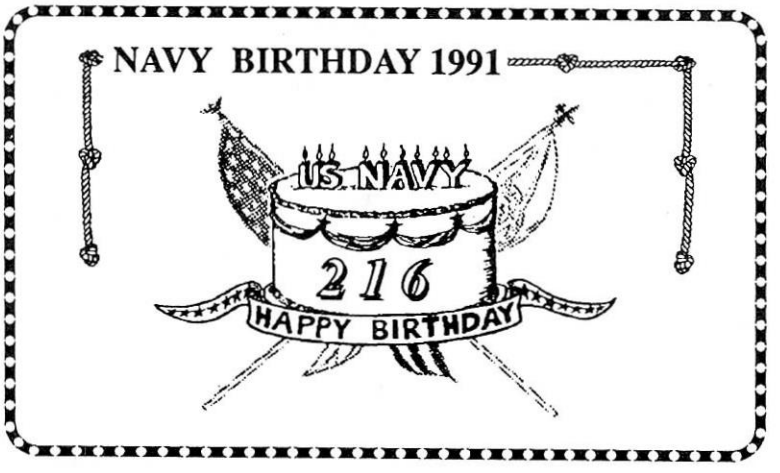
SFC John T. Flores (USA)
GySgt George H. Wrightsman (USMC)
SSG Debra Benfield (USA)
SSG Eric Cruz (USA)
SSG Dorothy M. Hernandez (USA)
TSgt Foster Wright (USAF)

Certificate of Achievement

Joseph P. Quigley (LO)
Dennis T. Roberts (LO)

Letter of Thanks
William F. Nall (GS)

* Summer hire



SUPERVISORS from pg 5

Third - - - Recognition

The supervisors need to display and maintain in their work areas "recognition of current individual and group efforts toward continuous process improvement." The instruction provides no further guidance, leaving the details to the supervisor's discretion. This is an easy and altogether pleasant task of leadership that encourages the supervisor to "Manage By Walking Around" and observing people doing things right. Existing formal recognition using the Incentive Awards Program is certainly appropriate for this display.

We all know of instances when a coworker went to extra effort beyond what was required because it was the right and necessary thing to do for the customer. Many times these acts of importance don't meet formal award criteria. They occur daily throughout the Agency and, in the aggregate, make a very big difference. At best, they are unappreciated and, at worst, not even noted. The QPIP expects supervisors to fill this gap by creatively developing and displaying local recognition appropriate to the organization and the process.

Why stress recognition? It is not enough to lead the improvement of processes. Supervisors have the responsibility and the human obligation to hold people publicly accountable for success. All of us like to hear our name (favorably spoken) and see it (correctly spelled). Award money is necessary and nice, but, for many of us, it does not feel as satisfying as peer recognition, or last nearly as long.

Summary - - - Just Do It

Dr. Laurie A. Broedling, the Deputy Undersecretary of Defense for Quality, recently spoke to DMA about quality and productivity. She characterized the Defense Mapping Agency improvement effort as more than mere cost avoidance, she called it death avoidance. People stake their lives on many of our products and services. Our work is important and serious. This doesn't mean the work can't be fun. Supervisors who enthusiastically lead their work groups to implement the three techniques will be able to show true process improvement in action to anyone, anytime.

No process is exempt. Many DMA processes provide services which are not directly related to tangible MC&G output. In fact, approximately half (it varies year to year) of the DMA budget supports the processes not involved with direct MC&G production! Leadership in process improvement applies to all supervisors in all organizations and operations—in short, to everything we make and do at DMA.

Summer is over, and school-bound children are everywhere. Obey the posted signs and laws so you and the kids have a safe school year.

DEFENSE MAPPPING SCHOOL
FORT BELVOIR
VIRGINIA 22060

OFFICIAL BUSINESS

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Public Affairs Office
Defense Mapping School
Fort Belvoir, VA 22060-5828

13 September 1991

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CONTOUR

Volume 18, Number 12 October 1991

VIRTUAL REALITY

by William Crisp

Pinball machines, PACMAN, Nintendo, now **Virtual Reality.**

Simulation and gaming have taken a major leap forward. What is your greatest fantasy? A trip through the galaxy? A trip through the human body? Perhaps placing your in-laws in a cage at the National Zoo?! Through Virtual Reality, these things, and much more, are becoming possible.

The term "Virtual Reality" can be defined as almost real. It refers to the process of reality simulation programmed and generated through a computer and experienced by an individual through peripheral computer devices, such as the VPL Data Glove, eyephones, earphones, and magnetic tracking sensors. The concept is basically an extension of arcade games into other areas (training being one) but with vastly improved interactive technology which gives greater realism. In fact, with Virtual Reality, you can "float" through space or "reach inside" a monitor screen and create, destroy, move, etc. as you wish.

Through technology, an individual is placed in an environment which represents an imaginary world under the individual's control. This environment is called Cyberspace. Cyberspace is generally safe, except for problems encountered when wearing electronic goggles. The goggles give an individual the sensation of actually moving within the animated scenery. If you have experienced vertigo, you have an idea of the sensation. The danger comes when the individual begins to physically move with the goggles on. The mind is in the animated environment but the body is not, and the movement has resulted in accidents. This problem is being resolved. The only other problem involves the animation. Most of it is computer-generated and realism is limited by a lack of detail at this point.

Both privately funded and government-supported laboratories are developing Virtual Reality systems. Development is largely technically driven, with plans for medical imaging, industrial design, and education and training. A number of theme parks are using the concept for some of their attractions. Busch Gardens, for example, uses a large screen and seat motion to simulate an airplane ride, a very rough airplane ride as you "fly" through a tunnel, through trees, and over a gorge! At times, the sensation is indeed real.

In the realm of education and training, the concept will have a major impact. The University of Central Florida is currently refining training for tank gunners, and programs are being developed for other skills. Simulated worlds as classrooms are on the horizon. However, every knowledge and skill will not be taught through this concept. It is another medium which must fit the subject matter to be effective. It has excellent applications in maintenance training and areas such as survey may benefit from it. For example, training for performing a traverse survey could be accomplished through simulation in which the trainee gets a "feeling" of being in the outdoor environment. Since the training would be accomplished indoors, time is saved and problems caused by inclement weather are avoided. But for now, realize that your greatest fantasy may be a virtual reality!

DoD plugs in computer resume service

By Master Sgt Linda Lee,
USA American Forces Information Service

A computerized job resume service and bulletin board called DORS opened for business recently at 79 military installations.

The Defense Outplacement Referral System, the newest service in DoD's transition assistance program, is free to separating military members and their spouses, and civilian employees, said Paula Davis, a DoD transition assistance specialist. The 79 installations are field-testing the system.

Davis said eligible users may be retiring, separating involuntarily or whatever. DORS offers a starting point in job searching, she said, adding users should find the strictly voluntary program easy and convenient to use.

"The program doesn't guarantee anyone a job. It offers an individual a chance to file a mini-resume. Companies registered with DORS will tell us when they have specific vacancies," said Davis. "They'll be sent the resumes of individuals in the data bank who meet the job requirements. They're not complete resumes, but they will provide employers enough information to decide if they want to follow up with an interview."

Resume applications will be available at transition offices, family centers and civilian personnel offices at participating installations. They should be filled out three to six months prior to departure, said Davis. When the form is completed and signed, the transition office will send the information by computer or mail to DoD's registry data base.

Information needed for the two-page mini-resume includes job-type and specific work preferences, education level and what region of the country the individual prefers.

But the most important part of the profile is the personal information block, said Davis.

"This block is for the individual to list competencies and skills. This may be fluency in a foreign language, computer experience or experience in a building trade," she said. "This is the opportunity to catch the employer's eye, to influence the employer. That's why it needs to be very carefully thought out and written."

Another aspect of the transition program's computer efforts is the transition bulletin board, said Christopher Jehn, assistant secretary of defense for force management and personnel.

"This electronic bulletin board will be available to the service transition offices," he said, "where it may be accessed by an individual or counselor either in printed form or by personal computer."

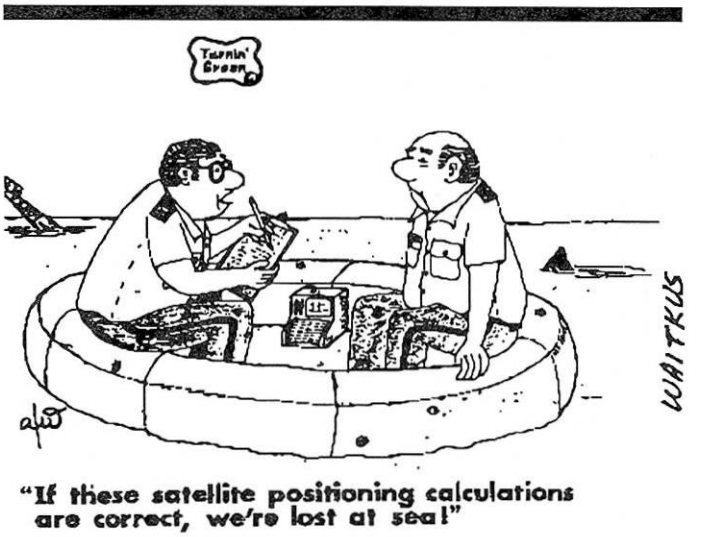
According to Jehn, the bulletin board will include employment advertisements, business opportunities, state employment services and employment data bases from various professional organizations.

Davis said states and civic groups will be given the opportunity to post information on the bulletin board. This material might include details on training seminars, job fair announcements and states' veterans benefits.

Information on the resume registry and the bulletin board will be available at installation transition offices and family service and support centers stateside and in 10 countries overseas. DoD worked with the services to determine which overseas locations would be able to link into the computerized services using a toll-free number. These countries are Belgium, Germany, Guam, Italy, Japan, Korea, the Philippines, Spain, Turkey and United Kingdom.

DORS and the transition bulletin board are scheduled to be fully operational throughout DoD within a year, Davis stressed. As installations obtain the necessary computer equipment and telephone lines, they will link into the DORS registry and bulletin board.

"It will take a little time, but we hope to have it on line for everyone as soon as we can," she said.



"If these satellite positioning calculations are correct, we're lost at sea!"

Focus on a Course

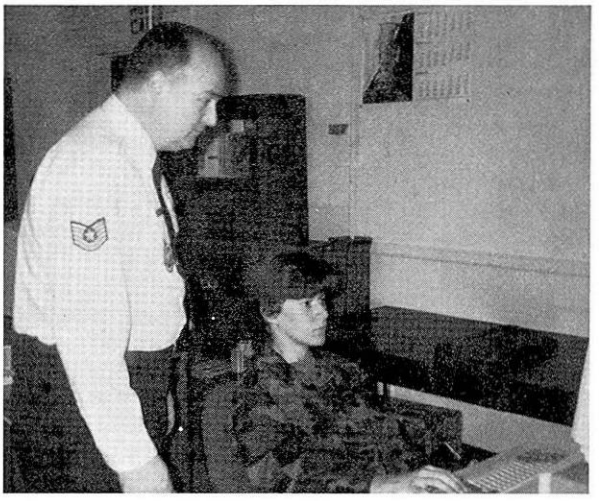
Advanced Geodetic Survey

Planning to Measure the World

by Capt James D. Reed

In the world of military geodetic survey, a typical U.S. military surveyor begins his/her career as a student in the Basic Geodetic Survey (BGS) Course. Upon graduation, they practice and sharpen their newly found skills through practical experience until they become qualified in the operation of survey equipment and techniques. Through career progression and experience, the geodetic surveyor will eventually find his/her way back to the Defense Mapping School (DMS) as a student in the Advanced Geodetic Survey (AGS) course.

The AGS course is specifically designed to provide students with a working knowledge of survey project planning, project management, project reporting and advanced surveying techniques to include satellite & positioning systems; computing and adjusting geodetic surveys, directions, lengths and positions; survey applications using microcomputers, and precise instrumentation related to higher order survey. A multi-service course, the Air Force and Marine Corps use AGS training as a logical progression in the surveyor's career, teaching advanced methods and procedures required to perform higher order surveys. In the same tone, the Army requires AGS as a technical track of the Engineer Basic Noncommissioned Officer Course for all soldiers in the 82D Military Occupational Specialty (MOS), a requirement which must be completed for proper progression in the career field. Whereas students learn technical skills in BGS, the AGS student finds their instruction focused in a direction more concurrent with their career development, that is, a managerial role.

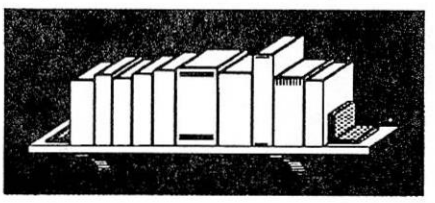


TSgt James E. Lobdell assists AGS student SGT Jeanine Hiatt with practical exercise on one of the AGS personal computers.

The course content focuses most of its time, (121 hours), on astronomic surveys, almost twice as much as any other block in the course. Although a dated method of determining positions and azimuths, it is extremely accurate and still used in the field to support mapping projects and establishment of starting control for various weapon systems. As such, it requires a great deal of practice and experience to master the method completely.

Since "Astro" can be taught only at night, it makes for bleary-eyed instructors and students as they acclimate to changes in their biorhythms. A good amount of course time is also spent in both Survey Computations (60 hours) and Point Positioning Systems (58 hours), necessitating a good student background in mathematics and personal computer experience. Once the student completes the strenuous requirements of this course, he/she will usually be assigned as a first-line field supervisor, responsible for the planning, management and quality control of a survey project under their command.

Teaching the AGS course requires instructors with extensive field experience and senior rank. Currently, the AGS course is manned with a GS-11, two E-7s and one E-6, with a combined total of over 75 years field experience. From this bountiful pool of experience, technical instruction is blended with practical field experience to get just the right mix of pertinent and challenging instruction. This experience base, while important to today's instruction, also serves to develop the instruction of tomorrow. To date, the AGS branch has completed 75 percent of the Task Analysis Data Bases required for incorporation of Global Positioning System survey methods into the course curriculum. In addition, the Army's planned FY92-93 procurement of Automated Integrated Survey Instruments signals a monumental change in survey instruction as technology bounds ahead. AGS has planned to meet the challenge.



A PARODY FOR ALL SEASONS

by SGM Herb Schmeling

A long, long time ago in a galaxy far, far away, the Defense Mapping School (DMS) Alliance was fighting the tyranny of the Fort Belvoir Imperial Softball Forces. For years, the war dragged on while the fans looked for one shining moment and, especially, a "shining star." But each time the moment came and a star would appear, disaster would befall the Alliance. From pulled muscles to broken fingers, from leaves to PCSs, through night school, TDY, and retirement, the DMS Alliance failed to win final victory. This year was no exception; it was a long, hard season, but again the Alliance failed to pluck the golden ring.

Led by Princess "Beni", (the senator from the planet Wheeler), this year's DMS Alliance team coaching staff included Bill Solokon and GS sidekick "Stubacca", the wascally ewok. They drew new players from all reaches of the solar system. Some came from Marineland, the Planet of the Fruits, and the Coloring Box Nebula. Others just ventured in from the sea and still others dropped in from the sky.

" Opposing third basemen feared Luke's every at-bat..."

But special to this team was the arrival of Luke Schwartzwalker and his Louisville Light Sabre. At the plate, the Jedi Knight demonstrated straight away that he was a free swinger. On the base paths Luke was determined to make things happen even if it turned out to be a triple play for the opposing team (first triple play ever against a DMS team). But rain or snow or dark of night would not stop Herbiwan's student from making his appointed rounds, usually from the bench to the plate, and then back to the bench.

Luke brought a special zing to the team. Each time he approached the plate, you could hear Herbiwan's voice saying, "Use the force, Luke, use the force." Opposing third basemen feared Luke's every at-bat, because they knew they would have to dash to home plate, grab the ball, and fire it to first. Throughout the season, most third basemen around the league were treated for minor abrasions due to collisions with the catcher. Yes, Luke's three-foot-long line drives had everyone guessing.

Although a loss in the final game prevented the DMS Alliance from achieving their season-long quest—a post season play-off berth—the team knew that there was always next year and they would be back.

While some teams approached this season with a win-or-die attitude, the DMS Alliance enjoyed playing "Debbie-Ball", a brand of softball where everyone has a chance to play the game and have fun. Where else do you walk up to the batter's box and everyone is chanting, "May the Schwartz be with you."

THANK YOU FOR YOUR HELP

1991 Combined Federal Campaign

"Your Help is Their Hope"

The DMS Combined Federal Campaign had its official kick-off at Director's Call on 1 October.

Post Chaplain, LTC Gary Sanford, gave a rousing invocation, followed by insightful remarks by DMA's loaned executive, Mary Ann Radawicz.

Guest Speaker Marvin Gast, National Volunteer Health Agencies, gave a short motivational talk.

This year's goal for DMS is $9400. A week into the campaign, more than half, $5700, had been collected. Last year, the School exceeded its goal by 117 percent with contributions totaling $11,867.60.

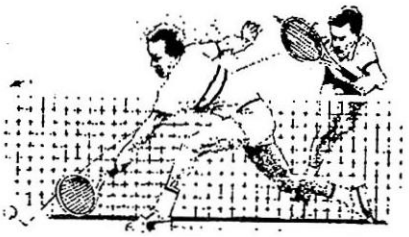
The agencies supported by the CFC need our support again this year. With your help they can continue helping others, so please give.

MARINE CORPS BIRTHDAY

NOV 10, 1991

216 YEARS PROUD

SPORTS



Bowling for the Commander's Cup

by SSgt M. J. Kocheran

The Commander's Cup trophy is an award for the Fort Belvoir unit that accumulates the most points in sports—such as softball, flag football, basketball and, yes, even bowling.

Bowling is one sport that allows smaller units on post to compete fairly with the larger ones. It takes more skill and finesse than brute strength; one does not have to be very physical in order to participate.

DMS has three bowling teams, DMS 1, DMS 2, and DMS 3, competing in the Tuesday Night Mixed Intramural League. They are made up of officers and enlisted men and women from all branches of service and from all departments within DMS.

"At this point, the league has 23 teams participating but we are trying to solicit at least one other team," said TSgt Bradford Clark, captain of the DMS 1 team.

Of the three teams representing the School, DMS 1 has the more serious bowlers.

"We are all out to have a good time, of course, but we are also out to win, " said Clark. The team adopted the name, "The Mushroom Corps", from a logo on one of SGM Herb Schmeling's tee shirts. "The Mushroom Corps" is made up of soldiers, sailors, airmen, and Marines. While there is still respect for the rank of certain team members, "rank, or rather the addressing of individuals by rank, goes out the window while bowling," said Clark. "But then, after that, it's right back to business as usual."

"We all have nicknames," said Clark. Capt Durkin, "Thumper", is so named because he drops his ball and shakes everything within five lanes; TSgt Clark, "The Doctor"; SGM Schmeling hasn't been nicknamed yet. He is still breaking in the Sergeant Major title so for now they'll go with that. Maj Sebastian keeps rolling strikes as long as the team keeps yelling "Semper Fi."

"Basically we are all out there 'high fiving' and having a good time," said Clark.

Kick-off of the league was on 17 September. DMS 1 opened the season with a clean sweep against league team #3 by winning all three games. It was so hot and humid in the bowling alley that it was hard to get a rhythm down; shoes stuck to the floor and hands stuck to the balls.

"By the time I finished my three games, I had broken out into a nice sweat," said The Doctor. Although the air conditioning was on, the alley was hot, crowded, and smokey. But DMS prevailed!

Of course, there was the customary "refreshment" frame, and on the first night, for the second year in a row, The Doctor lost again.

According to The Doctor, "Every one threw a strike in the frame and I threw a "Granny's Garters," which is a 5-6-7-10 pin split, with two on either side.

After the first night, The Doctor predicted that the Mushroom Corps will win the league this year. Last year, DMS finished 5th out of 12 teams; a few off-the-wall performances kept them out of the top 3. This year, DMS hopes to take it all.

"Our big anchor last year, Chief Kidney, won't be able to start until the second week in October so I had to be anchor for last night," said Clark. But once Kidney's back, they are sure to be unstoppable. The "Mushroom Corps" secret weapon—Sergeant Major, the team's high handicapper—is also returned this year. As long as he keeps rolling his usual 100 pin game, DMS will do all right.

Annual dues for participation in Commander's Cup Bowling are $10 for men and $7.25 for women, plus a $5.00 weekly fee (the same price as last year). Bowling balls and shoes are available to rent. There is also a pro shop at the bowling center. Barbara Batts, wife of Wayne Batts of the Geographic Sciences department, is the pro shop operator and is considered one of the better ball drillers in MDW. She has a good reputation for her knowledge of the game and can provide assistance to the beginner.

Competing for the Commander's Cup creates a certain amount of pressure. It's a lot of work, but bowling is also a lot of fun. Like any sport, some people let their emotions run a little high at times; they kick the ball return, sulk, throw towels and so on. The thing to remember is there will always be another ball, another frame, another game, another week.

How to manage a bad day

WASHINGTON—Navy Editor Service... If you've had a bad day, if you've experienced "Murphy's Law" (if it can go wrong, it will) first hand—don't give up, you might be able to cope after all. Some people are born relaxed, while for others it is a learned trait.

One of the first lessons in learning how to relax is to find something that you find particularly comforting and make sure you schedule time for this activity on a regular basis. This activity can range from the contemplative or spiritual to the physical, but should be something that you look forward to doing.

After this activity is firmly placed in your schedule, you are ready to step up to expressing your feelings. Be ready to share your point of view in a positive way. If you are using words like "fault" and "blame," you are not using a positive point of view. Be willing to hear the viewpoint of others with the realization their viewpoint is as important to them as yours is to you. Be able to carry out a task even if you don't "win" the discussion.

Another stress reducer is exercise. Exercising will not only get active duty service members ready for their physical fitness test, but can also be used to get rid of stress. Physical exertion is the natural forerunner to endorphin release—that "natural high" you've heard so much about is not a rumor. But make sure you pick a physical activity that you enjoy and is not beyond your capabilities.

Just as exercise can give you a "natural high," eating certain foods can enhance the potential for stress management. Some of these foods are grapes, bananas, carrots, peas, potatoes and poultry. As rule of thumb, any food high in vitamin B6 is good for stress management.

Another important stress controller is getting enough rest. Most adults need at least six hours of continuous rest each day. It is also helpful to learn how to relax specific areas of the body such as the eyes, neck and feet for short periods of time.

As we add new activities into our lives to get rid of stress, we may also have to avoid some habits. Avoiding hassles is sometimes easier said than done, but is probably the biggest culprit in building stress. One thing must be understood—you will not always prevail—and this is OK.

"Drag your thoughts away from your troubles – by the ears, by the heels, or any other way you can manage it. It's the healthiest thing a body can do."

– Mark Twain

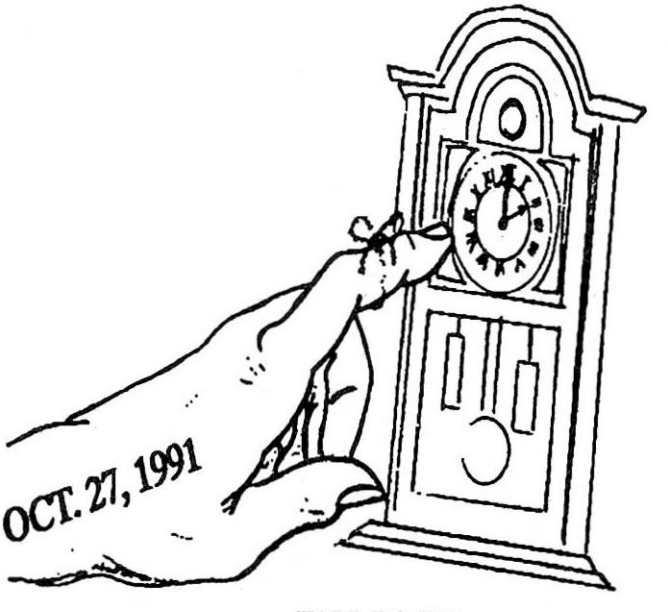
Another culprit in building stress is money problems. Control your finances. You know what your income is — make your personal financial plans within those limits.

Sometimes you may feel like Superman, but be a realistic goal-setter. Don't overextend yourself. Learn to set priorities so that the most important things get first attention. At work, you may want to consult your supervisor and come to a mutual decision on work-related priorities. You can only do so much, but be certain that you give your best to each task.

A stress reducer that has been overlooked for many years is laughing. A good hearty laugh can make stress virtually vanish before your eyes. Learn to laugh at yourself. If mistakes can be viewed as learning experiences, rectifying them often allows us to laugh at the origins.

Last but not least, learn to accept change. If there is one true constant in our world it is the fact there will be change. Not recognizing this is a certain set-up for stressful situations. Once we accept that change will occur, we become more willing to take the necessary steps to deal with it.

Compiled from "Ten helpful hints for managing stress," published in The Oak Leaf, *Naval Supply Center, Oakland, Calif.*



FALL BACK!

History — Origins of the Chief Petty Officer

WASHINGTON—Navy Editor Service

According to naval records, the first mention of the chief petty officer (CPO) was on a ship's muster roll in 1775. This brief mention of the CPO title did not resurface in naval history for almost 100 years.

The history and design of the chief petty officer's uniform date back to the 18th century Continental Navy of 1776. With the colonization of the new world, a need for a navy became apparent. Many of the people that settled our nation learned their seafaring skills in England. These sailors brought not only their seafaring skills, but also their customs, traditions and uniform similarities to this country. Many of our uniform styles can be traced to the British Royal Navy.

In 1865, a Navy regulation re-established the term "chief petty officer." The term was first used for the ship's Master-at-Arms, making him responsible for preservation of order and obedience to all regulations. An excerpt from an 1865 regulation tasked the senior enlisted person with the following responsibility:

The Master-at-Arms will be the chief petty officer of the ship in which he shall serve. All orders from him in regard to the police of the vessel, the preservation of order and the obedience to regulations must be obeyed by all petty officers and others of the crew. But he shall have no right to succession in command and shall exercise no authority in matters not specified above.

This, however, did not establish the term "chief" as a rate. It was merely a function rather than a rate. Petty officers were divided into petty officers of the line and petty officers of the staff. "Chief" referred to the principal petty officer of the ship.

The next reference to the term "chief" was in U.S. Navy Regulation Circular Number 41 dated Jan. 8, 1885. But this again refers to the term "chief" as a function or title rather than a rate.

All evidence indicates that chief petty officers were first officially recognized by General Order 409 of February 25, 1893. This order, published for the naval service in an Executive Order of the same date, was issued by President Benjamin Harrison.

General Order Number 431, issued September 24, 1894, changed the three rockers on the Master-at-Arms rating badge to one rocker. We know this as the rating badge of the CPO today. This general order also changed 1st, 2nd and 3rd class chevrons to their present-day form.

Information from the 1988 edition of Military Requirements for Chief Petty Officer.

WORTH REPEATING

"Political success is the ability, when the inevitable occurs, to get credit for it."

—Laurence J. Peter
author, educator

Director officiates at naval officer promotion

Lieutenant Reginaldo Gemora Salvilla, a student at the Defense Mapping School, was recently promoted to Lieutenant Commander in a ceremony conducted in August 1991 at DMS. LCDR Salvilla is a member of the Philippine Navy and currently serves as Chief, Logistics Branch, Procurement Officer, Armed Forces of the Philippines Mapping Center, Quezon City, Philippines.

LCDR Salvilla was born in Iloilo City, Philippines on 1 May 1947. He is married to the former Perla Ocsan Andrade and has four children; Michael, Mark, Martin, and Mary Ann.

LCDR Salvilla holds a bachelor's degree in mechanical engineering from Adamson University (1971), Manila, Philippines and a bachelor's degree in Geodetic Engineering from Far Eastern Aeronautical Trade Institute (FEATI) University (1986), also in Manila.

His military schooling includes the 78th Naval Officers Qualification Course (1974), Philippines; Supply Officers Course (1975), Philippines; Naval Intelligence Course (1975), Philippines; Transit Operators Course (1985), Philippines; Naval Command & Staff Course (1990), Philippines; and Basic Geodetic Survey Course (1991), DMS. He is currently enrolled in the Advanced Geodetic Survey Course here at the School.

Director's Call

NEW ARRIVALS
Military

Capt Mark S. Leach (USAF)
SFC Mark H. Sprague (USA)
SFC Elizabeth A. Fecher (USA)
SSG Jackie D. Burns (USA)

Civilian

Brenda Vincent (PI)

DEPARTURES
Military

MSG Richard Johnson (USAF)
MSG William C. Melen (USA)
SFC Patricia Rivera (USA)
LI1 John E. Curtis (USN)

Civilian

Carlos Angel (GS)

PROMOTIONS

1LT Frederick Kaehler (USA) to Captain
SSG Bruno P. Codispoti (USA) to Sergeant First Class

AWARDS

MAJ Arthur G. Thompson (USA) - Bronze Star Medal
SFC Elizabeth A. Fecher (USA) - Army Commendation Medal

CERTIFICATES/LETTERS
Military

MAJ Arthur G. Thompson (USA) - Certificate of Achievement
SFC Donald R. Payne (USA) - Master Instructor Certificate
SFC John T. Flores (USA) - Senior Instructor certificate
TSgt Foster Wright (USAF) - Senior Instructor certificate
SGT Patti A. Wilbanks (USA) - Senior Instructor certificate
SSG Jackie D. Burns (USA) - Memorandum of Commendation

Civilian

Joseph P. Quigley (LO) - Certificate of Achievement
Dennis T. Roberts (LO) - Certificate of Achievement

The **CONTOUR** is published monthly by and for the Defense Mapping School. Contents are not necessarily the official views of, n or endorsed by, the U.S. Government, the Department of Defense or the Defense Mapping Agency. Editorial content is edited, prepared and provided by the Public Affairs Office of the Defense Mapping School.

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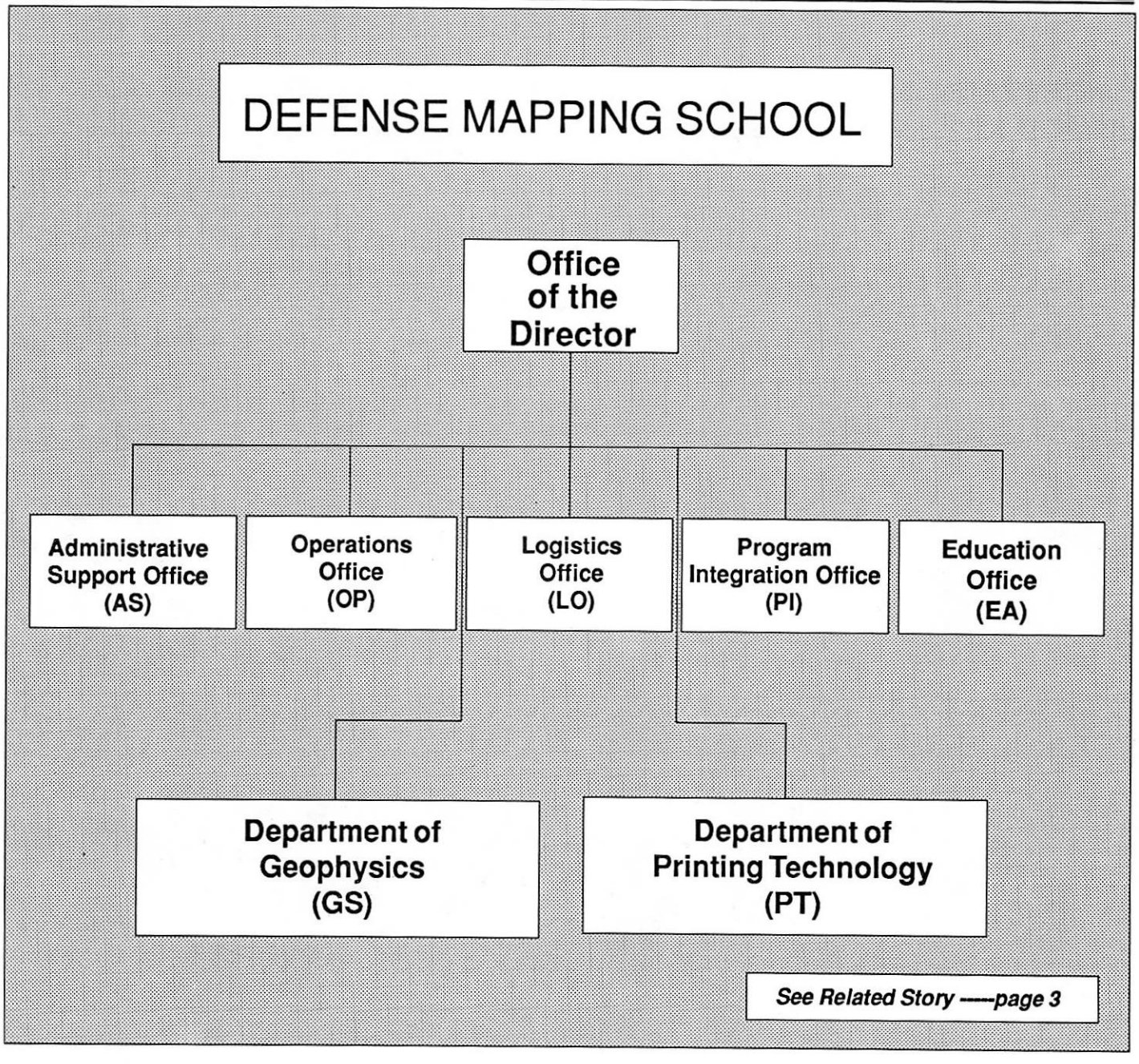

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FAIRFAX, VIRGINIA 22031-2137

Holiday Greetings

As we prepare for the holiday season, I reflect on how the present circumstances compare to those of last year.

A year ago, most of the men and women in DMA were working 12 hour shifts, seven days a week in support of our warfighters in Southwest Asia. None of us could predict how the sequence of events would unfold, nor could anyone have guessed how swift and successful our warriors would be.

We knew, however, that we were engaged in a monumental effort to provide the best MC&G support in the history of warfare. On a personal basis, each of you knew that in spite of the sacrifices you were making, our men and women in uniform were being called upon to make even greater sacrifices. Their success and ours is now a matter of recorded history.

As we celebrate the holidays, each in our own special way, we should be very mindful of our many blessings. For my part, I want to express my thanks for your great support to our nation's defenders, and wish you the happiest of holidays.

WILLIAM K. JAMES
Major General, USAF
Director

DMS resources realigned effective 1 December 1991

by William Revell

In keeping with the Defense Mapping Agency's planned reductions mandated by DoD's overall force structure changes, DMS realigned the current three teaching departments into two new elements—Printing Technology Department and Geophysics Department. The DMS staff will also include a small Administrative Support Office, in addition to the current Operations, Logistics, Program Integration, and Education Offices.

The Department of Printing Technology (PT) is being formed by realigning the Graphic Arts Department. A new Technical Support and Development Division will be formed to complement the Photolithography Division and renamed Reprographics Division. The Printing Technology Department will have 25 military and 16 civilian positions.

Five divisions — Joint Operations, Geodesy, Terrain Analysis, Cartography, and the International Coproducer (formerly IAGS) —will be assigned to the new Geophysics Department (GS). The Geophysics Department will have 27 officers, 32 noncommissioned officers, and 21 civilian positions authorized for FY92. This new department merges the Geographic Sciences and Management and Technology Departments, with some functional realignments between the current five operating divisions.

Editor's Note: There will be follow-up articles on the realignment in future issues of the Contour.

Navy track class graduates

by James Harnden

About a year ago, the Navy decided to discontinue the MC&G curriculum at the Post Graduate School in Monterey, California, and approached the Defense Mapping School (DMS) for alternative training opportunities for the Naval Officers.

At that time, DMS offered the Cartographic/Geodetic Officer Course (CGOC) designed for Air Force students, and the Mapping, Charting, and Geodesy Officer Course (MCGOC) for Army and Marine Corps students, both courses offering a broad background in MC&G technical areas.

A study concluded that it would be more efficient to form one basic MC&G officer course, with service "tracks" to address service-specific training requirements. And so, armed with lists of subject areas provided by Commander, Naval Oceanography Command and subsequent meetings with Oceanographer of the Navy staff, CNOC staff, Naval Oceanographic Office, Naval Oceanographic and Atmospheric Research Laboratory (NOARL), and National Oceanographic and Atmospheric Administration (NOAA), construction of the new course began. These commands and staffs, along with DMAHTC and DMASC personnel and the invaluable expertise of the resident staff of DMS, provided much of the technical information and insights needed to design this unique course suitable for all four services.

The makeup of the inaugural "Navy track" students, who graduated on 11 October, was remarkable. CDR Donovan will be the MC&G Officer, Office of the Oceanographer;

"Navy track" students listen to speaker and await their diplomas (Photo by SSgt M. J. Kocheran)

LT Howell, currently at HTC, has served at one of DMA's forward Combat Support Elements; LT Stone, with a year here at DMS as an instructor in the Joint Operations Division (MTJ), has also served at DMA Combat Support Center; LTJG Baldauf, also an MTJ instructor, has at-sea experience in both Coastal and Deep Ocean Survey.

This broad range of experience and background presented a golden opportunity to receive immediate and constructive feedback and will allow us to make appropriate changes as the Navy refines its philosophy for MC&G training.

The graduates and instructors met recently with representatives of OP-096 to continue the process of tailoring and refining the training needs of the naval oceanography and warfare communities.

CAPT Charles A. Martinek, Deputy Oceanographer of the Navy, addresses the "Navy track" graduating class as COL Samuel R. Schwartz (r) and MAJ Michael A. Byrne look on. (Photo by SSgt M. J. Kocheran)

Focus on a Course

Reproduction Equipment Repair Course Update

by David Miller

We've all heard or read the phrase "If it ain't broke, don't fix it." Ah, but when it is broke, it has to be fixed. That is when we look for one of the many service personnel that has had the privilege of attending and graduating from our Reproduction Equipment Repair Course.

The course provides students with the essential transferable skills and knowledge necessary to troubleshoot and repair major items of lithographic equipment. Additionally, it provides an orientation on the unique equipment found in the different Services.

Admission to the course requires completion of the School's Basic Offset Printing course, Navy/Air Force Basic Lithographer course, or equivalent, and command certification of a minimum of three years as an offset press operator. Admission also requires prior training, grade, vision and physical abilities as determined by individual Services.

All other admissions come from in-service personnel who require cross-training or retraining to meet service needs. Students from government agencies, as well as international students, must also satisfy the prerequisites, as established in the DMS Catalog and Course Descriptions.

The course is taught in four phases. During Phase I, the students are introduced to the course and given Hazardous Communications training, followed by a lesson on use and application of hand and measuring instruments used throughout the course. Phase II is Offset Duplicator Repair. In this phase, the students are provided with the advanced transferable skills and knowledge required to troubleshoot, repair, time, and adjust components of the duplicator. For the first lesson, the students are familiarized with the tools, safety checks, controls and lubrication required for the duplicator to pass paper from the feeder to the delivery tray. The students then test-operate a maladjusted offset duplicator and make the necessary adjustments to the vacuum feeder and register groups of the duplicator to pass paper from the feeder to the delivery tray. This is followed by timing of the vacuum feeder and test operation of the offset duplicator. Timing includes systems alignment and adjustments. Alignments and adjustments are verified by running register sets and checking registration. At this time, students disassemble, clean, grease, oil, and make necessary repairs. The duplicator is then reassembled, components are timed, and final adjustments are made by running test sets, checking registration, and ensuring that the duplicator is 100 percent operational.

Phase III is Process Camera Repair. Here students are taught to trammel and calibrate a maladjusted process copy camera. Lenses on a camera are optically oriented to cover the lensboard and copyboard areas encompassing the reproduction range of the camera. The substitution of a new lens or its mounting flange or any change in the geometry will nullify the accuracy of the counter readings and necessitate trammeling and recalibration.

Trammeling of a copy camera is paralleling the copy, lens and film planes of the camera to one another. Then the camera is calibrated and the lensboard and copyboard counters are set to distances required to produce desired reduction or enlargement sizes within the range of the camera.

In Phase IV, Repair and Maintenance of the Medium-Size Offset Press, students are familiarized with controls and overall operation of the press. Instruction includes troubleshooting techniques, assembly/disassembly, adjustments and timing, verification of adjustments and timing, and checking registration.

Finally—Phase V (a bonus), Graduation—the day the students have been looking forward to since the course start date. This is when the students receive their long-awaited and well-earned diplomas. Addresses are exchanged, goodbyes are said, and it is now time to head back to assigned duty stations, be it with an Adjutant General shop, Engineer Battalion, Engineer Company, Psychological Operations Unit, Marine Corps print shop, or a Navy print shop aboard ship. Civilian students return to their agency and international students return to their country—all with one thought in mind—it was well worth the 20-week investment.

Parts of this article were extracted from the Individual Program Supplement for the Reproduction Equipment Repair Course.

Focus on a Course

Yesterday's scribers are today's revision specialists

by SFC Herman J. Van de Vaarst

Mention the map-making process to any old time topographer and visions of old men with scribers slaving over light tables come to mind. Well, times have changed considerably since those of Mercator. The scribers are still there, but cartographers rarely draw maps from scratch anymore. Today's cartographer is a revision specialist.

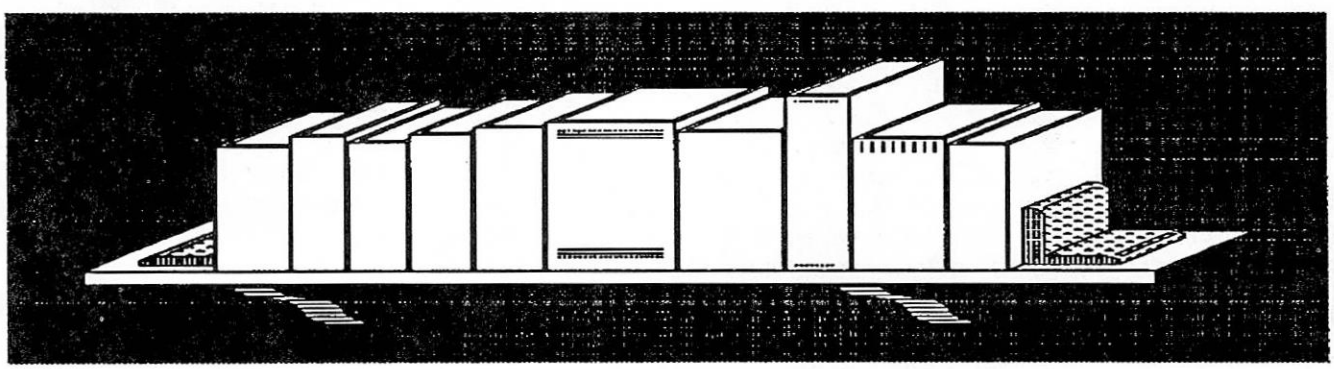
The purpose of the Basic Cartography course is to teach prospective military cartographers the fundamental map-making skills, to include: aerial photo interpretation, planimetric revision, map montaging and revision, photomosaic construction, and color separation methods. Quite a task for an 11-week course.

Basic cartography is taught in three separate phases. In the first phase, students learn the basics. This includes a review of map-reading skills and an introduction to the various coordinate systems used on military maps (UTM, MGRS, and Geographic). They are also taught the importance of registration and an introduction to the use of aerial photographs. In the second phase of the course, students are acquainted with the revision process. Here they learn to pull up information from the aerial photographs that they mosaicked in the previous phase. Proper symbolization and placement are stressed. They are also given their first real exposure to reproduction when they have to montage map sources and deal with the age-old problem of trying to depict a hemispherical earth on a flat square sheet of paper. In the third and final phase, the students learn scribing and the principles of color separation.

By the end of the course, the graduates have a firm understanding of the total map-making process, from the data collection to the printing of the final product. They are now ready to serve in various topographic units.

The cartography instructors teach an average of 70 students a year, about 50 percent Army, 40 percent Marine, and 10 percent allied. This gives students a healthy exposure to their counterparts in the other services and also helps to build ethnic and cultural ties. During the past year, we have enjoyed teaching students from the Philippines, Egypt, Nigeria, and Indonesia.

So now, one may ask, what is in store for future cartographers? Well, we cannot escape automation. Computers have invaded the workplace almost everywhere and the field of cartography is no exception. The cartographer of tomorrow will need to have a basic understanding of the Disk Operating System and the Aristo-coordinatograph. The cartographers' data base will be digitally stored and from this they will still have to produce the same fine products for which they have always been known. Here at the Defense Mapping School, we'll give them the tools they need to get the job done for tomorrow.



Belvoir CG addresses MCGOC graduates

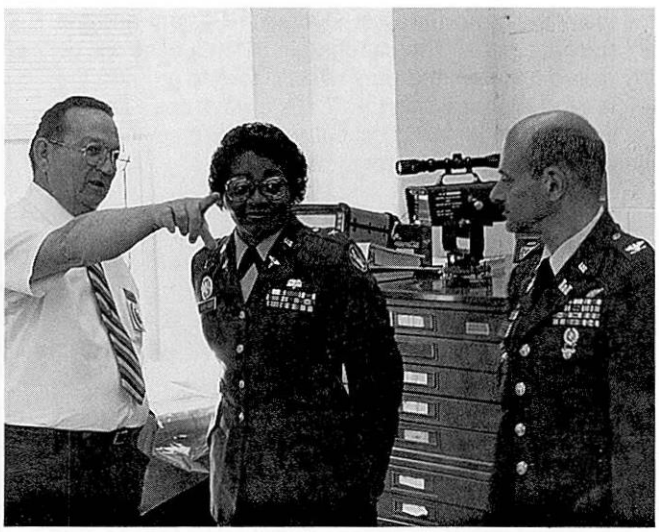
by CPT Scott Wilson

Brigadier General Clara L. Adams-Ender, Commanding General of Fort Belvoir, addressed the graduates of the Mapping, Charting, and Geodesy Officer Course (USA/USMC Track), Class 501/91 in Heitmann Auditorium on 15 November. The completion of this service track culminated the inaugural offering of the newly revised MCGOC course, which is now open to officers from all U.S. armed services. The Navy and Air Force Tracks graduated on 11 October.

BG Adams-Ender's address acknowledged the joint aspect of the class as she stressed the importance of service interoperability now and in the future. She then recalled some of the rigors of academic struggle to underscore her key point of mental and physical harmony and how such harmony will allow anyone to prevail over whatever obstacles they may encounter.

Following the MCGOC graduation ceremony, BG Adams-Ender was escorted on a tour of the School.

Brigadier General Clara L. Adams-Ender arrives at DMS to address MCGOC graduating class and to tour the School.



Wayne Gleason "points out" some interesting facts about the Geophysics Department to the General as COL Samuel R. Schwartz, DMS Director, looks on.

General Adams-Ender congratulates CAPT Kristine Urbauer, class leader, and presents her with her diploma.

--Photos by SSgt M. J. Kocheran

Graduation culminates inaugural offering of "New MCGOC" class

Despite various backgrounds, students share a common perspective

by CPT Scott Wilson

The graduation of the Mapping, Charting, and Geodesy Officer Course (USA/USMC track) class 501/91 on 15 November culminated the inaugural offering of the newly revised MCGOC course.

MCGOC is now a joint course in the fullest meaning of the term by now being offered to officers from all U.S. armed services and class 501/91 reflected this aspect.

The sole Marine attending the course, WOI Terry Fulton, posted the top academic average and was designated as the Distinguished Graduate. WO Fulton is now assigned as the MC&G Officer for the I Marine Expeditionary Force, Camp Pendleton, California. Finishing a close second was Army 2LT Richard A. Horsch, who was deemed the Honor Graduate. Lieutenant Horsch is assigned to the 100th Engineer Company, 30th Engineer Battalion (Topo), Fort Bragg, North Carolina where he is a platoon leader.

Five international officers also graduated with this class and they, too, shared joint service representation. Two were Air Force officers, two were Army, and one was a naval officer.

Five U.S. Navy officers completed this course, three of whom are assigned to the School. The senior naval officer, Commander Barry Donovan, is now assigned to the Office of the Oceanographer of the Navy at the Naval Observatory and the remaining member of this contingent was LT David Howell, who returned to his duties at DMAHTC. The rest of the students were Army officers.

2LT Adonis Chakides is assigned to the 30th Engineer Battalion's 175th Engineer Company. He deployed to Saudi Arabia during Operation Desert Shield/Storm and served as the Terrain Analysis Platoon leader. Upon his return to Fort Bragg, he'll assume duties as the Map Distribution Platoon leader.

With his background, 2LT Chakides had some very definite opinions regarding the value of the training he received. He said that the newly added elements of the MC&G Management block, which include such topics as Area Requirements, Crisis and Exercise Support, and War Reserve Stockage, as well as Distribution and Requisitioning will "...very definitely help me as the Map Depot Platoon Leader." He added, "I saw a lot of confusion about the whole process when I was in Saudi (Arabia) and I think the instruction here will help me clear it up back at Bragg." Turning his thoughts to his former duties in Terrain Analysis, Lieutenant Chakides said, "GIS, the more, the better." He then summarized his assessment by saying, "I learned a lot more here than I thought I would."

More indicative of the typical MCGOC student is CPT Anita Kohler. Although never having served in a topographic assignment, but with a degree in Environmental Resource Management, she sought a topographic job after completing her initial tour of duty as Construction Platoon leader and Assistant Operations Officer (S3) with the 84th Engineer Battalion (Combat) (Heavy) and the 45th Support Group, respectively, in Hawaii. For her, coming to MCGOC was an "unknown quantity" and she therefore had no real expectations, but she quickly added that she "learned a lot!"

CPT Kohler is attending the Engineer Officer Advanced Course enroute to Germany and is anticipating an assignment to the Operations Section (S3) of the 649th Engineer Battalion (Topo). From her perspective, she thought "the course was a great help", especially with regard to missions, equipment, and structure of topographic units, as well as project scheduling and quality control.

Regardless of their individual backgrounds and experiences, the graduates of this freshly revised course left with the confidence that they are prepared to accomplish any MC&G mission with which they may be charged.

Survey Results Indicate DMA Average On Sexual Harassment Question

Is harassment a problem at DMA?

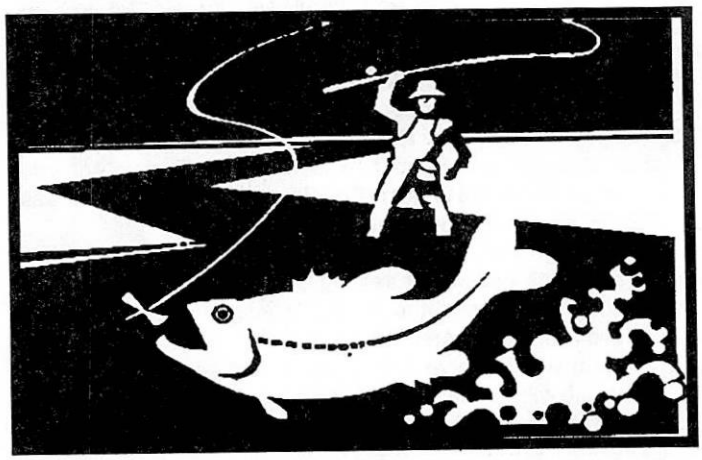
While a June 1991 survey of the DMA work force revealed that sexual harassment at DMA is no more or less a problem than at other Federal agencies, Maj. Gen. William K. James, USAF, DMA director, was not pleased with "average."

"I do not take comfort in being no better or worse than other agencies," General James told his senior staff. "I do not control other agencies, but for DMA my policy towards sexual harassment is very clear—it will not be tolerated in the Defense Mapping Agency. It creates an offensive atmosphere that undermines our effective mission accomplishment."

The survey indicated that many DMA employees have experienced, or observed, some form of sexual harassment in the past 24 months. No major organizational element was immune from employees who felt they had experienced some form of sexual harassment. The survey also indicated that employees perceived management to be a contributing factor in the sexual harassment issue. Employees also indicated that they considered sexual harassment "unprofessional."

The survey reported on three forms of sexual harassment—(1) Uninvited sexual attention; (2) Third party sexual harassment; and (3) Non-specific sexual harassment. All three forms of sexual harassment were related to a perceived reduction in productivity by the respondents with the highest reductions occuring as a result of third party sexual harassment.

See SURVEY page 9



Fisherman's luck

by SGM Carlos Sellers

It was the day after Christmas, we were down on the lake.
We got there so early even the frogs weren't awake.

The boat had been launched, but we were scurrying about;
The boat was slowly sinking--the drain plug was left out.

After hours of pumping we were ready to go.
Look at those clouds, I hope it don't snow.

The motor was purring as we headed upstream;
That 200 horse outboard really does scream.

Ten miles in five minutes, we were going real fast
Then the motor sputtered as we ran out of gas.

No problem we thought, we'll just fish back downstream.
We'll catch lots of bass just like in our dream.

I started the trolling motor and we were ready to fish,
Then I heard my buddy mutter--"OH, NO--you won't believe this!"

All of our tackle was left in the truck;
That's just what we needed--a little more bad luck.

With the trolling motor in high, we headed back in.
Suddenly bass were jumping everywhere, time and time again.

The bass were catching butterflies, snakes and frogs.
One caught a wild turkey that perched on a log.

Suddenly this bass charged the boat--he was huge in size;
He was at least 12 inches between the eyes.

That bass attacked the trolling motor, it broke with a loud pop;
Then he tried to eat the blades on my stainless steel prop.

He jumped out of the water and splashed with his tail.
When he opened his mouth it looked like a pail.

He kept on striking, eating everything in sight;
If I just had a spinnerbait, I'd give him a fight.

No motor and no tackle, we sat in disbelief;
Watching those bass as they continued to eat.

Finally a perch-jerker came cruising around the bend;
For $200, he'd tow us back in.

He tied on the tow rope, put his motor in gear;
Pushed down the throttle, then he opened a beer.

You're going the wrong way, we shouted, but he couldn't hear;
He never looked back, just kept drinking his beer.

Where would he take us? We didn't have a guess.
How did we ever get into this mess?

A lightning bolt flashed and we shuddered in fear;
But the perch-jerker never flinched, he just opened another beer.

Then came the rain and huge hailstones;
Our rainsuits blew away as we tried to put them on.

At 12 o'clock midnight we finally did stop,
There was nothing in sight but a run-down boat dock.

"Where's your truck," the perch-jerker said?
If we could have caught him--today he'd be dead!

We walked 20 miles down an old logging road,
Stepping on snakes, spiders and toads.

Just when we thought we couldn't walk anymore,
A worn-out dump truck arrived with a roar.

The driver was drunk and he spoke with a curse;
But we quickly climbed in, our luck couldn't get worse.

Three hours later we finally arrived,
Cold, wet and sore and barely alive.

We stumbled and fell as we searched in the dark;
This had to be the place where our truck was parked.

Do I have to tell you, we still had our luck?
Some lousy rat had stolen our truck.

Our wives never believed the story we told.
Our divorce is now final and our homes have been sold.

We learned something special from this cruel stroke of luck,
From the loss of our wives, our boat and our truck.
Yep--Murphy must have been a bass fisherman.

SURVEY from page 7

Dr. John B. Pryor, professor of Psychology at Illinois State University, and a noted authority on sexual harassment, developed the survey for DMA employees. It borrowed heavily on the survey used by the Merit System Protection Board to survey the Federal work force in 1980 and 1987. Some 8,417 surveys were mailed to all military and civilian members of the DMA work force. Thirty-one percent (2,631) responded, with 810 writing additional comments.

Dr. Pryor defined the three categories and gave some characteristics:

Uninvited Sexual Attention (USA) - example - pressure for dates

* Most USA took place at work during regular work hours for both women and men.
* The most common reaction to USA for both women and men was to ignore the behavior or do nothing (53% or women and 46% of men).
* Very few took any kind of formal action (4.8% of women and 2.3% of men).

Third Party (TP) Sexual Harassment, which may involve consensual sexual relationships and behaviors which result in creating a hostile environment for others in the work force - example - relationship between supervisor and subordinate.

* Most TP took place at work during regular work hours for both women and men.
* Complaints of TP typically arose from directly observed behaviors.
* The most common reaction to TP for both women and men was to ignore the behavior or do nothing (56 % of women and 54% of men).
* Very few took any kind of formal action (1.7% of women and 4% of men)

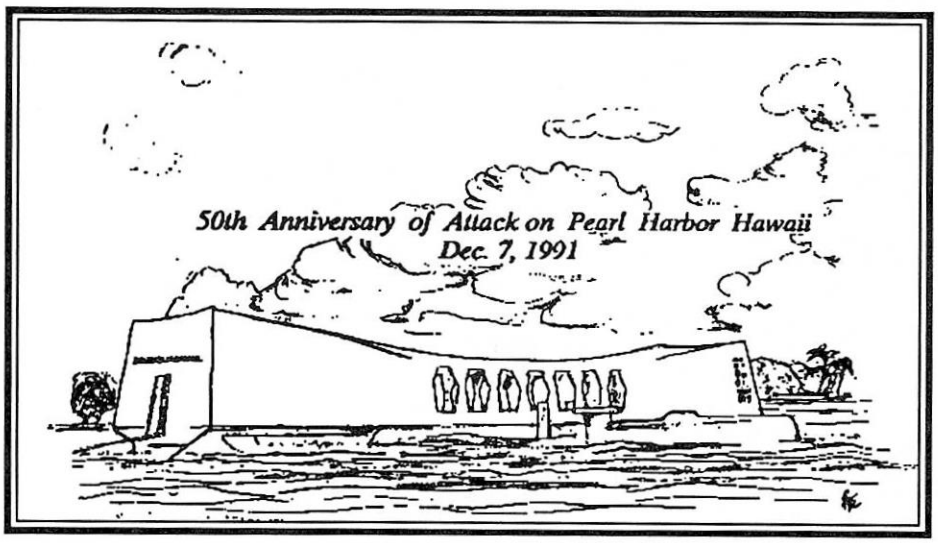
Non-specific (NS) Sexual Harassment - examples - sexually explicit computer software, graffiti, pin-up calendars.

General James, along with component directors and DMA senior staff, was briefed by Dr. Pryor on the preliminary results of the survey. After the briefing the Director told his staff, "I will not tolerate any form of sexual harassment, and I expect those in positions of leadership to serve as role models by treating employees with dignity and respect."

The general has directed briefings be given to the rest of the leadership team emphasizing the Director's expectations regarding zero tolerance of sexual harassment.

In response to a survey result which indicated many employees do not report sexual harassment because they lack trust in the system for dealing with the problem, General James said in a letter to every employee, "if you believe there has been sexual harassment, you should contact the appropriate Human Resources Operations Office Equal Opportunity Staff. If an investigation reveals that sexual harassment has occured, you have my assurance that appropriate and direct action will be taken to stop the practice and discipline the guilty."

Training on recognizing and dealing with sexual harassment will be given to top management starting early next year. It is envisioned that this training effort will go on for a period of time and will be eventually given to all DMA employees.



DMS recognized as leader in annual CFC fund drive

Editor's note: Major General William K. James, Director, DMA addressed the following to COL Samuel R. Schwartz, Director, DMS on 19 November 1991.

As the DMA Fall 1991 Combined Federal Campaign (CFC) draws to a close, I wish to congratulate you and your employees for an outstanding performance in support of the Campaign.

Defense Mapping School (DMS) achieved 113 percent of its goal of $9,400 with over $10,600 in contributions and pledges, and a 70 percent participation rate, including four "Eagle Awards." The highly effective efforts of your CFC Coordinator Sergeant First Class Herman J. Van de Vaarst ensured the success of the DMS Campaign. DMS will be eligible for the CFC "Merit Award" for exceeding $50 per employee and 65 percent participation, the "100 Percent Goal Certificate," and the "Payroll Deduction Giving Award" for achieving more than 75 percent contributions by payroll deduction. An awards ceremony is planned for early January 1992.

DMA overall achieved 107 percent of its goal of $302,100, with over $325,000 pledged. The Agency also reached the CFC "Winner's Circle" by raising more than 10 percent over last year's goal.

The many organizations served by the CFC will greatly benefit from the generous support provided by DMS employees. WELL DONE!

You can make a difference

by Robert T. Short

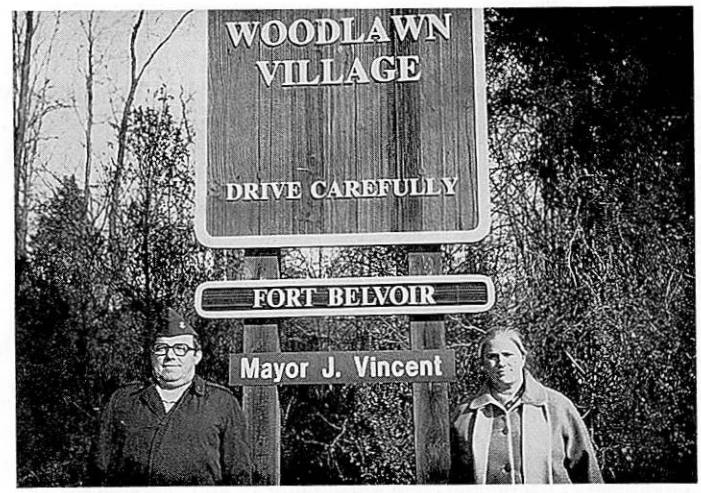
Editor's Note: One of our employees, Brenda J. Vincent, currently serves as Vice Mayor of Woodlawn Village in the Fort Belvoir, Virginia installation Mayoral Program.

In March 1984, SGM John J. Vincent was assigned to the greater Washington area. John and his wife, Brenda, applied for housing on Fort Belvoir and were assigned to their current quarters. Upon moving in, the decision was made that, although these were government quarters, for the time they reside there, it would be "home." Numerous improvements were made, not only to the immediate area, but also to the surrounding "common areas." Brenda's neighborhood involvement continued to expand and she eventually became a certified in-home day care provider. Although she worked in the home, she remained very involved with the "Outside World."

In October 1989, the Fairfax County School Board attempted to restructure the school boundary for the local elementary schools. What this meant was that Woodlawn Village would be administratively subdivided among three different elementary schools. Concerned with the potential impact of the change upon community life, Brenda immediately attempted to gain extensive Village involvement to organize, and tackle the challenge of fighting the county School Board. Several community meetings were organized to formulate a community position. Finally, in January 1990, Mr. Gerald Hyland, Mt. Vernon Supervisor, hosted a town meeting which General Arvid West, then Commanding General, Ft. Belvoir, attended. Upon learning the details of the situation, he pledged his support to the community's cause. He followed through on his pledge by personally appearing at the county School Board meetings and expressing the community opinion and desires regarding the school boundary issue. Through Brenda's personal initiative and the involvement of the Installation Commander, the Fairfax County School Board cancelled all action to realign the school boundary.

At about the same time, General West decided that a mayoral program would generate community interest and involvement, not only in this type of action, but would also keep the Commander and his staff informed as to the needs and desires of the communities of Fort Belvoir and the personnel who utilize its support facilities and services. Hence, the birth of the Mayoral Program in May 1990.

Brenda was hesitant to become a mayor at that time; however, she convinced her husband to run for office. John was elected as Mayor of Woodlawn Village and has continued to serve in that position. Brenda is now Vice Mayor and does her part to keep the commander and staff aware of issues, potential problems and situations, and recommends actions for the betterment of Fort Belvoir. The mayors are considered the "white hats" of Fort Belvoir and never get involved with personal problems. However, if the personal problems exceed



Brenda, with husband, SGM John Vincent, at Woodlawn Village where they reign as mayor and vice-mayor. (Photo by SSgt M. J. Kocheran.)

the jurisdiction of the area coordinators, the mayors step in and pursue a solution. When elected mayor or vice mayor, a week of intense training is given. In this training, meetings are held with various Fort Belvoir Chiefs to learn their functions and how they can assist in accomplishing community objectives. Following the training period, the elected officials are officially appointed in an installation ceremony.

Each housing area has its own mayor and vice mayor to represent the community at all meetings. Each mayor is given a community board to serve on, such as the Youth Services Council, Commissary, Hospital, Post Exchange, etc. Every month, a mayors' workshop is scheduled to discuss problems and develop an agenda for the commander's working luncheon. At this luncheon, the heads of the different post facilities hear and answer concerns of the mayors. The mayors return the answers to their community by publishing a community newsletter.

Having resided on the installation for more than seven and a half years, and adopting Belvoir as home, Brenda has become a role model for all residents of Fort Belvoir. Not only is her devotion directed to the installation, but she also expends numerous hours with the Woodley Hills Elementary School, Walt Whitman Intermediate School, and Mount Vernon High School. She is the Hospitality Chairperson and Craft Fair Chairperson of the Mount Vernon High School Choral Boosters.

Brenda's term as Vice Mayor will end in May 1992. If you are interested in serving your community, you are invited to get involved, to share the work, and, with a little luck—have a voice in the issues that impact your family.

1992 Presidential and State primaries

Thirty-eight states, the commonwealth of Puerto Rico and the District of Columbia will hold Presidential Primary Elections 18 February through 9 June 1992. All States will hold Primary Elections for other federal and State officials from 3 March through 3 October 1992.

The dates scheduled for each state Presidential primary are listed below.

DATE	STATE
18 February	New Hampshire
25 February	South Dakota
3 March	Colorado, Maryland
7 March	South Carolina
10 March	Florida, Georgia, Louisiana, Massachusetts, Mississippi, Oklahoma, Rhode Island, Tennessee, Texas
15 March	Puerto Rico
17 March	Illinois, Michigan
24 March	Connecticut
7 April	Kansas, Minnesota, NewYork, Wisconsin
28 April	Pennsylvania
5 May	District of Columbia, Indiana, North Carolina, Ohio
12 May	Nebraska, West Virginia
19 May	Oregon, Washington
26 May	Arkansas, Idaho, Kentucky
2 June	Alabama, California, Montana, New Jersey, New Mexico
9 June	North Dakota

The dates scheduled for each State Primary are listed below.

DATE	STATE
3 March	Maryland
10 March	Mississippi, Texas
17 March	Illinois
28 April	Pennsylvania
5 May	Indiana, North Carolina, Ohio
12 May	Nebraska, West Virginia
19 May	Oregon
26 May	Arkansas, Idaho, Kentucky
2 June	Alabama, California, Iowa, Montana, New Jersey, New Mexico, South Dakota
9 June	Maine, North Dakota, South Carolina, Virginia
14 June	Puerto Rico
21 July	Georgia
4 August	Kansas, Michigan
5 August	Missouri
6 August	Tennessee
11 August	Colorado
18 August	Wyoming
25 August	Alaska, Oklahoma
1 September	Florida, Nevada
5 September	Guam
8 September	Arizona, New Hampshire, New York, Utah, Vermont, Virgin Islands, Wisconsin
12 September	Delaware
15 September	Connecticut, District of Columbia, Massachusetts, Minnesota, Rhode Island, Washington
19 September	Hawaii
3 October	Louisiana

Happy Holidays to you all!

the Staff

Director's Call

NEW ARRIVALS

Military

SFC Von E. Ervin (USA)
LIC Otis H. Clay (USN)
SSG George R. Bass (USA)
SSG John M. Clark (USA)

Civilian

Janet Brooks (AS)
Virgil Tarry (PT)

DEPARTURES

Military

SSG Theodore Mohn (USA)

Civilian

Eva Roman-Vazquez (GS)

AWARDS

Military

Defense Meritorious Service Award

LTC William J. Watts (USA)
MAJ Thomas F. Milo (USA)

Joint Meritorious Unit Award

*MAJ Lloyd D. Carmack (USA)
*Capt Rickey I. Durkin (USAF)
*Capt Timothy McCaig (USAF)

Joint Service Achievement Medal

IS1 Terry W. Angel (USN)

Civilian

Army Achievement Medal

*SPC Karen L. King (USAR)

CERTIFICATES/LETTERS

Master Instructor Certificate

1LT Harry L. Cunningham (USA)
GySgt James A Chism (USMC)
LIC John H. McWilliams (USN)

Certificate of Appreciation

MAJ Lloyd D. Carmack, Jr. (USA)

Letter of Appreciation

Capt Rickey I. Durkin (USAF)

DMS SASMOY NOMINEES

Outstanding Senior Officer of the Year

*Lt Col Erwin L. Williams (USAF)

Outstanding Junior Officer of the Year

Capt Dominic G. Gabaldon (USAF)

Outstanding Senior Enlisted Sailor of the Year

BUC Thomas Kidney (USN)

Outstanding Junior Enlisted Sailor of the Year

LIC Carl A. Holloway (USN)

Outstanding Senior Enlisted Soldier of the Year

SFC Norman J. Michaud (USA)

Outstanding Junior Enlisted Soldier of the Year

SSG Susan L. Fortune (USA)

Outstanding Junior Airman of the Year

TSgt Kevin B. Hartfield (USAF)

*Recognition for DESERT SHIELD/DESERT STORM

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