

New Security Access System being installed

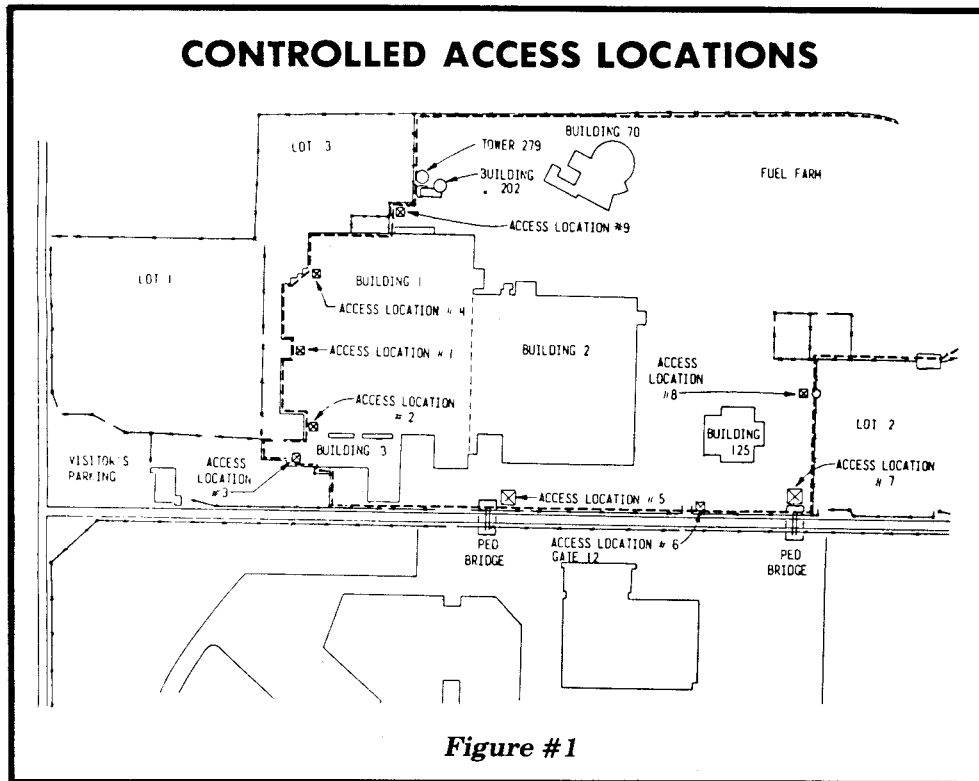


Figure #1

by Jim Kingston

Although some Center employees may take to it with no problem and others may have mixed reactions, NADC's new Security Access System will soon be a reality.

Most NADC workers agree with and understand the growing need for greater security. Certainly, vital work being performed here in the national interest warrants the best possible safeguards against compromise.

In physical appearance, the new system resembles those familiar turnstiles at the Vet, the Spectrum, or on the SEPTA subway system. So, sports fans may feel right at home coming to work.

According to Bruce Heath, NADC's physical security specialist, the new security access system serves a dual role: security and accountability. Security, in that only authorized persons will have access to the Center, in general, and sensitive areas, in particular. Accountability, in knowing who and how many people are on Center as well as when they are on Center. Heath points out that the system will be in operation 24 hours a day, seven days a week, all year 'round. Every time you enter or leave the Center, you must use your ID card. It's your passport to and from NADC.

The new system brings with it a number of changes, the first of which includes some minor alteration to the perimeter fence surrounding the inner compound, accompanied by new access locations (See Figure #1). For example, the street-level pedestrian crosswalk on Jacksonville Road at Hangar Bay #1, Building #1 will no longer be available since the fence will be closed. To cross to the airfield will require passing through a turnstile and using the pe-

destrian bridge over the road. Another new access location, #9, will be located behind Building #1. Here, cars entering for Buildings #1, 2, 70, and 125 will pass through the system and each occupant will be required to present a new ID card for access.

Naturally, new ID cards will be issued to everyone on Center. These new cards have information magnetically impregnated in them and are simply passed through a slotted reader to gain access. Several unique protective features are built into the system to prevent unauthorized use or misuse of cards. For instance, they prohibit 'pass-back'—that's when one person passes through the turnstile, then passes his card back to the person behind him who, in turn, gains access. Once you pass through the access system and are on board the Center, you still have the same freedom of movement throughout the complex. However, if you leave the Center, cross over Jacksonville Road to the airfield, go to your car in one of the parking lots, or simply go out to lunch, you must pass out through the system. If you fail to check out, the system senses you're still on board and if you try to come back in, it will reject you. If you're sensitive to rejection, imagine how it must feel being rejected by a machine!

Some of the popular short-cut access/entrance doors will be converted to 'emergency-only' status and be normally closed and alarmed.

The problem of forgotten and lost badges will be handled differently, too. You will still be shunted to the main lobby if you forget or lose your badge because you can not gain access without it, no matter what. You will still be

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Federal Employee Retirement System . . . is it FER you?

by Barbara Ward

Some important retirement decisions will have to be made by each of us this year. On 1 January 1987, the new Federal Employee Retirement System (FERS) came into effect. Those covered by the Civil Service Retirement System (CSRS) will have to decide during July to December whether to remain in that system or join the new one. In addition, everyone, regardless of his/her retirement system, will have to learn about the Thrift Plan to decide if he or she can afford to have some income tax-deferred.

In order to help you make these decisions, the Civilian Personnel Office will be providing you with information through several channels:

Training sessions—Group training sessions (3-4 hours) will be provided from January to March both for people who are automatically in FERS (hired after 31 Dec 1983) and those in CSRS. You will be notified as to which session to attend.

TV orientation—A half-hour video tape introduction to the new retirement system will be shown in the Center Auditorium at 1300 on January 12, 14, 16, 20, 22, 27 and 29. Any changes to this schedule will be announced in the LOG. Supervisory permission is required.

Computer Disk—An IBM-compatible computer disk and instructions will also be available (January 1987) from the Civilian Personnel Office and each Department's administrative office. With this disk, employees can compute and compare their basic annuity under both the old and the new systems. These disks are easy to use and are easily copied using DOS.

Written information—All employees should have received a FERS booklet which gives a comprehensive description of the system. Extra copies of this booklet are available from the Employee Relations Division. FERS updates will continue to appear in the LOG and, additional articles will appear in upcoming issues of the REFLECTOR.

During the next few months, you'll be hearing a lot about the new retirement system. To help you understand the system, some basic questions will be answered each month in the REFLECTOR. Since each person's employment history, personal situation, and future employment intentions are unique, this information is intended to give the necessary background to help you make the best decision.

Will everyone have a choice of retirement system?

No! If your employment date falls within either of the following categories, you are automatically covered by FERS and will not have a choice!

- Employees whose initial appointment occurred after 31 December 1983.
- Employees who re-entered Federal Service after 31 December 1983, and who had a break in service of more than one year and less than five years of civilian service. Creditable service for this purpose, includes temporary service and service for which a refund was made. Military service is not creditable.

From July through December of this year, all other employees may choose

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Dilworth returns to NADC

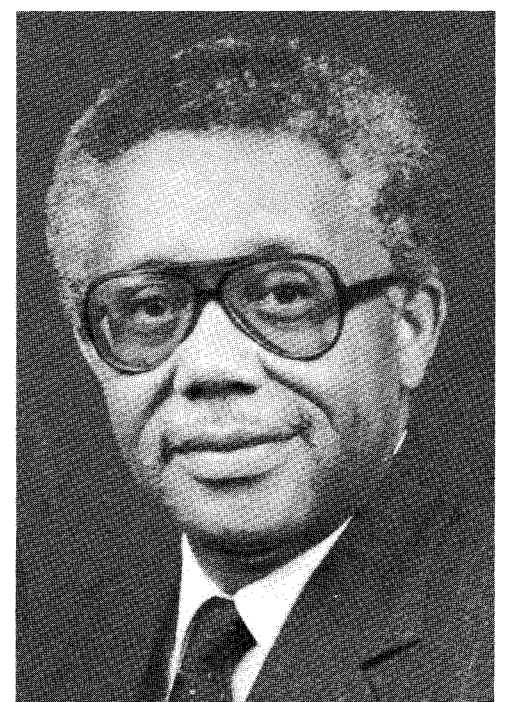
Guy C. Dilworth, Jr., a former longtime employee of the Naval Air Development Center, will be rejoining the staff as our top civilian—the Technical Director.

Dilworth earned a Bachelor's degree in Electrical Engineering from Tuskegee Institute and a Master's from Penn State University.

He served as an aircraft maintenance officer with the U.S. Air Force's Strategic Air Command from 1959 to 1963. He joined NADC in 1963 as a digital logic designer for the VP, VS, and A-NEW projects.

At NADC, Dilworth served as systems engineer for computer-driven cathode-ray-tube display systems. Later he became head of the Displays and Control Branch of the Systems Analysis and Engineering Department. Following his position as branch head, he was project engineer for the

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Guy C. Dilworth, Jr.

W&R brought Santa to town



Photo by JO2 Todd Lufkin

This little one doesn't quite know what to think of Santa and all the excitement surrounding the Annual Welfare and Recreation Orphans' Christmas Party.



Photo by JO2 Todd Lufkin

Santa presents a gift to one of the many delighted guests at the party.

If the SOC Fits

By Robert Janes

There is a recent change in federal law pertaining to the Standards of Conduct (SOC) which is of interest to many NADC employees. It is a provision in the 1986 DoD Authorization Act concerning contacts between current DoD employees and defense contractors regarding possible future employment.

The law applies to officers of the rank of Lieutenant Commander and above, and civilian employees grade GS-11 and above (or those in a comparable position if not under the General Schedule), who have participated in a procurement function relating to a contract. If there later is a contact between the Navy employee and that contractor regarding a prospective job (regardless of who initiates the contact), that employee must:

- a. Report the contact to his supervisor and the cognizant ethics counselor (here at NADC, the Office of Counsel), and
 - b. Disqualify himself from further on-the-job dealings with the contractor, unless and until he rejects the future employment opportunity.
- The one exception to this is where the first contact is made by a contractor and the employee involved immediately terminates the contact. In that case, the

employee need not report the contact; he must, however, report any later contacts.

What I feel is particularly significant about this statute is the broad definition which it provides for a "procurement function." One need not be in the Contracts Division to perform a procurement function, which the statute defines as "any function relating to—

- (A) the negotiation, award, administration, or approval of the contract;
- (B) the selection of the contractor;
- (C) the approval of changes in the contract;
- (D) quality assurance, operation and developmental testing, the approval of payment, or auditing under the contract; or
- (E) the management of the procurement program."

Under this far-reaching definition, a great many Center employees could prove subject to this law. The potential penalties for violation of the statute include a 10-year prohibition on employment with the contractor involved, along with as much as \$20,000 in fines. These are severe penalties, and the statute obviously is not to be taken lightly. If you want more information about this law, please call X-3000 or see me to discuss it further.

On this date in:

JANUARY

- January 1**
New Year's Day
President Abraham Lincoln signs the Emancipation Proclamation, declaring slaves free, 1863.
- January 6**
Samuel Morse publicly demonstrates his telegraph for the first time, in Morristown, N.J., 1838.
- January 7**
The United States holds its first presidential election. George Washington is voted the nation's first president, 1789.
- January 9**
Joint Chiefs of Staff established, 1942.
- January 11**
Dr. Luther Terry, U.S. surgeon general, issues the first government report saying that smoking may be hazardous to one's health, 1964.
- January 13**
Robert C. Weaver becomes the first black Cabinet member when appointed secretary of housing and urban development by President Lyndon B. Johnson, 1966.
- January 15**
Work is completed on the Pentagon, 1943.
- January 19**
Martin Luther King Jr. Day
Howard Hughes sets a cross-country air record, flying his monoplane from Los Angeles to Newark, N.J., in seven hours, 28 minutes and 25 seconds.
- January 21**
New York City enacts an ordinance making smoking in public by women punishable by a fine of \$5 to \$25 and up to 10 days' imprisonment, 1908.
The first atomic submarine, the USS Nautilus, is launched at Groton, Conn., 1954.
- January 24**
The U.S. Supreme Court rules the federal income tax constitutional, 1916.
- January 27**
Vietnam War cease-fire is signed in Paris, 1973.
- January 28**
The Coast Guard is created by Congress, 1915.
- January 29**
The first members of the Baseball Hall of Fame in Cooperstown, N.Y., are named, 1936. They include Ty Cobb and Babe Ruth.
- January 30**
Indian leader Mohandas K. Gandhi is assassinated by a Hindu fanatic in New Dehli, India, 1948.

Martin Luther King Jr. Remembered

Monday, Jan. 19, 1987, will mark the second observance of a federal holiday honoring slain civil rights leader Dr. Martin Luther King, Jr.

Jan. 14-19 has been designated "King Week '87" in memory of the slain civil rights leader. The theme of this year's observance is "Living The Dream: Let Freedom Ring!"

Secretary of Defense Caspar W. Weinberger said King Week '87 will represent an opportunity for the Department of Defense "to demonstrate our commitment to our nation's tradition of respect for individual human rights and dignity."

Weinberger urged DoD installations to demonstrate this commitment with programs, activities and special observances honoring King.



Promotions


Civilian:

Linda Carey, Barbara Dutkiewicz, George Frisch, Gerald Gallagher, William Heil, C. Scott Holloway, Francis Lorenz, Charles More, William Scott, Terry Thomas, Susan Verona.

Military:

AT2 Gary Campbell, HM1 George Christian, AE1 Albert Hines, MS1 James Hunter, HM2 Michael Korth, AO1 Antonio Lieggi, AT1 Mark Lusier, AZ1 Patricia Medzius, AT1 William Robbins, AE2 John Wagner.

Happy New Year



Reflector

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Commander, NADC	CAPT Edward J. Sturm
Technical Director	Guy C. Dilworth, Jr.
Public Affairs Officer and Editor	James S. Kingston
Associate Editor	Mary Ann Brett
Assistant Editor	JO2 Todd Lufkin

Three cited for meritorious service

by Mary Ann Brett

The prestigious Navy Meritorious Civilian Service Award was recently presented to three of the Center's finest: Dr. Ru Ying Lee, Steven McComas, and Eric Alfonsi, all of the Systems and Software Technology Department.

Dr. Ru-Ying Lee, a senior Software Engineer in the Advanced Software Technology Division, performs a variety of software engineering tasks and assignments. These assignments which involve reviewing, analyzing, and resolving particularly complex technical problems take advantage of Lee's skills as a software research specialist as well as an authoritative technical expert.

Five years of NADC, Lee was nominated for the Navy Meritorious Civilian Service Award in recognition of his



Photo by James Moore

Dr. Ru-Ying Lee

major achievements in Ada language investigations and in CYBERPLUS signal processing investigations. His benchmark experiments demonstrated

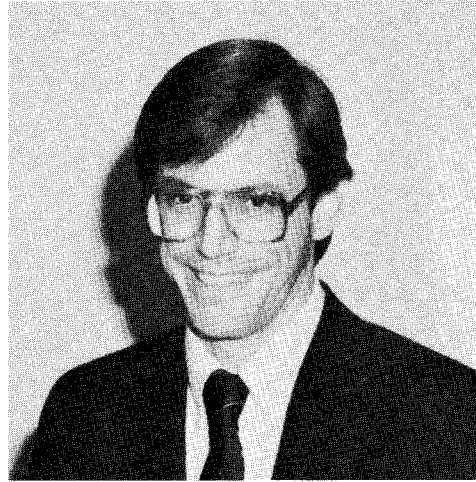


Photo by James Moore

Steven McComas

that Ada could provide significant productivity benefits in implementing real time systems. Lee has also made notable contributions in algorithm development, computation and efficiency analysis for signal processing applications.

Credited with nearly thirty published papers, articles and technical memos, Lee received his Ph.D. in Mathematics from the University of Pennsylvania in 1972. Subsequently, he attained a Master's degree in Electronic Engineering from Pennsylvania State University in 1982.

"I am thrilled!" said Lee at receiving the award. "An award of this level is a great honor. During my time at NADC I have worked on several interesting projects, always with good people." Lee concluded, "It's a pleasant feeling when your efforts are recognized and appreciated."

Steven McComas, S-3 Division Team Leader in the Fleet Software Engineering/Analysis Division, technically leads twelve in-house engineers and computer scientists in the development of all tactical mission, system test (diagnostic), positional trainer, and facility simulation software for the S-3A and S-3B Weapon Systems.

The award nomination described McComas as an outstanding Navy employee for the past fifteen years. He is highly respected and continually praised by Washington, DC sponsors, fleet squadron personnel, and other Navy installations for his expertise and software development accomplishments. McComas was complimented for his efforts in supporting the S-3 program both at the Center and while on



Photo by James Moore

Eric Alfonsi

temporary duty at the Naval Air Systems Command. He has contributed significantly towards a more effective S-3A and S-3B Weapon Systems in the fleet by providing technical insight, innovation, and ingenuity for the overall improvement of the S-3 ASW aircraft.

"It's a real honor," said McComas of being selected for the award. It's nice to know that hard work does pay off with recognition and that management appreciates it."

Eric Alfonsi is a senior Technical specialist for Digital Technology in the Computer Systems Technology Division. Recognized throughout the Department of Defense as an expert in digital technology, Alfonsi provides technical leadership in the initiation, planning, coordination, direction, and application of digital technology research and development for Navy, Marine, and Coast Guard systems.

Until a year ago, Alfonsi was a Branch Manager, a position he held for eight years. There he was responsible for transitioning the latest digital technologies into Navy aircraft such as LAMPS, S-3 and P-3.

Alfonsi was cited for 22 years of continuous and outstanding contributions to the development and application of digital technologies to Navy aircraft systems. He is also responsible for developing more than 30 engineers who have applied advanced digital technologies to Naval aircraft.

Recommended for other awards in the past, Alfonsi said, "I was still excited when I got this one. It's based on technical accomplishments and that means a lot to an engineer like me."

SPAWAR visits NADC



Photo by JO2 Todd Lufkin

On December 20, 1986 the Space and Naval Warfare Systems Command's highest ranking officials visited NADC for the first time. Briefings on Center developments and a tour of the facilities filled the day. Mr. Robert Doak, Rear Admiral John Weaver, Center Commander Edward Sturm and Vice Admiral Glenwood Clark, SPAWAR Commander attend a briefing on P-3C Update IV hardware and software being evaluated at the Center.

New security access system

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given a temporary badge if you simply forgot yours, but if you lose a badge and are issued a new one, the old badge is deleted from the system. Thus, if you later find your lost badge, it will not operate the system and will have to be turned in. There will be no 'spare' badges.

For the benefit of dependents and retirees, there will continue to be regular access to the Credit Union, although plans call for reconfiguring the present credit union area to conform to the new access restrictions. Employees using the Credit Union during normal work hours will have to go out through the security access system and back in again when they've completed their business.

So as not to throw the new system at you cold, there will be a 3-day get-acquainted session in January during which a demonstration turnstile with sample cards will be set up to give Center employees an opportunity to try-it before they have to use it.

Also included in the overall program is an expanded Security Central with new monitoring equipment. Although not part of this system, long-range plans call for a loop road around Building 125 leading to the 'strip' along Building #1 on Jacksonville Road and, eventually, a new main entrance to NADC opposite Gate #33.

Heath's recommendation to Center employees is "be patient—work with the system and it will work for you."

Dilworth returns to NADC

(continued from page 1)

carrier-based ASW command and control system. Dilworth next became manager of the Systems Readiness Division where he directed weapons systems reliability and maintainability engineering, projects systems cost research and analysis activities, and development system integrated logic support plans and special fleet support projects. Subsequent to his position as division manager, he was named deputy director then director of the Software and Computer Directorate. In that capacity, Dilworth directed programs involving tactical software for naval aircraft and ship-based systems, software research and development, al-

gorithm and software processing, advanced signal processing and computer system architecture developments, and development of mass data storage and retrieval systems.

In April 1981, Guy Dilworth was named Technical Director of the Naval Coastal Systems Center in Panama City, Florida. He has been the recipient of SES performance awards bonuses in 1982, 1983, 1984, and the Presidential Rank Award in 1985.

Dilworth is a member of the Institute of Electrical and Electronics Engineers and the Association for Computing Machinery. He is married to the former K. Jean Elliott. The Dilworths have three children: Michael, Martin, and Janean.

Dummies retire from S-3 flying assignments

The Navy's S-3 squadrons have retired all their dummies! They've replaced them with NADC's Ballast Block Assemblies.

Yes, this story sounds weird, but read on . . . it may make sense.

The S-3 is an ASW carrier-based aircraft equipped with four ejection seats. If an emergency occurs during a carrier landing or launch, the pilot can activate all four seats from his position. The two back seats go out together, followed by the front seats. Should one of the back seats be unoccupied it would accelerate ahead of its adjacent seat. The hot rocket catapult exhaust may then strike the crewmember ejecting in the slower moving seat. To avoid this hazard, all seats must be occupied with either a crewmember or an anthropomorphic dummy weighing about 160 pounds.

It is often necessary to fly an S-3 from a carrier to a shore station to pick up a passenger. The crew must then struggle to put a dummy into the empty seat on the outbound trip. This dummy is later removed and tied in the aisle when the passenger takes its place on the seat for the return trip. You can imagine the embarrassment a flight crew goes through lugging an awkward dummy aboard a thirty million dollar aircraft. The job is gut-wrenching and requires two people.

NADC's Seating and Escape Branch was tasked to do something about this problem. It was decided to use an as-

sembly of four interlocking aluminum blocks each weighing less than forty-five pounds. One person can carry and assemble the blocks, securing them to the ejection seat using the existing restraint strap system.

The most difficult aspect of the design was providing a method to securely fasten the block assembly when it was stowed in the aircraft aisle. It had to remain secure during the jolting deceleration of a carrier arrested landing, and the engineers were not permitted to drill a single hole into aircraft structure.

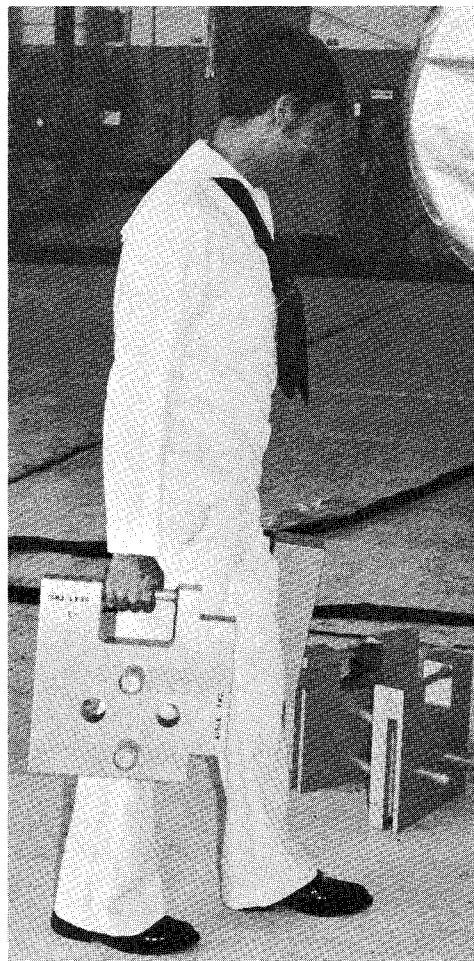
Eventually, all the design problems were solved and the NADC shops fabricated the prototypes. These were tested at NATC in both the ejection seat and stowed aisle positions as an S-3 went through catapult launches and arrested landings.

The units are now standard fleet equipment. The S-3 crews are happy to use them . . . and to retire their old dummies.

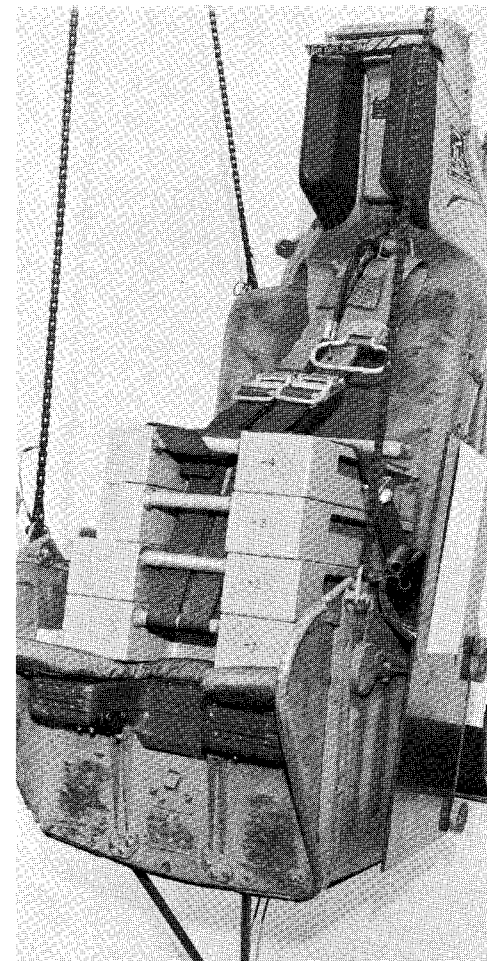
Dan Lorch, the design engineer, said, "This was a fun project because it was challenging, it could be completed in a short time, and we had the satisfaction of seeing equipment which we completely designed make it into fleet service. I was assisted by John Quartuccio who, at the time, was a co-op student engineer. This was an ideal project to train a new engineer in the art of design engineering, planning, detail design, fabrication, and testing. He got to

see it all. I wish the Center could obtain more of these small projects so other young engineers could see a program

from start to finish . . . one that ends with hardware delivered to the fleet."



Aircrewman carries ballast blocks in preparation for assembly.



Completed S-3 ballast block assembly installed in an ejection seat.

Federal Employee Retirement System

(continued from page 1)

whether or not to enter the new retirement system. This is a one time *irrevocable* opportunity to transfer.

Employees who re-entered federal service (after 31 December 1983) with a break in service of more than one year, but have more than five years of civilian service are referred to as "offset employees." Such employees remain subject to the CSRS, but their contributions to the CSRS and their benefits from the CSRS are reduced by contributions to and benefits from the Social Security system.

If I am an automatic FERS, and I don't have a choice of retirement plan, why do I have to go to a training session and do computations on the computer disk?

Unlike CSRS, FERS is a three-part system that is greatly affected by your Social Security benefits and your Thrift Plan savings. You will need to understand how both of these are affected by your past employment history and your future actions, so that you may obtain the maximum annuity benefit. The computer disk will allow you to see how your annuity is altered by increasing or decreasing your Thrift Plan contribution, changes in your projected future income, and by your future employment under the Social Security system.

What are the main differences between the two systems?

The current system (CSRS) and the new system (FERS) were designed for different purposes. The CSRS was established in 1920 (long before Social Security) to provide adequate retirement, disability, and survivor benefits inde-

pendently of other retirement arrangements. It is not a portable system. It was intended for a workforce that was recruited at the entry level and which traditionally continued for thirty years of service.

The new system was designed for a more mobile workforce, therefore, it is a portable system. If you leave FERS, you take along all your Social Security credit, and your Thrift Plan savings can be transferred to an IRA or equivalent. FERS provides adequate retirement, disability, and survivor benefits *in conjunction* with Social Security and the Thrift Plan, thus making it a comparable system. It is very important to remember that FERS is three tiered. *There are several other differences between plans that are also important to note.*

Minimum Retirement Age—Eligibility for optional retirement (retirement at the employee's initiative) is 55 with 30 years of service under CSRS and also under FERS, if you were born prior to 1948. If you were born between 1948 and 1970, your minimum retirement age under FERS is between 55 and 57. The minimum retirement age is 57 for anyone born after 1970.

Minimum Service—FERS offers an optional retirement after as little as ten years service (with the minimum retirement age) which is not offered under CSRS. However, there is a heavy penalty of 5% for each year that you are under 62.

Computational Formula—Both systems average your highest 3 consecutive years of salary, and then multiply that figure against a formula. The CSRS formula rewards lengthy federal

service:

1.50% × years 1 thru 5

1.75% × years 6 thru 10

2.00% × years 11 and after

The FERS formula is a flat 1% × years of service. The formula is increased to 1.1% only if you work to age 62 or beyond with at least 20 years of service.

Although the formulas differ, the FERS computation will add both a Social Security benefit and the Thrift Plan benefit, making the systems comparable in total benefit.

There is very little difference in the bi-weekly contribution that an employee would make to either system. The major difference is in the amount that the employee may decide to place into the Thrift Plan. A CSRS employee may place up to 5% of salary into this tax-deferred plan, and a FERS employee may place up to 10% of salary into the plan. The Thrift Plan will be the subject of next month's article.

Currently, one of the best advantages of the CSRS over the FERS is that annuities under CSRS are fully indexed for inflation (100% cost of living adjustment), while FERS benefits are not indexed at all until age 62, and thereafter are adjusted at a reduced rate.

Who should switch?

There are no clear guidelines. Everyone should *consider* switching to FERS, but, in the final analysis, it is an individual decision based on a number of factors, some of which are projections into the future.

There have been some analyses done by the "experts," and the factors identified as important in the decision-making process are age, mobility, salary, saving habits, marital status, and the

impact of future congressional decisions on both systems.

Age is a very important factor. If you are fairly young and can get a full career under Social Security, your FERS option should be carefully explored.

Your salary also impacts your decision to switch or not. Both extremes, low and high salaries, benefit, in different ways, under the Social Security laws. The lower your annual income, the higher the percentage of Social Security benefit you will receive. Many low income workers will do better under FERS than under CSRS. Higher salaried employees who aren't living to the edge of their income will fare favorably under the tax-deferred aspects of the Thrift Plan.

If you believe that you will be married at the time of retirement, and your spouse hasn't had a full career to offset the spousal benefits, you should be aware that Social Security *gives* you a spousal benefit, whereas CSRS reduces your annuity to pay for your spousal benefit.

Then there is the great big variable of the future. There are things you can plan and predict, and others (like future congressional actions) that you cannot.

Your retirement design has serious financial implications and every effort will be made to provide you with the education you need. We are starting with relatively basic information in these articles, and will progress to more complex aspects as we near July 1987. It is important that you begin now to investigate your benefits under both programs. Find the time to read the FERS booklet, attend the TV orientation and use the computer disk.



Reflector

Volume 32 Number 2

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

February 1987

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NASA looks for Mission Specialists

Singer is astronaut candidate

by Mary Ann Brett

"We're moving to the moon!" said little four-year-old Lindsay Singer. It was her interpretation of what her daddy, LCDR Timothy Singer, had just tried to explain thoroughly.

Singer was recently notified that he was chosen by the Astronaut Selection Board as a nominee for Astronaut Mission Specialist. Mission Specialists are crewmembers who serve on a series of missions and are expert in managing life support systems. His application is currently under consideration by the National Aeronautics and Space Administration (NASA). Those officers finally selected by NASA will report to the Lyndon B. Johnson Space Center, Houston, Texas in August 1987 for a one year training period, followed by a four year tour as an astronaut.

Singer, currently the Block Program Manager for Human Factors Engineering in the Aircraft and Crew Systems Technology Department, manages nearly twenty projects, spread among NADC, other naval laboratories, and civilian research institutes throughout the United States. These projects focus on automated decision aiding, future controls and displays and the design of cockpits projected nearly thirty years into the future.

Singer has quite an unusual and interesting background. He has served in three military services—first, as a 2nd Infantry Division Platoon Leader in the Army, then Air Force clinical residency at Wilford Hall USAF Medical Center in San Antonio, Texas. A Captain in the

Air Force for four years, he transferred to the Navy in October 1980 for the opportunity to work in Human Factors and to become a Naval Aerospace Experimental Psychologist on flight status. He explained that he did a gradual career shift trying to find a marriage of science and technical performance which was also linked to clinical and human behavior. Human Factors Engineering held the key and it ultimately led him to NADC in November 1983.

"Always intrinsically interesting to me" is how Singer described his interest in space. "Astronauts and the space program seem characters and endeavors of a heroic nature," he said. He remembered that about ten years ago, NASA sent out requests and information for people to evaluate potential research areas. At that time NASA was looking into habitability, human functioning, and performance in the esoteric and unusual atmosphere of space. "Since then," he said, "I've entertained the thought of becoming an astronaut, but only recently has it seemed to be a real possibility."

Most interesting to Singer would be the departure and exceptions to familiar engineering guidelines that apply to an earthly environment. "In the shuttle, or in space in a near-zero-gravity environment," he explained, "bodies tend to bend inward because of our musculature. That would cause the design of something as familiar as a desk to suddenly need a quite different configuration." If possible, Singer would

like to participate in the design and the layout of a manned space station. When asked if he had any desire to actually 'go up,' he answered, "ABSOLUTELY!" He'd like to physically help build the station as well as design it. "That would be an incredible focus of training, good luck and opportunity, one of the most spectacular events in my life," he said.

The Singer family discussed the potential assignment at length. Singer said, "The Challenger tragedy made it obvious it wasn't just an exciting, glamorous assignment, the risks are very real." He pointed out, however, that looking back on his career, the best things happened to him when he was willing to take a chance. "Although I don't underestimate them," he said, "it's certainly worth the risks."

Singer is a Phi Beta Kappa graduate of Reed College. He holds two Master's degrees in Experimental and Clinical Psychology and a Ph.D. from Yale University, where he had been awarded a National Institutes of Health Fellowship.

With his wife Ann (a former Air Force Nurse), and their girls Rachael—7, and Lindsay—4, Singer resides in the Chalfont area. He volunteers time to both the Bucks County Mental Health/Mental Retardation Advisory Board and serves on the Centennial Comprehensive Health Care Center Board of Directors.

"I've been one lucky person throughout my life," concluded Singer, "even if I don't get selected, it's been an extraordinary experience and an honor."

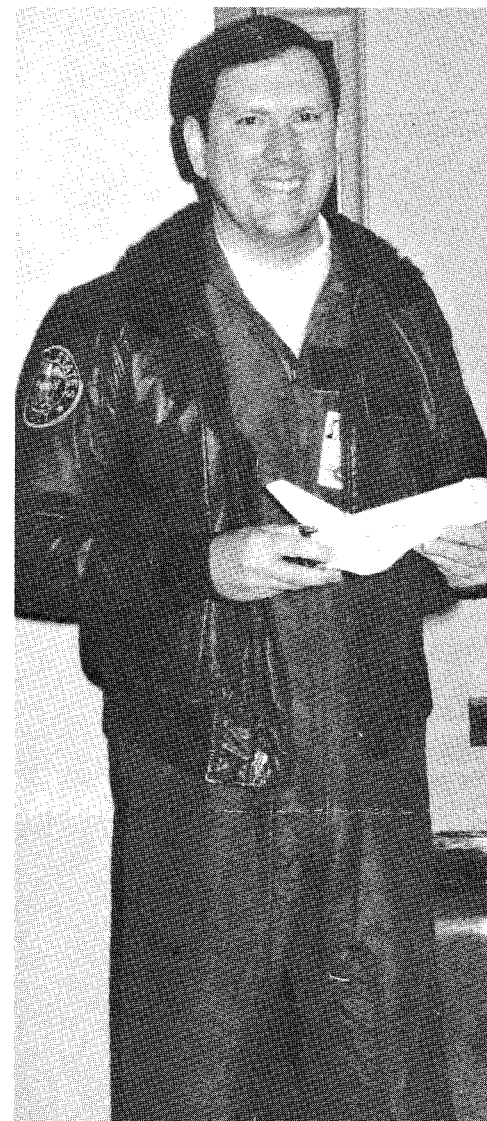


Photo by JO2 Todd Lufkin

Lieutenant Commander Timothy Singer in flight gear with model space shuttle that was given to him by his daughter.

Sailor of the Year honor goes to Getch

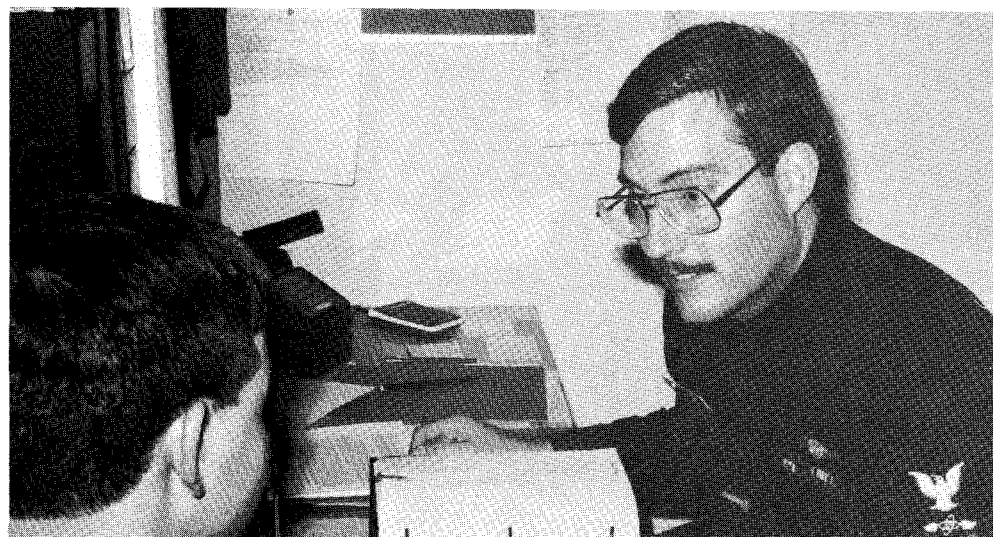


Photo by JO2 Todd Lufkin

Sailor of the Year, AT1 Earl Getch Jr., counsels a sailor on a career decision.

by JO2 Todd Lufkin

NADC's Sailor of the Year (SOY) for 1986 is Command Career Counselor and Education Officer, AT1 Earl Getch, Jr. The 29-year-old sailor has been in the Navy for 10 years and has been at the Center for 19 months.

Getch was excited about being named SOY, with the high level of competition he faced from the other nominees. "With the high level of competition I faced, I was very honored by the Sailor of the Year Board and Commanding Officer selection; any one of the nominees would have been an excellent choice," he said.

This native of Monticello, Fla., has previously been stationed at RTC Orlando, Fla.; NATTC Millington, Tenn.; NAS Jacksonville, Fla. and VP-23,

Brunswick, Maine (where he was Sailor of the Year for 1984).

When Getch arrived at NADC he didn't set out to be the Command Career Counselor. "I was nominated with a group of highly ranked individuals," he said. "I was then interviewed by the Chief Staff Officer, and was selected by the Center Commander. I attended a five-and-a-half week school at Norfolk, Va. and received the 9855 NEC for Command Career Counselor." Getch states that he doesn't plan to switch to the NC (Navy Counselor) rate. "I'm fulfilling a specialty job that the Navy offers and enjoying it. In fact NADC doesn't have the military manpower to rate an NC at this time."

He feels the job of Command Career Counselor has been challenging and rewarding. "I feel that I am performing a job outside my rate which is allowing me to grow personally, while at the same time helping others to achieve their career goals."

(continued on page 8)

BLACK



HISTORY

Month

Letters to the Editor

To the Editor:

It is a shame that this letter needs to be written. If whoever made the decision not to close the Center had one ounce of concern for the people who work here, we would never have had the fiasco which took place in the parking lot after work yesterday, 1/22/87. After being treated to an announcement informing us that we would be ticketed if we didn't park in a snow removal area, everyone expected that the base would be closed at around 1300. Five minutes before 1300, the announcement came, "the base would NOT close."

All of the contractors that we usually work with had already gone home. All of the other government installations that we interact with in Washington, DC, Willow Grove NAS, and just about every other company in the North Eastern United States had been let out by 1300. But not here at NADC. If the decision to stay was correct, then almost every other company and government installation was wrong to leave early. What I would like to know is how far the person who made the decision to keep the base open had to drive to get home, and was he parked in the main lot with the rest of us?

I wouldn't have even minded staying until the normal time if the Center had done anything at all to help the people stranded in the lot. If the gates in the rear of Lot 1 had been open, I might have gotten out. If there had been a snow plow out there to plow some of the lanes where there were no cars stuck,

I might have gotten out. If there were some Center vehicles there to help pull cars out of the lot, I might have gotten out. The guards didn't even have shovels to lend out. I walked over to Channel to buy a shovel, and on my way back, a guard asked to borrow mine. As it was, I had to leave my car in the lot and walk home.

Today, I was thankful I didn't find a ticket on my car, but I still had to dig it out of a snow bank.

Name withheld on request

To the Editor:

SAFETY FIRST?

Just how much snow is required to fall before the Center declares it is unsafe for employees to drive home? I am referring to the storm of 22 Jan 1987. I am sure everyone remembers it—13 inches of snow, towns declaring State of Emergency, cars stuck everywhere, roads impassable. I was shocked to learn that the NAVAIRDEVCEM would remain open, business as usual, jeopardizing the lives of the employees. It saddens me to think that the loss of a few dollars for closing the Center is more important than our health and safety. To make matters worse, most private businesses and other Naval facilities did wisely close preventing any business transactions outside of the Center. How about those parking lots? That is where many people had the most difficulty, trying to get out of the parking spaces and lots. The least you could do is get the snow removed promptly, i.e. before a foot of it falls.

salted/cindered, and were passable. In fact, many Center employees reported only minor delays after waiting out the height of the storm.

To have attempted to plow the Center parking lots while all our cars were there certainly would have been highly impractical and may well have caused many people to be plowed in. The Center snow plowing plan is effective after the snow stops and the job has to be done just once . . . in the absence of hundreds of cars. As it was, about 100 cars were abandoned or simply left overnight in parking lot #1, greatly hampering the snow removal process. The first priority for snow plowing are the roads and fire lanes on Center where emergency vehicles need to travel.

I'll agree that the wording of the snow removal parking regulation announcement left a bit to be desired, and the closely following decision not to close the Center was not what most people were hoping to hear, but the non-closing decision carried with it a liberal leave authority for those who wished to exercise the privilege.

Equating the health and safety of individuals to Center dollars and cents would be the last thing this or any commander would do in arriving at a closing decision. Just to clarify what it does cost to close NADC, think in terms of \$700,000 a day or nearly \$100,000 an hour.

Not to minimize John Nichols' serious injury, his accident occurred at about 0845 or about a half hour after the snowfall began and there was light accumulation. Going from Bldg 125 to Bldg 2 is difficult at best with the construction going on there.



Photo by JO2 Todd Lufkin

A bleak morning view of Parking Lot #1 in what turned out to be an 18-inch snow storm.

The walkways (or lack thereof) were worse—sure wish I had brought my skis. What will it take?

We are all anxiously awaiting a reply, especially John Nichols, Code 40, who is laid up in the hospital with a broken leg and ankle. Injury occurred on the walkway by Gate 12, 22 Jan 1987, walking (sliding) from Building 125 to Building 2.

Name withheld on request

Letter to the editor

The S-Team

NADC has a variety of team participation activities such as volleyball, softball, golf, etc. which require varying degrees of competitiveness. Of all the Center's teams, the one unique team has to be the Snow Removal Team.

Here is a team, consisting of 10-15 members, which has only one opponent, Mother Nature, but has 2500 judges and referees who are experts in the art of snow removal because they spend an hour or two in their driveways each sea-

son. The NADC Snow Removal Team is the only team whose members can test their endurance by operating a loader, grader, snow plow or our 20-ton snow blower for 24 hours non-stop, except for coffee and no-doze breaks.

They experience the thrill of a stunt driver while attempting to manipulate snow plows and the blower through a maze of cars scattered all over the parking lots—often in zero visibility—a true test of the reflexes. They experience the excitement of driving up and down the 8,000 foot runway for hours with a snow plow moving tons of snow or operating the blower at half-a-mile an hour, stopping every 20-25 feet until the operator can see to proceed another 20-25 feet. Some of our members are really lucky, they work side-by-side with Mother Nature shoveling and salting miles of sidewalks.

So, if you're looking for the ultimate challenge, spend 24 hours with our team.

The team captain,
Edward Linke

Editorial Response

First of all, let me acknowledge that I have edited these letters-to-the-editor, deleting personal references and some of the emotional reactions.

Those of us who have had experience in the military services as well as all other civilian employees of Department of Defense agencies should realize that decisions made by military commanders are as judgemental as those of any other corporate executive. Their decisions are based on many factors including the needs of the individuals as well as the needs of the installation. Unfortunately, we are not always aware of everything that goes into that decision-making process. Their decisions are made using foresight and judged by us using hindsight.

Our individual reaction is more likely to be mostly, if not completely, personal: "Why don't *they* close this place and let *me* get out of here?" Maybe it's because closing this place is not the best decision for you, for me, or the Center.

Consider this:

The major winter storm that just hit us did not begin until after the start of normal working hours—or about 0800, to be more precise. As the snow accumulated, many workers in the area opted to leave work and crowded onto roads and streets *before* road crews were mobilized to begin plowing, salting, and cindering operations. Consequently, they only compounded the problem making it worse for the road crews and others who were to follow.

Although those of us who left later in the day may have eventually gotten stuck on a side road or had to detour, in general, the main roads were plowed,

Security Reminders


UNCLASSIFIED BUT CONTROLLED

Critical or sensitive technological information might not be classified but requires control of its dissemination. Refer to NAVAIRDEVCEMINST 5510.13C for the proper application of distribution statements that limit the dissemination of reports, etc. to those having a valid need-to-know of such information. See also OPNAVINST 5510.161 for in-depth guidance on the

distribution statements and their proper application.

CUSTODIAN RESPONSIBILITIES

Persons who have signed for custody of items of government property, or are charged with custody of property in storage, are responsible for the maintenance, safekeeping and accountability of the property. NAVAIRDEVCEMINST 5500.4 outlines the action to be taken if they become aware that property is missing, lost or stolen.



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Commander, NADC	CAPT Edward J. Sturm
Technical Director	Guy C. Dilworth, Jr.
Public Affairs Officer and Editor	James S. Kingston
Associate Editor	Mary Ann Brett
Assistant Editor	JO2 Todd Lufkin

Fleet gets Integrated Tactical Decision Aids

by Mary Ann Brett

"The Second Fleet has just authorized our Integrated Tactical Decision Aid (ITDA) software package for release throughout the entire Navy," announced LCDR Richard 'Rocky' Hudson of the Command, Control and Planning Program Office of the Battleforce Systems Department. Currently in the production stage, the ITDA system is being reproduced in *both* software cassettes and user manuals for fleet distribution beginning in February.

The Center's ITDA package saves time and optimizes the use of battleforce assets. It allows a particular battleforce to plan ahead, to know its specific sonar's and radar's capabilities for different environmental conditions, and the aircraft or weapon systems available for use at any specific time. It will also provide information on which ships are available, and what shore facilities will be supporting that battle force. The Center's ITDA is devoted to all warfare areas—antisubmarine, anti-air, anti-surface unit, and electronic warfare. In the future, it will also be involved in some of the strike warfare areas. Because of this widespread application, it is invaluable to the composite warfare command (CWC) officer in determining his best posture—his best defensive posture against attack or his best offensive posture should he have to do force projection.

Until recently, there were several independent sources developing decision aide software; local computer experts on each staff throughout the Navy, on as many different types of computers created a proliferation nightmare. Because many of these programs were never validated and documented, accuracy suffered as well.

A 1984 Memorandum of Understanding from the Office of the Chief of Naval Operations (OPNAV) established NADC as the Central Development Agency (CDA), a centralized laboratory for developing system-engineered tactical software for the entire Navy. In this capacity, NADC works directly under the Fleet Mission Program Library (FMPL) Tactical Steering Committee (TSC). The TSC is composed of senior representatives from the Second and

Third Fleets, SUBLANT, CINCPAC, CINCLANT, and COMPATWINGS-LANT. The CDA has been very successful at gathering the different software packages throughout the Fleet; validating them in an operational environment and selecting the best of the group to be incorporated into a single program.

At that point in March 1985, the CDA brought to the Center approximately 30,000 lines of worthwhile decision aid code. Hudson said, "we went through the painstaking effort of validating each algorithm behind the software and recording it using the HP-UNIX operating system using either 'C' or Fortran language with hopes of soon going to Ada. We grouped the programs into warfare modules so that one particular tactical evolution could be completely planned through one run of that module. Now, that software is essentially transportable to all of the Navy's official tactical software and computer hardware systems.

The cost savings are significant, explained Hudson. The Navy pays for one software package, one time, and has it done right the first time. Training costs are also held to a minimum. "Once an officer is trained and familiarized with this software, regardless of his future orders, the software and types of computers will be the same."

But, nothing is so constant as change, they say. What happens to the system next? "This is our first issue," said Hudson, "called ITDA Issue 2.0. We've already expanded the program to 300,000 lines of code and we plan to do a yearly renewal, improving on the existing software and addressing the expert system realm."

The process of satisfying Fleet needs is continuous, explained Hudson. "On a weekly, daily, even hourly basis, we're in direct interface with Fleet users to improve the software system." It's the Center's job to provide the answers which will enable the Fleet to perform as tactical experts, optimizing the use of their assets. The Center also has the advantage of being familiar with future weapon systems concepts, new radars, sonars and electronic warfare capabilities not yet operational.

Hudson and his team are looking for-



Photo by JO2 Todd Lufkin

Lieutenant Commander Richard "Rocky" Hudson.

ward to the second evolution. He described the first as "... cleaning up everyone else's dirty laundry (software)" and returning it in a clean and usable fashion. "Now we can devote our efforts and \$3 million annual operating budget to developing new, even more highly sophisticated software," he said. "It's a challenge just keeping up with the state-of-the-art because technology

is advancing so quickly".

Proud of his team's accomplishment, Hudson explained, "We're a direct link between the Navy R&D lab and the fleet user. The Fleet is getting a product which successfully meets their needs and in a rapid turnaround time. This effort, supported by nearly every department on Center, will be a key note in the success of NADC."

CFC a great success CAPT. Sturm thanks all

The FY-87 Combined Federal Campaign is now complete and the results indicate that it was the most successful campaign ever. A grand total of \$120,046.75 was realized, representing 126.3% of our \$97,000 goal. This was an increase of more than \$6,000 over last year's contribution even though the Center has 188 fewer employees than last year.

On behalf of the International Services Agencies, National Health Agencies, United Way Agencies, National Service Agencies and the many needy individuals who benefit from these organizations, thank you.

EDWARD J. STURM, Captain, USN

EDITORIAL

Radio's erroneous zones

Confusion reigned as it snowed. Philadelphia's news radio stations reported Monday, 26 January that:

"All federal offices in the Philadelphia area are closed!"

Naturally, if you looked out your window at several additional inches or a foot of new snow piled on Thursday's blizzard deposit, your interpretation of the news item was: "Ah, good! NADC's closed!" A lot of folks did.

The problem, it seems, is a definition of just what is the "Philadelphia area"?

There are, at least, several generally used and widely accepted definitions: It may be the 5-county Greater Philadelphia Area which encompasses Philadelphia, Montgomery, Bucks, Delaware, and Chester Counties. Then, too, it may be the Tri-State Delaware Valley of Southeastern Pennsylvania, Southern New Jersey, and Delaware.

Or it may simply be Philadelphia, itself. The answer is: when in doubt—find out. A few folks did.

Certain essential personnel such as security guards, firefighters, public works, and the like are *required* to call in, regardless of news reports to the contrary. A lot of folks didn't.

Aside from not filling the emergency needs of the Center, neglecting to call in could earn you an LWOP or an AWOL.

Another area suffering from neglect or oversight is a recall number—also known as your home phone. People who are subject to recall in an emergency must inform the Center management of changes of phone numbers and be sure everyone who needs to know how to contact you can contact you. Some folks couldn't.

If the SOC Fits

by Robert Janes

Probably the most fundamental rule in the Navy's Standards of Conduct (SOC) is to avoid any activities which would create or give the appearance of a conflict of interest, and there seems to be some confusion about just what on-the-job activities could create a possible conflict.

The Navy's SOC instruction provides that the financial interests of an employee's spouse, minor children, and other household members are to be treated in the same manner as the employee's own interests, and goes on to specify that where there is a conflicting interest (normally due to the holding of stock in or employment by a government contractor), the employee must avoid "participation in any official activities that are related to the conflicting interest. . . ." Many people believe that this language encompasses only those activities involving the award or direct administration of contracts, such as membership on a contract selection panel, or service as a contracting officer's technical representative, or

COTR. It is true that these are among the areas where conflicts are most likely to arise, but they are certainly not the only areas. Other activities which could create a conflict of interest include things such as the review for acceptability of the hardware or data delivered under a contract, the review of and acceptance of the hours performed under the contract, the preparation of a specification or a statement of work for which a particular contractor is likely to be a competitor, etc. In short, it is necessary to avoid *any* on-the-job activities which could reasonably be expected to have a direct effect, whether positive or negative, upon the company involved.

As with the SOC in general, the only prudent approach is:—when in doubt about the propriety of any proposed action, you should check with my office before taking the action. Where we have encountered potential conflicts in the past, we have always been able to alter the employee's duties, in a manner acceptable to both employee and supervisor, so as to avoid any problems.

Federal Employees Retirement System

Thrift Plan offers chance to save

This second article on the Federal Employee's Retirement System (FERS), as promised, will focus on the Thrift Plan. The Thrift Plan offers the opportunity to save a percentage of your salary tax-deferred. There are several options governed by specific rules.

All employees currently in the Federal Employees Retirement System will have a savings account automatically opened for them 1 April 1987. In addition, Uncle Sam will deposit 1% of your pay for all creditable service since 1 January 1984. FERS employees will continue to have this 1% given to them for as long as they continue working for the federal government.

How much may you contribute?

Employees covered by FERS may contribute, through payroll deductions, up to 10% of their salary tax deferred and the government will match the contribution up to an additional 4%:

Employee contributes	Government contributes
first 3% of salary	1% automatic contribution
next 2% of salary	3% match
next 5% of salary	1% match
10% maximum contribution	0% match
	5% maximum contribution

Who manages the fund?

Your contributions are managed by the Federal Retirement Thrift Investment Board, five members appointed by the President. These members will, in turn, appoint an Executive Director, who will ultimately have the direct responsibility for all investment decisions.

How will the money be invested?

For the first five years of FERS all of the government's contribution and a portion of the employee's contribution will be deposited in the Government Securities Investment Fund (a risk-free investment fund with a competitive rate of return). Eventually all FERS employees will be able to invest in one or all three different investment funds. The others are the Fixed Income Investment Fund (which provides a fixed rate of return for a specified period of time) and the Common Stock Index Investment Fund (a stock fund whose rate of return will vary). FERS employees will have an opportunity to change their investment choices at least every six months. This year the open seasons for the Thrift Plan will be in April, July, and January 1988.

When can employees stop their contributions?

At any time! However, there is a penalty for stopping at a time other than during an open season: if you do this, you will be ineligible to participate in the Thrift Plan until the *second* open season that occurs after your decision to stop the contributions. Reductions, increases or changes on investments can *only* be made during the open season. At least 30 days before each open season employees will receive a statement of their Thrift Plan account, as well as comparative, historical evaluations of each investment fund to help

you select the one best suited to your needs.

Can CSRS employees participate in the plan?

Yes, but the rules are different and less advantageous. CSRS participants are not entitled to the 1% government contribution or any matching funds. They are limited to depositing up to 5% of pay, rather than the 10% FERS employees may contribute. Also, they have no choice of investment funds. They may only contribute to the Government Securities Fund. Nonetheless, even with these limitations, it remains a tax-deferred savings account, which is quite a nice enhancement to the CSRS. Employees under the CSRS may begin contributing to the Thrift Plan on 1 April 1987.

What does 'tax-deferred' mean?

It means that federal income tax is not paid on the employee and employer contributions, or on the earnings which result from these contributions until the employee receives distribution, usually at retirement. In effect, an employee contribution to the Thrift Plan, will reduce the employee's gross income for federal income tax purposes.

Employees in higher salaried positions should be aware, however, of the non-discrimination rules and the Tax Reform Act of 1986. The non-discrimination rules require that our workforce be divided into two groups: high income employees (more than \$50,000 annually) and lower income employees (less than \$50,000 annually). These rules also state that the average percentage of pay that is tax deferred for those in a high income group can only exceed by a marginal amount (2%) the average percentage of pay that is deferred by the lower income group. This may prevent many high income employees from contributing up to their maximum 10% of pay. The 1986 Tax Reform Act limits private and public employees from deferring more than \$7,000 of income annually (indexed annually).

What if an employee leaves before retiring?

He takes all of his Thrift Plan savings with him. The only exception is the 1% government contribution which is owned by the employee only after 3 years of service. The employee contributions and the employer matching funds are immediately transferable to an IRA or any other qualified pension plan should the employee leave government service. Please note that this is not given to you in a lump sum, it must be invested in a qualified pension plan.

If, at the time of separation, the employee is eligible for a deferred Basic Annuity (has more than 5 years creditable service), payment of the Thrift Plan funds can also be given as an immediate or deferred annuity, or as a payment in a lump sum after the employee retires with a Basic Annuity. If you are younger than 59 and want these funds as an immediate annuity or as a lump sum when your pension begins, IRS has a 10% tax waiting for you since you've never paid taxes on this money before.

Beginning in 1988, active employees will be able to access their personal thrift funds through a loan program. Although very little has been written on this, it appears that loans will be limited to the purchase of a home, medical expenses, educational expenses or financial hardship. Loans can not exceed the employee contributions.

What allowances are made for the delayed start?

Since the Thrift Plan was supposed to start in January, but has been delayed until April, the government is making allowances for the lost matching funds. For people who are currently in FERS, the government will contrib-

ute \$2 for each \$1 the employee contributes of his first 3% of pay, and \$1 for each \$1 the employee contributes for the next 2% of pay from April to June 1987. Also from 1 April to 30 September 1987 employees in FERS may contribute up to 15% of pay (rather than the regular 10% maximum).

CSRS employees may contribute 7.5% of pay (rather than the 5% maximum) from 1 April to 30 September 1987.

We recognize that you will need to hear this information more than once. Be assured that we will provide you with every possible opportunity. Next month's article will review Social Security benefits.



Photo by JO2 Todd Lufkin

Chief Staff Officer Captain Fred Wright congratulates AK1 Frank Liffmann on becoming Sailor of the Quarter and HM2 Michael Korth on his selection as Blue Jacket of the Quarter.

Liffmann named SOQ

by JO2 Todd Lufkin

AK1 Frank Liffmann, Supply Response Section Supervisor, has been named the Naval Air Development Center's Sailor of the Quarter for the last quarter of 1986. The 34-year-old sailor has been in the Navy for 14 years and at the Center for seven months.

In a Letter of Commendation from the Center Commander, CAPT. Edward Sturm, Liffmann was lauded for his "continual display of high degrees of professionalism, initiative, flexibility and a positive 'Take Charge Attitude.'"

On being named SOQ, Liffmann stated: "I wasn't too confident that I would make it. The competition had been here much longer than I and had greater visibility than I do. I was really surprised."

A native of New York City (although actually born in Colombia, South America), Liffmann has been stationed at NAS Pensacola; NAVSTA Keflavik; the USS FRANKLIN D. ROOSEVELT (CV-8), NAS Jacksonville; the Naval Air Development Center (his first tour here); NAF Lajes; and both VA-87 and VS-31, Cecil Field, prior to coming back to NADC.

Liffmann is also the Leading Petty Officer of the Supply Response Section. "I am an expediter, which means my main job is to procure hard-to-come-by parts for the airplanes," he said. "For

the planes to fly I have to do my job. It sounds trite, but it is true—you can't fly without supply."

This SOQ speaks five languages fluently. "I learned French and Russian when I was going to college at Louisiana State University (where he majored in Russian); Spanish and Portuguese from living in Colombia; and German from my parents," he stated. "The world opens up when you speak another language. It's exciting to share ideas and thoughts with people who aren't American."

His advice to his fellow sailors is to be diligent. "You have to pay attention to detail; it's hard work, but it will get the job done," Liffmann confidently stated. He also is a strong advocate for community involvement. "I interpret technical directives and tutor high school students in foreign language free of charge. There's something rewarding in teaching and learning languages."

Liffmann's plans for the future include advancement and rotation. "I'm concerned with what kind of a tour I can expect this time around at NADC. But on the other hand I'm also thinking that I'd like to go back overseas; maybe Europe. And of course I take the Chief's test this time around," he stated, crossing his fingers. He is presently scheduled to rotate from NADC in October of 1988.

EEO is for everyone

by Kathy Gause

A right and a responsibility

Equal Employment Opportunity (EEO) is a right as well as a responsibility of each employee. The rights are not just for minorities or handicapped individuals and the responsibilities are not just for supervisors. Each of us has the same coverage under the law (Title VII of the Civil Rights Act of 1964) and the same responsibility to treat everyone fairly. It is impossible to treat everyone equally, but it is the law to treat everyone fairly. Under Title VII, discrimination is treating someone unfavorably in comparison to others because of national origin, sex (both male and female), handicap (includes an employee being accommodated for a recent heart attack), race (includes Caucasian), color, religion (or no religion), or age (40 years or above). Sexual harassment also is prohibited. The EEO Program exists to help managers, supervisors, and employees carry out both the spirit and letter of the law. It is not a program to give preferential treatment to any employee. It does not exist to advocate any individual or group.

The Center is responsible for following specific Department of the Navy (DON) complaint procedures, including timeframes, designed to protect an employees' employment rights. However, to initiate the DON process, it is necessary for an employee to bring the issue to the attention of an EEO Counselor within 30 calendar days of an alleged action. Both supervisors and employees are encouraged to talk with the Center's EEO staff. If any employee feels he or she has been treated less favorably in comparison to others in any employment situation, he or she should talk to one of the EEO counselors pictured on posters throughout the Center or call the EEO office on extension 3061. Supervisors are also encouraged to contact an EEO Counselor or specialist if they have questions regarding a potential complaint. NAV-AIRDEVENINST 12713.6, outlining the complaint process, is available from the EEO Office.

Affirmative Action alive

Distinct from EEO, affirmative action is still alive and well. All employees should be aware of the Center's Affirmative Action Plan, also available in the EEO Office. Even though we are in a minimum hiring mode, programs to retain our high-caliber workforce and our recruitment stature as well as mission-oriented community outreach will be of major emphasis for the next year.

Four programs to support Center EEO Objectives (which also offer a waiver from Managing-to-Payroll) are: Worker-Trainee (three years), Stay-in-

School, Federal Junior Fellows (a five-year summer coop which may be, but not limited to, science and engineering students), and Summer Aides. Your department EEO Committee and Federal Women's Program Committee representatives will be actively supporting these efforts. If any employee would like to contribute their ideas or time, contact the EEO Office or your committee representative.

NADC received the Philadelphia Area Navy EEO Council award last year for our outstanding EEO Program. Let's continue this momentum.

Federal Women's Program

by the Federal Women's Program Committee

In October 1967 Executive Order 11375 added sex to other prohibited forms of discrimination in Federal employment—race, color, religion, and national origin (physical and mental handicap was added in 1973). The Civil Service Commission (now called the Office of Personnel Management) responded to this new order by establishing the Federal Women's Program. In August 1969, the Federal Women's Program was integrated into the overall Equal Employment Opportunity (EEO) Program.

The Federal Women's Program Committee (FWPC) is organized under the umbrella of the EEO Program, serving in an advisory capacity. The committee may, according to its by-laws, undertake a study of any problem affecting Center women or sponsor events that will enhance the Federal Women's Program, whose primary goals are:

1. to end sex discrimination and prevent sexual harassment;
2. to increase job opportunities;
3. to increase educational opportunities;
4. to become involved in the community.

Last calendar year we sponsored a number of presentations. A "Welcome Aboard Co-op Brunch" recognized the co-ops on board as one of the Center's important human resources. In celebration of Women's Equality Day, our "Careers at NAVAIRDEVEN" panel discussion provided information about careers in the finance, contracts, secretarial, personnel, wage grade, and S&E areas on Center. We also prepared and conducted a survey that was distributed to all women on Center. The survey was designed to uncover the concerns of Center women, assisting us in making plans for future FWPC projects.

Now under our new Chairperson, Judy Scott (Code 033), and Vice-Chairperson, Ruth Pickering (Code 7042), we are making plans for calendar year 1987 focusing on job enrichment and retention of our high caliber employees. The theme for projects sponsored this year by the committee is "Women and Team Spirit." We will also be continuing our involvement from last year with the co-ops, day care concerns and an enrichment program for clerical and administrative positions. Please watch

the Log for further information on upcoming events.

The FWPC is comprised of representatives from each directorate/department. This member composition is not only required as an EEO program but also works well because it fosters input from women across the Center's department/directorate lines. The following is a list of the current FWPC members and their codes. If you find that what we do interests you, and you

would like to come to our meetings, the FWPC meets the third Wednesday of every month at 1030 in the Walnut Conference Room (the old DCP Conference Room). You are invited to attend our meetings (with supervisory permission) and/or send your comments to your department/directorate representative or to the Federal Women's Program Manager, Janet L. Russell, Code 03E.

Federal Women's Program Committee

Code	Name	Phone	Code	Name	Phone
03E	Janet L. Russell	1366	2001	Kathleen Felts	3160
033R	Judy Scott		2021	Carla Macke	3178
	Chairperson	3960	3022	Georgianne Schneckner	7038
7042	Ruth Pickering		4001	Patricia Hartman	2779
	Vice-Chairperson	2272	5042	Donna Morgan	4070
03E	Nancy Jordal		6062	Margaret Russo	2660
	Recorder	3061	6063	Nancy Tillman	1455
02S	Harriet Feder	2532	7012	Barbara Baum	1162
0343	Rita Brownlee	1575	80CS	Lynn Kaiser	2315
0462	Helen Boyd	2766	8423	Delores Ferguson	2218
071	Carol VanWyk	2375	8423	Irene McGrath	1559
1021	Ann Lipinski	2016			

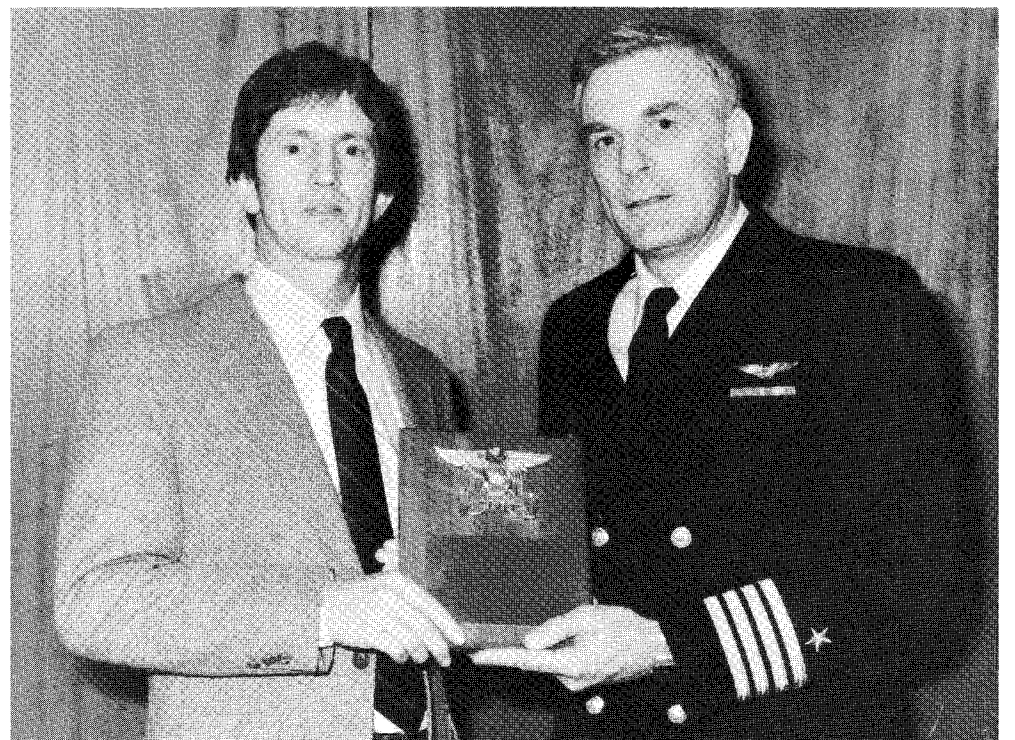


Photo by JO2 Todd Lufkin

Ronald Young receives Barnaby plaque from Center Commander Captain Edward Sturm.

Ron Young takes annual Ralph S. Barnaby Award

Civilian Personnel Officer Ronald Young was the 1986 recipient of the Naval Civilian Managers' Association (NCMA) 12th Annual Ralph S. Barnaby Award.

Presented to Young during a recent luncheon ceremony, the award was named for Captain Ralph S. Barnaby, USN (1893-1986), NADC's first Center Commander. The award was established in 1975 to formally recognize outstanding administrative and managerial contributions and distinguished service to the Center and the Navy at large.

Young, who has been at the Center since September 1976, was cited for being the driving force behind the successful recruiting program which resulted in hiring almost 300 scientists and engineers. He established a 24-

hour outside counseling Employee Assistance Program and initiated the Federal Junior Fellowship Program affording minority college students the opportunity to gain work experience at the Center during their education.

Young holds a Bachelor's Degree in Business Administration from West Virginia University in 1965 and a Master's Degree in Public Administration from the University of Southern California in 1975. He is a member of the NCMA, the Philadelphia Federal Executive Board, and the International Personnel Management Association.

Recent past recipients of the Barnaby Award include: former Associate Technical Director, Jerry Guarini (1985), Isadore Zaslow (1984), Dr. Gloria Chisum (1983), and Harold Tremblay (1982).

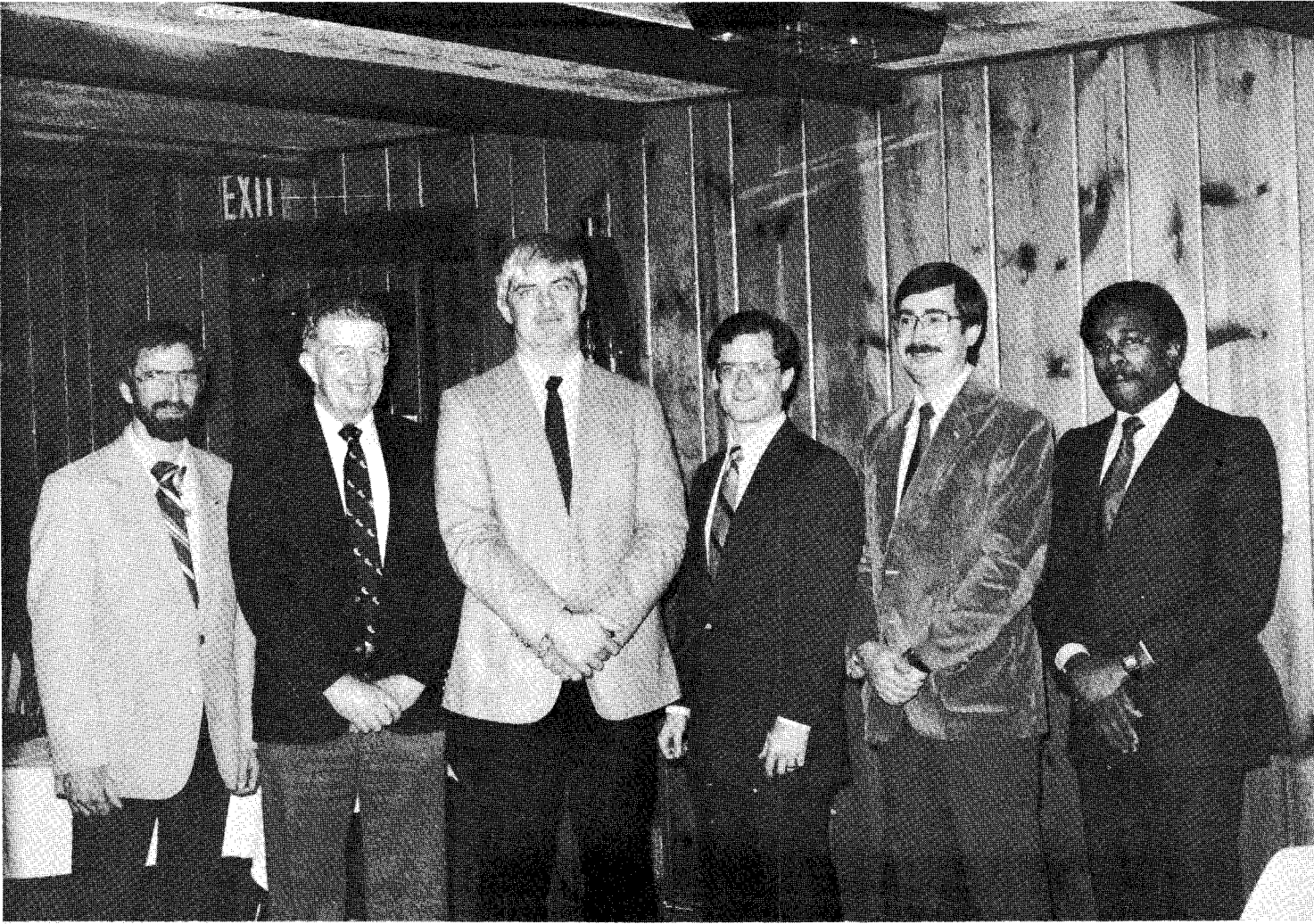


Photo by Regina Gasuk

Toastmasters installs new officers

Recently installed new toastmaster officers include: Rockne Anderson, Secretary; Leroy Poore, Treasurer; Karl Van Wyk, President; Jack Supp, Past President; Charles Webster, Sergeant-at-Arms; Chester Terril, Administrative Vice-President; and (not shown) Sid Williams, Educational Vice-President. Toastmaster of the Year Award went to Rockne Anderson, who also won last year, and passed the award to Jim Thompson (not shown), Most Improved Speaker.

WANTED:

Topics for the Small Business IR Program

By the Small Business Office

It's time to prepare your topics for the FY88 Small Business Innovation Research (SBIR) Program. Topics are to be submitted to Code 094 via your department director.

Congress established the SBIR Program to stimulate technical innovation by small hi-tech firms. DoD views SBIR as an opportunity to strengthen the role of small and disadvantaged business in defense-related R&D while increasing the commercial application of DoD research.

The program is divided into three phases. Phase I concentrates on proving the scientific and technical feasibility of the proposed effort. A follow-on

Phase II award is directed toward producing a deliverable product or process. Phase III awards foster commercial application from the government-funded research or further government development.

Each year topics are solicited on all areas of research and development. After review by NADC, the selected topics are submitted to the appropriate systems commands, who then submit their selections to SECNAV for final approval. Once SECNAV has approved the topics, they are published in the annual DoD solicitation. Phase I awards are made for approximately \$50,000 to successful topic proposals. Presently, NADC has three Phase I awards and

two Phase II awards; responses to the FY87 topics are being evaluated for award. Current subjects include the design/development of an electro-mechanical marine kevlar cable, the development of stabilized hi-temperature oxides by CVD, and the development of a miniature expendable zoom lens for an RPV.

Funding for a project can come from any sponsoring systems command. The overall program is funded by a 1.25% "tax" on the total DoD R&D budget.

NADC is looking to expand its participation in this program. If you have any questions on SBIR, contact Janet Koch (Small Business Office, ext. 2456) or Jerry Polin (PAR, ext. 2316).

Promotions

Civilian:

Margaret Bernhardt, Christine Biscardi, Lauren Brake, Mark Breidenthall, Julia Buckland, Ann Marie Burke, Erna Caskie, John Ceneviva, Francis Chamberlain, Brian Concannon, Janet Drulis, Michael Eddowes, Mark Engle, Scott Finken, John Fitzpatrick, Francis Flannery, Charles Foltz, Carrol Gendur, Elizabeth Gormley, Teri Hackett, Douglas Hall, Kathleen Hanling, Martha Harazim, Karen Heller, Frank Hollenbach, Christina Horvat, Gregory Humphrey, Robert Jankiewicz, Lisa Johnson, Richard Joseph, Edward Kenkelen, John Kelly, Kevin Kennedy, Otto Kessler, Joseph Kern, Dean Kimelheim, Lawrence Kinker, Paul Krebs, Frederick Kreuzberg, Tara Larson, Edward Lesoravage,

Helen Ling, Paul Lipacis, David Loewenstern, Edward Mansfield, Janet Martinelli, Rose Masselle, John Mehr, Richard Miller, Lynn Mohl, Julian Olyansky, Paul Ondeck, James Orr, Eric Patent, Lawrence Pitrone, Doris Reese, Joan Reimel, Umberto Salvati, Etoile Schamis, Matthew Schrier, Paul Sheridan, Richard Souder, Pascual Spensieri, Janet Suchockas, Michael Sutton, Stinson Swyers, James Toll, John Tyberski, Harry Ubele, Mary Wixted.

Military:

AE1 Todd Adams
AW1 Kenneth Carrigan
AD3 David Jackson
MS3 Anthony Matthews

New titles in the Library

Following is a list of books recently added to the Scientific and Technical Library. Visit or call your Library at x2918 to inquire about these books.

ARTIFICIAL INTELLIGENCE

"The Connection Machine," W. D. Hillis QA267 .H487 1985

"Robot Vision" B. Horn TJ211.3 .H67 1986

AVIATION

"Aircraft versus aircraft" N. Franks UG700 .F73 1986

"Helicopter Aerodynamics" R. Prouty TL507 .P725 1985

COMPUTER SCIENCE

"C Programming Guide" 2nd ed. J. Purdum QA76.73 .C15 P87 1985

"Introduction to VAX/VMS" T. Shannon QA76.76 .063 S53 1985

"New Computing Environments: Parallel, Vector and Systolic" QA76.9 .A73 N4

"Optical Computing" TA1630 .063 1984

"Principles of CMOS VLSI Design" N. Weste TK7874 .W46 1985

"Starting Forth" L. Brodie QA76.73 .F24 1987

MATERIAL SCIENCE

"Advanced Thermoset Composites" TA418.9 .C6 A284 1986

"Ceramic Glaze Technology" J. Taylor TP812 .T39 1986

"Failure of Plastics" TA455 .P5 F34

"Metal-Filled Polymers" TA455 .P55 M48 1986

"The Stress Analysis of Crack Handbook" H. Tada TA409 .T33 1985

"Structural Adhesives" TP968 .S83 1986

NAVIGATION

"Electronic Aids to Navigation" L. Tetley VK560 .T28

OPTICS

"Nonlinear Optics and Quantum Electronics" M. Schubert QC446.2 .S39 1986

"Optical Fiber Sources and Detectors" TK5103.59 .0665 1985

RADAR

"Radar Data Processing" A. Farina TK6580 .F37 1985

"Radar System Design and Analysis" S. Hovanessian TK6575 .H684 1984

REPORT WRITING

"How To Write and Publish Engineering Papers and Reports" H. B. Michaelson T11 .M418 1986

Security Alert

In a recent memo from Space and Naval Warfare Systems Command, Washington travellers should be made aware of the following recent criminal activity in the Crystal City area:

Assaults on men. A well-dressed white woman, age 26, height 5'4", weight 112 lbs., brown hair and eyes, has been "working" the Crystal City and Tysons Corner bars. Intended victims: businessmen staying in nearby hotels/motels. Her strategy is to be invited to the man's room for a drink. She administers scopolamine (potent, fast acting drug) to the victim's drink and, when he passes out, makes off with his valuables (and sometimes his rental car). The real danger is that scopolom-

ine overdose can be lethal and critical dosage varies from individual to individual. Police fear that a theft may become homicide. There are eight documented incidents of her activity in this area since 1 October 1986.

Assaults on women. A black man, age 24 to 29, height approximately 6', very thin, clean-cut, casually dressed, has assaulted 15 women in Crystal City since 27 September 1986. The timing of his assaults are confined to the morning, between 0815 and 0900, and early evening, between 1615 and 1830. He accosts his victims just outside or on the ramps to the parking garages. He is selective in his choice of victims: white females between the ages of 24 and 29.

VIEWPOINT

This month's question is:

"Where in the world would you like to spend Valentines Day?"

Prepared by JO2 Todd Lufkin
Photos by JO2 Todd Lufkin

Terry Angelozzi, Code 8312

"Alone on the beach at Waikiki at sunrise with Tom Cruise in a tub of red Jello (the tub of Jello is optional)."



Nancy Jordal, Code 03E

"Any warm climate with my husband and without the kids, of course."



Ed Calvello, Code 032

"On a stairway to the stars, to visit Jupiter and Mars, with Lee Remick in my arms!"



CDR Don Clark, Code 80

"I'm going to be with my wife, and it will be out of this world."



Gerry Morgan, Code 8132

"In Hawaii with Magnum (Tom Selleck)."

Jim Orfe, Code 0242

"Obviously in a heart-shaped hot tub with a sweetheart."



Ada Fisher, Code 0461

"Given my druthers, my Valentine of 38 years and I would cruise the Rhine being properly awed by the castles and mountains. However, it appears we will celebrate in the greatest place for us—each other's company. May your day be as happy!"



Sports

League managers meet for new season

by Charlie Destra

Softball is around the corner and the NADC league managers held their first meeting on 28 January to discuss various administrative matters and issues. Topics included the start date of the '87 season, the length of the schedule, division format, changes to the by-laws, and league dues.

But the chief topic centered around the addition of three new teams to the league, swelling the total number from 14 to 17. The newcomers are CSC, the Bandits, and an old favorite, the Misfits. (At press time, it was still possible to enter a new team, so it's conceivable that another entry or two will have

been accepted by the time of this printing.)

CSC is comprised of contractor personnel from Computer Science Corporation. The Bandits were born from the Guzzlers, as three of the Guzzlers' top players broke away to form their own team. The new-look Misfits are back after a year's hiatus, with some familiar faces—and some key additions.

While little is known about the CSC squad, the feeling here is that the Bandits and Misfits will not be weak links or soft spots on the schedule as is often the case with new teams (witness the rough going experienced by last year's expansion teams, the Rumlbers and

Bushwackers).

In fact, the Misfits, former champions, are certain to be formidable, featuring a potent lineup led by Mickey Rudock, Jeff Price, and Ed Swiski. This heart of the lineup threesome is as good as any in the league. The addition of Swiski is a coup for manager Jim Kearney, who lured the former home-run champ out of retirement. Swiski and Joel Wexler also give the team a solid pitching duo.

The Bandits, not to be outdone, have a nucleus consisting of two of the league's top all-around athletes, Stan Zajdel and Rick Sames, along with

sweet swinging Dave Whitenack.

Clearly, these are not teams with unknown quantities; these are teams with proven—and exceptional—talents. They will be in the hunt from the start.

To make things more interesting, a few of the established teams have lost some of their punch since last year, as a result of defections to the new teams as well as to other teams. Look for a tough-to-predict, exciting season, marked by parity and close games.

The defending champion Granfalloon, however, is the exception: they are intact, and likely to be improved over last year—if that's possible.

Goofers and Alley Cats take 1st half

by Tom Reiter

Congratulations to Al Knobloch's Goofers and Bob Geyer's Alley Cats for winning the First Half Division Championships. Clutch series by Denise Beck (476) and Janet Geyer (470) clinched it for the Alley Cats. Considering the Goofers bowled with a blind (that's a missing bowler), they really needed Al Knobloch's 572 series although Lorraine Reidinger's Division High, 233 in the final game iced it.

In addition to Lorraine's 233, the Half's high individual scores were Rick

Yeager's 257, Steve Metcalf's 257 & 728 series, Ernie Wykes' 645 and Caroline Tierney's 538 series. High average leaders are Steve Metcalf 191, Hank Lystad 186, Denise Beck 160, and Caroline Tierney 159.

The Second Half started with an explosion. Pat Tease bowled an amazing 244 game. Amazing, considering it was 136 pins above her average. Just shows you that on any night, with the proper liquid motivation, anything can happen. Congratulations Pat—a 318 game with handicap, WOW!!

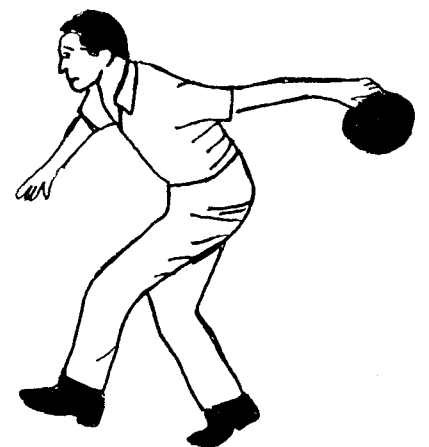




Photo by JO2 Todd Lufkin

VISIONS OF SUGARPLUMS—A drawing was held among those who contributed to this year's W&R Orphan's Christmas Fund . . . the winners of homemade chocolate confections were: Jean Bollard (Code 70), The "Mouse"; James Crockett (Code 302), the "5¢ Mug"; and First Place winner Dennis Agnew (Code 16) "the House".

Blacks in Battle: From 1775 to Now

by Tom Joyce

American Forces Information Service

In November 1775, Gen. George Washington signed an order forbidding the recruitment of blacks during the American Revolution. One month later, he reversed himself. Washington's wisdom is demonstrated by the contributions blacks made to the growth of the United States and the shaping of the armed forces that protect it.

The entire nation, the Department of Defense and each military service will once again celebrate Black History Month in February. This year's theme, "The Afro-American and the Constitution: Colonial Times to the Present," calls attention to the extensive military contributions made by black Americans throughout the history of the United States.

The early contributions of black Marines, soldiers and seamen were often omitted from American history books, according to authorities. But the contributions by blacks were many, even in the early Colonial days.

Although blacks first fought for the U.S. armed forces during the American Revolution, many more contributed to America's defense in the War of 1812. Records show that during this period, black men served in Regular Army units, fought in battle and were taken prisoner.

During the Civil War, black Americans took up arms for both the Union and the Confederacy. In 1862, the Union Army allowed blacks to enlist, marking the beginning of the "United States Colored Troops." Twenty-four black men were honored for their bravery with the Medal of Honor during the Civil War.

It was during the Spanish-American War that black officers first assumed leadership roles. National Guard units played an important part in the U.S. military forces, and black regiments were well-represented. The Eighth Illinois Infantry Regiment was commanded by a black colonel, and several other units were commanded by black field grade officers.

Records show that almost 400,000 American blacks served their nation during World War I. Although there were many heroes, two men, Henry Johnson and Needham Roberts, stand out.

Pvt. Henry Johnson was attacked by a group of at least 12 German soldiers one night while he was on sentry duty. Although severely wounded, he went to the aid of a fellow soldier who was being taken away by the Germans. Johnson continued resisting until the Germans retreated. Johnson was one of the first 171 black Americans to be awarded the prestigious French Croix de Guerre during World War I.

Pvt. Needham Roberts also received the French medal under circumstances similar to Johnson's. While on sentry duty, Needham was severely wounded, but continued to resist the enemy, even to the point of throwing grenades from a prone position.

But it was during World War II that black Americans emerged to perform brilliantly in almost every specialty. One author, Robert E. Greene, noted that "the pattern of exclusion because of skin color was beginning to lose its uniformity and strength." Clearly, black officers and NCOs assumed greater responsibilities. For the first time, he wrote, "the achievements of blacks in military endeavor were documented and accepted without debate."

Black Americans' service during the Korean War was reflected by heroes such as Pvt. William Thompson, a Medal of Honor recipient. Thompson's unit was being overrun, but he remained at his machine gun, pinning down the attackers. His actions allowed the rest of his unit to withdraw to safety. Thompson continued to fire at the enemy until he was killed.

From 1962 onward, a new black soldier emerged. He was "not a laborer or body servant, a part-time soldier or a rare hero, but an ordinary soldier, fighting and working on equal terms with whites in the military service of his country," in the words of one observer.

Black contributions in Vietnam are

legendary, and it is to this period that many young black Americans look to find their heroes. There were men not unlike Sgt. Rodney Davis, who saved the lives of his fellow Marines by throwing himself upon a grenade. Davis was awarded the Medal of Honor for his actions.

Getch selected as SOY

(continued from page 1)

Getch takes particular pride in several aspects of his job. Or is "Taking someone who wants to get out of the Navy; but isn't sure what they want to do and helping them consider a career pattern in or out of the service" he stated. Another is "getting an individual orders that they weren't going to get. But by working with detailers and the individual, coming up with something that everyone is happy with." He also feels good standing at Quarters during a frocking ceremony and realizing that he played a small role in helping to get those individuals where they are.

His advice to his shipmates is to look beyond simply doing your job. "In everything you do try to do more than just what you're assigned. Go that extra mile for others, not just yourself," Getch

Much is known about the contributions blacks have made to the military in modern times. But Black History Month is also a time to remember the enormous contributions blacks have made from the day the republic was formed.

stressed.

Getch views his selection as Sailor of the Year as the pinnacle of his career. "I achieved this honor through doing a job that is outside my rate. When I was SOY in '84 my nomination was based on being an Electronics Technician, but this time my nomination was based on what I've done at NADC as Command Career Counselor."

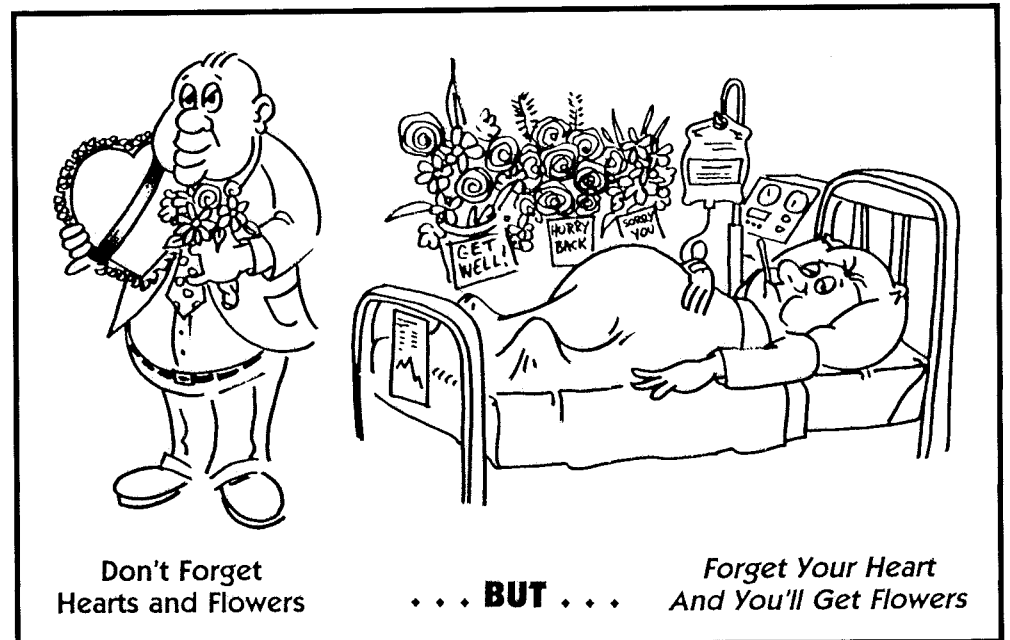
This SOY's plans for the future are twofold. "My immediate plans are to wait on the Chief Petty Officer test results due in March, pass and get selected. My mid-range plans are to complete my college education in July—a Bachelor of Science Degree from Southern Illinois University and then look into a commissioning program."

Getch, his wife Annette, and their daughter live in Doylestown.



American Heart Association

WE'RE FIGHTING FOR YOUR LIFE





Reflector

Volume 32 Number 3

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

March 1987

In This Issue:

FERS
New SECNAV
Fire Department
Sports
Blarney

Winters named new Center Commander



Captain Curtis J. Winters, USN

by Mary Ann Brett

Captain Curtis J. Winters, USN, currently Assistant to the Deputy Commander for Program Support at the Naval Air Systems Command, will be assuming command of NADC this summer.

Winters attended the University of Kansas as an NROTC Midshipman, where he received a Bachelor of Science degree in Aeronautical Engineering and was commissioned in January 1963.

Designated a Naval Aviator in June 1964, he was assigned to VP-8 at the Naval Air Station, Patuxent River, Maryland, where he participated in deployments to Sangley Point, Philippines and Keflavik, Iceland. In January 1968, he reported to VP-31 at the Naval Air Station, Moffett Field, Califor-

nia where he served as flight instructor in the P-3 aircraft.

Additional assignments included Postgraduate School in Monterey, California where he received a Master of Science degree in Aeronautical Engineering in 1971, and the staff of Commander, Fleet Air Keflavik, Iceland where he served in the Antisubmarine Warfare Command Center.

In November 1973, Winters reported to VP-24 at the Naval Air Station, Jacksonville, Florida, making deployments to Keflavik, Iceland and Sigonella, Sicily. In December 1976, he was assigned to VX-1 at the Naval Air Station, Patuxent River, Maryland where he served as Projects Officer. In December 1978, Winters reported to VT-28 at the Naval Air Station, Corpus Christi, Texas and assumed the duties of Executive Officer. In July 1979, he as-

sumed command of VT-28.

Completing his tour with VT-28, Winters was assigned to the staff of Commander, Seventh Fleet embarked in USS BLUE RIDGE, operating from Yokosuka, Japan. In August 1982, he entered the Industrial College of the Armed Forces. Upon completion of studies in June 1983, Captain Winters was assigned to the Naval Air System Command Headquarters as Director, Plans and Programs Division. In September 1986, Winters assumed his present duties.

Winters wears the Meritorious Service Medal, the Air Medal with numeral two, the Navy Commendation Medal with gold star and various campaign and area awards.

He and his wife Marian Louise have four children: Christopher, 22; Jeanne, 20; Kevin, 17; and Robert, 13.

Writing PDs: As easy as 1-2-3

by Sherry Kabin and Mary Ann Brett

The Civilian Personnel Department (CPD) has introduced its new Automated Position Description System, known as AUTO PDS. Its purpose is to greatly reduce the time and effort required to write, type and classify position descriptions (PDS). The system initially contained a library of 87 PDs, covering about 75% of all Center positions and was stored on the Central Computer System (CCS).

To prepare Center employees to use AUTO PDS profitably, CPD conducted training sessions, attended by more than 250 supervisors and clerical assistants. These sessions provided 'hands on' experience using the system, and enabled most attendees to be comfortable using AUTO PDS independently.

The system has been very successful. Since implementation, it has been used widely by most departments on Center. To date, AUTO PDS has been accessed more than 1800 times, and is now averaging 125-150 accesses monthly.

Users of AUTO PDS are of a similar opinion. Ada Fisher, Personnel Clerk for the Command Administration Department said, "It's an excellent tool; really not difficult to handle." She uses AUTO PDS for creating summer hire PDs. "It's much quicker," she explained, and maybe more importantly, "You know you're producing something that will be correct the first time around."

Another advocate is Bernadette Weber, Staff Support Specialist in the Tactical Air Systems Department. Weber said instructions for using the system

were very explicit and easy to follow. "I've used it (AUTO PDS) a lot, especially since the reorganization. It really speeds up the process."

Ronnie Kinder, Support Services Specialist in the ASW Systems Department is also impressed with the system's ease of usage and convenience. She uses AUTO PDS primarily for electrical engineering and clerk typist PDs. Kinder said, "It's nice to know that the words have already been approved."

As a result of AUTO PDS' popularity, plus several requests for additional PDs, CPD has recently completed a major update to the system. We have added 32 new PDs—bringing the total to 119, potentially covering 90% of all Center positions. These PDs represent most functional areas on Center (technical, financial, computer, contracts, clerical, secretarial, administrative, supervisory, wage grade, etc.), and a wide range of grade levels.

AUTO PDS contains many generic PDs describing work which could be performed by various series. Among these are 26 S&E PDs describing nearly every type of technical work performed on Center. Supervisors in the Warfare Systems Departments will be particularly interested in several newly-added generic PDs describing warfare analysis, advanced concept engineering, and systems engineering functions. It should be further noted that all AUTO PDS S&E position descriptions have been endorsed by SPAWAR, and selected for inclusion in a Navy-wide automated position description system currently being developed.

Our system was designed for use on Center Office Automation System

workstations using ITT computers. It's easy to use—involving 3 steps:

1. Log onto the CCS and choose the menu option for automated position descriptions. Follow the prompts to locate your desired PD.

2. Transfer the PD from the CCS to your personal document disk.

3. Use Microsoft Word software to edit your PD as desired, and print it out.

AUTO PDS represents a commitment on the part of the Civilian Personnel Department to facilitate accomplish-

ment of personnel management responsibilities. Through automation and streamlined personnel processes, CPD will continue to work toward reducing management's administrative burden, and enabling increased concentration on technical endeavors.

The end result is an 'original' typed PD in about 15 minutes. (For further user instructions or information on AUTO PDS position coverage, call Sherry Kabin on extension 1536.)

Sifford speaks on Women's History

On Thursday, March 26, 1987 journalist Darrel Sifford will address the topic of "Women and Team Spirit" at 1000 in the NADC Center Auditorium as part of the on-going March celebration of Women's History Month sponsored by the Federal Women's Program Committee.

Sifford, a nationally syndicated columnist and social commentator for THE PHILADELPHIA INQUIRER, is a graduate of the University of Missouri School of Journalism. After working at THE NEWS TRIBUNE in Jefferson City, Missouri, THE COURIER JOURNAL in Louisville, Kentucky, and THE NEWS in Charlotte, North Carolina, Sifford joined THE PHILADELPHIA INQUIRER in 1976. He has a four-times-a-week column distributed to more than 120 daily newspapers. He has published a book "Father and Son" and is currently working on two others.

Don't miss it! (Supervisor's permission required to attend.)



Darrel Sifford

Women's History
Month

Nat'l Poison
Prevention Month

Federal Employees Retirement System

Social Security and Windfall

by Barbara Ward

Previously we discussed both the Federal Employees' Retirement System's (FERS) Basic Benefit and the Thrift Savings Plan. The third tier of the FERS is Social Security, which also provides retirement, survivor and disability benefits. It is important to understand how social security works and to be aware of recent changes affecting many of us.

- If you were expecting to take advantage of both a Civil Service Retirement System (CSRS) pension and a social security benefit you ought to learn about the "Windfall Elimination Provisions."
- If you were expecting income from your spouse's social security benefit, while receiving your own government pension, you better look at how the "Government Pension Offset" will affect your benefits.
- If you were planning to work while receiving a Social Security pension, you should know how the "Earnings Test" will affect your social security benefit.

Currently, the social security tax is 7.15 percent (including medicare deductions) of an employee's wages. This tax is applied up to the social security wage base (\$43,800 in 1987). Although the wage base changes every year due to national wage increases, if your income is currently above this amount you will not pay social security taxes for that portion of your income above the wage base. Social security taxes will be increased to 7.51% in 1988-1989 and to 7.65% in 1990.

Eligibility

To become eligible for social security retirement benefits a person has to have sufficient quarters of coverage. Anyone born after 1928 must have 40 quarters of coverage. Persons born prior to this date can add 11 to the last two digits of their birth year to determine their required quarters of coverage. The amount of earnings needed to qualify for a quarter of coverage is indexed to annual increases in national wages. In 1986 a quarter of coverage was earned for each \$440 of social security covered annual earnings. No more than four quarters of coverage may be credited for a year. Your local Social Security Administration office can provide you with an exact accounting of the quarters of coverage on your record.

Retirement Age

Reduced social security retirement benefits may be obtained as early as age 62. The "normal retirement age" for persons who will attain age 62 before the year 2000 is 65. This means that these individuals can receive full, unreduced social security retirement benefits at age 65. Anyone born after 1938 will have their normal retirement age increased as follows:

Year	Normal Retirement Age
2000	65 years, 2 months
2001	65 years, 4 months
2002	65 years, 6 months
2003	65 years, 8 months
2004	65 years, 10 months
2005-2016	66 years
2017	66 years, 2 months

Year	Age 62	Normal Retirement Age
2018		66 years, 4 months
2019		66 years, 6 months
2020		66 years, 8 months
2021		66 years, 10 months
2022 or later		67 years

Computation of Benefits

There is nothing simple about a social security benefit calculation. The computation is done by indexing a person's yearly earnings over his work career, averaging them into a monthly figure (Average Indexed Monthly Earnings = AIME) and then applying a social security formula to that amount.

- For 1986 the three-step formula is:
- 90% of the first \$297 of the AIME plus
 - 32% of the AIME from \$297-\$1,790 plus
 - 15% of the AIME over \$1,790

The percentages are written into the law and do not change, but the dollar amounts normally increase every year as national wages increase. The Social Security Administration publishes booklets for those with the inclination and the ability to estimate their own benefits.

Unfortunately, the complexity of the social security benefit program does not stop here. Employees first hired by the Center on or after 1 January 1984 will have this social security formula applied to their computation. However, most of the Center's employees who

Promotions

William Adams, Jr., Bilal Alam, Randall Allen, Carlo Allodoli, Sharon Bebey, Georges Bernardin, Richard Billman, James Billy, Kevin Birney, Edward Boscola, Joseph Bradley, George Breiting, Anthony Brescia, Robert Bruce, Joseph Buck, James Buggy, Kathryn Burger, Thomas Caniere, Dennis Cantwell, Gina Capozzoli, Barbara Cavender, Lois Childs, Michelle Cho, Peter Cho, James Cobb, Thomas Curran, Maria Depasquantonio, James Donahue, Michael Doyle, Cathleen Dudek, Jerome Duley, Timothy Fitzpatrick, Ann Fowler, Scott Fowler, Robert Griet, Jeremy Guttman, Stephanie Hall, Richard Hallman, Elizabeth Harzer, Thomas Haug, Marvin Hoang, William Jemison, Donald Jones, Patrick Kelly, Dong Kim, Thomas Kister, Todd Kline, John Kolb, Michael Lavin, David Lewandowski,

currently meet the minimum social security eligibility requirements, will be subject to the Windfall Elimination Provision, whether they remain in CSRS or switch to FERS.

The Windfall Elimination Provision

In 1983 a change in the social security law imposed a different social security benefit formula which affects, among others, federal employees who will receive a benefit from CSRS. Many employees transferring from CSRS to the FERS will be affected by this provision.

The provision reduces the social security benefit for persons who have less than a full career (30 years) under social security covered employment and who also receive a CSRS pension.

In accordance with this provision, the first bend point in the formula cited above is reduced for less than a full social security career. For example:

- someone with 25 years or less social security-covered employment will have the 90% in the formula changed to 40%;
- anyone with 26 years will have 90% in the formula changed to 50%;
- anyone with 27 years will have 90% in the formula changed to 60%;
- anyone with 28 years will have 90% in the formula changed to 70%;
- anyone with 29 years will have 90% in the formula changed to 80%.

Fortunately, for people close to re-

tirement age, some protective exceptions were written into the provision. These are known as transition rules. If an employee was eligible for either a social security or a CSRS benefit before 31 December 1985, the reduction does not apply. If an employee will be age and service eligible for both social security and CSRS benefits between 1986-1989 the following transition rules apply to the 90% bend point in the formula:

Year	90% =
1986	80%
1987	70%
1988	60%
1989	50%
1990 and later	40%

Government Pension Offset

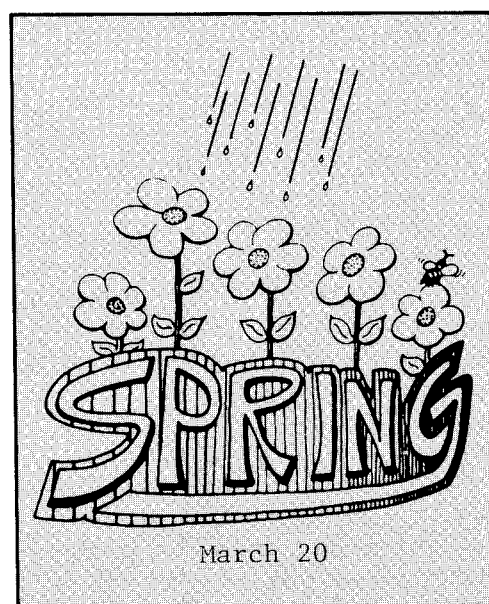
Anyone who becomes eligible for a CSRS retirement benefit after June 1983 will be subject, as a spouse or a surviving spouse, to a reduction in their social security spousal or survivor benefit. This offset does not reduce your CSRS pension, but it does reduce the social security benefit you would be entitled to as a spouse or a surviving spouse by two-thirds of the amount received through your CSRS pension.


To illustrate the effect of the "government offset provision," lets take the example of Mary Retiree who has worked for the Federal government and is now considering retirement. In addition to her own monthly pension of

(continued on page 8)

Mark Lipacis, Dorothy Littley, Paul Lubiejewski, Kamala Mahadevan, Thomas Matthews, Brian McElvaney, Paul McGee, Thomas McGovern, Madeline McGrory, Michael McLain, Timothy Monaghan, Wayne Mondelblatt, Geraldine Morgan, George Moroney, James Mosley, Thomas Murray, Maria Nahill, Sanda Oehmke, James Persechino, Patricia Petrella, Michael Poli, Daniel Probert, Sreekanth Rajan, John Quartuccio, Jr., Robert Salanon, John Samaras, Keith Sansalone, Carmen Scandone, III, Joseph Schanne, Jr., Donald Scott, III, David Seever, Jesse Stonier, Gregory Sweriduk, John Tepper, Joseph Thomas, James Thompson, Michael Umehara, Anthony Vendetti, Elizabeth Walsh, Michael Warren, Daniel Wells, David Whiten-

ack, Barbara Wiley, Kenneth Williamson, Lauretta Wormser, Sharon Wright.





Reflector

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

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Commander, NADC CAPT Edward J. Sturm
Technical Director Guy C. Dilworth, Jr.
Public Affairs Officer and Editor James S. Kingston
Associate Editor Mary Ann Brett
Assistant Editor J02 Todd Lufkin



Photo by James Kingston

NAVY LEAGUE SWEARS IN NEW OFFICERS—During a dinner and tour evening at NADC, the Southeastern Pennsylvania Council of the Navy League of the U.S.A. swore in their new officers with the assistance of Center Commander Captain Edward J. Sturm (at the podium).

AIAA at NADC

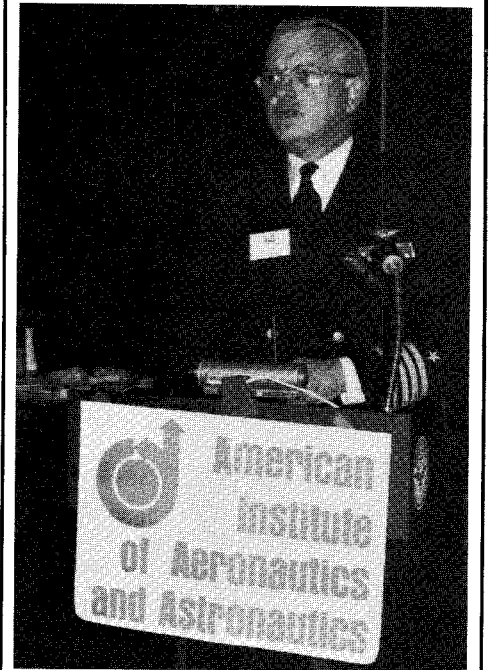


Photo by JO2 Todd Lufkin

Captain Robert M. Kraft, USN, Deputy Program Manager for National Aerospace Plans at the Defense Advanced Research Projects Agency addresses a luncheon meeting of the American Institute of Aeronautics and Astronautics in the NADC Dining Room.

If the SOC fits

By Robert Janes

One aspect of the Navy's Standards of Conduct (SOC) which seems to be of great interest to our employees is the area of post-employment restrictions. By this I mean the legal restrictions on a person's activities after he or she leaves a government position. Recently, an engineer contemplating retirement told me it was his understanding that once he left the Navy, he would be prohibited from dealing with NADC for a certain number of years after his departure. He was pleasantly surprised to find out the restrictions are nowhere near that severe.

There are special rules applicable to members of the Senior Executive Service, and other special rules which apply to retired regular naval officers (most notably the rule against "selling"). With the exception of these two groups, however, most NADC employ-

ees face only two basic restrictions on their activities once they leave the Center. These restrictions apply whether or not one retires or resigns, and are applicable to *all* former Government employees. Therefore, they apply to SES members and retired regular officers in addition to the special rules applicable to those groups.) These two restrictions are each directed at "representational" activities on behalf of another.

The first restriction is a lifetime prohibition on representing anyone (typically a government contractor) with respect to a particular matter with which the employee had been personally and substantially involved with when he was with the government. The second restriction is a three year prohibition on representing another with respect to any particular matter that came under the employee's official responsibility during the last year of his

government employment. It is important to note that if a former employee does not "represent" anyone, i.e., if he or she stays back in the office and does not interface with the government either orally or in writing, there is no possibility of violating either restriction.

Aside from the special rules applicable to former SES members and retired regular officers, and a few other minor exceptions, the above two representational restrictions are the only restrictions applicable to the post-employment activities of former NADC employees. There are regulations that have been published by the Office of Government Ethics explaining these two restrictions in great detail, and the Office of Counsel is available to furnish a copy of these regulations or to provide advice to interested employees concerning this or any other aspect of the SOC.

New SECNAV Webb designated

by Mary Ann Brett

The White House has formally announced that James H. Webb, Jr., noted author, Marine Corps Vietnam veteran and Assistant Deputy Secretary of Defense for Reserve Affairs (ASDRA) has been nominated by the President to be the 66th Secretary of the Navy replacing John Lehman, Jr., who recently announced his resignation.

Webb, 41, is most well-known as the author of "Fields of Fire," a novel about Vietnam ground combat. He is a 1968 graduate of the Naval Academy and served as a rifle platoon leader and company commander with the 1st Battalion 5th Marine Regiment in Vietnam. He earned the Navy Cross, the Silver Star, two bronze stars and two Purple Hearts.

With a law degree from Georgetown Law Center in 1975, Webb worked as a staff member to a Congressional committee. For the past three years, Webb has served as the ASDRA.

In addition to "Fields of Fire," Webb also wrote "A Sense of Honor" and "A Country Such as This." He has written and lectured on many military topics such as service roles and mission, the

draft, strategy and tactics, key manpower issues and U.S./Japanese defense obligations.

Webb is a native of St. Joseph, MO. He and his wife Joann have three children. (MAB).

SPAWAR PAO on the road



Photo by Mary Ann Brett

The Space and Naval Warfare Systems Command (SPAWAR) Public Affairs Officer Captain Sirmans will be visiting each of the Navy laboratories reporting to SPAWAR. Recently, he spent the day with NADC PAO James Kingston familiarizing himself with Center programs.

Women's History gets a month

Women's History Week has grown since it was first observed in 1981 and is now observed throughout the month of March.

The National Women's History Project first promoted the idea of a women's history observance. Mary Ruthsdotir, organization spokeswoman, explained the extended time period:

"When Women's History Week was first initiated, there was so little information available on women's history that some teachers probably wondered if there was, in fact, enough material on the subject to fill an entire week.

"Over the past six years, however, women's history has come to be accepted as a valid academic field, extensive research has been undertaken on a wide variety of topics, hundreds of books have been published at every grade level, and the contributions of women to the building of our communities have been rediscovered and celebrated in many states and in hundreds of cities and towns across the country."

Although the observance is called National Women's History Month, the Department of Defense focus will be what women can achieve today and tomorrow. According to Rosemary Howard, DoD Federal Women's Program manager, the month will be observed by publicizing the many training opportunities available to DoD women.

The theme for DoD's observance is "Taking Charge: Leadership and Empowerment." Seminars on subjects such as negotiating techniques, conflict resolution, individual development and management and leadership will be presented on DoD installations in the United States and overseas.

The seminars are designed to appeal to everyone in the DoD community. Howard said that a number of men attended last year's seminars—"some because they are managers who want to help women get ahead, and others because we have good information and they want to learn too." (MAB)

NADC Fire Department

Fires don't take

by JO2 Todd Lufkin

Every little boy goes through a phase where he wants to grow up to be a fireman.

Well here at NADC there are 41 fellows who grew up to realize their childhood dreams. However, reality isn't the fun and games that a youngster thinks.

The fact that the Center has a fire department (Code 814) may not be common knowledge, nor is it widely known is that this group of men is Buck County's only professional or fully paid fire department; a few local firemen are partially paid.

The fire department is housed "across the street" in Building 134 (by the Crew's Rest, tennis courts, and auto shop). It is one of the Center's newest facilities; approximately 2½ years old. Previously, the firehouse was located in Building 1, where the Administrative Support Division is now located and the crash house was by Gate 30.

Building 134 is quite comfortable, with muted tan walls and floors. The walls also have appropriate pictures of fires and firefighting and fire safety posters. The sleeping quarters are roomy and homelike—similar to those found in college dorms. There is a large kitchen with four refrigerators and a microwave oven and a lounge with a television. This lounge also serves as a training area. A-Z Maintenance cleans the bathrooms, but the firemen are expected to clean up after themselves in the kitchen and lounge. There is also a patio, complete with grille and picnic tables, for family "get" togethers.

The firemen—which includes driver operators, EMTs, firefighters, chief inspectors, fire captains, assistant fire chiefs and the fire chief are split into two platoons, "A" and "B." They work 24 hours on and 24 hours off. With the January 22 snowstorm there was a lot of confusion about coming in to work or whether the Center was open or closed. But the firemen knew that snow or not they had to come to work—as they must on every major holiday and every weekend. However, they are compensated in that for every seven working days they get three days off and every 13 weeks they get five days off. One fireman shrugged it off by saying "We never close—fire doesn't take a holiday."

As in every Navy-related job, the firemen experience a lot of "hurry up and wait." At 7:30 a.m. a daily roll call is held in which information is passed from one shift to the next and where daily assignments are given by the Assistant Fire Chief.

The drivers and crew check the apparatus they're assigned and the firefighters check their gear. The first 2½ weeks of every month finds the firemen checking each Center fire extinguisher to be sure it's in working order.

The firemen state that their days are spent "conducting group inspections, training, vehicle inspections, airfield maintenance, and, most importantly, fire suppression (hands on fire fighting)."

Additionally, both platoons have Fire Captains—sort of a first-line supervisor. In overall charge is Fire Chief Don Meadows. The Fire Chief was stationed here in 1964 while serving in the Navy.

NADC's firemen work with one ambulance, two engines, three crash trucks, one twin-agent unit and a water tanker. The traditional fire-engine-red color of yesterday has been replaced by lime green.

In addition to the Naval Air Development Center, the firemen also aid in combatting fires in neighboring townships. This mutual aid has been very beneficial.

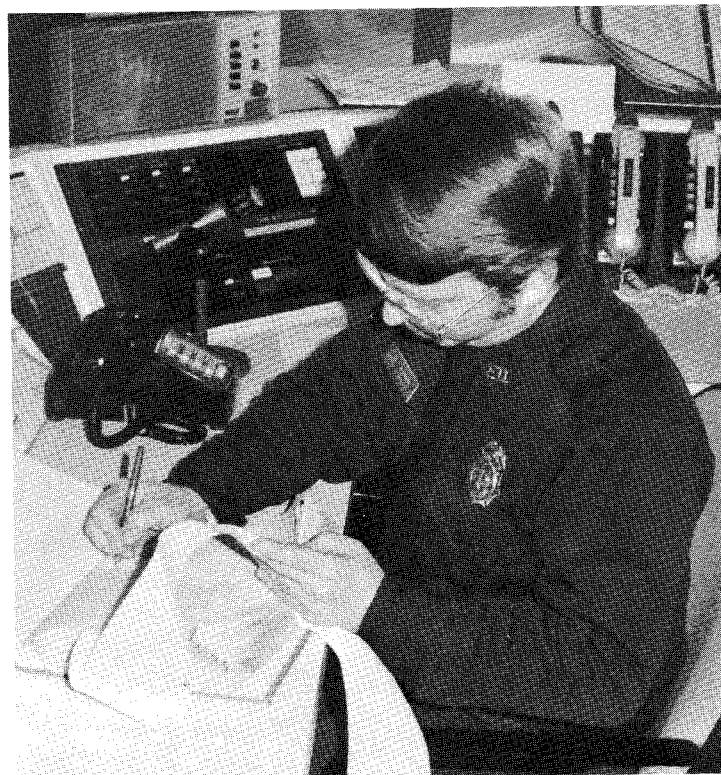
Firefighting isn't the only function these men perform. The station maintains an ambulance service that provides medical coverage to the base and the local community. Each platoon has several men trained as EMTs (Emergency Medical Technicians).

The EMT course is approximately three weeks long or a total of 147 hours. Additionally, several fire fighters have, on their own, taken the First Responder class and one has also, on his own, received his paramedic license.

Other duties that the firemen have include: maintenance of the E28 arresting gear on the runway; during snowy conditions they assist in transporting emergency personnel who work at Warminster General Hospital; working with the Public Affairs Office in setting up the Sesame Street trailer (providing fire safety information and general public awareness); delivering Santa Claus to and from the annual W&R Orphan's Christmas Party.



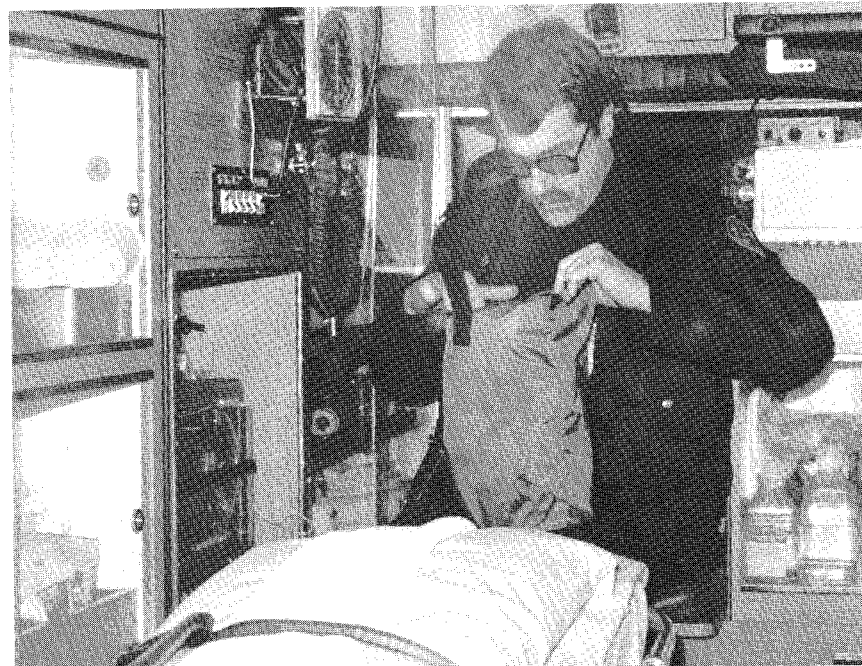
Firefighter Chuck Steinbach demonstrates technique for handling patients with back injuries.



Firefighter Mike Evanick stands watch in alarm tower.



Driver Operator Gene Byers checks out breathing apparatus during morning checks.



EMT Mike Quinn checks ambulance equipment at start of his shift.

is always on call a holiday

Photos by JO2 Todd Lufkin



Driver Operator Joe Perkins checks engine during morning checks.

About 95% of the men are also members of local volunteer fire departments or ambulance crews. One fireman laughingly commented that it could be possible "to be dispatched to NADC even on your day off."

Camaraderie between the firemen is very high. Most maintain close friendships outside of the department.

When not training or on a job the firemen or conducting collateral duty, they can be found in the lounge watching fire prevention videos. As one fireman stated, "training never stops, it's important to update your skills. We're a fine-tuned machine and need to remain that way."

To an outsider it seems that there is

a lot of time when the firemen are waiting on bells (signifying there is a fire or other emergency). During this time there is a lot of gallows humor. One fireman explained that "this humor isn't for the public or our family's ears. It helps relieve the stress and allows us to keep our sanity." One fireman quickly pointed out that "stress is worse than fire. We can't let it get to us, or it (fire) could take us over."

Stress also can affect their home life. "Keep in mind that when we're 24 hours at the firehouse, our families are alone for 24 hours, that doesn't help a marriage. Also, our families don't realize, nor can they comprehend, what we go through," stated one fireman.

It takes a certain kind of person to be a fireman; one who lives and works on the edge—attrition is very high. Another fireman said, "How many people will get up to respond in the middle of the night only to find out it's a false alarm?"

When the alarm sounds, the firemen are on their way in a minute or less. "We never know what we're dealing with until we actually arrive on the scene. When we go out we never know how long we'll be gone—we could be gone for 24 minutes or 24 hours," said one of them.

On the way to the fire they try to psych themselves up. They try to imagine what the fire looks like and how they are going to do their respective jobs. "We don't think of the dangers involved until we're safely back at the station. Then we say to ourselves 'hey, I could have bit the big one back there,'" stated one of the crew.

They were concerned that their fellow Center employees know that the fire department exists and that they be aware of and adhere to the emergency bells when they ring in the various buildings. "We don't control the bells. We're only enforcing them; we're doing our job and, hopefully, in the process, saving lives." The NADC fire fighters are gung-ho men who feel this awareness and cooperation isn't too much to ask.

Perhaps Fire Chief Don Meadows summed it up best—"This is a good group of guys, who take a lot of pride in themselves and their equipment. It goes without saying that I'm very proud of them."

This group of men includes Assistant Fire Chiefs Charles Mayers of "A" and William Adams and Vince Crusco of "B"; Fire Captains Carlos Sanchez and Mike Gindele of "A" and Charles Snyder and Al Keiss and James Myers of "B"; EMTs Kevin Haggerty, John Dworsky and Michael Quinn of "A" and Willis Pelletier, Glenn Watson and Tommy Hunter of "B"; Driver Operators Calvin Harvey, Paul Cronin, Steve Fisher, John Scott and Kinzel Edwards of "A" and Arnold Gibson, Eugene Byers, Russell Miller, Joseph Perkins and Michael Hartman of "B"; and Firefighters Mike Evanick, Mark Showmaker, Chuck Steinbach, Jim Marlin and Rich Valesky of "A" and Richard Kulp, Steve Mobley, Michael Goldberg, Richard Gerhard and Curt Braeunle of "B."



Fire Chief Don Meadows



Driver Operator John Scott, Fire Captain Carlos Sanchez and Firefighter Chuck Steinbacher repack attack line.



Firemen practice hydrant hook-up procedures with Engine 69.

Sports

NADC takes basketball championship



Photo by AZ3 Brenda Denonville

NADC Raiders take first place during the NAS Willow Grove Intramural Basketball Tournament for 1987. L to r: (back row) AFCM Nelson Williams (Coach), AX2 Ronald Maki, Tony Davis, Michael Janinek, Quintin James, AE3 Rickey Grant, AO1 Barry Evitts, AKAN Michael Wilborne; (front row) Joe Cameron, Tyrone Snowden, AD2 Earl Taft, AO2 Henry Taylor, AE2 Tyrone Shamwell, AEAN Anthony Tallie.

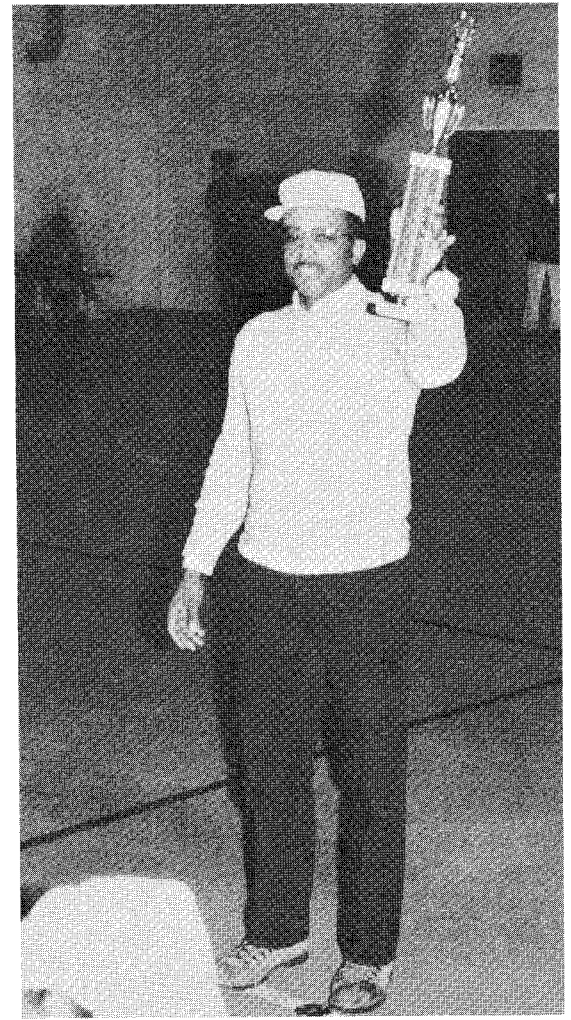


Photo by AZ3 Brenda Denonville

Head Coach AFCM Nelson Williams celebrates his second consecutive first place victory from the "Willie Grovers."

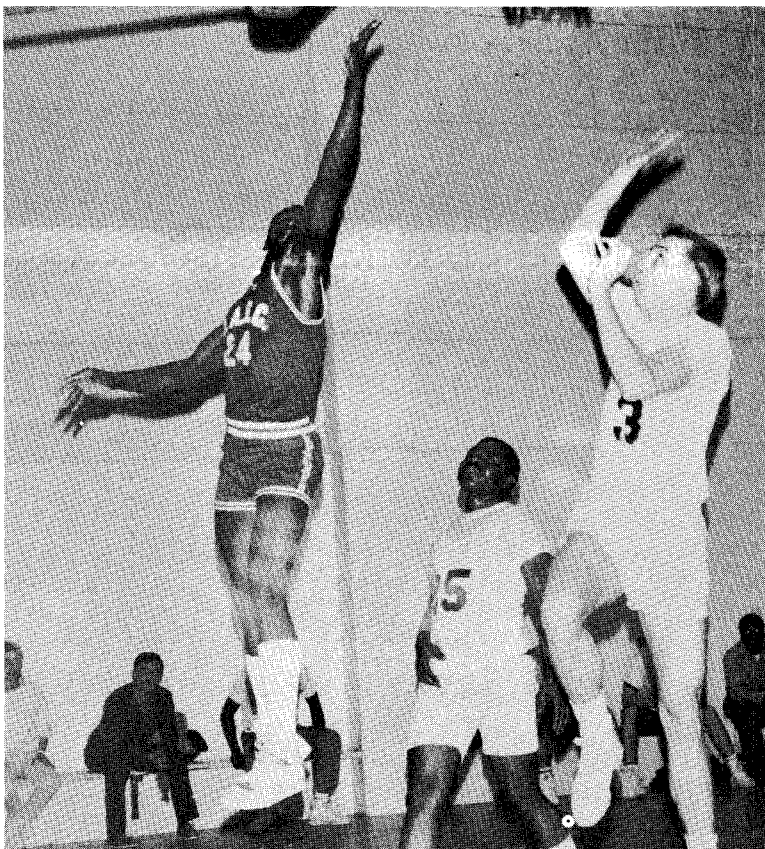


Photo by AO2 James Phelan

Henry "Air" Taylor flexes for another easy layup; one out of ten isn't bad.

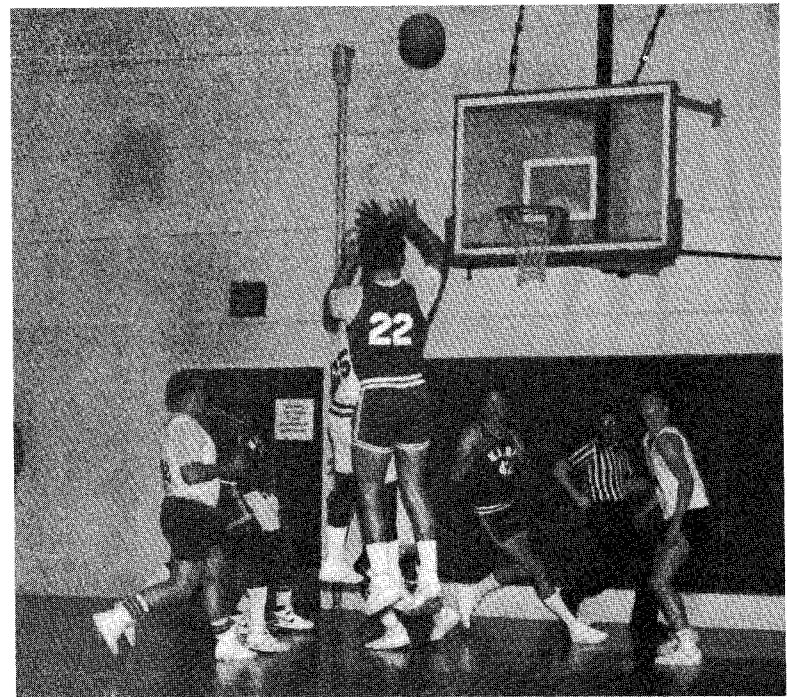


Photo by AO2 James Phelan

Barry "Shot Gun" Evitts cans another three pointer.

Six new teams to play in Softball League

by Charlie Destra

The new teams just keep on coming. At the first softball meeting (28 January), the Bandits, Misfits, and CSC joined the league. Then, on 18 February (deadline for entering a team), three more representatives showed up at the league's second meeting petitioning for entry of their teams into the league. Suddenly, the league has mushroomed to 20 teams, six more than last season.

The ramifications of this growth are far-reaching, both administratively and on the field. Nothing is set in concrete yet, but the league seemed to be leaning towards a 19-game schedule (every team plays every other once) as opposed to last year's 16-game sched-

ule. This translates into 190 total games—78 more than last season, extending the season five more weeks with a possible start date as early as 13 April.

The early start date will adversely affect the teams' practice plans, what with the inevitable cold, damp conditions and 20 teams fighting over limited practice space. Also, the league will need more ball fields, and the plan calls for using Werner field in addition to Inertial, Tyler, Kemper and Sailor's. The problem with Werner field is that games must start at 4:30 (a half hour earlier) and not go beyond 6:00.

Confusing? To say the least. But just what affect all this new blood will have on the league standings remains the

most intriguing issue. The most recent new entries—the Cellar Rats, the Dawgs, and the Dyna Tigers—are all unknown quantities. Throw CSC into the equation and that makes four new teams for which we have little or no background. (As reported earlier, the Bandits and Misfits, though newcomers, are made up largely of veteran players and appear to be solid.)

Rarely do new teams dominate, let alone post winning records, but should just a couple of these squads prove to be competitive, this could have a major effect on the balance and power structure of the league. Only 10 of 20 teams will make the playoffs and a couple of established teams could find themselves on the short end of the stick. The

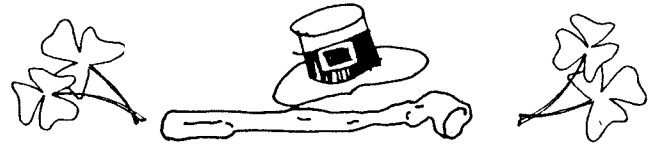
new teams' role in the scheme of things is likely to be that of spoilers, at least until they develop the harmony and chemistry needed to play on a consistent, winning basis.

And one other small matter took place at the league meeting. Agent Orange, in an obvious effort to confuse the situation further, announced that they were changing their name to Orange Crush. So, we have six new teams, five with new names, one (Misfits) with an old name; and one old team with a new name.

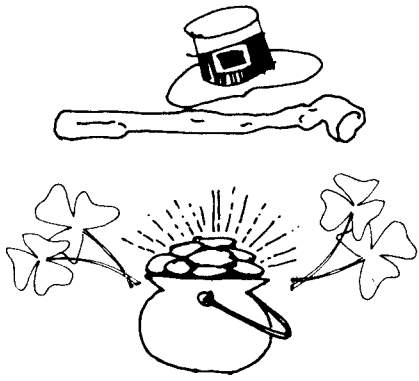
And who's to blame for all this confusion? Well, I'd rather not name names.

VIEWPOINT

Photos by
JO2 Todd Lufkin
Mary Ann Brett



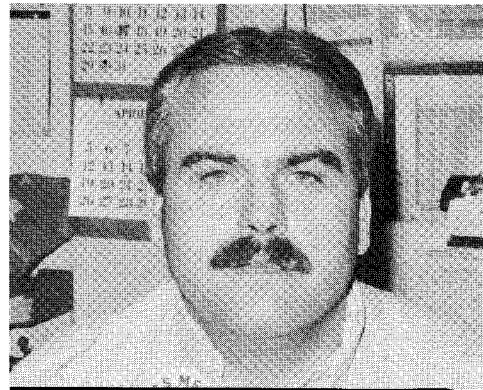
This month's question is:



"Do you consider yourself more like a leprechaun or more like St. Patrick? Why?"

Timothy Fitzpatrick—Code 6011

"I'm far from saintly, so I have to consider myself more like a leprechaun, since I dipped into my pot of gold and charmed many a willful lassie!"



John Fitzpatrick—Code 4023

"I would have to say St. Patrick because I don't know anyone who would want to be short, green, fat, and have long ears, except maybe my co-workers."

Patrick Sweeney—Code 4021

"Neither. I'm too much of a "people person" to be solitary and unfriendly like a leprechaun. I couldn't be like St. Patrick because snakes give me the "willies." Consider me a fun-loving Irishman who enjoys a mug or two of Guinness Stout in the company of good friends."



Kathleen O'Brien—Code 01

"More the leprechaun than St. Pat, more mischevous and elfen. I keep me treasure under me hat, and raise me glass to Dublin. Erin go braugh!"



Patrick Clausius—Code 6014

"I feel more like a leprechaun because the IRS is always after my pot of gold."

LT Kathleen McCarthy—Code 04A

"I wish I were more like a leprechaun because with a pot of gold I could retire and be a full-time mother."



MSSN Shawn Sebring—Code 84

"St. Patrick, because I deal with a lot of snakes."



Mixed League Bowling News

by Tom Reiter

As we reach the mid-point of the second half, the league standings and best efforts are:

A DIVISION

TEAM	CAPTAIN	HI-GAMES	
Goofers	A. Knobloch	Leo Markushewski	247
		Lorraine Reidinger	233
White Winos	S. Tiley	Ron Garber	232
		Terese Wells	166
Warveyhallbangers	B. Weber	Mike Lizbinski	223
		Caroline Tierney	213
Big Spenders	R. Casagrand	Bob Casagrand	225
		Elaine Granieri	190
From The Gutter	D. Williams	Rick Yeager	257
		Char Pohle	180
Red Winos	T. Reiter	Mike Dent	246
		Iris Hayslip	209
Stange Brew	J. Mitchell	Jim Mitchell	202
		Lynn Fratrik	165
Spare Us	D. Morgan	Dick Coughlan	212
		Donna Morgan	211
Lucky Strikes	C. Burian	Art Duhaime	232
		Mary Feeley	190
Lane Brains	M. Thomas	Hank Lystad	245
		Ro Lystad	190
Jerry's Kids	J. Miller	Carl Kizelkowicz	243
		Joan Miller	188
Bullshooters	T. Leahy	Steve Spadafora	204
		Eileen Cunnane	192

B DIVISION

Alley Cats	R. Geyer	Gene Toner	225
		Denise Beck	234
Magic Markers	N. Weinman	Larry Sicher	221
		Andrea Sicher	189
Eleventh Frame	H. Goldstein	Allen Goldstein	247
		Sandy Weathers	207
Neiners	H. Catto	Mark Lind	233
		Jeanne Canton	227
Blips	M. D'Aulerio	Mike D'Aulerio	252
		Sharon Robinson	170
Destroyers	L. Dunn	Brian Hutchison	227
		Lorrie Dunn	207
Les Champignons	M. Troyanosky	John Harris	209
		Ann Harris	213
Dynamic Duos	E. Gifford	Nick Doto	218
		Bonnie Long	177
204 Pin Heads	L. Johnson	Bob Parsons	244
		Lisa Johnson	169
Screwballs	P. Tease	Dave Rose	210
		Pat Tease	244
Falcons	C. Calkins	Wayne Jerdan	218
		June Olson	232
Who Cares	J. Bowes	Steve Metcalf	257
		Barb Fleischut	184
SUBSTITUTES: Carla Crist 211		Cliff Tierney 203	



Photo by JO2 Todd Lufkin

A CHECK IN HAND—is worth \$120,046. That's what the 1987 Combined Federal Campaign (CFC) Chairperson Maureen Marron presented to Center Commander Captain Edward Sturm. This year's campaign proved to be the most successful ever as more than 126% of the goal was collected from fewer personnel. Also present and closely involved in the endeavor were Bette Simpson, NADC CFC Coordinator, Neil Abramson, Data Manager for this campaign, and Ted Trilling, who developed a CFC software package three years ago and has worked diligently, contributing hundred of personal hours to revising and improving the programs.

No Blarney spoken here

by JO2 Todd Lufkin

St. Patrick's Day . . . March 17. Thoughts of this date evoke images of shades of green, leprechauns, shamrocks and the Blarney Stone. Actually, this is the date that St. Patrick, the patron saint of Ireland, died in about 461 A.D.

St. Patrick's Day has been observed in the United States since colonial times when the Friendly Sons of St. Patrick was organized in Philadelphia. The movement spread to New York City when Irishmen of the Roman Catholic and Presbyterian faiths organized a chapter of the society there. Since 1845, observance of this date has been nationwide.

Sketchy reports exist about the man whose death is celebrated as a feast day by Irish Catholics and "honorary" Irishmen throughout the world.

Patrick was born in England around 389. When he was 16 he was abducted

by pirates and sold into slavery in Ireland. During his captivity, Patrick dedicated himself to religion, escaped and became driven with the notion of converting the Irish to Christianity.

Beginning in Northern and Western Ireland, he gained many converts. Legend has it that Patrick founded more than 300 churches and baptized over 120,000 people. He would remain among the Irish the rest of his life.

Many stories about him are based only on legend. One of the best-known tales tells how he charmed the Irish snakes into the sea so they were drowned (to this day there are none in Ireland). According to another legend, Patrick illustrated the idea of the Holy Trinity with the three-leaf shamrock.

As a result, the shamrock is the national flower of the Republic of Ireland. All loyal sons of Ireland still wear a shamrock in their lapels on St. Patrick's Day. The name shamrock is Anglicized from the Irish word "seamrog,"

meaning three-leaved.

Having nothing to do with St. Patrick the man, but firmly connected with St. Patrick's Day are the wee folk of Ireland: the leprechauns.

These little people have the appearance of a small wrinkled old man about two feet tall; very cranky and extremely rich. They work as cobblers, dressing in green and wearing leather aprons. They live alone, far from towns and concentrations of "big people." When he can be found, often by following the sound of his shoemaker's hammer, he can be caught and forced to reveal the hiding place of his treasure of a pot of gold. However, if the captor takes his eyes off the leprechaun for an instant, the leprechaun will disappear.

Also connected with St. Patrick's Day is the Blarney Stone.

This actually does exist as a block of limestone in Blarney Castle, near Cork, Ireland. Legend says that the owner of Blarney Castle used promises and flat-

INTEGRITY ALERT

by Ron Kabin

Commercial Solicitation
by Center Personnel

To eliminate the appearance of coercion, intimidation, or pressure from rank, grade or position, all full time DoD personnel (Military and Civilian) are prohibited from making personal commercial solicitations or sales to DoD personnel who are junior in rank or grade, at any time, *on or off duty*. This includes, but is not limited to, the solicitation and sale of insurance, stocks, mutual funds, real estate, and any other commodities, goods or services.

This prohibition is not applicable to the following:

- The one-time sale by employees of their own personal property or privately-owned dwelling,
- Off-duty employment of DoD personnel in retail stores,
- Unsolicited sales.

For civilian personnel, solicitation limitations apply only to personnel under their supervision at any level.

Violations of the above may be reported to the Code 00 Center Hotline Recorder at extension 3015, or the Internal Review Office at extension 3033.

tery to keep his home from being attacked. At one time this block bore the date 1446. Legend has it that a person who kisses the Blarney Stone will have the power of sweet, persuasive, wheedling eloquence. To this day anyone who is a smooth talker is said to have the gift of the "blarney."

The wearing of green on St. Patrick's Day is a way of honoring the emerald island of Ireland. Being pinched for not wearing green is a tradition of unknown origin.

The largest St. Patrick's Day parades in the United States take place in New York City and Chicago. In fact, New York's is even larger than the parade in Dublin, Ireland.

Erin go brag!

FERS and Social Security

(continued from page 2)

\$150, Mary believes she will be receiving \$200 a month on the social security record of her husband, who plans to retire at the same time (50% of the \$400 he is expecting to receive). However, the government pension offset will reduce her spousal benefit unless Mary was eligible to retire prior to June 1983.

If Mary is subject to the offset, her expected \$200 spousal benefit will be reduced by two-thirds of the \$150 government pension she will receive (two-thirds of \$150 = \$100), leaving Mary with a social security benefit of \$100 (\$200 - \$100 = \$100) based on her husband's social security entitlements.

The key point being that unless your pension will be significantly less than your spouse's, you can not expect very much, if anything, from your spouse's social security benefit.

If this offset impacts your pension projections significantly, you may need to seriously consider switching to FERS during the open season (July to December), since according to the Office of

Management and Budget *FERS participants, including CSRS employees who transfer to FERS, will not be subject to this reduction.*

Earnings Test

All social security benefits are affected by an "earnings test." This means that your social security benefits may be reduced if your income exceeds (e.g., if you elect to work while receiving a social security retirement pension) the limited annual amount established by the Social Security Administration. In 1986, social security benefits were reduced \$1 for each \$2 that was earned over \$5,760 by anyone under age 65. For persons between the ages 65 and 69, the ceiling was \$7,800. Although in 1990 persons aged 65 to 69 will have a smaller reduction, \$1 for each \$3 earned over the 1990 ceiling, you should be aware that you will be subject to this "test" until you reach age 70.



Photo by Mary Ann Brett

Hearts and flowers at NADC

Each year for Valentines Day, the NADC Officers' Wives Club gets together and assembles bouquets for the convenience of NADC sweethearts. This year there were candy hearts, too. Proceeds of this sale go to various charitable endeavors identified by the Wives' Club.



In This Issue:

- Smoking policy
- Sexual harassment
- Bomb threats
- Sports
- Easter tale

Naval War College

A link to the real world

by JO2 Todd Lufkin

"... To enhance the professional capabilities of its students to make sound decisions in the highest command and management positions."

This high sounding ideal is the mission of the United States Naval War College in Newport, R.I. Founded in 1884, this is the Navy's senior educational institution and the world's oldest Naval War College.

The War College provides its students, both military and civilian, with a challenging academic environment, made up of intense study requirements, guidance in individual research, and the chance to delve into problems in sufficient depth as to understand complex issues and relevant factors involved in the decision-making process.

Two War College alumni are NADC's Bob Becker, Associate Technical Direc-

tor, and Tom Castaldi, Head of the Mission Avionics Technology Department.

Both attended in the early to mid-1970s and found their time there to be very rewarding and consider it profitable. "We (scientists and engineers) tend to get caught up in our own world and going to the War College opens our eyes," said Castaldi. "The experience broadens your horizons and helps you to better understand the world's big picture."

Classes average about 125 students (100 from all the armed services) and are broken into groups of 15. The student body also has representatives from foreign nations.

Lasting about 11 months long, the school year is divided into trimesters: the first covering Strategy and Policy; the second Defense Economics and Decision-making; and the last, Employ-

ment of Naval Forces. Each area is explored by the student and the seminar group through lectures, intensive reading, discussions, research, written papers and guest speakers.

"The objective of the class is to show the students what the Navy would do in a given scenario," said Becker. "How the Navy would carry out its mission with regard to national policy. By looking at the scenario from different perspectives, you get an entirely different view of the role of Naval power that you might not have otherwise considered."

Both Castaldi and Becker were impressed with the quality and profes-

sionalism of the instructors. This faculty is selected from several sources: the Navy, the other services, and eminently qualified civilian professors. "The military instructors provide a valuable link between the academic pursuits and the realities of professional interest," stated Becker. "The civilian faculty is made up of distinguished, published scholars in their respective fields who are at the War College on sabbatical," explained Castaldi. Both pointed out that the civilian-military mesh ensured the students received a well-rounded education.

(continued on page 4)

Federal Employee Retirement System—Military Deposits

by Jacquelyn Benner

Are you confused by the choices you have to make regarding the new retirement system? You are not alone. To assist in your decision-making your Personnel Office is providing information from many sources. Speakers from the Office of Personnel Management and from Government Retirement Benefits, Inc. will conduct seminars; special literature has been ordered for each employee; a computer disk to help make projections of retirement benefits is available in your department's administrative office and in CPD; training courses have been ongoing; an instructional video tape is expected soon; and articles focusing on specific retirement concerns are published in this newsletter. This month we hope to shed some light on deposits of money into the retirement systems.

Deposits and redeposits are made in a number of situations: to credit active military service, to credit employment time for which no retirement contributions were made and to return money which was refunded upon an earlier separation from employment. The consequences of not making these contributions usually are a reduced annuity and, depending upon how long one waits to repay, a large interest payment.

Let's explore military deposits as

they are treated in both the Civil Service Retirement System and the Federal Employees Retirement System.

Interest Payments

Much mention has been made of interest payments. The law specifies that military deposits can be made without paying interest if made within two years of entering into the retirement system. For CSRS employees that interest is calculated from October 1, 1985, or two years after first becoming subject to CSRS (whichever is later). FERS interest begins on January 1, 1989, or two years after entering FERS. However, essentially three years are interest free if you pay your deposit in full before three years are up. This is because OPM computes your interest at the end of the year during which it is cumulating. For instance, if you were automatically covered by FERS on January 1, 1987, you now have until December 31, 1989, to make interest free military deposits.

The amount of interest due is variable depending upon the earnings of the retirement fund. For 1985 the interest was 13%; for 1986, 11.125%. This is compounded annually in computing your payment. It should become evident that the consequences could be substantial if your deposit is not made

(continued on page 8)

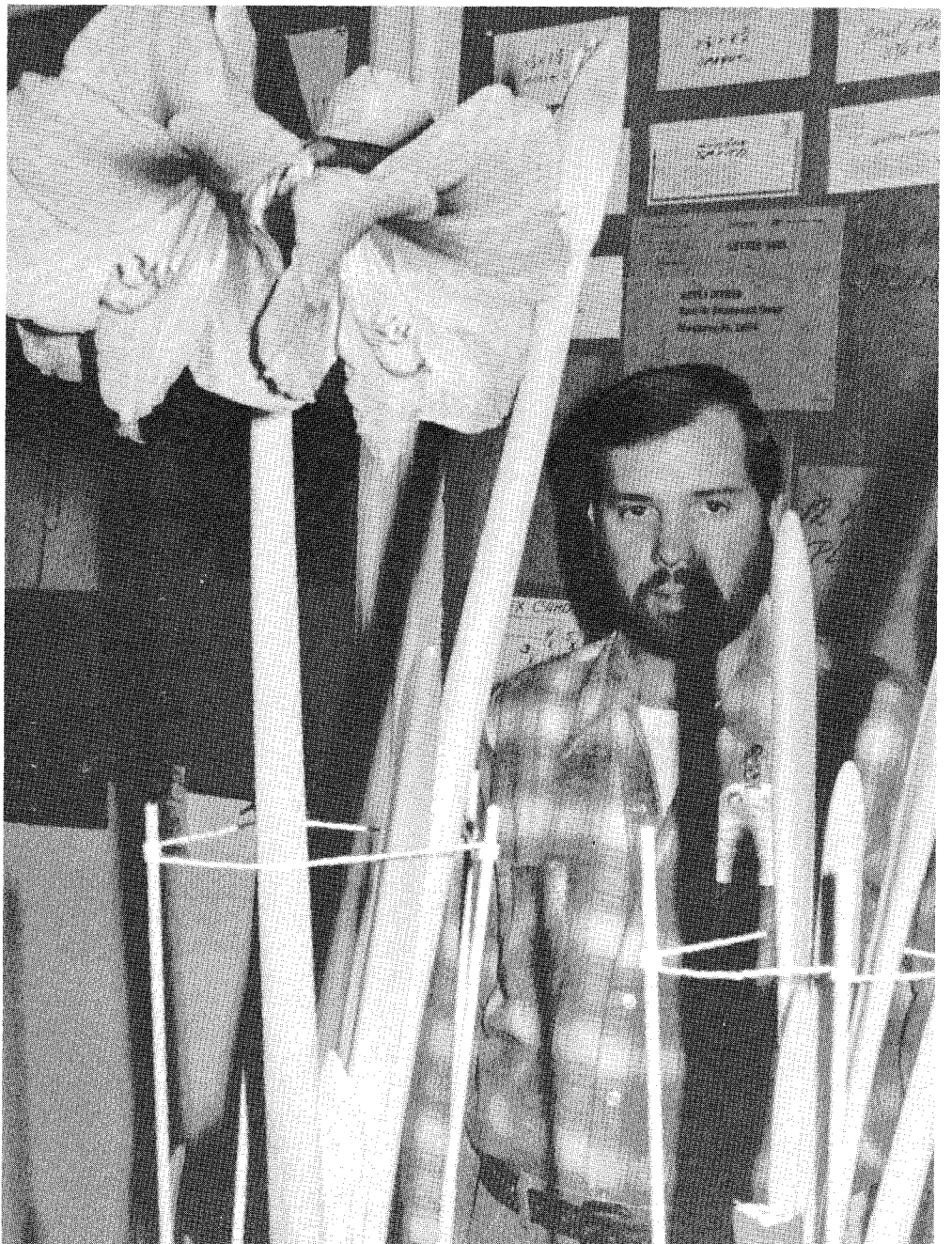


Photo by JO2 Todd Lufkin

SPRING IS IN THE AIR all year long—Steve Ridpath, Shop Store 6, welcomes Spring by growing a beautiful orange amaryllis. Ridpath's hobby is horticulture and as all can see he definitely has a green thumb.

PEACE *With* **FREEDOM**
ARMED • FORCES • DAY • 1987

National Secretaries' Day

Command Corner



CAPT Edward J. Sturm
Center Commander



Guy C. Dilworth, Jr.
Technical Director

We have received numerous questions on Center policy regarding smoking. The following is provided to inform you of current operative policy and what the future holds.

The negative health aspects of tobacco smoking have been well documented and publicized in terms of their effects on both smokers and nonsmokers. The challenge, in terms of establishing a smoking policy at NADC is to strike a balance between the rights of individuals to smoke and the rights of nonsmokers to a reasonably smoke-free environment.

As many of you know, on 4 December 1986 the General Services Administration (GSA) issued revised smoking regulations in buildings controlled by GSA. Essentially, these regulations prohibited smoking in general office spaces, required designated smoking areas to be established, and permitted smoking in private offices where adequate ventilation exists. Because the NADC buildings and facilities are owned and controlled by the Department of the Navy, the GSA published regulations do not apply to us.

This in no way implies that we are less concerned about a healthy work environment for our employees. It has been, and continues to be, our intent to create an environment that supports smoking abstinence, discourages the use of tobacco products, and provides smokers with encouragement and professional assistance to stop smoking. To that end, we will continue to sponsor programs to help our employees stop smoking.

Our current smoking policy is contained in NAVAIRDEVCCEN Instruction 5100.34. This instruction prohibits

smoking in auditoriums, shuttle vehicles, conference rooms, classrooms, and requires "no smoking" areas to be designated in the cafeteria. Smoking is still permitted in common work areas as long as adequate ventilation exists.

A revised Secretary of the Navy (SECNAV) instruction was issued on 17 July 1986 clarifying SECNAV policy on smoking in the Navy and Marine Corps. Our already existing center policy on smoking is in full compliance with the new SECNAV requirements.

We are aware that the Space and Naval Warfare Systems Command (SPAWAR) is currently working on a revised SPAWAR instruction that will apply to all SPAWAR field activities. Indications are that this policy will place further restrictions on tobacco smoking and require further field activity smoking cessation efforts. As soon as this policy is received, we will implement any new requirements as soon as they are properly staffed.

Our goal at NAVAIRDEVCCEN is to recognize the rights of smokers and nonsmokers alike, and to provide a policy that is in harmony with our obligation to provide a reasonably smoke-free environment. We ask for everyone's cooperation in this effort. If you have any questions on the Center's smoking policy, please contact Mike Masington, Command Safety Officer, on extension 2167.

Edward J. Sturm
Captain, USN
Commander

Guy C. Dilworth, Jr.
Technical Director

Letters to the Editor

Dear Editor:

There seems to be no place to register written complaints about the Cafeteria. During the last two years I have spoken to Cafeteria Managers, sent letters to the Food Services Board, and used the Department of Navy Suggestion system, all to no avail.

Sure we can get replacements for sour milk, but there is a veritable floodgate of other complaints & suggestions, (some valid) yet few people know where

to take them. There is no company address, and no suggestion box.

I, for one, would like to know that Cafeteria upper management hears the suggestions and complaints, and that they are aware of the number of people who have them.

On behalf of the frustrated users of the Cafeteria, when will something be done and, in the meantime, to whom may we write?

Bob Walter
Code 05405

Dear Bob:

Service America, the management of the Cafeteria and dining room, is always on Center and, in fact, maintain offices here. Their phone number (ext. 3245) is in the Center directory and the resident manager, Jose Ferrer, is readily accessible.

The Food Services Board chairman is Aris Pasles, Code 071, ext. 1103. There is no reason why valid comments or complaints should go unanswered. If mail or phone calls don't get action, visit them in person.

Editor.



Photo by James Moore

A LOT OF BRASS turned out for the 2 day Naval Air System Command (NAVAIR)/Naval Air Development Center AWS Systems Review, held in the Center's Auditorium. VIP visitors included RADM R. Leuschner from NAVAIR, RADM R. Pittinger, and RADM C. Brickell from the Chief of Naval Operations. The comprehensive review was coordinated by Robert Fosko and CDR Williams Mugg from the ASW Department.

Small Business demo held

The U.S. Small Business Administration Procurement Center Representative for the Breakout program, in cooperation with NADC, held a small business demonstration in Hangar No. 1. All employees were invited to see the latest in hardware as demonstrated by Jerry Goldberg and Joan Merkel of METRA Systems.

METRA Systems is a Small Business Distributor for TEAC, NF Electronics and Ono Sokki to name a few.


Some of the electronic equipment they demonstrated were a portable spectrum analyzer, data recorders, wave from generator and the latest frequency response analyzer."



Photo by JO2 Todd Lufkin

Jerry Goldberg of METRA Systems demonstrates equipment at the small business demonstration on Center.

REMINDER
Small Business Week
11-15 May 1987
"Small Business: America's Growth Industry"



Reflector
NAVY AIR DEVELOPMENT CENTER, WARMINSTER, PA.

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Commander, NADC CAPT Edward J. Sturm
Technical Director..... Guy C. Dilworth, Jr.
Public Affairs Officer and Editor James S. Kingston
Associate Editor Mary Ann Brett
Assistant Editor JO2 Todd Lufkin

EEO is for everyone

Preventing Sexual Harassment—It's a good policy

From the EEO Office

The key to establishing an environment free from sexual harassment is to maintain a professional working relationship with those you come in contact with while performing your duties as a government employee. The Naval Air Development Center has a policy that prohibits sexual harassment and that guarantees victims of sexual harassment the right to be counseled, to file charges, and to have their allegations investigated promptly and impartially (Per NAVAIRDEVCON Instruction 5354.3 dated 27 May 1986).

What form of behavior constitutes sexual harassment? Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of

a sexual nature constitute sexual harassment when:

1. Submission to such conduct is made (either explicitly or implicitly) a term or condition of an individual's employment;

2. Submission to or rejection of such conduct by an individual is used as the basis for employment decisions (i.e. training, promotion, work assignments, travel, etc.) affecting such an individual; or

3. Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive work environment.

What constitutes a work environment and who is covered under the Center's policy? The Center's sexual

harassment policy applies to any situation which occurs in a work-related environment, including travel, and covers all working relationships including those with contractors.

Preventing sexual harassment is the responsibility of both supervisors and employees. Supervisors should demonstrate their commitment to providing a work environment free from sexual harassment by:

1. Monitoring the environment and ensuring that any instance of sexual harassment they encounter is dealt with in a prompt, remedial manner.


2. Setting the proper example for subordinates by their own behavior.

3. Attending the Prevention of Sexual Harassment Training Course for Supervisors, and giving their employ-

ees an opportunity to attend appropriate training.


Employees should demonstrate their commitment to preventing and eliminating sexual harassment by supporting this policy through their own professional behavior.

Individuals who are sexually harassed should make it clear to the offender that his/her comments, gestures, or physical contact of a sexual nature/overtone are unwelcome. DO NOT IGNORE THE PROBLEM, this usually makes matters worse. Report the incident to the appropriate supervisory level, the Deputy Equal Employment Opportunity Officer, the Federal Women's Program Manager, or an Equal Employment Opportunity Counselor.



Commander's Safety Award

Presented to



Commanders Awards—Comptroller Department 2 yr., Civilian Personnel Department 1 yr., Planning Assessment Resources Department 1 yr., Mission Avionics Technology Department 1 yr.

Group Awards—TSD Electrical Branch, TSD Machine Shop #1, PW Rigging Branch, PW Service Branch, PW Transportation Division, Security Division, Shop Stores Branch, Fuel and Liquid Gas Branch, Storage Branch, Packing and Preservation Section.

Supervisor's Awards—Vincent Morelli 5 yr., Dominic Zaccaria 1 yr., Edward Engle 6 yr., Robert Reed 2 yr., John Hannon 2 yr., Earle Largent 7 yr., Edward Linke 6 yr., John Kupetz 13 yr., Edward Long 7 yr., John DeValle 1 yr., Cron Eckman 1 yr., Alfred Keiss 3 yr., Charles Snyder 3 yr., Carlos Sanchez 2 yr., James Myers 2 yr., Michael Gindele 1 yr.

Material Handling and Construction Equipment Operator's Awards—Dale Jackson 19 yr., Lister Ransom 16 yr., William Walto, Jr. 13 yr., Joseph McHugh 13 yr., Junious Newman 10 yr., Charlie F. Belcher 2 yr., Nick Markwald 2 yr., Casper Pepe 2 yr., Thomas King 1 yr., John McGee, Jr. 13 yr., Kenneth Danser, Sr. 13 yr., T. William Singleton 11 yr., Lloyd Pinkett, Jr. 8 yr., Edward Hill 5 yr., James Bryant 2 yr., Paul Newborn 2 yr., Lorenzo Capili 1 yr., Sherry Forbes 1 yr., Philip Shannon 1 yr., Eladio Colon 12 yr.

Safe Driving Awards—Thomas Ryan 15 yr., William DeBoer 13 yr., William Zar 11 yr., Michael Besler 2 yr., Calvin Harvey, Jr. 8 yr., Paul Cronin, Jr. 5 yr., Arnold Gibson 4 yr., Kinzel Edwards 3 yr., Eugene Byers, Jr. 2 yr., Russell Miller, Jr. 2 yr., Stephen Fisher 1 yr., Joseph Perkins 1 yr.

in recognition of their excellent record achieved in performing their duties without a lost-time mishap during the twelve consecutive month period.



Photo by JO2 Todd Lufkin

A PREVIEW OF THE NEW SECURITY SYSTEM in operation—Daniel Jackson, Maris Equipment Company, demonstrated the use of the turnstyle in the Credit Union Lobby that will be installed for the new Access Control System. Here for three days, he is the Project Manager for the installation.

If the SOC Fits

by Robert Janes

Since last month's Standards of Conduct (SOC) column, in which I wrote about the area of post-employment restrictions, there has been some newspaper coverage of a new Department of Defense regulatory change which would bar some DoD employees from certain outside employment activities once they leave the Government. One article in particular implied that this new regulation would drastically affect many DoD employees. When, as a matter of fact, this regulation would apply to very few NADC employees. In this column I will explain it briefly to give you an idea of its scope.

The regulation implements Section 931 of the FY 1987 DoD Authorization Act. It applies to civilians at or above

the GS-13 level, and officers at or above the 0-4 pay grade. In order to be affected, the employee must spend the majority of his working days during the two years before he leaves DoD in one of the following capacities:

a. Performing a procurement function relating to a DoD contract at a site or plant of the contractor; or

b. Performing procurement functions on a contract relating to a major defense system, in a manner that involves personal and substantial participation and includes decision-making responsibilities.

If an employee fits into either of the above categories, he cannot go to work for that particular contractor during the two-year period after he leaves DoD. It must be emphasized, however, that the statute applies only where "a

majority of the person's working days" during his last two years with DoD were spent performing one of the above activities.

By the time this article appears in print, we should have received a copy of the DoD regulations which implement this statute. Anyone who would like to review them or discuss this further should contact us in the Office of Counsel on extension 3000.

Although this particular statute will not affect many NADC employees, this is reflective of an increased tendency on the part of Congress to try to curtail DoD employees' post-employment activities. Some very restrictive bills have been proposed, and in the event that any of this legislation becomes law, I will keep you notified in this column.

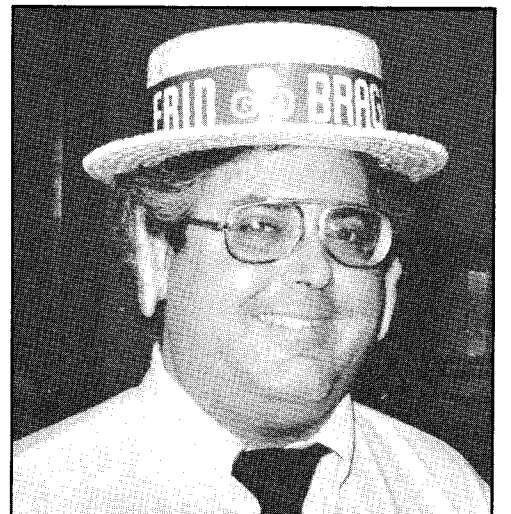


Photo by JO2 Todd Lufkin

FINKELEPRECHAUN! What some people won't do for the famous luck of the Irish on St. Patrick's Day. In case you don't recognize the face between the elfen ears, it's our own Robert Finkelman.

Naval War College

(continued from page 1)

Castaldi acknowledged that, academically, the War College was on a par with any other school he had attended and that the credits were transferable to any civilian graduate school. Becker found the focus of the War College to be different from any of the schools he attended; he was exposed to the liberal arts and had to learn new concepts and theories.

At the Naval War College, it is felt that if it fulfills its objectives, the graduating students will have acquired the vital intellectual tools required to make them effective leaders in any environment where their careers may lead them.

Castaldi and Becker strongly agree with this philosophy. "The War College is a broadening and integrating experience; a career-development broadening experience," said Becker. "The more factors that are brought to bear, the better the decision. If you can make a better judgement, then the better the decision-making process becomes. Has it helped me? I most definitely think so, but I invite others to answer that question also."

As Castaldi viewed it: "I was exposed to the theory, the process of decision-making and I co-mingled with other people from different fields and nations. Since then I've used that methodology and thinking with my work here at Center. It definitely has helped me with

my own self-growth."

Simply just because a Center employee attends the Naval War College doesn't guarantee a promotion. "The exposure there gives me the tools to become a better manager and decision-maker. It helps make a person a little more competitive," added Becker.

Castaldi highly recommends the experience for all members of the Center's professional staff, both male and female. "However, I wouldn't suggest it for someone who hasn't had at least 10 years of working experience," he noted. "You really do need that time to understand ones technology and the full aspect of Naval operations at our level. As you mature in your job, you see the Center in a different light. That is the time to go to Newport. In the long run, both the person and the Center benefit—they're better employees when they return."

Other War College graduates include Tom Shopple, Joe Micciche, John Harding, Chuck Halko, John Shannon, George Eck (retired), Bill Ogden (retired), Richard Bell, Rick Norford (retired) and Larry Ott.

According to Ed Calvello in Civilian Personnel, the last time anyone from Center attended the War College was the academic year 1979-80.

NAVAIRDEVCEENOTE 1240 of 10 December 1986 provides guidelines for those personnel who wish to apply.



Photo by JO2 Todd Lufkin

THOMAS CASTALDI (left) and ROBERT BECKER (right), former and present Associate Technical Directors, respectively, discuss technical and administrative matters.

What Is A Small Business?

by Diane Heal

The Federal Acquisition Regulations defines a small business as a concern that is independently owned and operated; is not dominant in the field of operation in which it is bidding on government contracts; and with its affiliates, qualifies under the size standard for its industry. Now, that's a mouthful! So, what does it mean?

The industrial size standards are determined by the Small Business Administration (SBA) and based on Office of Management and Budget's Standard Industrial Classification (SIC) Code. The SIC is a numerical code assigned each manufacturing and service industry (example: Aircraft "3721", Ice Cream Cones "2052", Instrument Repair "7699"). After a code has been established for a particular industry, SBA then determines a small business size criteria for that industry based on number of employees or on an average of annual gross receipts over a three year period.

All solicitations must include an appropriate SIC Code and related Small Business Size Standard. The Small Business Office determines the SIC based on the solicitation's statement of

work. Some of those most frequently used at the Center are:

SIC Code	Size Standard
8711 Engineering Services	\$13,500,000/year
3571 Computers	100 employees
3826 Analytical Instruments	500 employees
3812 Search, Detection, Navigation Equipment	750 employees
7373 Computer Integrated System Design	\$7,000,000/year

This looks like determining the size of a business is clear-cut—WRONG! Sometimes a company can be small for one item/service and large for another. Take companies that provide engineering support and software services, some companies can qualify as a small business under the \$13.5M criteria for engineering services, but are over the \$7M for computer integrated system design.

If you have any questions or would like more information on Small Business Programs, contact the Small Business Office, Code 094, on extension 2456/7132/3452.



Photo by James Kingston

SPAWAR VIP's VISIT CENTER RADM Robert L. Topping (right) and RADM Kenneth L. Carlsen (not shown) from SPAWAR attended an ASW/TACAIR Briefing at NADC on 25-26 March.



Photo by JO2 Todd Lufkin

BENNER CITED BY GUARD/RESERVE Paul R. Benner, TACAIR Systems, displays an award presented to him by CAPT Edward Sturm for his outstanding support of the Guard and Reserve Program. Al Ortiz (left), an Army Reserve Captain, nominated his supervisor for the award.



Photo by JO2 Todd Lufkin

DOING A FIRST-CLASS JOB Members of NADC's First Class Association and other volunteers build a decorative dividing wall as part of a general "face-lift" of the Crew's Rest.

Women's History Month Highlights at NADC



Photo by JO2 Todd Lufkin

Darrell Sifford, nationally syndicated columnist with *The Philadelphia Inquirer* speaks to a full house in the Center Auditorium on "Women and Team Spirit" for Women's History Month.



Photo by JO2 Todd Lufkin

Mary Cannon, RN, coordinator of the Women's Health Center, Frankford Hospital in Philadelphia, speaks on "Women's Health Issues" to employees in the NADC Dining Room.

Commander Salutes

HMC David Becker, Fire Chief **Donald Meadows**, Assistant Chief **William Adams**: For assistance to a family following an automobile mishap during the previous snowstorm.

AE1 David Dickson (Code 80): For outstanding support which ensured the timely delivery of the Bloodhound 39 aircraft as required by the Peacekeeper Flight Test Program.

William Seeman (Code 20): For significant support providing in handling AQM-127A contractual issues.

CDR Jerome C. Landers (Code 30): For outstanding support as Military Coordinator during the recent visit of **RADM BATZLER** (SPAWAR-30) and party.

Maureen Marron (Code 03); **AMSC Michael DiVona** (Code 80), **Frank Dolan** (Code 02), **Kathleen McPeak** (Code 03), **Joseph Cody** (Code 04), **Carol Wright** (Code 05), **Robert Pasquarella** (Code 07), **Roy Preston** (Code 10), **Joseph Columbo** (Code 20), **Karen Neilson** (Code 30), **Walter Young** (Code 40), **J. Jayme Miller** (Code 50), **Bernard DuPee** (Code 60), **Nicholas Antonini** (Code 70), **Robert Moore** (Code 80), **Thomas Ames** (Code 83), **Marcia Weisberg**, **Eileen LeGates** (Code 84), **William Wiesemann** (Code 01). For personal interest and commitment to the 1987 Combined Federal Campaign which resulted in an outstanding success.

CDR Wayne Savage, **CDR Ken-**

neth App, **CDR Eugene Bal**, **LCDR Albert Raithel** (Code 10): For informative briefings and assistance provided during the Aurora Software Development Unit's visit.

Richard Mitchell (Code 10): For outstanding performance while representing NADC on the SPAWAR Special Projects Team.

LCDR William Little (Code 60): For dedication resulting in receiving the Naval Aviation Physiology Special Award.

Richard James (Code 30): For outstanding contribution as a member of the Battle Force Command and Control Warfare Systems Transition Working Group.

Nicholas Hodorovich (Code 20): For dedicated efforts in assisting the Naval Avionics Center in their TACAIR War Game.

Joyce Iavecchia (Code 20): For outstanding performance as our A-6F Lead human Engineer.

Vinh Nuyen, **Thomas Popp**, **Emmanuel Englesson** (Code 60); **Carl Reitz** (Code 20): For outstanding performance while investigating the Pioneer RPV incidents.

Stephen Elchenko, **Guy Fenerty** (Code 70): For valuable support to the Advanced Signal Processor Program.

LCDR Peter Letarte (Code 60): For significant contribution to the welfare of Dr. Koop during his stay at the Bethesda Naval Hospital.

Security Alert

Reacting to Bomb Threats

Think that caller's threat about a bomb is a practical joke? Chances are you're right but do you really want to take the chance. How you react to a bomb threat can mean the difference between life and death.

The car bomb that leveled the Marine Corps barracks in Beirut, Lebanon, killing 241 servicemen, demonstrated the destructive capacity of a single bomb.

Fortunately, there is no indications of a threat directed toward military installations in the U.S. But no base, post, depot or training site overseas or in the United States is immune to the threat.

Each service and command has established plans for dealing with bomb threats. In every case, level heads and a speedy response to threats can help save lives and property.

If a bomb threat is called in, the person answering the telephone should take the following steps:

- Keep the caller on the line as long as possible. Ask to have the message repeated and record every word spoken by the caller.

- If the caller doesn't say where the bomb is located or what time it is expected to detonate, ask.

- Tell the caller the building is occupied and that an explosion will kill or injure many innocent people.

- Listen for peculiar background noises such as car engines, music or other sounds that could help determine the caller's location.

- Pay particular attention to the caller's voice for indications of sex, emo-

tional state, accents and speech impediments.

If a written threat is received, experts advise:

- Avoid unnecessary handling of the message to retain fingerprints or other evidence that could be valuable to an investigation.

- Save the envelope or container in which the message arrived.

Additionally, be suspicious of:

- Items that lack a return address.

- Excessive postage.

- Unusual size or shape.

- Oily stains or discoloration.

- Protruding wires or foil.

- Peculiar smell.

Incorrect spelling or caveats such as "Confidential for _____", "Eyes only", and "Personal for _____."

If a package or a letter is suspect DO NOT ATTEMPT TO OPEN OR DEFUSE. Contact Security Division extension 2097.



I don't dare ask my secretary to get coffee for me, that's why I'm telling you to do it!



Photo by Mary Ann Brett

A "MAJOR" EVENT—Major **David Schultz** (center), **Canadian Forces**, received his Major's bars from Center Commander **Capt. Sturm** upon his recent promotion to Major. **Schultz** is the Engineering Change Proposal Officer for the S-3 program. **Major Blaine Feltmate** (left), **Canadian Liaison Officer** was present for the presentation.

Promotions

Frances Abramson, Brenda Allardyce, Joseph Armstrong, Jr., Michael Avillion, David Ballarini, Thomas Battle, Jr., Richard Bonner, George Brickner, Denise Byrnes, Stephen Campana, Michael Cannon, Carmen Castro, Dante Ceniccola, Richard Clapp, Susan Coar, B. Ranae Contarino, Richard Dean, Michael DiBerardino, Vivian DiCristofaro, Annette Dietz, Eileen Dobrowolsky, Robert Fay, David Findlay, Margaret Fisher, Arthur Fletcher, Anne Gillotti, Bernard Goodrich, Marguerite Hoefling, John Hollingsworth, John Ierardi, Michael Janiner, Robert Kennedy, Judith Koper, Jeffrey Lewis,

Jules Lewyckyj, Sheila Little, Michael Markushewski, Nick Markwald, Anna Mawhinney, Thomas McHugh, Carol McIlwain, Nicholas Mirales, Shirley Morris, David Mutschler, Robert Orr, Ross Osborn, Richard Parkinson, Robert Parsons, Kenneth Peers, Laurie Pelleiter, Jeff Pilant, Marcela Pisano, Richard Piscicella, Theodore Reed, Gregory Reh, Donald Sawyer, Ronald Simononis, Timothy Springer, Patrick Sweeney, Oliver Szeto, Mark Thomas, Adelaide Thompson, Walter Tolle, Sam Tseng, Margaret Vigelis, Michael Wagner, Warren Williams, John Winarczyk.

Blood donations increase in recent drive

The March Blood Drive at NADC provided the American Red Cross with 318 donors. That is a nearly 30% improvement on the December drive which resulted in 245 donors.

In the listing below, those employees who donated blood in both the December '86 and March '87 drives are designated with an "="; those who donated only in December, an "*"; those only in March, a "+".

Code OOR Edwin Scholl* **Code 02** Suzanne Baier+, Maureen Bullene+, Joann Cocchimiglio*, Sylvia Fiumara+, Joseph King+, Rhea Koncz+, Linda Lips*, Edward Lucas+, Margaret Rudolph+, James White+, Michael Wolfe+, Marlene Worden+, **Code 03** Rita Brownlee+, Eileen Craig+, Marlene Grubb+, Margaret Higgins+, Kathleen McPeak+, Robert Pomrink+, Judith Scott+, Lynn Scott+, Bernard Skillens*, **Code 04** Ada Fisher+, Margaret Fisher+, Robert Fisher+, Anthony Fletcher+, Dale Kostenbauder+, Migdalia Martinez+, Kathleen McCarthy+, Norma Mittauer+, Ronald Moddy+, John Pessano+, Margaret Vigelis+, **Code 05** Karen Chornetski+, John Greiner+, Alan Kaniss+, George King*, Michael Malecki+, James Oliver+, Alan Reines+, Robert Smith*, Elsie Worobe+, **Code 07** Donald Furmanski+, Harry Heinzl+, Christopher Kirk*, Tom Leahy+, Barbara Miller+, Mary Moran+, William Myers Jr.+, Robert Pasquarella+, **Code 09** Diane Heal*, Robert Janes+,

Vincent Rice+, Barry Topham*, Michael Williams+, Nelson Williams+, **Code 10** Frances Abramson*, Rosemary Alexander+, Neil Axler+, Den- nie Baker+, Douglas Bellis+, John Bowes Jr.+, John Bramer*, Richard Brooks+, Julia Cawley+, Margaret Douglas*, Debra Erney*, Darren Fields+, John Freeman*, William Hasselbusch Jr.+, Thomas Herbert*, Edward Huber+, Michael Janinek*, Richard Kolbe*, Bernard McHugh*, Thomas Merkel*, Gerald Miller+, Kristina Lyn New*, Robert Oakley+, David Panetta*, Roy Preston+, Phillip Sapovits*, Joyce Sweeney*, Steven To- rok+, Barbara Turner*, David Wil- liams+, **Code 20** Walter Beamer+, Ronald Bender+, Brian Brady+, Jo- seph Colombo+, Roland Hall Jr.+, John Hester+, Carla Mackey+, Carole Preston+, Edgar Reed III+, Carl Reitz+, Ronald Schwartz*, **Code 30** Debra Erney+, Robert Gallagher+, John McFadden+, David Mutschler+, Peggy Newbrough+, Eileen Ryan+, Debbie Sztubinski*, Harry Ubele+, Miriam Van Luvanee+, Carl Van- wyk+, **Code 40** Edward Beals+, Wil- liam Bradely+, James Buggy+, Tomasa Castro+, Vincent Di- Cristofaro+, Vivian DiCristofaro+, Lisa Goldberg+, Charles Halko+, Gordon Heal+, Jolie Kaszupski*, Scott Kee+, Doris King+, Martin Leb- lang+, Danny Ma+, Kamala Mahad- evan+, Edward Mansfield+, Jeffrey Miller+, Thoma Murphy*, John Pye+, Norbert Reis+, Stephen Schmitt, Wal- ter Schoppe*, Matthew Schrier+, Leon

Smith*, William Zane+, **Code 50** Pa- tricia Abraham*, Eric Alfonsi+, Steve Bazow+, Edward Beach+, Eileen Beans+, Roland Bender*, Richard Bill- man+, Carol Blakey+, James Cam- pana+, Charles Campbell+, Andrew Carroll+, Eduardo Danganan+, Ther- esa Dedominicis+, Wayne Everett+, Keith Faller, Robert Gallis+, Thomas Gilligo+, Felix Gonzalez+, John Har- ris+, Roger Hontz+, Randell Huck- aba+, Jeffrey Irvin*, Joseph Kaszupski+, Timothy Keck*, John Ki- chula*, Charles Kraft*, Stephen Levin+, Mark Lipacis+, Walter Lip- ski+, George Logue+, Robert Mach- ler+, Lorraine March+, Michelle Martin+, Milan Matura*, Edward Me- bus+, John Mehr*, Robert Melby+, Donald Miller+, Timothy Monaghan*, Raul Moser*, David Moyer+, Robert Mullins+, Scott Natter+, John Oak- ley*, Joseph Oriti+, Louis Rak- szawski+, Michael Rankin+, Harry Reichardt+, Harry Ricca*, Leonard Roach+, Robert Smith+, John Snis- cak+, Martha Snyderwine+, Curtis Swatchick+, Marie Taylor*, John Tep- per+, Frank Ulrich*, Matthew Urick*, Anthony Vendetti+, Michael Wag- ner+, Michael Walker*, John Whalon+, John Wilks+, John Wil- liamson+, Akira Yoshida+, **Code 60** Dennis Agnew+, Diana Aharrah+, Ralph Aharrah+, Randall Allen+, James Alper*, William Barcklow+, William Becker*, Lee Biggs+, Julieta Booz*, Reynolds Brooks+, Kenneth Bullard+, Michael Cannon+, John Clark Jr.+, John Connors+, Michael

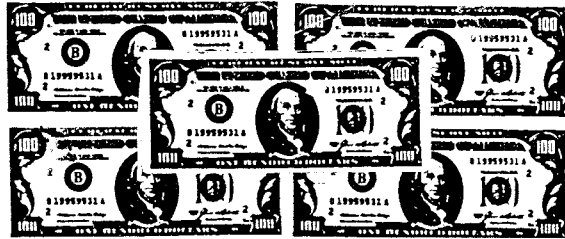
Costanzo+, Richard Dalrymple*, Dan Darrigo+, Edward Deesing+, Mosie Devillier Jr.+, Jorge Dominquez+, Michael Doyle+, Lynn Drelick*, Charles Dugan+, Ronald Emery+, Anthony Eng+, Harry Frost*, Ar- mando Gaetano+, Ronald Garbo*, Kenneth Green*, Samuel Green- halgh+, Thomas Haug+, James Hen- derson+, Dennis Horn+, Marshall Hynes+, Jonathan Kaufman*, Ken- neth Kelly*, Steven Kinsely*, Thomas Kircher+, Kenneth Koper+, Fred Kuster+, Richard Lee+, Mark Lilly+, Lin Lu+, Maryjane Maloney*, Leonid Markushewski+, Robert Mcconnell+, Kenneth Mergner+, Ronald Mery*, Charles Miller+, Wayne Mondelblatt*, Mary O'Dowd+, John Ohlson+, Rich- ard Paciej+, Eric Preissner*, David Pulley+, Glenn Rhodside+, Martin Ruzansky*, Irving Shaffer+, Albert Simkins+, Christian Skriver*, Timo- thy Springer+, Marshall Thomas Jr.+, Marvin Walters*, Walter Wer- ner+, Keith Wills+, Craig Wood+, **Code 70** Timothy Anderson*, Jerome Azarewicz+, Ruth Bendzlowicz+, Daniel Carbo+, Peter Carroll*, Bar- bara Cavender*, John Ceneviva+, Mi- chael Daulerio+, Alden DuPont+, Mark Engle+, Stuart Farber*, Ray- mond Glemsor+, Holly Hake+, Ste- phanie Hall*, Mark Hryszko*, Robert Imbrogano+, Michael Juscak*, Hel- len Keller-Surman+, Joseph Kemp*, Gary Lapreziosa*, Dino Lostracco+, Shelia McGuire*, Thomas McHugh+,

(continued on page 7)

VIEWPOINT

This month's question is:

Photos by JO2 Todd Lufkin and Mary Ann Brett



"You've just inherited \$1 million. What is the first thing you do?"

"Donate half of it to the Muscular Dystrophy Association."

AEAN Jerry Meyer, Code 8231



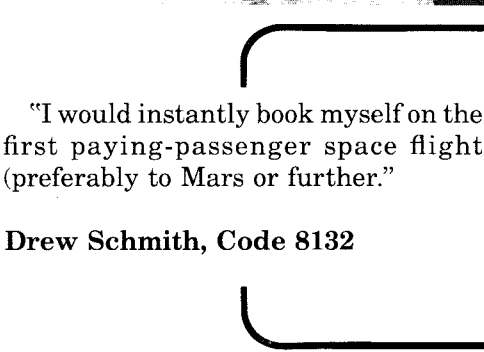
"I'd seek out some sound investment tips from someone with experience in these matters—like Joey Coyle (of Purolator fame)."

Charlie Destra, Code 032



"I'd start a computer company specializing in computers for handicapped people and provide inexpensive child-care for the employees."

DP1 Maureen Cosby, Code 1S



"I would instantly book myself on the first paying-passenger space flight (preferably to Mars or further)."

Drew Schmith, Code 8132



"Gather the family and book a flight on a first class trip around the world with a 1987 red Mercedes 520SL waiting for me upon arrival home."

Joan Garofalo, Code 0102S



"I would say 'Thank God, what did I do to deserve so much?'"

AME3 Michele Williams, Code 042



"I'd quit the firefighting business, travel around the United States and retire in Nova Scotia."

Fire Capt. Mike Gindele, Code 814

Softball League begins play with new look

by Charlie Destra

The Softball League will begin the 1987 season this month (13 April) with more changes than can be remembered in recent history. As reported earlier, six new teams will be featured, and will add considerable interest—and uncertainty—to this year's race.

But this won't stop me from dusting off my crystal ball and making my annual foot-in-the-mouth predictions.

We should see the Granfalloon sprinting to the league's best record again, with the 8th Inning not too far behind. Sometimes lackadaisical in the early going, the 8th Inning needs only to worry about a potential slow start. But this year's diluted field should prevent that from happening.

After those two, the crystal ball gets a little cloudier. Any one of a number of teams can emerge from an apparently closely-matched group.

The Guzzlers, traditionally an upper-echelon team, have been hurt by the loss of key players and their status is not so secure as in the past. But they still have some quality people and experience on their side. In no particular order, the Guzzlers, along with the Druids, Devils, Nightriders, Bearcats, Rebels, Pacer, Bandits, and Misfits, would seem to have the edge for making the playoff cut (10 of 20 will see post-season action). The Misfits and Bandits, though new entries, have known personnel who could catapult them to greater heights.

Depending upon numerous factors, however, a couple of these teams might not make it, and one or two others might, namely the Renegades and Phantoms. The Renegades may have a tough time bouncing back from some big off-season defections, and the Phantoms, tough at the plate, will have to

give up fewer runs than in the past.

The Bushwackers and Rumlbers may still be too young to challenge, but they're scrappy and showed sparks in their rookie seasons. Orange Crush has changed its name, but needs more tangible changes to do better.

And who knows how the other remaining new teams—the Cellar Rats, Dyna-Tigers, Dawgs and C.S.C.—will develop? Because of these question marks (and various personnel changes) predicting who does what is particularly difficult this year. If just one of these teams posts a winning record, there could be major ramifications, and I'll wish I never gazed into that crystal ball in the first place.

One of the major changes this season is the adoption of the DP (designated player) rule, which allows teams to bat an 11th player in the lineup. Teams with a surplus of good hitters could ben-

efit. . . . The league will use the Hous- ing Field (behind Tyler) instead of (previously reported) Werner Park. . . . Players are forbidden to park their cars on Inertial or Tyler fields this season. . . . Rainouts will be played on Fri- days. . . . And how about this list of would-be "celebrity" owners for some of the league's teams: Guzzlers—Foster Brooks. . . . Pacer—Mario Andretti. . . . Nightriders—Paul Revere. . . . Renegades—Attila the Hun. . . . Orange Crush—Anita Bryant. . . . Cellar Rats—Mickey Mouse. . . . Granfal- loon—Happy the Clown. . . . Devils—Lucifer. . . . Dawgs—Mr. Peabody. . . . Phantoms—Mrs. Muir. . . . Misfits—Lenny and Squiggy. . . . Bandits—Jesse James. . . . Rebels—Robert E. Lee. . . . and C.S.C.—Hal (from the movie "2001").

Mixed League Bowling News

by Tom Reiter

Wes Gleason, a ringer imported by the Goofers Al Knobloch, had quite a night on the 18th of March. His first game consisted of 11 strikes with an open frame in the middle for a 267; slipped to a 165 second game, but came back with 7 strikes in his first 7 frames. After waiting for 2 misracks, he crossed over, left 3 pins and gently (?) caressed

the ball-return with a karate kick. He ended with a 264 game. His 696 series was our League's second highest series this season. In other news, preparations for the banquet are underway. The vice-president, Lorrie Dunn, has done a great job so far. We will be partying on Friday night, the 19th of June at Shaw-nee-High Point.

Blood donors

(continued from page 6)

Thomas Michalski =, Kathleen Mon- trey*, George Moroney +, William Nuss*, Richard Parkinson*, Robert Parson*, Robert Preedy +, James Ra- chiele =, Ted Reed +, Theresa Reis*, Ronald Roadarmel*, Jeremy Ronbin- son +, Sharon Robinson =, James Sanders*, John Santini =, Carl Schmiedekamp =, John Santini +, Ste- ven Shelikoff +, Carl Schmieder- kamp +, Marvin Schwartz +, Bernard Spano Jr. +, Alvin Spector +, Stephen Sterchak +, Bradford Sterling*, John Supp Jr. =, Dennis Sutton +, James Ward Jr. +, Johnson Yuen +, Robert Zwissler +, **Code 80** Joseph Clay =, Phillip Kaufman =, **Code 81** Joseph Armstrong =, Melvyn Berg +, Jeffrey Biscardi +, George Boyle +, Catherine Burian +, Eugene Byers Jr. =, Joseph Dwornek =, Arnold Gibson*, Phyllis Grant*, Robert Hall =, Michael Hart- man =, Mary Hellings =, Alfred Keiss =, Lawrence Miller =, David Moore =, Robert Moore +, Michael Ro- galski*, George Rossi*, Ervin Rother- mel =, Andrew Schwartz +, David Stasen*, John Towarnicki +, Edmond Turmelle*, Glenn Watson*, Larry Wil- liams*

ton +, Frank Tarlecki +, Robert Ur- ban =, James Wheatley =, **Code 84** Claire Ashley =, Rosa Cerankowski +, Brenda Denonville*, Mark Drager +, Loretta Dunn =, William Ganter +, Teri Hackett*, Thomas Karr =, Mary Lipinski +, Norman Mitchell +, Eileen Nikander +, Michael Palaia +, Frances Pannell +, Robert Reed +, Selina Rid- path =, T. William Singleton*, Brian Truskoloski*, Michael Valdivieso*, Christopher Veith =, **Tenants** Arlys Erickson (97), Ross Hendricks (901), James McKeown (934), Charles Monie (94A), Diane Pfeil (90), Barry Topham (97), James Waters (92), **Contractors** Stephen Bahr*, Terri Beahan*, David Bolich (ARC) =, Anthony Cerino (VEDA)*, Margaret Conlin (Ketron) +, David Curtis (FTC) =, Glenn DeGutis (SDC)*, Emmet Eckman (Keystone)*, Lisa Falkenberg*, John Finegan (SEM- COR)*, Jeanette Gray*, Michael Ham- iltan (UNISYS) +, Gregory Helc (R.B.C.) +, Mark Hryszko (ORI) +, Paul Irelan (W.G.N.S.)*, Jeff Jengehino (SAMBE) =, James Kearney =, Steve Kedington (Keystone)*, Elizabeth Kern (ROICC)*, Linda Kichula (CSC) +, William Klein (Datanamics)*, Ann McNamara (DSI) +, Dorothy Ma- haffey*, Patricia Merrick*, Christine Minor (Datanamics) +, Michele Moran (ASP)*, Beth Mumford (ARC) =, Louis Pelosi (Synetics) +, Veronica Peurifoy (ROICC)*, Dennis Ritaldato*, Russell Rossino (U.S. Post Office), Lawrence Scott (A-Z Maint.) +, Stanley Spiegel (Esscube Eng.) +, Stephen Stelzer (SAMBE)*, Bradford Sterling (ORI) +, Teresa Stump (Credit Union) +, Ed- ward Tuhacek (Howard Sec.)*, Char- lene Wadelius*, Jennifer Webster (K.C.A.) +, Patricia Wildasin (CSC) +, Frank Williams (ISI) +, Sabrina Wil- liams (SDC)*, William Zebrowski (FTC)*

Code 82 Raymond Bernard +, Mark Briedenthall +, Leonard Broomer =, William Brown =, Carmen Castro +, Daniel Christian +, Otto Engdahl =, John Kelly =, Thomas King*, Charles Komindo +, Henry Kowalewsky +, John McClintic +, Robert Mc- Fetrige =, William McKenna +, James McKeown*, Thomas Mc- Laughlin*, Jerry Meyer +, Anthony Mosakowski +, Tim Olson +, Kenneth Peers*, Bruce Rickmers +, Kathleen Quinn +, Stanely Shelton =, Earl Smith*, Martin Smith +, Robert Stan-

NADC Mixed League Individual Statistics as of March 1987

by Tom Reiter

MEN YEAR TO DATE A-DIVISION

High 1		High 3		AVG	
Rick Yeager	257	Ernie Wykes	645	Hank Lystead	182
Hank Lystead	256	Hank Lystead	628	Rick Yeager	180
Leo Markushewski	247	Al Knobloch	624	Al Knobloch	179
High 1/HCAP		High 3/HCAP			
Rick Yeager	278	Ernie Wykes	717		
Dave Williams	271	Paul Haas	678		
Hank Lystad	271	Al Knobloch	672		

WOMEN YEAR TO DATE A-DIVISION

High 1		High 3		AVG	
Loraine Reidinger	233	Iris Hayslip	573	Caroline Tierney	159
Caroline Tierney	213	Caroline Tierney	552	Iris Hayslip	148
Donna Morgan	211	Elaine Granieri	514	Loraine Reidinger	147
High 1/HCAP		HI-3/HCAP			
Loraine Reidinger	277	Iris Hayslip	702		
Donna Morgan	269	Donna Morgan	681		
Iris Hayslip	252	Melissa Honert	662		

MEN YEAR TO DATE B-DIVISION

High 1		High 3		AVG	
Steve Metcalf	257	Steve Metcalf	728	Steve Metcalf	181
Allen Goldstein	247	Mike Bubb	612	John Vincent	172
Ron Lubanski	236	Steve Jerdan	602	Ron Lubanski	170
High 1/HCAP		High 3/HCAP			
Allen Goldstein	285	Steve Metcalf	760		
Steve Metcalf	272	Steve Jerdan	704		
Ron Lubanski	266	Allen Goldstein	688		

WOMEN YEAR TO DATE B-DIVISION

High 1		High 3		AVG	
Pat Tease	244	Denise Beck	577	Karen Thomas	158
Denise Beck	234	Karen Thomas	541	Denise Beck	154
June Olson	232	Lorrie Dunn	519	Eileen Dobrowolski	147
High 1/HCAP		High 3/HCAP			
Pat Tease	318	Denise Beck	688		
Jean Canton	289	Pat Tease	687		
June Olson	288	Jean Canton	682		

Volunteer.

WERE FIGHTING FOR YOUR LIFE

American Heart Association

A tale of the Easter bunny—a hare-raising story

by JO2 Todd Lufkin

With the approach of Easter, we naturally think of such traditional customs as Easter egg hunts, jelly beans, baskets & gifts from the Easter Bunny, Easter bonnets, and Easter Parades. But did you ever wonder what the Easter Bunny was before he became a bunny or where Easter's name originated?

The name, "Easter," is Old English and shows heathen traces. The Venerable Bede, a monk, tells that it is derived from Eostre, a northern Goddess of Spring and the Dawn, whose principal celebrations were held about the time of the Vernal Equinox. The Anglo-Saxons gave her name to April, which they called Eastur-monath. Another theory suggests it is derived from the

word "oster," to rise.

The French name, "Pacques," or the Spanish and Italian "Pascua" or "Pasqua," Dutch "Paach" and Swedish "Pask" all are derived from "Passover," coming through Greek and Latin forms from a Hebrew word, "pesach," meaning Passover. Our own English "pascal," applied to Easter ceremonies and the Spring moon, has the same root and so has the homely north-country or "peace-eggs" for Easter eggs.

Easter and the days on either side of it—referred to as Eastertide—arrive during the season of bursting blossoms and greenery, when the churches are filled with white lilies and narcissi and decked with the deep green of yew branches, which belong only to Easter.

In France, and some other tradition-

ally Roman Catholic countries, where the church bells are silent from Maundy Thursday to Easter Eve, the children are told that their parents have gone to Rome to get the eggs. In other European areas it is the Easter Hare who lays the eggs in the garden or throughout the house.

The Easter Rabbit (or bunny as you might prefer), who performs the same function in this country, is only a variant of the tradition, one of the many examples of the common confusion in the later folk beliefs between the rabbit and the hare. The hare is the true Easter animal. He was once sacred to the European Spring Goddess, whom we have already met; Eostre.

In Great Britain, ritual hare hunts once took place during this season.

Hares still appear on Easter cards in Northern Europe and in the little baskets in which German and Hungarian children collect their Easter gifts.

In Yugoslavia, the hare makes a nest in the stable and here the children go on Easter morning to find the eggs that are hidden in the hay.

It is among the long grasses and the spring flowers of the gardens in Great Britain that the children look for eggs. If the weather is too harsh, they look in nooks and crannies indoors.

But the overall principle is the same, and at this time if at no other, the hare reappears in his ancient guise, as the living emblem of fertility, renewal, and the return of spring.

FERS—Military deposits

(continued from page 1)

in a timely manner. Furthermore, these deposits must be made *before retiring* in order to receive credit.

Overpayments

There are some employees who paid their military deposits under the CSRS rules of 7% and now find that they are subject to FERS deposit rules. They have overpaid and are entitled to a refund of the difference between the 7% and the 3% deposit. To date instructions have not been received on how this refund will be distributed.

Other Deposits

Perhaps you worked as a temporary employee and did not pay into the re-

tirement fund or left federal service and withdrew your retirement fund money. You should give some consideration to purchasing that time for full annuity credit. Not receiving that credit reduces your total retirement benefit. In addition, the interest continues to cumulate until it is paid. Since percentages of pay and interest rates for these situations differ, they must be calculated on an individual basis.

If you decide you would like to make a deposit or would like assistance in making decisions on these matters, please contact Dottie Kirkpatrick (extension 2367) in the Personnel Office's Employee Relations Division.

On This Date — April

April 1

Month of the Military Child begins.
National Child Abuse Prevention Month begins.
U.S. Air Force Academy established, 1954.

April 4

NATO established, 1949.

April 5

Daylight Saving Time begins in United States.

April 6

Cmdr. Robert E. Peary raises first U.S. flag at North Pole, 1909.
United States enters World War I, 1917.

April 9

Civil War ends. Lee surrenders to Grant at Appomattox Court House, Va., 1865.

April 11

Navy accepts its first submarine, the USS *Holland* (SS 1), 1900.

Army establishes its first permanent flying school, College Park, Md., 1911.

April 12

U.S. Civil War begins at Fort Sumter, S.C., 1861.

April 13

Thomas Jefferson, third president, born, 1743.
National Library Week begins.

April 14

Pan American Day
Passover begins.

April 15

Federal income tax due.

April 18

Paul Revere makes his famous ride, 1775.

April 19

Easter
American Revolution begins, 1775.

April 21

Spanish-American War begins, 1898.

April 22

National Secretaries Day

April 23

Army Reserve established, 1908.

April 25

United Nations organized, San Francisco, 1945.

April 26

Captain John Smith and English colonists establish the first permanent settlement in the New World, at Cape Henry, Va., 1607.

April 30

Navy Department established, 1798.

W&R Trips:

Get-A-Way Weekend—Super Party Train to Virginia Beach 24–26 July—\$249. per person Double; \$239. per person Triple; \$219. per person Quad.

Get-A-Way Weekend—Super Party Train to Montreal 28–31 August—

\$269. per person Double; \$249. per person Triple; \$219. per person Quad.

Bus Trip to Boston-Newport—4 days—12–15 September \$299. per person Double; \$284. per person Triple.

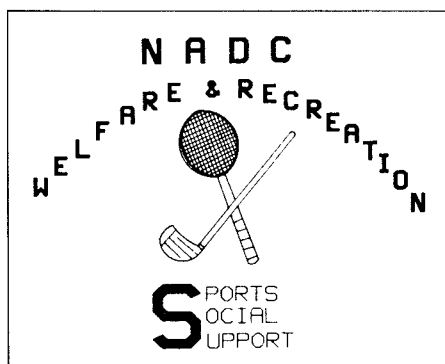
For flyers, information, reservations call Margaret Vigelis on extension 3067.



Photo by JO2 Todd Lufkin

Winning letterhead design chosen

Lucretia Colantonio of the Supply Department won the NADC Welfare and Recreation Association's Letterhead Contest. She received an Entertainment '87 book for her efforts from Michael Cannon Vice Chairman of the Association.

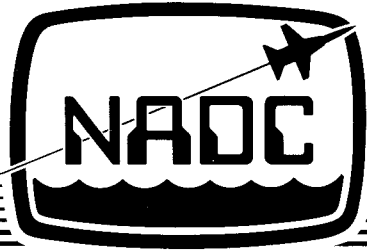


Winning letterhead design.



1987 Annual NADC W & R Picnic

Can summer be far away? NO! Your Welfare & Recreation Association is currently making plans to hold the annual picnic on Saturday, July 18, 1987 at Dorney Park. Hope to see you there. Look in future "Logs" for details on ticket prices and a survey on possible alternate sites for future picnics due to price increases at Dorney Park. Contact Len Roach on extension 1641 for more information.



Reflector

Volume 32 Number 4

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

May 1987

In This Issue:

Presidential message
FERS
1st Qtr Sailor & BJQ
Hood retires
Sports

Savage selected for Captain



Photo by JO2 Todd Lutkin

Wayne F. Savage peers from behind a plant as he moves into his new office as Head of the ASW Systems Department.

by Mary Ann Brett

Congratulations to Commander Wayne F. Savage who was selected for promotion to Captain in the U.S. Navy.

"I was truly surprised" said Savage of receiving the official word on his promotion from Center Commander CAPT Edward Sturm. Sturm had summoned Savage under the guise of an impending problem. "I've got a Captain that I don't know what to do with—and it's you!" said Sturm with pleasure and congratulations.

Savage arrived at NADC in February 1985 and has spent two years as the VS Program Director responsible for direction and management of technical support to the S-3A and S-3B fleet operational software. He is now assigned as Department Head of the Antisubmarine Warfare Systems Department (ASWSD) replacing CAPT Jack Hood who retired in April.

A 1967 graduate from the Naval Academy, Savage received his Masters degree in Aeronautical Engineering from the Naval Postgraduate School in Monterey, CA in 1975. He was sta-

tioned aboard the USS JOHN F. KENNEDY until 1978 and then proceeded to the Office of Naval Research (ONR), Washington, DC as the Missiles Project Officer through June 1981.

His assignment through January 1985 was as a Division Director and then as a Project Manager at the Joint Cruise Missile Project Office (JCMPO), Washington, DC. The JCMPO is responsible for the development and acquisition of Tomahawk Cruise Missiles for both the Fleet and Air Force systems. While there, Savage held a three-faceted assignment—he was involved in concept definition, full scale engineering development, and finally, totally responsible for competitive procurement of the missiles.

Savage, an S-2 pilot, asked to be assigned to NADC. With experience in applied, basic, and advanced developmental research, he saw the Center as an opportunity to test equipment and collaborate with people whose work is directly applicable to the Navy's needs.

In his current position as Head of
(continued on page 6)

McErlean heads Air Vehicle and Crew Systems

by Mary Ann Brett

Dr. Donald P. McErlean has reported aboard as head of the Air Vehicle and Crew Systems Technology Department (AVCSTD), a vacancy created during the Center's recent reorganization when Robert Becker was reassigned as Associate Technical Director.

McErlean has an extensive aviation-related background—mostly with the Air Force. Starting his military career as a Lieutenant in the U.S. Air Force

in 1966, he completed graduate school at Rutgers University and received his doctorate in Aerospace Engineering in 1970. McErlean served in various engineering, research and development assignments at Wright Patterson Air Force Base until 1972 when he opted to leave active duty.

His early civilian career also took shape at the Wright Patterson propulsion laboratory where he worked on special, classified-type projects, mostly

in weapons. There, he managed a major facility performing experimental engineering.

McErlean later entered the systems acquisition field, equivalent to the Navy's PMAs (or Washington, DC sponsors.) He progressed to System Program Director of the Strategic Engines Systems Program Office responsible for propulsion systems for the F-16, F-15, B1, and F-14 aircraft and Advanced Cruise Missile. That program office,

similar to NADC's organization, was responsible for contracting, logistics, and other aspects as well as engineering.

At least ten years of McErlean's experience has been concentrated in the tactical air arena where many of the most difficult problems in air vehicles are likely to surface because of its state-of-the-art requirements.

(continued on page 6)

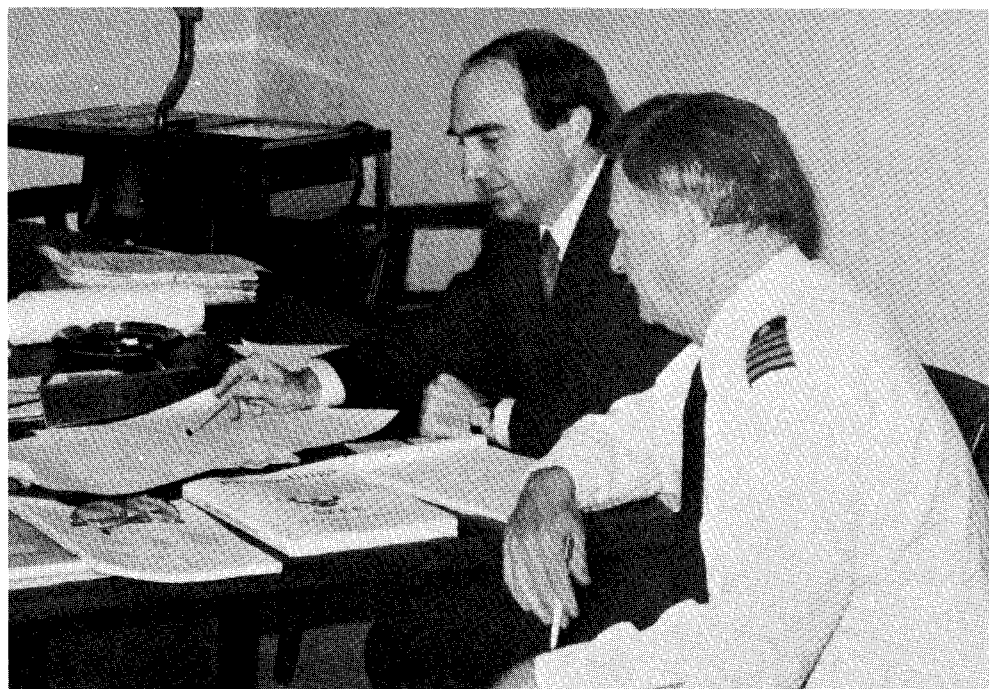


Photo by Mary Ann Brett

Dr. McErlean and his Deputy, CAPT Thom Gallagher, discuss future courses for the Air Vehicle and Crew Systems Technology Department.

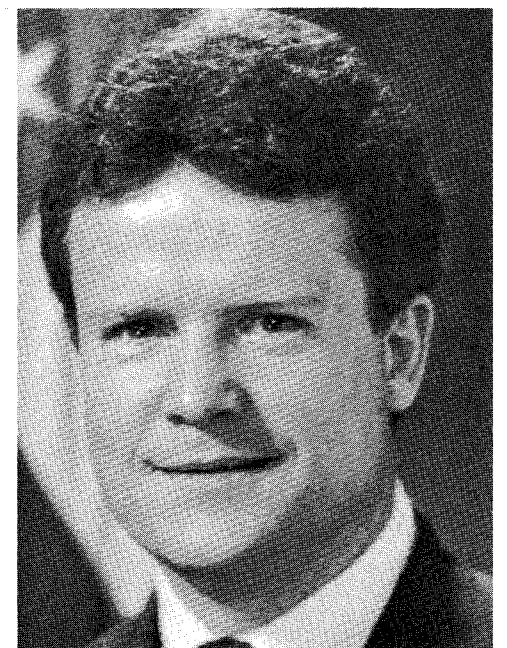
New SECNAV takes oath

Secretary of the Navy James H. Webb, Jr. was sworn into office during ceremonies May 1 on the steps of Bancroft Hall at the U.S. Naval Academy.

Secretary of Defense Caspar Weinberger administered the oath of office before the Chief of Naval Operations ADM Carlisle A.H. Trost and Assistant Commandant of the Marine Corps GEN Thomas R. Morgan, the Brigade of Midshipmen and several hundred guests.

Secretary Webb, a 1968 Naval Academy graduate, is the first Academy graduate to have served on active duty and to assume the Office of Secretary of the Navy. He is also the highest ranking Vietnam veteran in the Reagan administration.

Webb said, "... it is the fine men and women in uniform today ... who will give me the greatest pleasure and the highest rewards ... of my new office."



James H. Webb, Jr.

1987 Armed Forces Day Message From The President

The more than 2 million active service members and 1½ million National Guard and Reserve personnel have a challenging task: preserving peace and defending freedom.

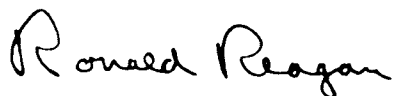
The freedom and liberty that Americans enjoy today result from the dedication, spirit, courage, and patriotism of our men and women in the Armed Forces. We must never forget that you who wear our country's uniform are the armor that shields our democratic way of life. You are the strength and security that help keep the free world free.

It is appropriate this year, as we commemorate the Bicentennial of the Constitution, to remember that 23 signers of our Constitution were soldier-statesmen.

As our Nation celebrates Armed Forces Day, 1987, all Americans should reflect upon the proud heritage of the Armed Forces and remember their sacrifices.

As your Commander in Chief, I am proud, as every American should be, of the unparalleled progress we have made in attracting and retaining quality volunteers to our military services. The renewed appreciation and confidence Americans are showing for our service men and women are a direct reflection of the high quality personnel who proudly serve this Nation.

In return for your dedication and in the interest of national security, I solemnly promise to continue to press for the best equipment and the best living and working conditions for all members of the Armed Forces and their families who sacrifice so much in defending our democracy.



Ronald Reagan
President

Commander Salutes

Thomas Sanders (Code 40): For diligent efforts as Vice Chairman of IEEE's 1986 Position Location and Navigation Symposium.

CDR Kenneth App (Code 10): For significant effort during the installation of the CV-ASWM Model 4.1 aboard the USS THEODORE ROOSEVELT.

Felix Gonzales (Code 50): For significant assistance to CNO in developing requirements for airborne expandable countermeasures.

Stuart Simon (Code 07): For significant assistance to the Commander Space and Naval Warfare Systems Command during their command inspection of the Naval Weapons Center.

David Panetta (Code 10); **Harry Koper** and **Robert Bollard** (Code 50); and **Fred Shocket** and **David Loewenstern** (Code 70): For briefings to the Naval Reserve Unit 0193.

Michael Warren and **John Harris** (Code 50): For valuable contribution to the flight testing phases of the SH-60F Program.

Carol McIlivain and **Larry Eckert** (Code 60): For valuable briefings to the Naval Air Station, Whidbey Island Aviation Life Support Systems Division Team.

ADC Bruce Hopper, **AD1 Rodney Cook**, **AD1 Jeffrey Johnson**, **AD2 Gregory Duncans**, **AD3 Craig Hoffman**, **AMH2 Gary Poulin** (Code 82): For outstanding performance while providing maintenance support to the Pacific Missile Test Center.

AE1 David Dickson, **AD1 Rodney Cook**, **AD1 Jeffrey Johnson**, **ADAN Alex Bauzon**, **ADC Bruce Hopper**, **AMH2 Mark Gray**, **AD2 Gregory Duncans**: For outstanding accomplishments during an engine change on our UP-3A 148889 which was disabled at St. Croix, U.S. Virgin Islands.

MAJ Blaine Feltmate (CF), **CDR William Mugg** (Code 10); **Roland Bender** (Code 20); **Robert Houser**, **James McEachern**, **Frank Marshall**,

John Tralies, **Thomas Weiss**, **Eugene Macur**, **Edward Garabed**, **Thomas Polaneczky** (Code 50): For informative briefings to LCOL Preuss' (CF) recent visit.

MAJ Blaine Feltmate (CF): For valuable assistance provided during the visit of staff officers from National Defense Headquarters.

Guy Dilworth (01): For valuable contributions to the Jacksonville Corps of Engineers observation of Black History Month.

CAPT John Hood, **LCDR James Burd** (Code 10); **LT Richard Ryan**, **ATC Thomas Mathey**, **AD1 Edward Whalen** (Code 82): For professionalism and significant efforts contributing to the success of a special Chief of Naval Operations (CNO) project.

Robert Janes (Code 09): For an excellent briefing at the Government Contracts Law Course.

Roman Fedorak (Code 50): For an excellent briefing on nonvolatile memory technology at the Micro-electronic Directors Meeting.

George Breitingner (Code 50): For significant assistance to the Naval Surface Weapons Center during a CNO special data collection effort.

James Kingston (Code 04); **Dr. Edward Feinberg** (Code 01); **Robert Finkelman** and **Alan Kaniss** (Code 05): For significant efforts during the Mid-Atlantic Government Information Council visit.

Dorothy Kirkpatrick and **Neil Abramson** (Code 03): For significant contribution to the Office of Civilian Personnel Mgmt's FERS training.

LCDR Timothy Singer (Code 60): For valuable briefings presented at Training Air Wing Six's Safety Stand-down.

Steven Campana (Code 50): For outstanding contribution to the Airborne Infrared Search and Track "Red Stripe Team."

If the SOC Fits

by Robert Janes

One of the biggest developments relating to the Standards of Conduct (SOC) over the last few years has been the emergence of fraud, waste, and abuse hotlines. It seems now that everybody has a hotline—every activity, Command, SECNAV, DoD, etc. These hotlines can be viewed in two different lights. On the one hand, they serve a very worthwhile purpose, by encouraging the proper conduct of government employees. They help to keep us straight, and their very existence helps to promote confidence in government, both among employees and outsiders. On the down side, many people are disturbed by the whole idea of hotlines, feeling that they tend to create an atmosphere of mistrust, where Big Brother is watching one's every move, and that one misstep, may get you turned in to the authorities.

There have been hotline calls involving NADC—over the Center hotline itself, as well as to higher levels in DoD. When a call involving NADC is made to a higher level activity, it will be referred to us for investigation. We must then report back on our findings and

resolution of the matter. These calls are especially significant, for NADC management tends to have less discretion in resolving a problem when we must report all of our actions to a higher level command.

Among the allegations made against NADC employees in hotline calls are improperly using government vehicles, having personal items made or repaired in our shops, improperly using franked envelopes, falsifying time cards, fraudulent travel claims, etc. In some cases the caller is anonymous, and we never learn his/her identity. We do know that in many cases the calls are made by federal employees or government contractors. Callers have alleged misconduct on the part of SES members and Naval officers, as well as the lowest graded GS and WG employees. No person or activity is immune to being the subject of a hotline call. In every instance, the hotline allegations are given a thorough investigation. Whatever your personal feelings are concerning these hotlines, you should all be aware of their existence, for they can affect each and every one of us and they are apparently here to stay.

Integrity Alert

Use of Center Telephones

by Ron Kabin

All personnel are reminded that Center telephones are to be used for official government business and that use of official DoD telephones constitutes consent to communications security telephone monitoring in accordance with DoD Directive 4640.6.

The duration of all calls must be kept to a minimum. Where feasible, teleconference, NAVGRAMS and postal facilities should be used as substitutes for long-distance calls. In addition, AUTOVON and tie lines should be used rather than commercial lines.

Directory assistance calls shall be made only for official business, and only after researching phone directories. A review of recent Center telephone billings disclosed costs in excess of \$600 a month for this service alone.

Weekly Center telephone billing lists are reviewed and forwarded by Communications (Code 043) to all supervisory personnel. It is the responsibility of cognizant individuals to examine these listings to ensure that calls made are for official government business only. Personnel found to be abusing telephone privileges for personal use will be required to reimburse the Cen-


ter and may be subject to disciplinary action. In cases of extreme abuse, users may possibly have additional restrictions placed on their telephones which could include losing the capability of receiving off-Center calls.

A monthly phone bill is paid for every telephone instrument on Center. Therefore, if you are aware of any abandoned telephone equipment, contact Code 043, extension 2175 so they can disconnect or redistribute it.

Remember, it is the responsibility of all Center personnel to ensure that our telephone billings are kept to a minimum, and that the phone system is being used for official purposes only. If you are aware of Center telephone abuse you may report it to the Center Hotline Recorder extension 3015, or to the Internal Review Office extension 3033.

Security Reminders

Any form of contact, intentional or otherwise, with any citizen of a communist controlled country or country currently hostile to the United States must be reported to the Security Officer (Code 044). Refer to Paragraph 0502, NAVAIRDEVCCENINST 5510.13C.



Reflector

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA

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Commander, NADC	CAPT Edward J. Sturm
Technical Director	Guy C. Dilworth, Jr.
Public Affairs Officer and Editor	James S. Kingston
Associate Editor	Mary Ann Brett
Assistant Editor	JO2 Todd Lufkin

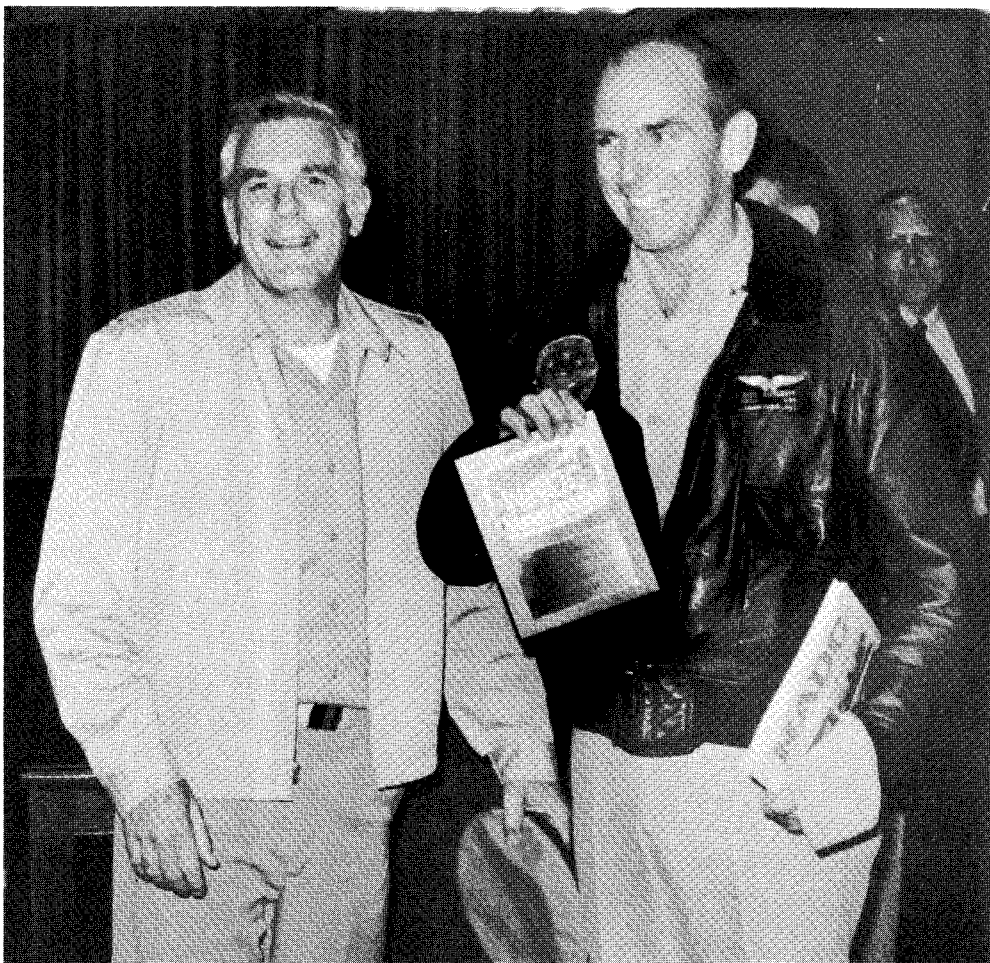


Photo by Mary Ann Brett

THREE STARS AT CENTER—VADM Richard Dunleavy displays the plaque he was given by CAPT Edward Sturm. Dunleavy was on Center April 20 to view some of the major products and mission areas of NADC.

Federal Employees Retirement System—Should I transfer?

By the time this article appears in print, those of us who are currently covered by the Civil Service Retirement System (CSRS) will have attended the general overview training session on the Federal Employees Retirement System (FERS), will have heard Joe Richardson's presentation on the advantages and disadvantages of the FERS for the CSRS employee, and will have been to a session on Social Security benefits. We will have also had an opportunity to watch the FERS videotape and experiment with the computation disk. Highlights of the new system have also appeared in every *Reflector* since January. But even with all this information, the decision whether or not to transfer to the FERS is not an easy one to make.

Everyone should consider transferring. That doesn't mean that everyone should transfer, but, rather, that everyone should consider the possibility. There is no general rule based on your salary or years of service.

What follows is a list of basic transfer principles and an explanation of key transfer considerations which should be analyzed by everyone who is considering making the switch to the FERS.

Basic Transfer Principles

1. If you transfer into the FERS, your basic annuity will come from the FERS but will be computed as follows:

If you have five or more years under the CSRS which are *not* covered by Social Security, the Social Security Amendments of 1983 cause the service under the CSRS to be computed under CSRS rules. In this situation military service will also be computed under CSRS rules.

Conversely, if you have less than five years under the CSRS which are not covered by Social Security, all service

will be computed under FERS rules. Any military service will also be computed under FERS rules;

2. If you transfer to the FERS, FERS eligibility rules apply to retirement, survivor, and disability benefits;

3. If you transfer to the FERS, service under the CSRS will be used to determine whether you are eligible to retire from the FERS;

4. The "high-3" average pay calculation based on total federal service is applicable to both CSRS and FERS computations;

5. If you retire with a reduced FERS annuity, the total CSRS/FERS annuity is reduced;

6. The Supplement (which enhances the Basic Annuity until Social Security is payable at age 62) is based on FERS service only;

7. Survivor benefits received under FERS are computed under FERS rules only; likewise, disability benefits under FERS are computed under the FERS rules only;

8. Cost-of-living-adjustments (COLAs) are pro-rated; the portion of the benefit attributable to the CSRS is adjusted by the CSRS COLA, while the portion of the benefit attributable to the FERS is adjusted by the FERS COLA;

9. Sick leave is not creditable under the FERS; however, sick leave for a transfer employee will be credited by taking the lesser of the amount of sick leave accrued at date of transfer or retirement and computed under CSRS rules;

10. If you are a re-employed annuitant, all CSRS retirement benefits cease and you begin your new service under FERS; at final retirement the CSRS benefit will be re-instated and increased by all the intervening COLAs, plus all additional FERS service benefits.



Photo by Mary Ann Brett

CHIEF OF NAVAL RESEARCH VISITS—RADM John Mooney makes a point to the Center Commander, CAPT Edward Sturm, and the Technical Director, Guy Dilworth Jr. Mooney visited NADC April 30 for a series of research, development and systems briefings.

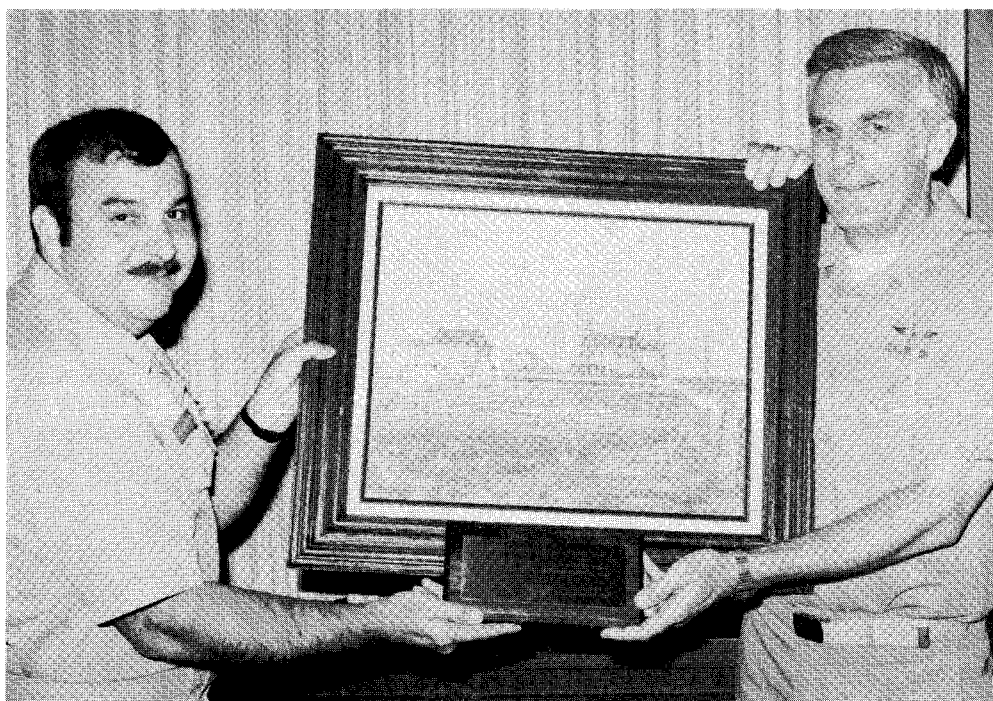


Photo by JO2 Todd Lufkin

PICTURE'S WORTH A THOUSAND WORDS—LCDR James Burd presents CAPT Edward Sturm with an oil painting of Quarters A. Burd did the painting from a vintage photo. The picture will hang in Quarters A for posterity.

General Consideration

When are you eligible to retire? The age at which you are eligible to retire should influence your decision to transfer. The most distinct advantage of the CSRS over the FERS is that annuities under the CSRS are fully indexed for inflation (100% COLAs). FERS benefits, however, are not indexed at all until age 62 for regular retirees. Thus, if you are eligible to retire in your fifties, the CSRS COLA becomes a significant advantage. However, if you are not even eligible to retire until your sixties, the availability of Social Security benefits (which are fully indexed) and the FERS benefits (which are indexed at CPI minus 1 at age 62) may make the FERS more attractive.

When are you likely to retire? Aside from retirement eligibility, a key question concerning transfer is the length of time you plan to continue working for the federal government. If you are likely to continue to work beyond retirement eligibility, your Thrift Plan account will continue to grow and accrue earnings.

Salary Level at Retirement—Who receives the greatest benefit under the FERS? Low-salaried employees generally will do better under the FERS than the mid-level or high-salaried employees because the Social Security benefit is weighted toward lower income workers and the bulk of their retirement income will come from the Social Security tier with the Basic Annuity and the Thrift Plan simply adding to the benefit. High-salaried employees will also fare well under the FERS. Because they may have additional disposable income to add to their Thrift Plan accounts once their Social Security taxes cease at the maximum annual wages subject to Social Security (\$43,800 in 1987). Salary above that level is only subject to the mandatory FERS contribution, i.e., 1.3% of pay in 1987. Mid-level employees receive the worst treatment under the FERS because they often pay Social Security taxes on total salary, (including overtime pay, bonuses, etc.) yet the Social Security benefits are more heavily distributed to the lower income employee.

(continued on page 4)

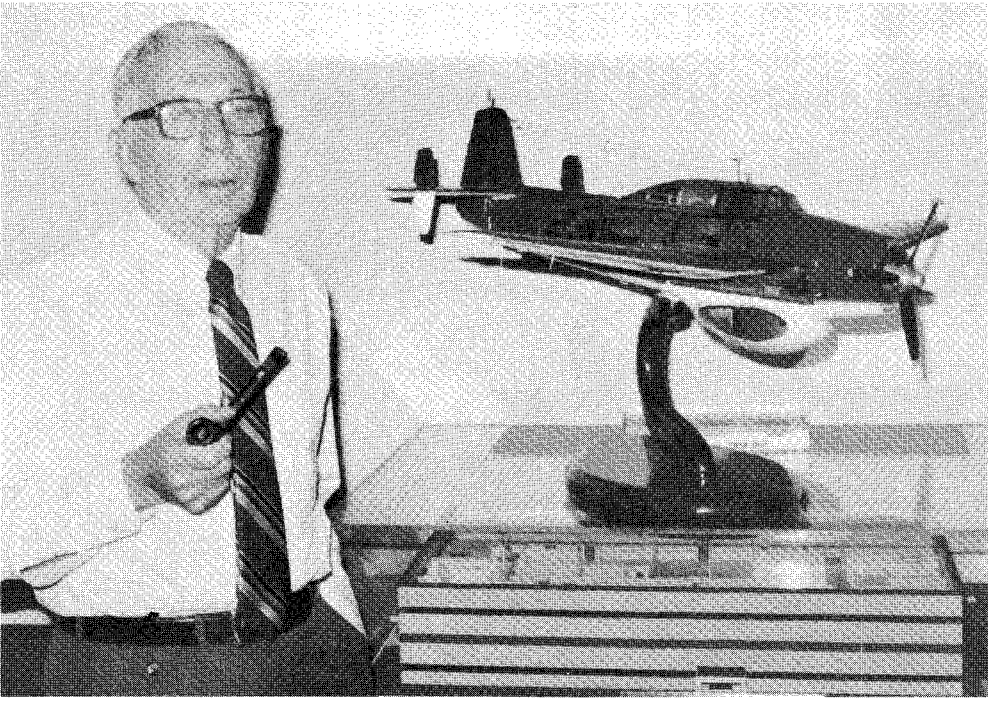


Photo by JO2 Todd Lufkin

FOR POSTERITY—Dr. Harry Krutter, a former Technical Director at NADC donated his 1:16 scale model of the TBM-3W to the Naval Aviation Museum in Pensacola, Florida. The TBM-3W was the Navy's first Airborne Early Warning plane with APS-20A radar. The original radome for this aircraft was designed and built at the Center in the late 1940's.



SHOW AND TELL—LT James Gross (left) and LT Richard Ryan are two of many naval officers at NADC who donate their time to local schools to explain a pilot's role in the Navy. These two officers spoke at Our Lady of Good Counsel.

Federal Employees Retirement System

(continued from page 3)

Level of participation in the Thrift Plan. The more you contribute to the Thrift Plan, the greater the final retirement benefit. In fact, except for lower income employees, active participation in the Thrift Plan is necessary to provide FERS benefits which are equivalent to or higher than those available from the CSRS.

Eligibility for Social Security Benefits. Since the FERS is based on Social Security coverage, if you transfer you must have sufficient Social Security coverage (40 quarters for those turning age 62 in 1990 or later) to receive that tier of the FERS. While you will begin earning Social Security credit as soon as you transfer to the FERS, many federal workers now nearing retirement may not earn enough Social Security quarters prior to retirement to qualify for the 40 quarters. Others, however, may already have sufficient Social Security due to non-federal employment. The status of your Social Security credits should be checked before transferring. You can do this by visiting your local Social Security Administration and picking up the paperwork.

Survivor Benefits. When a spouse has dependent children or when the spouse is eligible for Social Security, pre-retirement benefits are generally better under the FERS than under the CSRS. However, if this situation does not exist and if the employee had less than 10 years of service, the CSRS benefits are usually better. If the spouse is not eligible for Social Security benefits but the employee had at least 10 years of service, the benefits under the CSRS and the FERS are approximately equal. Generally, post-retirement spousal benefits are better under the FERS than the CSRS.

Disability Benefits. If you have less than 22 years of service, the FERS disability benefits are better than the CSRS disability benefits. However, if you have 22 or more years of service but are not eligible to retire, the CSRS benefits could be slightly better than

the FERS benefits, unless the FERS employee also qualifies for Social Security disability. If you have at least 22 years of service and are eligible to retire, FERS and CSRS benefits are about the same.

The one red flag to watch for is an individual who transfers, becomes disabled under the FERS, but who does not meet the Social Security test for disability and does not have sufficient quarters of coverage for Social Security retirement benefits at age 62. That person's benefit under the FERS could be sharply reduced at age 62.

Reasons to Remain in the CSRS

Windfall Elimination Provision. Under what is known as the "windfall" elimination provision, Social Security benefits are reduced below their normal if you have less than 30 years under Social Security. This reduction continues to apply to those who transfer to the FERS, and may be detrimental to certain transferees.

Earnings Test on the Supplement and the Social Security Benefit. Except for disability benefits, CSRS benefits are not reduced if an employee continues to work outside the government after retirement. The FERS Supplement and all Social Security benefits received until age 70 are tested for earnings and reduced at fairly low levels.

Cost-of-Living Adjustments (COLAs). CSRS benefits and Social Security benefits both are fully adjusted for inflation (100% of the Consumer Price Index (CPI)). FERS benefits, however, are usually not adjusted for changes in the cost-of-living until age 62, at which time the adjustment is usually CPI minus 1. A transfer employee receives a CSRS COLA on the portion of the benefit attributable to the CSRS years of service and a FERS COLA on the portion attributable to service under the FERS.

Retirement Age. Under current law, if you are covered under the CSRS you

can retire with an unreduced annuity at age 55 after 30 years of service. Under the FERS, the retirement age for an unreduced annuity after 30 years of service will increase from age 55 to age 57 during the next 40 years.

Reasons to Transfer to the FERS

Portability. The FERS is a portable retirement plan in that benefits accrued under the Social Security and Thrift Plan tiers of the FERS generally are retained by you and continue to increase, even if you leave the government.

Contributions to the Social Security tier will be added to any made during private sector employment, and the more service you have under Social Security-covered employment, the greater the Social Security benefit. If you leave the federal government prior to retirement, your entire Thrift Plan account can be transferred to an IRA or equivalent, or in some situations be left in FERS and continue to accrue earnings. The CSRS, on the other hand, is not a portable system. If you leave under the CSRS prior to retirement eligibility, you may withdraw your contributions with little or no interest, but by doing so you forfeit your benefits. Alternatively, you may leave your contributions in the system, drawing a relatively lower benefit at age 62. The benefit is "relatively lower" because it is based on your "high-3" average pay at separation, and it is assumed that the figure will erode during intervening years due to inflation.

Flexibility. The FERS allows flexible financial and career planning, since you can determine how much to contribute to the Thrift Plan based on personal goals, needs, and income. The benefit from the CSRS will be based solely on years worked and "high-3" average pay times the appropriate percentages.

Tax Rates and Tax Shelters. The FERS Thrift Plan allows employee con-

tributions, the government match, and all Thrift Plan investment earnings to be tax-deferred until an annuity is received. Also, you are taxed on your salary after it has been reduced for any contributions made to the Thrift Plan.

Liberalized Deferred Service Retirement Benefits. Under the CSRS a deferred retirement benefit (a benefit due an employee who leaves government prior to retirement eligibility) cannot be received until age 62, regardless of years of service. The FERS liberalizes this provision and permits receipt of an unreduced benefit after 30 years of service when you attain the Minimum Retirement Age (55-57), regardless of when you leave government. Similarly, after 20 years of service you can receive an unreduced benefit under the FERS at age 60, but a reduced benefit at the Minimum Retirement Age with 10 years of service.

Social Security Spouse Benefits. Social Security provides spouse benefits which can amount to an additional 50% benefit to a family when the spouse reaches age 65. This benefit makes the Social Security tier of the FERS attractive to married couples where one spouse either has not worked or has little work experience.

Elimination of the Public Pension Offset. If you are receiving a CSRS benefit or a survivor is receiving it, the current Social Security law reduces the Spouse benefit and any survivor benefit by two dollars for every three dollars received from the retirement plan. If you transfer into the FERS, that reduction will be avoided.

Taxability of Social Security Benefits. All or a portion of Social Security benefits are exempt from federal income tax. Since the first tier of the FERS is Social Security, if you transfer into the FERS and become entitled to Social Security benefits you will receive those benefits partially or wholly free from federal taxes.

(excerpted from your Federal Employees' Retirement System (FERS), 1986.)

First Qtr Sailor and Blue Jacket named

Sailor of the Quarter

by JO2 Todd Lufkin

The Naval Air Development Center's Sailor of the Quarter (SOQ) for the first quarter of 1987 is AW2 Paul Benn. The 26-year-old sailor has been in the Navy for seven years and in May will have been at the Center for a year.

Benn was proud to learn that he was named SOQ. Additionally, he humbly admits he was surprised to learn that he had made it. "There was some pretty stiff competition, but then there always is. I was honored just to have been nominated and among the other nominees," he stated.

Having just been transferred to Verticle Flight from Schedules, the SOQ quickly gives credit where credit is due. "I owe it all to ADCS (Richard) Lancaster and AXC (Ira) Sparkman. They felt I was worthy of the recommendation," he said. "and without their leadership I couldn't be a follower."

A native of Boise, Idaho, he has been stationed on the USS CORAL SEA, various training commands; Patrol Wing One in Kadena, Japan; VP-19 in Moffett Field, Calif. and then NADC.

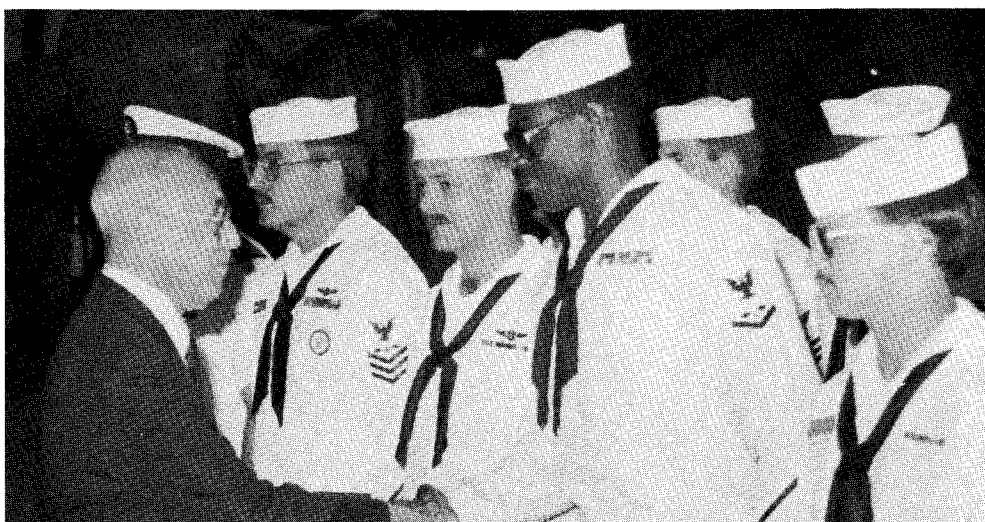


Photo by Drew Schmith

AW2 Benn (center) and AX2 Bates (center left) receive congratulations from Navy League representative.

Benn advises his fellow petty officers that when in doubt they should ask a chief. "That's what my first skipper told me and I always felt that it made sense," he said.

The SOQ is due to rotate in May of 1989. For the time being he plans on moving up through the ranks and hopes to return to another VP (P3) squadron ("either coast," he added.)

Benn and his wife Wendy reside in Jeffersonville, Pa.

Blue Jacket of the Quarter

AX3 John Bates has been named as the Naval Air Development Center's Blue Jacket of the Quarter (BJQ) for the first quarter of 1987. Bates has been in the Navy for five years and has been on Center for a year-and-a-half.

The 26 year-old BJQ has been stationed on the USS INDEPENDENCE,

and at NAS Millington, Tenn. and NAS Jacksonville, Fla.

Bates was surprised that he was selected as the Blue Jacket. "I didn't think I would get it, but at the same time I thought that I would. I have this inner confidence in myself."

This native of Shreveport, La., urges that sailors spend time getting more involved in Center activities. "Don't just work your shift and leave. Utilize your free time," he said. Taking his advice to heart, Bates is currently training to be a Weeblo pack leader for the Cub Scouts.

The BJQ is also active in physical fitness. "I lift weights six days a week, run three days and do aerobics three days," he said. "It helps motivate a person, opens their mind and gives them a good spirit." Bates points out that NADC's Special Services has renovated the weight room and set up new weight machines and urges that they be checked out. "Physical fitness helps a person rid themselves of a lot of tension and frustrations," he said.

The BJQ is career-oriented; hoping for a commission in the Navy as a Limited Duty Officer.

Bates is married and has a son.

Dacey to be promoted

by Mary Ann Brett

LCDR Leo F. Dacey has been selected for promotion to Commander after 14 years of naval service. Currently CV-Anti-submarine Warfare Module Project Officer, Dacey arrived at NADC in December 85. He has a Master of Science Degree in Electrical Engineering from the Naval Postgraduate School and a Master of Business Administration from the University of Texas. Dacey should be at NADC through October 1988.



LCDR Leo F. Dacey



Promotions

Brian Adams, Forestine Akinfosile, Jerome Azarewicz, George Banks, Cleon Bashore, Georgia Bernard, Francis Biddick, Floyd Bollinger, Leonard Brinton, Loretta Campbell, Michele Campbell, John Chhit, Lorraine Dalrymple, Michael Daulerio, Joanne Emory, Glenn Fala, Bernard Finch, Diane Gould, John Harris, Elizabeth Harvey, Christine Healy, Nancy Heinzl, Tommy Hunter, Barbara Hutchinson, Robert Imbrogno, Russell Johnson, Christine Kim, Richard Lewis, Steven Ly, Steven Lyman, Linda

MacDonald, Sheila McGuire, Russell Miller, Geng Moy, Corinne Newnham, Khien Nguyen, Blair Nicodemus, William Nuss, Thomas Persing, Rosanne Petro, Lister Ranson, Doris Reilly, Diane Reiter, Joseph Reiter, Georgeanne Schneckner, Philip Shannon, Steven Shelikoff, Mohammad Shirazi, Bettie Simpson, Kenneth Sims, Stacy Sirken, Valentina Sklar, John Strobel, Oliver Szeto, Lam Bich Ta, Marjorie Tausek, Steven Thoman, Garth Torok, John Townarnicki, David Town, Michael Walker, Elsie Worobe, Stanley Zugay.

ASW Department Head retires



Photo by JO2 Todd Lufkin

Center Commander CAPT Edward Sturm presents retirement certificate to CAPT John Hood during a ceremony in the Center Conference Room. CAPT Hood, former head of the ASA Systems Department retired from the U.S. Navy at the Naval Air Development Center after 24 years of service.



Photo by JO2 Todd Lufkin

CAPT and Mrs. (Ginger) Hood are 'piped over the side' (a traditional Navy custom) at the steps of the Center's front entrance as the Captain departs.

VIEWPOINT

Photos by JO2 Todd Lufkin and Mary Ann Brett

This month's question is:

"Who would you like to dance around the maypole with and why?"



Kim Fields—Code 043

"My dad, because he's the best dad in the world."

AZ3 Brenda Dennonville—Code 82B1

"Tom Selleck. Need I say why?"



Angela Boukalis—Code 042

"Bruce Springsteen. I like the song he sings, 'War, What is it Good for?'"

Mike Cannon—Code 6033

"Stephanie Powers. Because she has red hair like me and I like older women."



Marti Malin—Code 80S

"With my favorite dance partner of course, because he's got 'spring' in his step."

Savage (continued from page 1)

ASWSD, Savage sees his role as a "facilitator," making sure that communications both internal and external to the department are coherent, consistent, and complete.

Savage's promotion will not alter his scheduled rotation time of late summer 1988. It has, however, affected his plans for the future. Savage considered remaining in this area and possibly retiring at the end of his tour at the Center, had he not been promoted. Now, he looks forward to an assignment in Washington, DC, possibly as a Project Manager or Division Director at the

Naval Air Systems Command.

Savage attributed much of the good fortune throughout his twenty-year naval career to his co-workers and family. Without the support and patience of his wife and two children, Savage explained, he would have never made it. "In fact," he said in jest, "in some cases, things got accomplished in spite of me because of the people who worked with and for me." He added, "the people at NADC are super; we just need to see they get the right direction, guidance and credit for the great job they are doing."

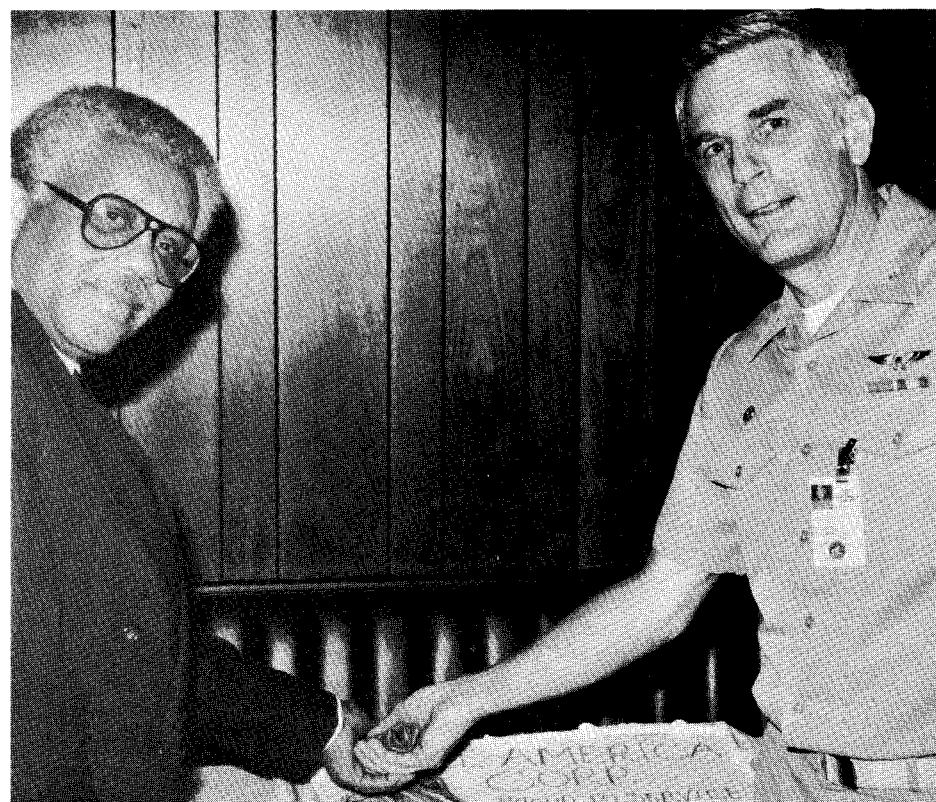


Photo by JO2 Todd Lufkin

A TOAST TO SERVICE AMERICA whose contract at NADC was renewed for 3 years. Technical Director Guy Dilworth and Center Commander Edward Sturm cut the cake during a celebration in the NADC Dining Room.



Photo by JO2 Todd Lufkin

FOOD SERVICES BOARD President Aris Pasles (center) with Don Morway, TD Guy Dilworth, CAPT Edward Sturm and Rich Lipperini after congratulating Service America employees.

McErlean heads AVCSTD

(continued from page 1)

A search for additional challenge in a research and development environment led McErlean to NADC. "This job is a unique opportunity" he said, "especially because AVCSTD is a veritable amalgam of technology." The responsibilities and expertise range from aircraft modification to human factors, biomedical engineering and life support to aerodynamics, materials, and platforms. He explained that another plus is the operational nature of the job which will allow him to "keep a finger in the technology area."

From a management perspective, McErlean said, "the challenge will be to ensure that the various divisions maintain a coherent focus and that both operational and management controls allow the department to function as a unit."

From a technology point of view, he continued, "the challenge is to concentrate on making our products the best they can possibly be. I'd like for us to be essentially beyond comparison."

McErlean is committed to continuing encouragement in technical excellence which is also a prime goal set forth by the Center's Technical Director.

The combination of technical expertise in aerodynamics, air vehicles, and propulsion, and his experience and education in management have prepared McErlean for these challenges. He said, "My job will be made much easier because of the tremendous level of excellence, experience and capability already existing in my department and throughout the Center."

When not at work or drilling once a month as a Lieutenant Colonel in the Air Force Reserve, McErlean is an avid toy train collector and buff, specializing in pre-war Lionel and American Flyer. "When I've settled in one place long enough," he said, "I set them up and even run them occasionally."

McErlean and his wife Sally are originally from northern New Jersey. Currently in Dayton, Ohio, she and their two sons, Timothy (14) and Michael (12), are planning to join him here soon.

Softball playoff race is underway

by Charlie Destra

After just two weeks of play in the crowded NADC Softball League, the race for the playoffs is underway and already taking shape. Location in the standings at this point in time may seem insignificant (especially with a marathon 19-game schedule ahead), but with only 10 of the 20 teams qualifying for post-season play, the games will grow in significance at a very early stage this season.

And so far, there are very few surprises in the standings. (At press time, no team had played more than five games.) The teams that were projected to do well, by and large, have gotten off to good starts, and those that were expected to struggle were doing just that.

The 8th Inning, one of the league's powerhouses, had jumped out to an impressive 4-0 start to lead the pack. The veteran squad, known for their slow starts and strong finishes, decided to turn things around this time. They were averaging 18 runs per game and yielding just 4.5.

The Nightriders and Misfits were alone in second place at 3-0, both benefitting somewhat from early soft schedules. But, they've been winning in

lopsided style: 19 runs scored vs. 4.6 runs for the Riders; 13 vs. 4.6 for the Misfits.

The Bearcats, Renegades and Bandits (2-0) rounded out the undefeated teams.

The top-favored Granfalloon, along with the Rebels, were next in line at 3-1. The power-laden 'Falloon looks every bit as tough as last year, averaging a whopping 21.2 runs per game (league's best) and surrendering a miserly 4.2 (league's lowest). In their lone loss (vs. the Druids), pitcher Greg Heydet fanned nine batters.

The Rebels took advantage of an early soft schedule to post three wins, but they've been giving up 11 runs per game and must improve on that to keep pace.

The Devils were next at 2-1, followed by CSC and the Guzzlers (1-1), the Phantoms (1-2), and Druids (1-3). The Druids' record is misleading, having been cursed with a murderous early schedule. Their standing should improve dramatically as the season goes on.

Finally, the winless teams were the Pacer (0-1), Analytic Animals, Dawgs, and Dyna Tigers (0-2), Orange Crush

and Rumlbers (0-3), and Cellar Rats (0-5).

With the injection of the new teams into the league, it looks as though the parity the league enjoyed the last couple of seasons has become a thing of the past. We'll have a firmer idea of things to come by next month.

POP - UPS

The Granfalloon may have set an unreachable record by scoring 27 runs in one inning in their game against the Dawgs

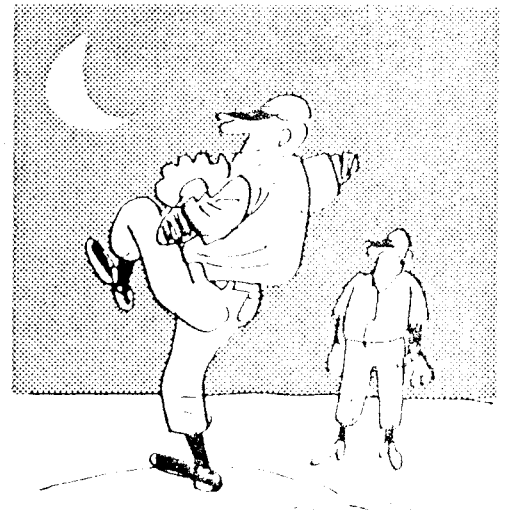
the 'Falloon, in only four games, had nine different men who have homered

the 'Falloon's Heydet whiffed six straight Phantoms and recorded eight strikeouts in four innings

the new-look Guzzlers (2-1) are experimenting with a pitching rotation of Bob Geyer and John Bowes (could be a hitter's paradise)

the tough-luck Druids were ahead in the fifth inning of all three of their losses

Growing pains: three new teams, the Dawgs, Dyna Tigers, and Cellar Rats



were giving up 27, 15, and 15 runs, respectively, per game

But, the first year Bandits and Misfits look impressive

the Misfits' slugger Jeff Price had five roundtrippers in three games

the Analytic Animals are no longer the Bushwackers, as reported last article

the league obtained the Sailor's field for use during the week, eliminating the Housing field.

Center's Bowling Leagues benefit kids



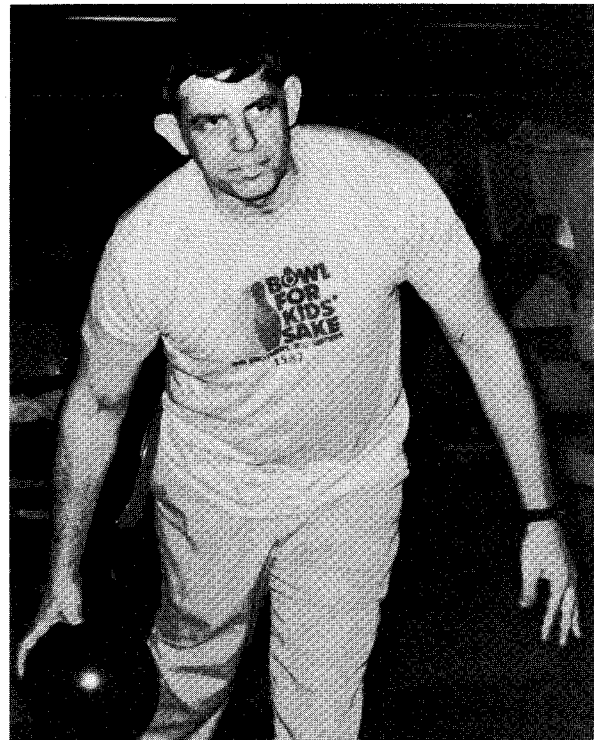
Photos by Mary Ann Brett

Bowlers from both the NADC Mixed and Men's Leagues collected pledges-per-point to benefit Big Brothers/Big Sisters. Thanks to Center participants and generous pledgers, more than \$9,000.00 was collected to benefit the cause. Stuart Simon (left), Planning Assessment Resources and Thomas Reiter (right) ASW Systems, display "T" shirts and towels with Big Brother representative Arthur Wallenstein, also Warden of Bucks County Prison.



Carla Mackey

Carla Mackey raised a grand total of \$708 from 106 sponsors for a 150 game. "I enjoyed it, especially since sponsors were willing and it was easy to collect!"



LCDR Michael Dent of the ASW Department bowled a 200 game and collected \$376 for the cause.

RECREATION SERVICES

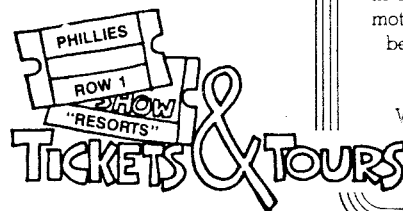
ATLANTIC CITY

Thursday 4 June

Join us on the Fun Bus - we're heading for the "Resorts" in ATLANTIC CITY on 4 June 1987. Package includes motorcoach transportation, \$15.00 in coins, \$2.50 food & beverage coupon and 5 1/2 fun hours in Atlantic City.

Call X2169 for more information, pre-paid reservations only.

WHEN? 4 June 1987. WHERE? ATLANTIC CITY
HOW MUCH? \$10.00 per person



Hypertension: The Salt Connection

by Evelyn D. Harris

American Forces Information Service

Hypertension doesn't mean you're too tense. It means your blood pressure is too high.

May is National High Blood Pressure Month. As a member of an organization that believes in good health, you're probably more aware of the need to keep your blood pressure under control than your outside-of-DoD friends.

Every time you go to the clinic, the nurse puts a cuff around your arm and measures your blood pressure with a gauge. A normal reading for an adult male is 120 over 80 millimeters of mercury. The first number is the systolic pressure—the reading when the heart is working hardest, pumping blood out of the heart. The second number—the lower one—tells the diastolic pressure, occurring when the heart is filling with blood again.

A blood pressure reading that stays at a level of 140 over 90 or higher indicates a person has hypertension.

According to Dr. Motilal Pamnani, the connection between stress and high blood pressure is not clear. Pamnani is associate professor of physiology at the Uniformed Services University of the Health Sciences, the nation's only military medical school.

For example, he said, "Death row inmates have no higher blood pressure than the rest of the population. But people in lower economic classes do tend to have higher blood pressure." Pamnani believes this could be related to the stress suffered by the poor, but it could also be related to diet or other factors.

"There is a clear relation between hypertension and a diet that is high in salt and low in potassium," said Pamnani. However, he said, this is true only for people who are more sensitive to salt. "The majority of Americans eat a

diet that is far too high in salt, but they don't all have high blood pressure."

One in four Americans has high blood pressure. The rate for black Americans is almost 40 percent. And about one out of two Americans has high blood pressure by age 60. Other factors that increase the risk of hypertension are being male, obese or diabetic, or taking birth control pills.

Scientists have theories as to why certain people are at higher risk. For example, some speculate that blacks tend to retain salt because they originally came from a hot climate. According to Pamnani, the evidence for this is not conclusive.

Since untreated high blood pressure can result in heart attack, stroke or kidney problems, keeping track of your blood pressure is a good idea. And so is eating less salt and more potassium.

You can get enough potassium by including bananas, citrus fruits and juices and beans in your diet. However Pamnani warned against taking potassium supplements unless your doctor has prescribed them, since they can cause a variety of side effects, ranging from mouth irritation to stomach ulcers.

Even if you don't think you're sensitive to salt, it's a good idea to cut down. Pamnani said that we get as much salt as we need from foods in their natural state, so there is no need to add salt in cooking or at the table. "But once people are used to eating salt, things don't taste right without it," he said. "It just takes self-discipline and time to get used to a lower salt diet." Cutting down on salt gradually makes it easier.

Some suggested low- or no-salt seasonings are lemon juice, garlic, onion powder (not onion salt), vinegar, herbs and spices. If you don't have hypertension but want to reduce salt, Pamnani

suggested not adding salt at the table and going easy on fast foods and highly processed foods such as canned soups.

Other salty foods include dill pickles, canned tuna (except for the kind packed without salt) and baking soda. Pamnani also advised going easy on salty condiments such as soy sauce, which has 1,379 milligrams of sodium in a tablespoon. Monosodium glutamate—

MSG—a flavor enhancer commonly used in Oriental cooking, and sodium nitrate, a preservative, are also sources of sodium in foods. A tablespoon of salt has 6,589 milligrams of sodium.

Nutrition experts recommend a daily sodium intake of between 1,100 and 3,300 milligrams. Many Americans consume two to three times that amount.



Photo by JO2 Todd Lufkin

Mumford honored

CDR Thomas Mumford was recently honored with the Navy's Meritorious Service Medal "for exceptional meritorious conduct in the performance of outstanding service as the Test and Operational Resources Officer at NADC" from Oct 1984 through April 1987. CDR Mumford (left) displays his new Meritorious Service Medal after the presentation by Center Commander CAPT Edward Sturm.

History of Mothers' Day

by JO2 Todd Lufkin

A day set aside for the purpose of honoring motherhood—that is what Mother's Day stands for.

On this day many families and churches make a special point of honoring mothers. Many people follow the custom of wearing a carnation on Mother's Day. If they wear a colored carnation, it means that their mother is living; a white carnation indicates that their mother is dead.

A day honoring mothers was observed many years ago in Great Britain. It was called "Mothering Sunday," and came in mid-Lent.

In 1872, Julia Ward Howe made the first known suggestion for a Mother's Day in the U.S. She urged that people observe a Mother's Day on June 2 as a day dedicated to peace. For several years, Howe held annual Mother's Day meetings in Boston. Mary Towels Sasseen, a Kentucky schoolteacher, started holding Mother's Day celebrations in 1887. Frank E. Hering of South Bend, Ind., launched a campaign for the observance of Mother's Day in 1904.

However, the idea for the holiday is generally credited to Anna M. Jarvis (1864-1948) of Philadelphia, Pa. She was a native of Grafton, W. Va. Jarvis went to Philadelphia in 1904, where her mother died on May 9, 1905.

Two years later she began a cam-

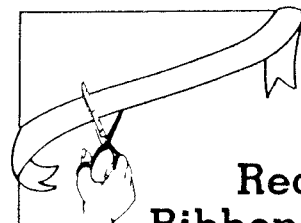
paigned for a nationwide observance of Mother's Day. She chose the second Sunday in May, and began the custom of wearing a carnation. On May 10, 1908, churches in Grafton and Philadelphia held Mother's Day services. Because of her efforts, Philadelphia officially observed the day on May 10, 1908.

Jarvis then became the missionary of the idea, writing thousands of letters to influential men and pleading for the observance of the day. In May 1913, Pennsylvania made it a state holiday.

In 1913, Congress recommended that the second Sunday in May be made a national holiday honoring mothers.

A year later on May 9, Mother's Day received national recognition. On that day, President Woodrow Wilson signed a Congressional resolution recommending that the Legislative and Executive departments observe Mother's Day. The next year, President Wilson was authorized to proclaim Mother's Day as an annual national observance and it has been celebrated ever since.

International Mother's Day was established as May 11. In India, Mother's Day was proclaimed as a living memorial to the wife of the political and spiritual leader Mohandas Gandhi. Other countries that observe a mother's day include Afghanistan, Cuba, Costa Rica, Spain and Yugoslavia.



Recreation Center Ribbon Cutting Ceremony

Friday 22 May 1987 • 1030 Hours • Building 99

A ribbon cutting ceremony is scheduled for Friday 22 May 1987, to showcase the new construction additions to the Recreation Center, Building 99.

The new construction additions include an expanded men's locker room with additional lockers, a ladies' locker room with shower, lockers and lavatory facilities, a coed sauna, and increased gear/equipment issue office space.

As if these additions weren't enough, Recreational Services has provided new gear issue checkout equipment including basketballs, footballs, camping gear, camper trailers, canoes, portable party grill, and much more!

The Weight and Fitness area features new "NAUTILUS" weight training equipment, computerized treadmills, "Lifecycle" computerized exercise bikes, and "liferower" video display rowing machine.

Additionally, there is a new information area containing pamphlets and brochures on local points of interest, vacation locations, and discount coupons for area attraction.

The Automotive Hobby & Minor Repair Area features new tool sets to perform a variety of car repairs and preventive maintenance.

Stop by and take a look at our progress, don't forget to join us on Friday 22 May for the ribbon cutting ceremony.

Morale Welfare & Recreation
Director:
Mr. R. T. Brewer 441-3438

Recreation Director:
Mr. Jeff Tolle 441-2169

Community & Youth Activities:
Ms. Patsy Schaefer 441-2169

Administrative Staff:
Mr. A. Purchase 441-2169

Recreation Services Office 441-2169
Monday thru Friday: 0900 to 1900
Saturday & Sunday: 1000 to 1600

Auto Hobby Shop 441-3587
Monday thru Friday: 1000 to 1900
Saturday & Sunday 1000 to 1600

Fitness Facility 441-2169
Monday thru Friday: 0900 to 1900
Saturday & Sunday: 1000 to 1600

In This Issue:

DeLuccia decorated
Technology Transfer
Family Housing Office
Sports
Change of Command
Stay "Dry," Not High

First Lady of Computers

Hopper at NADC for Human Resources Week



Rear Admiral Grace Hopper, USN (Retired)

Computer whiz and veritable legend, retired Rear Admiral Grace Hopper will be the Guest of Honor and speaker at NADC for Human Resources Day on July 8th.

Grace Brewster Murray was born on December 9, 1906 in New York, New York. She claims as her second hometown, Wolfeboro, New Hampshire, to which she first traveled in the summer of 1907. She attended Vassar College, graduating in 1928, with Phi Beta Kappa and a Vassar College Fellowship. She attended Yale University, where she received the degrees of MA in 1930, and PhD in 1934, together with election to Sigma Xi and two Sterling Scholarships.

She returned to Vassar as an Assistant in Mathematics in 1931, becoming ultimately an Associate Professor. During this time, she received a Vassar Faculty Fellowship and studied at New York University (1941-42).

In December 1943, she entered the United States Naval Reserve. Upon graduation, she was commissioned Lieutenant (JG) and ordered to the Bureau of Ordnance Computation Project

at Harvard. Here, she learned to program the first large-scale digital computer, Mark I. In 1946, she resigned from her leave-of-absence from Vassar and joined the Harvard Faculty as a Research Fellow in Engineering Sciences and Applied Physics at the Computation Laboratory where work continued on the Mark II and Mark III computers for the Navy. In 1946, she received the Naval Ordnance Development Award.

In 1949, she joined as Senior Mathematician, the Eckert-Mauchly Computer Corporation in Philadelphia, then building the UNIVAC I, the first commercial large-scale electronic computer. She remained with the company, now Sperry Corporation, as a Senior Programmer. She was later appointed Systems Engineer, Director of Automatic Programming in 1952 when she published the first paper on compilers. In 1964, she became Staff Scientist, Systems Programming. She retired from the UNIVAC Division of the Sperry Rand Corporation in December 1971, while on military leave.

(continued on page 4)

Loyal to the CORPS

by Jim Kingston

No, we don't mean the Marines. This CORPS is an acronym for "Computer Resources Procurement System" and it simplifies, speeds up, reduces cost, and all-around does good things to make your procurement of computer resources quick and easy.

According to Dr. Ed Feinberg, NADC's ADP Official, "CORPS will save the Center thousands of clerical, engineering, and management man-hours each year in preparing and reviewing procurement requests for computer resources."

The instructions and ADP-related supporting documentation fill a huge loose-leaf binder to overflowing. These were implemented by a largely manual process. Often, missing data required requests had to be routed back to the originator. Changes were difficult to keep up with because of SECNAV data processing regulations. What could or should take about 3-4 days often wound up taking 3-4 months!

Enter, CORPS! The new system requires one form which is computer-generated and virtually "walks" the preparer through step-by-step, asking pertinent questions regarding the equipment or service to be procured. When all questions are answered, a summary is printed out. If the system detects any problems with the request, the summary sheet tells the originator to contact the ADP official . . . it's vir-

tually fool-proof! The requestor reviews the summary and if everything is correct, signs and dates it. His or her signature serves as a certification of the accuracy of the request. The identification number on the summary is noted on the Purchase Request (PR) and the two documents get stapled together and go for departmental approval. The department approving official need only review the summary sheet and sign off on the PR.

With CORPS, a summary which used to take hours—even days—to prepare can be completed and printed by anyone in five to ten minutes. No clerical support is required, no pouring over detailed instructions, directives, or complex forms.

Since Dr. Feinberg is the ADP Official who reviews all procurement requests, using CORPS simplifies and speeds up his review process. With the system, he can review and process many times the number of requests as was possible under the old system. The significance becomes apparent when you realize there are more than 1800 ADP requests made each year. Jeff Saks, who worked with Feinberg in developing CORPS shares the responsibility for reviewing these requests. Joan Garafalo handles preview and postreview processing of the procuring requests.

During review of procurement requests by the ADP official, the CORPS

summary is removed from the PR and becomes an enclosure to the ADP review memo. This eliminates the need to repeat details of the procurement in the ADP memo and allows the use of a preprinted form ADP memo. Prior to

the advent of CORPS, individually tailored ADP memos were prepared, often requiring several days. Now, the ADP memo is completed in minutes, at the

(continued on page 8)



Photo by JO2 Todd Lufkin

UNDER SECY SPEAKS TO AFCEA—Dr. Ronald L. Kerber, Deputy Under Secretary of Defense for Research and Advanced Technology, addresses members of the Armed Forces Communications and Electronics Association (AFCEA) at their annual luncheon held in NADC's dining room late in May.

FOURTH OF JULY MESSAGE FROM THE PRESIDENT

On July 4th, Americans everywhere gather to celebrate the birth of our Nation. We commemorate the achievements of the Founders who built the Republic; we reaffirm our dedication to liberty; and we pause in pride and gratitude to remember the service and sacrifice of those who made us and keep us the land of the free and the home of the brave—the men and women of our Armed Forces.

Independence Day 1987 is special, because this year we mark the Bicentennial of the Constitution, the anchor of the freedom and independence cherished by all Americans. The magnificent document the Founding Fathers hammered out two centuries ago remains as relevant and timely as the day the final draft was signed. But, as the members of the Army, Navy, Air Force, Marine Corps, and Coast Guard well know, the freedoms it embodies have been safeguarded at great price.

Throughout our history, millions of Americans have made tremendous sacrifices—many giving up their lives—in defense of a common vision of a Nation governed of the people, by the people, and for the people. Today this legacy continues in the dedicated professionalism of you—our service men and women at home and in outposts around the globe. Long after this year's Independence Day parades are over, long after the last skyrocket explodes in the night sky, the American people will continue to look to you to guard their hard-won independence. As your Commander in Chief, I am proud to send a special salute to all of you who wear our Nation's uniform so proudly. Your commitment to our country's defense means that we will always have cause to celebrate freedom, on the Fourth of July and every day.

God bless you, and God bless America.

Ronald Reagan
Ronald Reagan



Drexel decorates DeLuccia—John DeLuccia (left), supervisor of the Aerospace Materials Division, accepts the "Distinguished Alumnus Award" from Harry Rogers, acting head of Drexel University's Materials Engineering Department. DeLuccia recently received the award for his outstanding contributions to education and corrosion of materials research. He received his Bachelor's Degree from Drexel in 1961 and teaches there part time.

Commander Salutes

Judy Koper, Laretta Wormser, Nancy Lindsey, Susan Tiley, Daniel McCauley, Gregory Sweriduk, Wendy Lin, Mary O'Dowd (Code 60); Lisa Johnson, Helen Ling, Sheila

McGuire, Ruth Pickering and Patricia Beach (Code 70): For participating in the Archbishop Wood High School for Girls math and science presentation at NADC.

If the SOC Fits

by Robert Janes

In April's Standards of Conduct (SOC) column, I wrote about the passage of a new law restricting the post-employment activities of certain DoD employees. We have now received the DoD regulations which implement this statute, and in this month's column I will provide some additional information about it.

At the outset, I note that the April column was incorrect in one respect. I erred in stating that the law applies only to civilians at or above the GS-13 level and officers at or above the O-4 pay grade. This is correct insofar as officers are concerned, but the regulations make clear that the statute encompasses all civilians at or above the **minimum rate of pay** for a GS-13. Thus, the law also applies to those GS-12 or WG/WS employees who are at a high enough step that their pay exceeds the GS-13 minimum.

The law applies to any employee who spends the majority of his working days during the two years before he leaves DoD in either of the following capacities:

- a. Performing a procurement function relating to a DoD contract at a site or plant of a major defense contractor; or
- b. Performing a procurement function relating to a major defense system and, in the performance of that function, participating on any occasion personally and substantially in a manner involving decision-making responsibilities with respect to a contract for that

system through contact with a major defense contractor.

As you can see from the above language, which is taken pretty much verbatim from the regulations, this statute can prove quite confusing. Some of the key phrases here are defined in the regulations as follows:

Major defense contractor—one who received over \$10 million in defense contracts during the prior fiscal year.

Major defense system—Generally, this includes those systems with expected overall RDT&E expenditures exceeding \$75 million or expected total procurement expenditures exceeding \$300 million.

Majority of working days—The important thing here is that the actual time spent is immaterial. It is the number of working days that counts. Thus, if an employee spends just one minute a day performing the requisite procurement functions, on more than 50% of his working days during the last two years of Government service, he fulfills this aspect of the law.

Procurement function—This is defined broadly, and includes **any function relating to** (a) the negotiation, award administration, or approval of a contract; (b) the selection of a contractor; (c) the approval of a change in a contract; (d) the performance of quality assurance, operational and developmental testing, the approval of payment, or auditing under a contract; or (e) the management of a procurement program.

An employee covered by this new law is prohibited from working for the contractor involved during the two year period after he leaves DoD. The penalties for violation of the law can range as high as \$250,000 for the employee and \$500,000 for the contractor. Thus, although the law would not apply to many NADC employees, if you are one of those to whom it would apply, the consequences of violating it are extremely harsh.

One key feature of this statute is that it specifically provides that an employee may obtain a written legal opinion

concerning the law's applicability to a proposed new job. The statute and regulations can be confusing, and I urge any of you who have questions concerning your coverage under this law to see me for such a written opinion. In light of the potential penalties, it would be foolish not to get such an opinion beforehand if there exists any reasonable question concerning the law's applicability. Indeed, it appears that many large businesses will require prospective employees coming from DoD to obtain such an opinion before hiring them to work for them.

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Commander, NADCCAPT Edward J. Sturm
Technical Director.....Guy C. Dilworth, Jr.
Public Affairs Officer and EditorJames S. Kingston
Associate Editor Mary Ann Brett
Assistant EditorJO2 Todd Lufkin

TECHNOLOGY TRANSFER

Royalties paid to spur innovation

by Mary Ann Brett

More than 40% of the applications for patent/invention being filed in the United States today are coming from foreign countries—a trend that seems to indicate the technology push once centered in the U.S. is dwindling.

In an effort to revitalize innovation, Congress instituted the Federal Technology Transfer Act of 1986 (PL 99-502), the latest in a series of bipartisan initiatives to encourage domestic technology transfer.

The Congressional Record reports the federal government spending tens of billions of dollars annually on research and development. Federal laboratories (like NADC) alone spend some \$18 billion and employ one-sixth of the nation's scientists and engineers. The federal government makes this huge investment to serve public needs, particularly in defense, health, and space. In the process, scientists and other federally supported researchers create a wealth of unclassified inventions and ideas, which, if properly used, could be of enormous value to state governments and American industry.

Historically, however, legal barriers and lack of communication have prevented states and the private sector from taking full advantage of this national resource. With international competition so strong Congress feels we can no longer afford to ignore this available technology.

In 1980 the Stevenson/Wydler Technology Innovation Act directed federal laboratories to create offices to assist the transfer of federal inventions and expertise. Later that year, the landmark Bayh-Dole Patent Amendment gave small business and non-profit organizations including universities the right to own and develop inventions that result from federally funded research. Until then, very few federal inventions were ever used by American companies or universities.

The 1986 Act gives federal agencies the authority to enter into mission-related, cooperative research and development work with industry, state

governments, universities, and others. For the first time, the nation's nearly 700 government-operated laboratories will have clear authority to work side-by-side with industry and the states to better utilize unclassified federal inventions and ideas.

This Act also gives government employees an incentive to work on projects that have commercial potential as well as being mission related.

The Act guarantees that federal inventors will now receive a share of the royalties when and if an invention is commercially licensed. This means a guaranteed 15% minimum (not to exceed \$100,000) share of the royalties to the inventor(s). Previously, all royalties went into the U.S. Treasury.

Henry (Hank) Hansen, Patent Counsel for NADC, explained that now, when an invention is reported at the Center and it is determined to have sufficient Navy interest to warrant the expense of filing for a patent application, it will also automatically be considered for commercial licensing.

Additionally, the Technology Transfer Coordinator, Jerry Bortman, will publicize and distribute the invention disclosure to those industries which might have an interest. If prospective licenses result, the Center would enter into negotiations with the companies for the purpose of granting a royalty-bearing license for commercial use.

ROYALTIES

As we stated, a minimum of 15% (\$100,000 max) of the royalties will be granted to the inventor(s). The remaining 85% can be used by the federal laboratories to cover the expenses of the Technology Transfer Program, to supplement rewards to personnel who have invented technology with only military applications, and to further scientific exchange, education, and training. Although agencies already award nominal amounts for mission-related patents, they now have the authority to make substantial cash awards when deserved.

COOPERATIVE RESEARCH AND LICENSE AGREEMENTS

In the past, the Center has entered into cooperative agreements with universities on a limited basis. But, until recently, the 'bid and contract system' was virtually the only avenue for R & D labs like NADC to work with private industry. Now the labs can make legal agreements to work side-by-side with the private sector provided it is in the government's best interests.

Bortman explained that in one of these agreements the Center could contribute resources such as people, facilities, and equipment—almost anything short of cash. The industry partner could contribute the same, including cash.

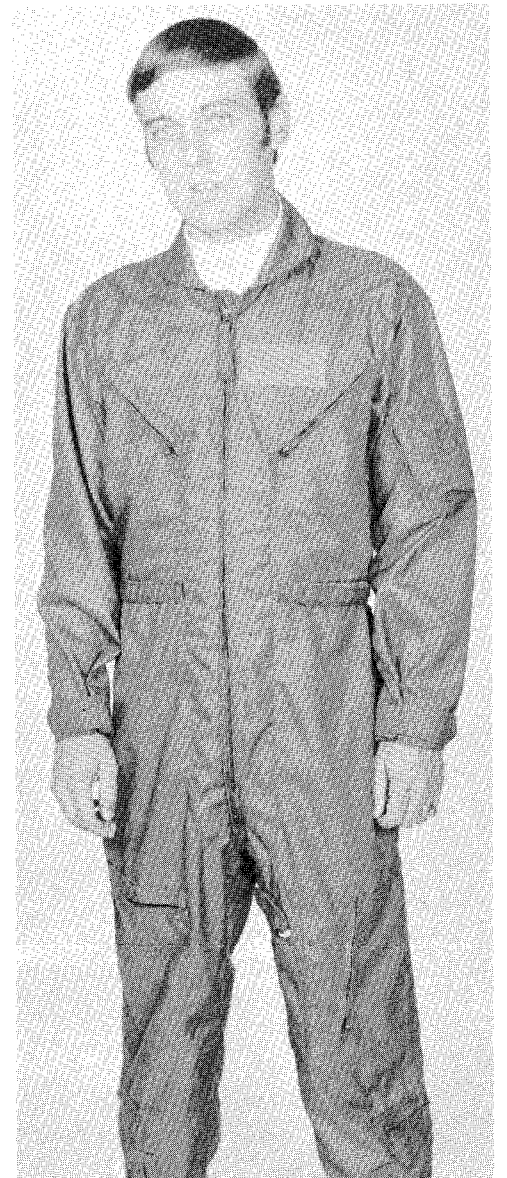
Also, each laboratory may now enter into its own license agreements instead of having the determination made in Washington, D.C. And, the inventor(s) will participate in the negotiations. In fact, an NADC Invention Evaluation Board has been designated. It consists of the Associate Technical Director, the Patent Counsel, the Technology Transfer Coordinator, and one of the technical department heads on a rotating assignment basis. This Board will evaluate the patent application for Navy as well as commercial use and it will determine whether to apply for a patent.

"With the help of the University City Science Center, a non-profit consortium of universities and hospitals," said Bortman, "the Center is re-examining patents granted in the past five years. We are looking for potential (or in some cases, broader) commercial applications and the possibility of granting or renewing licenses for royalties."

Some of the more familiar NADC technology innovations already transferred into industry include NOMEX (Dupont trademark name), a fire retar-

dant fabric developed here. The fiber for the fabric was considered by Dupont for use in electrical insulation and tires. About 15 years ago, a scientist at the Center proposed the fiber could be woven into fabric and used in protective clothing for naval aviators. After years

(continued on page 7)



Aircrewman in anti-exposure garment of NOMEX fabric.

Stamping Out Computer Crime

If you were a computer hacker and wanted to enter someone else's system, how would you get the password?

According to DoD security officials, it's very possible you'd find it tacked to a bulletin board or, even more conveniently, in a desk drawer, right there with the combination to the safe.

If not, you could probably figure it out if you knew something about that person. Often people choose passwords based on their name, address, telephone or Social Security number, husband or wife's name, maiden name or children's names.

The most common woman's name for passwords is "Susan." For men, it's "Fred," likely because it can be typed with one hand. "Elvis" is the most common password for rock and rollers, and car buffs tend to go for "Porsche" or "Corvette."

To discourage computer crime, DoD officials recommend selecting a password that mixes together six or more letters and numbers. Memorize it so you don't have to write it down. Don't share it with other people, and change it at least once a year.

DoD security experts offered these additional computer security tips:

- Limit physical access to your computer room and systems.
- Keep monitors and screens away from windows and doors.
- Don't leave a system operating unattended.
- Don't walk away from a system that's logged onto a network.
- Have maintenance performed only by authorized and qualified people, and only after sensitive information is removed.
- Strictly control any modifications to system hardware.
- Use an audit system.
- Use electronic labels to show the sensitivity of information.
- Protect or destroy magnetic storage media, even after overwriting and degaussing.
- Protect the ribbons used to process sensitive information.
- Secure the system at the end of the day.
- Never work on sensitive information at home.



Photo by JO2 Todd Lufkin

TIE A YELLOW RIBBON—around the new *Recreational Services weight-training room*. Center Commander, CAPT Edward Sturm, officially opens the remodeled facility and urges all employees (civilian and military alike) to utilize the equipment. The facility is headed by Ron Brewer and managed by Jeff Tolle.

Housing — a family business

by JO2 Todd Lufkin

Highlights of their credo include: "military families or individual service members . . . are the most important persons who enter our offices; they are not an interruption of our work, but the purpose of it . . . Our job is to respond to their requirements as expeditiously and efficiently as possible . . . Our job is to adequately house the military families."

They carry out this philosophy to a tee—and then some.

They are the staff of the Center's Housing Office.

Led by Mr. E.J. "Lee" Leibrandt (Housing Management Director), they include Linda Carey, Elaine Mears, Diane Fischer and Ann Powell.

Leibrandt prefers to downplay the word 'referral' in his office's title. "This makes it sound like we just refer people to rental agencies," he stated. "In fact, we actually find suitable housing and list apartment complexes, utility companies, day care centers, etc."

The Housing Office or Code 8302 has served the Center's military members for 12 years. Originally housed in Shenandoah Woods, they moved due to a fire. They have been in Building 135 for a little over a year-and-a-half.

"Although separated from the rest of NADC by Jacksonville Road, we are still an integral part of the Center," stressed Leibrandt.

Code 8302 also maintains the 199 three and four bedroom townhouse units at Shenandoah Woods and six Married Officers' Quarters along Jacksonville Road.

The Housing Management Director and Linda Carey have attended the extensive training course in Jacksonville, Fla.—Introduction to Family Housing Management. "This is a two week, extensive course," explained Carey, "what we learned there, the Navy Housing Family Housing Manual (NAVFAC P-930), and some common sense are our guidance."

The Housing Office receives its funding from Northern Division, at the



Photo by JO2 Todd Lufkin

E. J. "Lee" Leibrandt—Housing Management Director

Philadelphia Shipyard. "The usage of this money is very strict," stated Leibrandt. "It goes into NADC's budget and we have to use it the way that it is ear-marked. For example, if there is money for snow removal, then that's what it's used for."

They receive approximately 300 walk-ins per year and what "seems like a million phone calls," said Carey. The office is open Monday thru Friday from 6:30 A.M. to 4:30-5:00 P.M.

Leibrandt's philosophy for customer relations carries over into the office—"Do the most you can for these people." To aid with this goal there is also a 12 member Housing Advisory Board to get tenant inputs and responses. He quickly points out that this is not just a gripe session, these meetings do bear fruit.

Diane Fischer has been with the Housing Office for a short time. When she arrived she had no housing experience. However, she quickly "picked up on the system and expanded upon it," stated Leibrandt.

Fischer works with the maintenance of Shenandoah Woods and runs the trouble phone, where she receives between 20-25 calls a day. She listens to the problem or complaint and then assigns the case to one of the two contractors. She also maintains repair-maintenance files for each household.

Anne Powell came to the Housing Office from Public Works in April. She is a clerk-typist and covers for Fischer on the trouble phone. Powell also works in the Self-Help Shop in Shenandoah Woods for several hours three times a week. Here tenants can pick up gardening or home maintenance equipment. "I enjoy meeting the public and associating faces with voices that I've heard on the phone," stated Powell.

Elaine Mears has been with the Housing Office several years. She is in charge of inspecting the Shenandoah Woods' units to ensure that they are left in the same condition that they are found by the tenants. "We're rigid, but fair," stated Leibrandt, "we have to be. This is their home away from home."

The Housing Management Director notes that no one in his office has any real set function. "We can't just limit ourselves to just one thing. What would happen if we were sick? You can't tell the people on the phone 'I'm sorry, but we can't help you until Diane or Elaine gets back,' No, we all do some of this and that."

The Credo for Navy Family Housing Management Personnel ends with "Service is our business!" The highly enthusiastic Housing Office team personifies this philosophy as this customer agrees.



Photo by JO2 Todd Lufkin

Diane Fischer



Photo by JO2 Todd Lufkin

Linda Carey



Photo by JO2 Todd Lufkin

The Housing Office Staff—(L-R) Anne Powell, Linda Carey, Diane Fischer and E. J. "Lee" Leibrandt. Missing from picture is Elaine Mears.

Hopper to visit NADC

(continued on page 1)

During the years from 1952 to the present, she has published over fifty papers and articles on software and programming languages. She has also served on the ANSI X3.4 Committee on the standardization of computer languages. She is presently serving on the CODASYL Executive Committee.

She has served, starting in 1959, first as Visiting Lecturer; in 1962, as Visiting Assistant Professor; in 1963 as Visiting Associate Professor; and since 1973, as Adjunct Professor of Engineering at the Moore School of Electrical Engineering of the University of Pennsylvania. In 1971, she was appointed Professorial Lecturer in Management Science at the George Washington University and served until 1978.

In 1962, she was elected Fellow of the Institute of Electrical and Electronics Engineers. In 1964, she was selected to receive the 1964 Achievement Award by the Society of Women Engineers. In 1969, the Data Processing Management Association selected her as their

first Computer Sciences "Man-of-the-Year." The American Federation of Information Processing Societies gave her the Harry Goode Memorial award in 1970. In 1971, the UNIVAC Division of the Sperry Corporation initiated the Grace Murray Hopper Award for young computer personnel to be awarded annually by the Association for Computing Machinery. In 1972, she received the honorary degree of Doctor of Engineering from the Newark College of Engineering, a Wilbur Lucius Cross Medal from Yale University, and was made a Fellow of the Association of Computer Programmers and Analysts.

In 1973, she received the honorary degree of Doctor of Science from the C. W. Post College of Long Island University, was elected to membership in the National Academy of Engineering, was presented with the Legion of Merit by the Navy, and was selected as a Distinguished Fellow of the British Computer Society. In 1974, she received the honorary degree, Doctor of Laws, from the University of Pennsylvania at the 50th Anniversary Convocation honoring the

Moore School of Electrical Engineering.

In 1976, she received the Distinguished Member Award of the Washington, D.C. Chapter of the Association for Computing Machinery, and an honorary Doctor of Science from the Pratt Institute. In 1979, she received the W. Wallace McDowell Award from the Institute of Electrical and Electronics Engineers (IEEE) Society.

In 1980, she received the Meritorious Service Award from the Navy, an Honorary Doctor of Science from Linköping University, Sweden, Honorary Doctor of Science from Bucknell University, and an Honorary Doctor of Science from Acadia University, Nova Scotia. In 1981, she received Honorary Doctor of Science degrees from Loyola University, Chicago and the Southern Illinois State University and an Honorary Doctor of Public Service from George Washington University, Washington, D.C. In 1982, she received an Honorary Doctor of Humane Letters from Seton Hill College, Greensburg, Pennsylvania, and attended the dedication of the Grace

Murray Hopper Center for Computer Learning, Brewster Academy, Wolfeboro, New Hampshire.

In 1983, she received Honorary Degrees from Lake Forest College, Lake Forest, Illinois; Clarkson University, Potsdam, New York; Hood College, Frederick, Maryland; Russell Sage College, Troy, New York; Villa Julia College, Baltimore, Maryland. In 1984, she was honored with the IEEE Computer Pioneer Medal, American Association of University Women Achievement Award, Federally Employed Women Achievement Award, and the Association of Computing Machinery Distinguished Service Award. She received the Living Legacy Award, Women's International Center, San Diego, California and was one of the recipients of the Women of the Year Award, Young Women's Christian Association of the National Capital Area.

(continued on page 7)

Sports

Granfalloon takes early lead in League Race

by Charlie Destra

The Granfalloon, not surprisingly, was leading the pack in the Softball League's race for the crown with a 9-2 record, at press time. But their lead, with roughly half the games played, was a narrow one over several teams.

Also soaring to impressive starts were two newcomers, the Misfits (8-2) and Bandits (6-1), the 8th Inning (7-2) and the Nightriders and Bearcats (6-2). The Bearcats had been alone at the top with a 6-0 record before dropping two straight (to the Nightriders and Devils). And the Druids, rebounding from a slow start, have climbed back into contention, as expected, with a 6-4 mark.

Those seven teams look very solid, and at this early stage would appear to have playoff berths locked up. Only 10 teams will make the playoffs and it is virtually unforseeable for any of these teams to falter and drop below the top ten by season's end. Basically, their

losses have been to each other, evidencing a seven team hierarchy in the league.

So, that leaves 13 teams fighting for only three available post-season spots. Of these teams, the Rebels (5-5), Devils (4-3), Pacer (3-2), CSC and Renegades (3-3) would seem to have the best chances to finish in the upper half. The once-mighty Guzzlers at 2-4 have a shot, but are having difficulty adjusting to defections that have apparently affected their status. They're scoring 8 runs per game and giving up an uncharacteristic 14. The Orange Crush are 3-4, but doubts remain as to whether they're for real.

The Rumlbers (3-7), one of the better hitting teams, are unfortunately, also one of the worst defensive squads, having surrendered a bloated 159 runs in 10 games. They are likely to come up short, along with the Phantoms and Dawgs (1-5), Analytic Animals and Cellular Rats (1-7), and the winless Dyna Tigers (0-6).

For the seven teams at the top and the six teams at the bottom of the standings, their fate is pretty much secure. It's those seven teams that are sandwiched in the middle that will come to play every day and battle tooth and nail for the remainder of the season hoping to finish in the top ten.

Which team has the most potent lineup? How about the Granfalloon, who now have 11 players with at least one home run. (Mark James has been the main man with six.) Compare that to the Phillies who have 13 players with at least one homer and have played 35 more games

The 'Falloon staged the season's best comeback, erupting for nine runs in the last two innings to overcome an 11-3 deficit against the Nightriders. Mark James' two-run blast (two outs, 2-2 count) iced the 12-11 win

Definition of a .500 team: Rebels, 5-5 record, 111 runs scored (12.3 average), 114 runs surrendered (12.6)

The league has featured some unusually high scoring fiascos this year. No less than 14 of the 20 teams were averaging more than 10 runs per game (with two others at nine); thus, the Nightriders' 1-0 defensive struggle over the Druids was a rare purist's affair, and a welcome and refreshing change.



by Charlie Destra

The All-Star game format is not yet set in concrete but the plan is to have a 3 or 4 team round-robin tournament to be played 11 July at the Sailor's, Inertial and Tyler fields. A firm agenda and further details will be posted via flyers at various Center locations

MIXED BOWLING NEWS

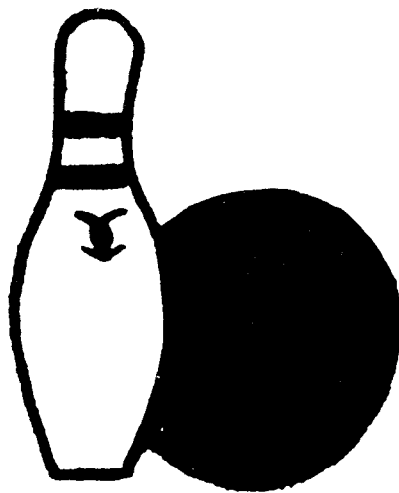
by Tom Reiter

Congratulations to Neil Weinman's Magic Markers for repeating as champions of the Mixed League. Starting with the last night of the season, they caught and tied Helene Goldstein's 11'th Frame causing a special, 2'nd half tie-breaking 3 game roll-off.

After winning by 54 pins, they took on Bob Geyer's Alley Cats for Division honors. Winning their Division by 37 pins, the next step was the League Championship battle with Al Knobloch's perennial titans, the Goofers.

Confusing the opposition and the scorekeeper by using nine different bowlers, they took a 66 pin lead into the final game of the season. Then came Andrea Sicher's explosion of a near perfect 289 game and it was all over. Everyone is happy for Neil and his team, their good sportsmanship is representative of all our bowlers. Again, congratulations—we'll meet again at the awards banquet.

- MAGIC MARKERS**
 NEIL WEINMAN (C)
 THERESA WEINMAN
 ED BEACH
 DIANNA BEACH
 JEFF IRVIN
 LARRY SICHER
 ANDREA SICHER
 GLENN SAVAGE
 LOIS SAVAGE
 LEE BOURGEAULT



ALMOST PERFECT!

by Tom Reiter

The bowling season ended with two outstanding efforts. In the Men's League, Mark Cahill bowled a 299 game on the last regularly scheduled night. After eleven straight strikes, only a wobbling six pin kept him from perfection. His 299 matches Chuck Hegedus' as the highest score ever bowled at Thunderbird, Street Lanes.

Andrea Sicher of the Mixed League's reigning champion Magic Markers waited until the final game of the Championship rolloffs to calmly(?) roll ten straight strikes before leaving the dreaded ten pin on her eleventh ball. She covered that to finish with a 289 game. Considering she went into the game with a 140 average, and the pressures of championship play, her feat was one of the greatest ever seen by the Mixed or any League.

Congratulations to Mark and Andrea!

Get your crew together at the CREW'S REST.

FABULOUS FRIDAY. Every Friday the club features a discounted beverage special "Social Hour" from 3:30-5:30pm. Treat your taste buds to a variety of complimentary hors d'oeuvres or complimentary "Build Your Own" Taco Bar. Next we'll start your evening off early, featuring Top 40 music by DJ Tom McCabe from 6:00pm until.....

PLANNING A PRIVATE PARTY? If a private party is in your future, call on the Crew's Rest today to reserve a date for your special party. The club has various catering banquet menu's for breaks, breakfast, luncheons dinners, hors d'oeuvres, buffets and entertainment services. Phone 441-7651

YOU ASKED FOR IT, NOW YOU'VE GOT IT. Yes the Crew's Rest will provide a DJ from 7:00pm to 12:00 am every Saturday night for your listening and dancing pleasure. Why pay more when you can enjoy an inexpensive evening with friends?

YOU ASKED FOR IT, NOW YOU'VE GOT IT, PART II. We hear you and now here it is; food service every weeknight. Stop in and try our freshly prepared ham, roastbeef, or turkey sandwiches served on a kaiser roll with lettuce, tomato, pickle and chips or the club's "Build Your Own" Taco bar. A super deal for our super customers.

YOU ASKED FOR IT, NOW YOU'VE GOT IT, PART III. Now our weekend club customers and swimming pool patrons can enjoy a low priced, great tasting sandwich or taco. Saturday's and Sunday's the club will serve these great tasting sandwiches or your personally built taco starting at 1:00pm.

THE CLUB HAS REOPENED ON MONDAYS, FROM 4:00 to 11:00pm.

NADC Outdoor Swimming Pool Open

The NADC Outdoor Swimming Pool is now available to all permanently assigned NADC federal employees, on a space-available basis. NADC federal employees may only use the pool Monday through Friday, from 1:00 p.m. to

8:00 p.m. excluding federal holidays. Daily admission is only \$1.50, payable at the Outdoor Swimming Pool. NADC federal employee may sponsor one immediate family member, but may not sponsor a guest. NADC contract employees are not authorized use of the pool.

The Outdoor Swimming Pool is located behind the Crews Rest, building #7. The pool features a new stereo sound system, patio tables, chairs, and lounges, lockers for clothing storage and a solar pool cover to retain the water's heat. Additionally, the pool has a new playground set for the children.

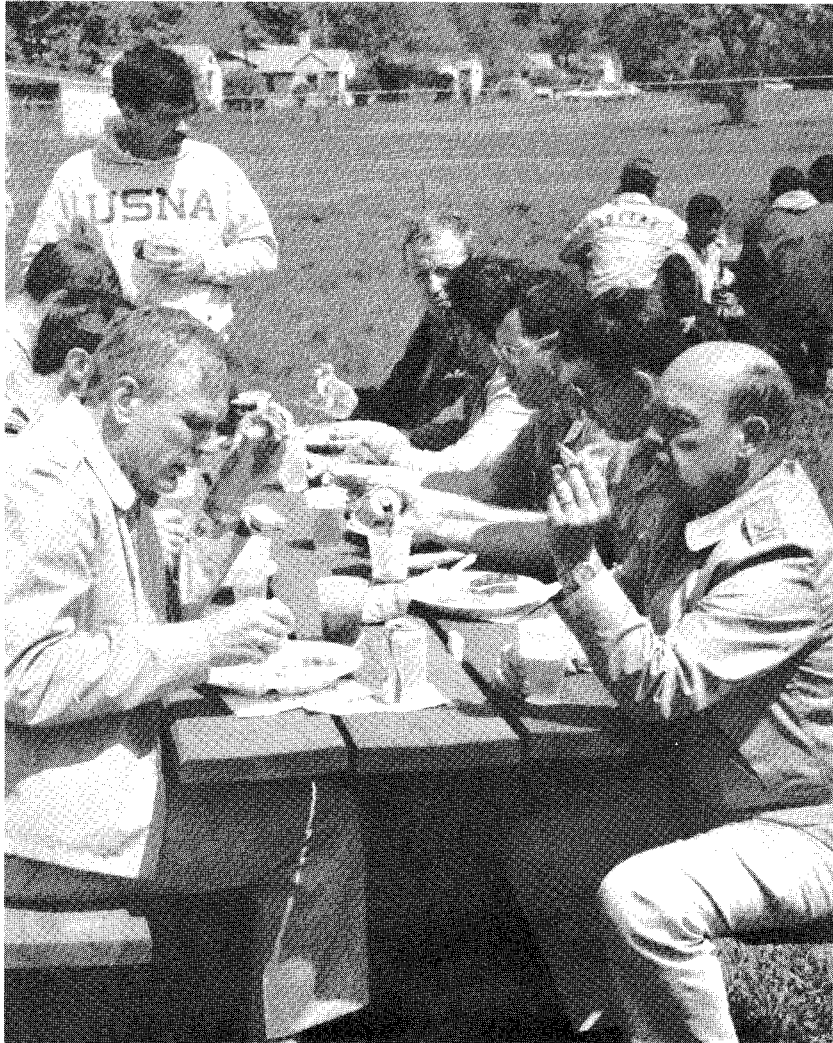
Private Pool Parties can be held at the pool after 8:30 p.m. until 1:30 a.m.

All food and or beverages for your private party, must be contracted through the Crews Rest, phone 441-7651. Private pool party fees are as follows:

0-49 people		
8:30 p.m.—11:30 p.m.		\$43.00
8:30 p.m.—12:30 a.m.		\$49.00
8:30 p.m.—1:30 a.m.		\$55.00
50-74 people		
8:30 p.m.—11:30 p.m.		\$71.00
8:30 p.m.—12:30 a.m.		\$83.00
8:30 p.m.—1:30 a.m.		\$95.00
75-125 people		
8:30 p.m.—11:30 p.m.		\$99.00
8:30 p.m.—12:30 a.m.		\$107.00
8:30 p.m.—1:30 a.m.		\$125.00



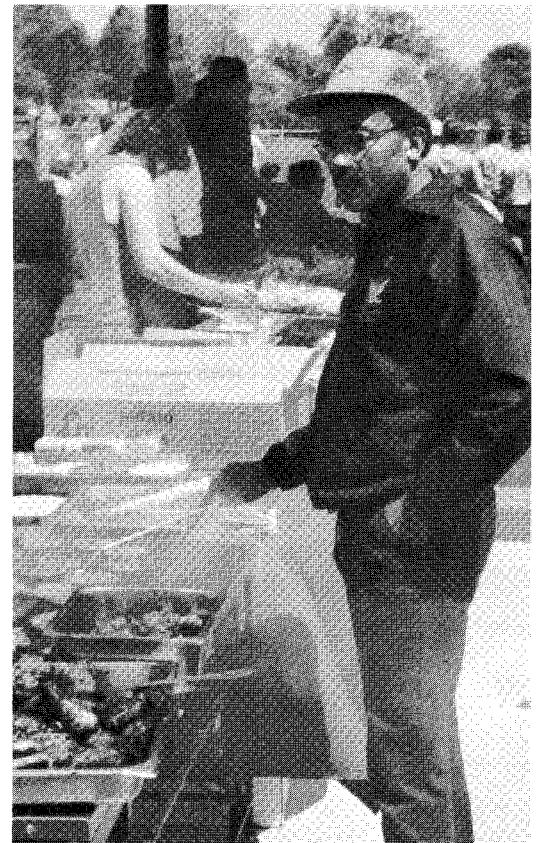
A picnic makes the pain worthwhile



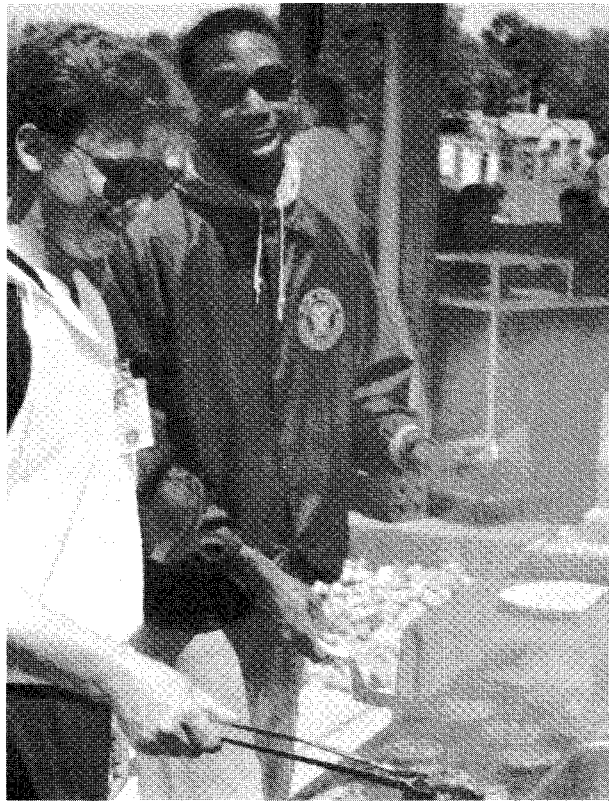
Photos by JO2 Todd Lufkin

Captains Edward Sturm and Fred Wright converse during military picnic after semi-annual Navy physical fitness testing. The picnic was sponsored by Recreational Services.

Command Master Chief, AFCEM Nelson Williams has "volunteered" as relief cook for his hungry friends and co-workers.



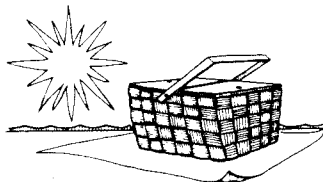
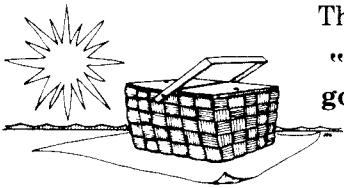
AME2 Mike Dixon (left) and AD3 Rickie Grant lend a hand at cooking an endless amount of food.



VIEWPOINT

Photos by JO2 Todd Lufkin and Mary Ann Brett

This month's question is:
"What is your biggest goal for this summer?"



Athena Morgan—Code 8132

"To better myself, work harder and to be a successful person in life."



ATCS John Allen—Code 1B12

"To sail and tan all summer long without getting burned."



Lois Kieserman—Code 04413

"To retain whatever is left of my sanity for the new security system."



Debbie Sztubinski—Code 30S

"To put our new sailboat into the water for the first time—without involving the Red Cross or the Coast Guard!"

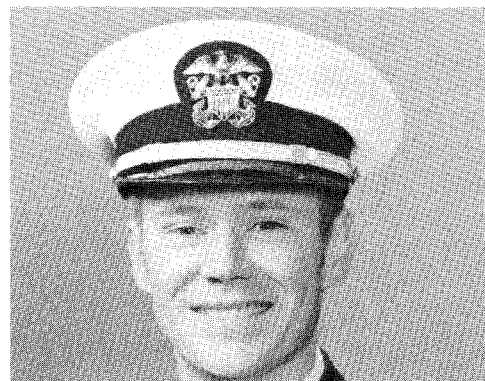


John Scott—Code 07

"To play better golf and help the 'Duffers' to a championship."

LT Edward Redmann—Code 1021

"Keep my garden alive, read more and have a great vacation with my wife."



Mariane Kuebler—Code 80C

"To get my new job, marriage and house off to a great start."



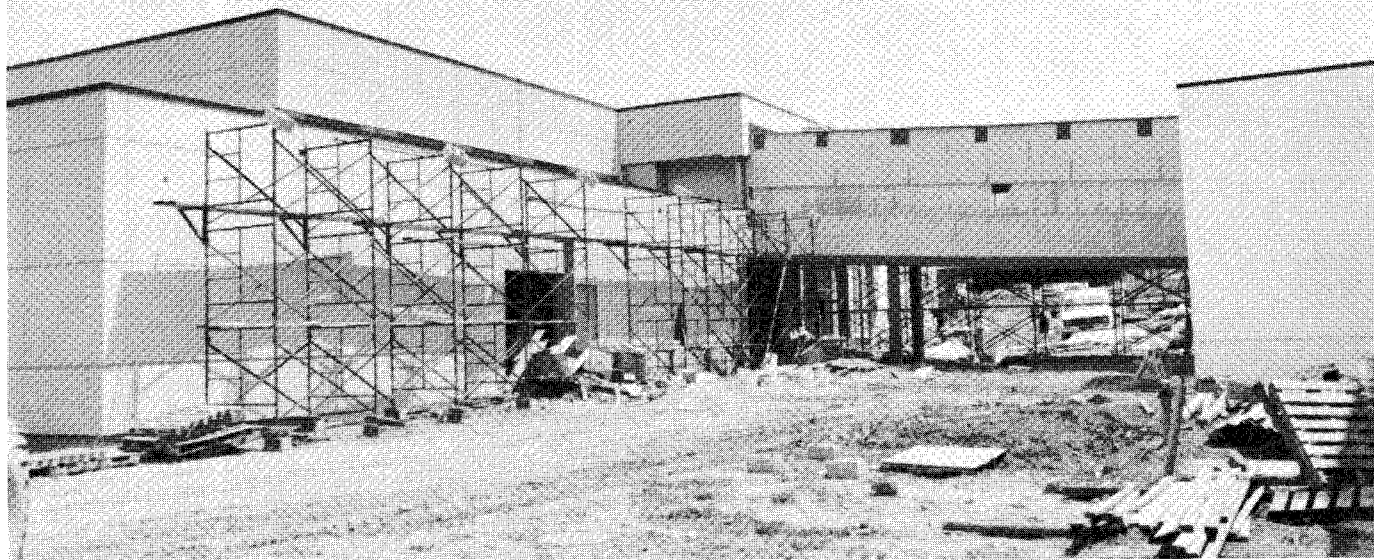


Photo by JO2 Todd Lufkin

TACAMO/GPS LAB NEARS COMPLETION—Nearly 90% complete, this new office and laboratory should be in 'move-in' condition by early July 1987. The facility connects Bldg. 2 and Bldg. 125.

Technology Transfer

(continued from page 3)

of R & D, the fabric has become the standard for tri-service flight suits. It is also used across the country for fire fighters, policemen, and in industrial clothing.

The Nuclear Magnetic Resonator (NMR), now called The Magnetic Resonance Imager (MRI), is used in major hospitals across the country. It is designed to detect and differentiate between malignant and non-malignant tumors. NADC participated in the early research that led to its first commercial application. The MRI is replacing the CATSCAN in many hospitals and represents a major contribution in the bio-medical field.

"One of our more recent technology transfers," Bortman said, "is in the area of corrosion protection coatings—a whole series of coatings from AMAL-GUARD through water-displacing paints."

NADC was one of the first Navy labs to initiate a Technology Transfer effort about 10 years ago. "Now," Bortman continued, "the President, through an Executive Order, and Congress, through their Technology Transfer Act,

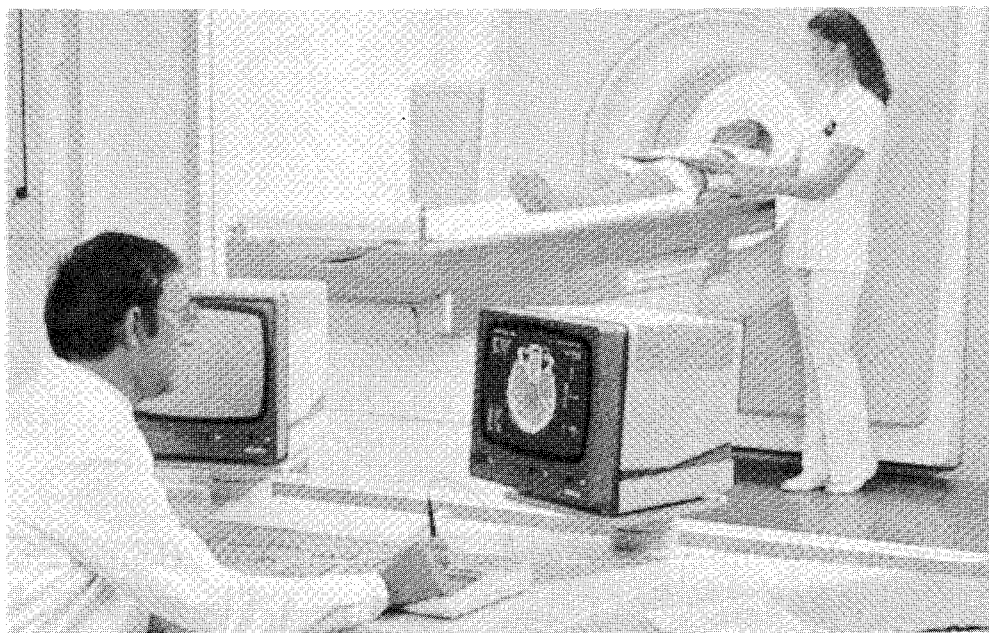


Photo provided by SIEMANS Medical Systems Inc.

Magnetic Resonance Imaging Equipment

are saying to deal with Technology Transfer as a national issue."

Hansen and Bortman agree the whole purpose of this thrust is to spur innovation and productivity in this country. Hopefully, it will help create jobs, improve the trade balance, and boost the economy.

"Here at the Center, I expect a dramatic increase in invention disclosures," said Hansen. "I strongly encourage employees with valid ideas to apply." Hansen believes many people have a tendency to downplay their inventions, but, he noted this may be the incentive needed to report them. Remember—even a new use for an old device could be patentable.

H. Hansen and J. Bortman can be reached on extensions 3000 and 2033, respectively.

Security Reminders

Material classified Secret must be entered in the Center's control system at the time of origination or receipt on the Center. Working papers must be dated when created, marked on each page with the highest classification of information they contain. When working pa-

pers are to be retained more than 90 days, filed permanently, or released outside the command all accounting, control and marking requirements prescribed for a finished document are mandatory. Refer to Paragraph 0807, NAVAIRDEVCEININST 5510.13C.

Promotions

Timothy Armstrong, Ross Barcklow, Brendan Beary, Robin Benz, Desiree Beverly, Eugenia Boyes, William Brown, Angel Carreras, Kevin Casey, Albert Cavalieri, Joseph Cleghorn, Nicholas Conti, R. Bradley Cope, Pamela Craigie, Micaela DiPasquo, Tho Do, Jorge Dominquez, Mary Donnellan, Carol Eberz, James Eck, John Floyd, Timothy Foley, Gregory Folts, Michael Goldberg, Sandra Grazioso, Kenneth Green, Leslie Greenbaum, Holly Hake, Inger Hansen, Robert Hayes, Bruce Heath, Elizabeth House, Brigitte James, Jeffrey Jones, Kenneth Kelly,

Sang Kim, Keith King, James Koch, John Kowalski, Michael Kramer, Richard Kulp, Lorraine Lasorsa, Clara Leeds, Walter Leyland, Robert Love, Robert Mack, Tony Madison, Cheryl McGowen, Chris Miller, Christopher Miller, Joseph Minnucci, James Moore, Lynda Newman, David Nguyen, Nancy Nissley, John Phillips, David Rose, Kevin Ryan, Richard Sames, Catherine Schoenherr, Dennis Shinn, Harvey Sokoloff, Kevin Stayer, Curtis Swatchick, Harry Tyndall, Michael Valdivieso, Judith Walker, George Weller, William Williams.

Hopper to visit NADC

(continued from page 4)

Also in 1984, she received Honorary Degrees from University of Maryland, College Park; Smith College, Northampton, Massachusetts; Saint Peters College, Jersey City, New Jersey; Worcester State College, Worcester, Massachusetts; Hartwicke College, Oneonta, New York; Providence College, Providence, Rhode Island; City College of Morris, New Jersey; and Bloomsburg College, Bloomsburg, Pennsylvania. In 1985 she received Honorary Degrees from Aurora College, Aurora, Ohio; Western New England College, Springfield, Massachusetts; College of William and Mary, Williamsburg, Virginia; River College, Nashua, New Hampshire; Marist College, Poughkeepsie, New York; Saint John Fisher College, Rochester, New York.

She is a fellow of the Institute of Electrical and Electronics Engineers, a member of the Association for Computing Machinery, the Data Processing Management Association, the Armed Forces Communications and Electronics Association, a Fellow of the American Association for the Advancement of Science and a member of the Franklin Institute, the U.S. Naval Institute, and the International Oceanographic Foundation.

She maintained her close connection with the Naval Reserve and was eventually promoted to Commander. At the end of 1966, she was retired with the rank of Commander in the Retired Reserve. She was recalled to active duty on August 1, 1967. On August 2, 1973, she was promoted to the rank of Captain on the retired list of the Naval Reserve. On November 8, 1983, she was promoted to the rank of Commodore with the title of that grade changed to Rear Admiral on November 8, 1985. She served on active duty, with the Naval Data Automation Command as NAVDAC-OOH until September 1, 1986 when her name was returned to the retired list.

All are invited to hear the Admiral speak in Hangar Bay 3, Bldg. 4 at 1300 on July 8th (supervisory permission required to attend). If you can't come in person, the event will be broadcast on close circuit TV monitors throughout the Center.

ANNOUNCEMENT



*The Commander
Naval Air Development Center
Change of Command Ceremony
Captain Edward John Sturm, United States Navy
will be relieved by
Captain Curtis John Winters, United States Navy
on Friday the seventeenth of July
nineteen hundred and eighty seven
at half past one o'clock
Naval Air Development Center
Warminster, Pennsylvania*

Integrity Alert

by Ron Kabin

Use of Government Quarters

Center personnel going on travel are reminded that when government quarters are available but not used, the payment of the quarters' portion of the per diem or actual expense allowances may not be made except when one of the following situations apply:

1. The order issuing authority issues a statement that the use of Government quarters will adversely affect the mis-

sion performance. This exception does not apply to employees attending training courses at a military installation.

2. The Commanding Officer responsible for the Government quarters furnishes a statement that the use of Government quarters is impractical.

3. The Center Commander has determined that the employee's duties will require official travel in excess of 50 percent of the total number of the employee's basic administrative work weeks during that fiscal year.

When government quarters are not available, the traveller is responsible for having a "nonavailability statement" added to their travel orders.

Remember, it is the responsibility of all Center personnel to ensure that our travel costs are kept to a minimum. If you are aware of travel abuse by Center personnel you may report it to the Center Hotline Recorder extension 3015, or to the Internal Review Office extension 3033.

Stay "Dry," Not High, On the Water

by Evelyn D. Harris

American Forces Information Service

Ah, sun, sea and suds—heaven! Unfortunately, if the one enjoying the suds is also piloting the boat, that statement could be literally true.

Last year, 1,116 people died in boating accidents. And more than half of these deaths, according to the U.S. Coast Guard, involved alcohol.

In addition to the lives lost, the Coast Guard said the accidents resulted in 25,000 injuries, and \$420 million in property was lost or damaged.

Researchers have found that even sober boaters are subjected to "stressors"—noise, vibration, sun, glare and motion that can produce "boater's hyp-

nosis." Boater's hypnosis can slow reaction time almost as much as if you were legally drunk. Adding alcohol to these factors only intensifies the effect.

Alcohol also intensifies the effect of caloric labyrinthitis, a fancy term for the disorientation caused by water entering the ear. A drunk person whose head is immersed can become confused and swim down to death instead of up to safety. This explains why some good swimmers who have been drinking drown for no apparent reason.

Those are all good reasons for not drinking and driving a boat. And here's one more—you risk a fine of up to \$1,000, a criminal penalty of up to

\$5,000 and a year in prison.

Coast Guard statistics show that drowning accounts for 85 percent of boating fatalities. Most of those who drowned were not wearing life jackets or personal flotation devices.

According to the Coast Guard, most boating accidents and fatalities are preventable. Get the training you need to pilot your craft safely, and make sure everyone on your boat wears a Coast Guard-approved personal flotation device. For the location of a boating course near you in any state except Virginia, call 800-336-BOAT. In Virginia, call 800-245-BOAT. Overseas, contact your installation safety office.

Mother fathered Father's Day

by JO2 Todd Lufkin

It was Sunday, it was Mother's Day 1909, and Mrs. John Bruce Dodd was listening to a sermon in a Spokane, Washington church. But her thoughts were of her father William Jackson Smart, affectionately known as "Billy Buttons."

She was married now, had her own child, and had more appreciation for the courage it took for her father to face the tragic and early loss of her mother. He was suddenly faced with shouldering the full responsibility of raising his six children . . . five boys and a girl. The more Dodd thought about it, the more she became convinced that fathers, too,

should have a day of recognition.

Throughout the following year she brought her plan up to others and it was well received. In the spring of 1910, she presented a petition to the Reverend Conrad Bluhm, President of the Spokane Ministerial Association, and asked that he suggest to his fellow members that they choose a Sunday in June (the month of her father's birth) to remind parishioners of the appreciation owed to fathers.

The local YMCA helped to sponsor the event and the ministers agreed to preach on this theme. The Mayor of Spokane issued the first Father's Day proclamation. Soon Washington's Governor, M. E. Hay, became interested

and set the third Sunday in June for the state-wide observance.

In 1916, from his desk in the White House, President Woodrow Wilson pressed a button unfurling a flag in Spokane to begin the state observance. Eight years later, in 1924, President Calvin Coolidge recommended that Father's Day be observed in all the states, declaring that such an occasion would "establish more intimate relations between fathers and children, and to impress upon fathers the full measure of their obligation."

The red or white rose is recognized as the official Father's Day flower.

There are many valid claims as to the origins of Father's Day, this is just one.

CNO ADDRESSES SEXUAL HARRASSMENT

Sexual harrassment is a form of arbitrary discrimination which is unprofessional, unmilitary and unlawful, stated chief of naval operations ADM Carlisle A. H. Trost in a recent message.

In recent years, the issue of sexual harrassment in the workplace has received much attention. The Navy's policy clearly states that sexual harrassment will not be tolerated. Sexual harrassment awareness training is provided to all hands in the Navy.

"Our people are expected to observe the highest ethical standards to ensure proper performance of our mission and maintenance of the public trust," Trost said. "It is the responsibility of each of us, using the chain of command, to ensure that any instance of sexual harrassment is dealt with in a very diligent and expeditious manner."

W&R Trip News

Saturday, August 22, 1987—Cape May Magic—Trolley car tour; Physick Estate Tour; free time at Cape May's outdoor mall; tour of the Abbey Mansion and Mainstay Inn. Enjoy relaxing lunch at the Winchester Inn. Bus will depart NADC main parking lot at 8 A.M. and return at 5:30 P.M. Cost \$43.

5 Days/4 Nights—October 29—November 2, 1987. Tour includes round trip air transportation, hotel accommodations, 2 breakfasts, transfers from Orlando International Airport, free shuttle to Walt Disney World, EPCOT, Pleasure Island, and Lake Buena Vista Shopping Center, Applicable taxes and gratuities. Limited number of spaces available. Cost per person \$349. dbl, \$329. triple \$319. quad.

Call Margaret Vigelis, at ext. 3067, for information and reservations.

Loyal to the CORPS

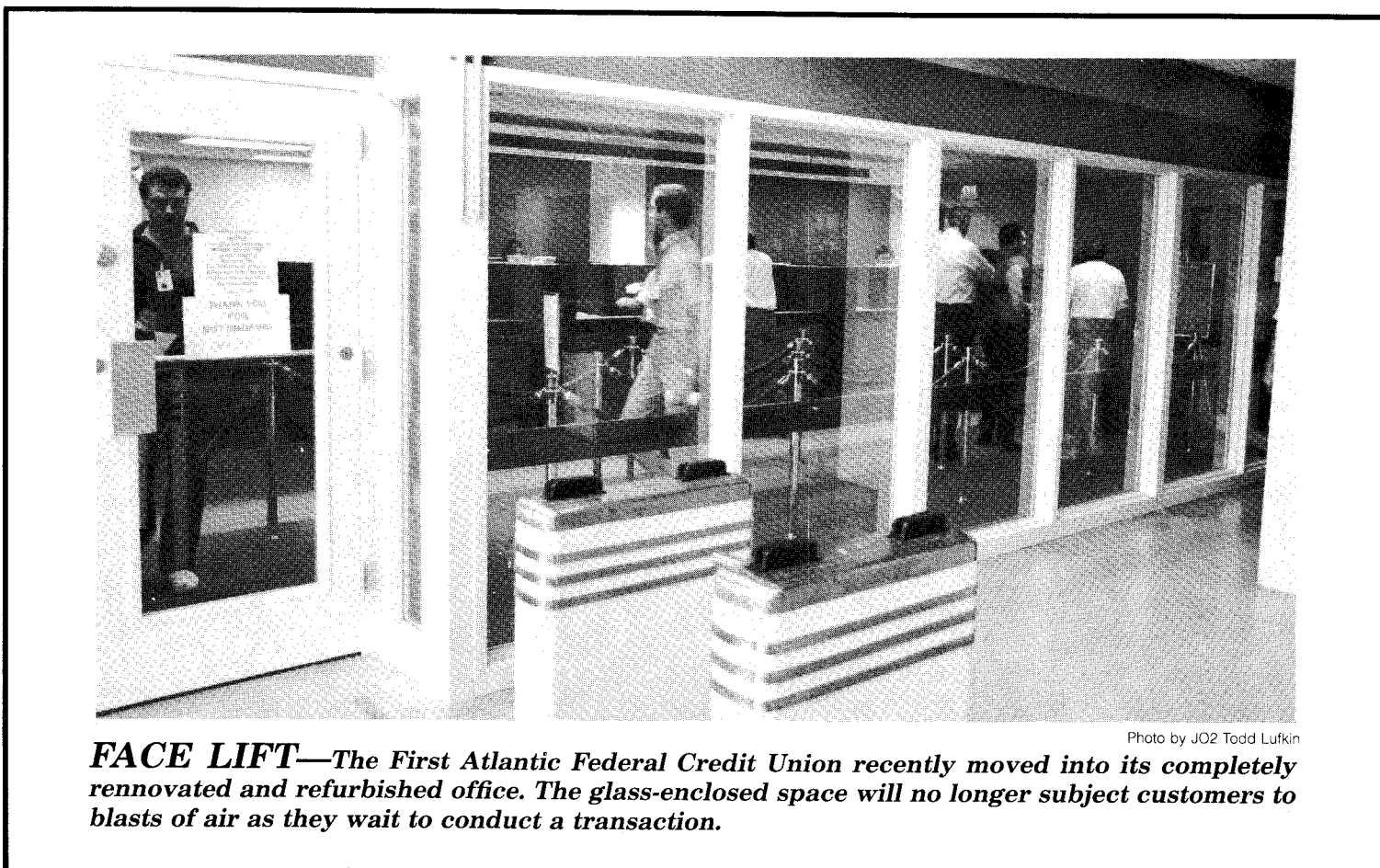
(continued from page 1)

same time that the request is being reviewed.

The implementation of CORPS would not have been possible without major contributions by the Computer Department. Bob Finkelman, head of the Computer Department, provided the programming support and integrated CORPS into the CIS menu system. Finkelman is the alternate ADP Official in Feinberg's absence.

For those of you who may have become accustomed to or comfortable with the old manual system—forget it! Effective 27 April, CORPS became the system for all the acquisition of computer hardware, software or professional services—from a \$50 software package to a \$50,000 piece of hardware.

In order to become accustomed to the new system, you are free to practice with it. Anyone with Center Computer System access and menu can call up CORPS. You can generate a variety of test summaries with no repercussions. A summary does not become active unless and until you attach it to a PR and send it through the approval chain. The CORPS is looking for a few good ADP requests.



FACE LIFT—The First Atlantic Federal Credit Union recently moved into its completely renovated and refurbished office. The glass-enclosed space will no longer subject customers to blasts of air as they wait to conduct a transaction.

Photo by JO2 Todd Lufkin



Volume 32 Number 7

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

July 1987

In This Issue:

Young engineers compete
10th Annual Awards Day
Sports
Superior Civilians cited
CAPT Gallagher retires

*Women's Equality Day Luncheon***Television personality to visit NADC****Sheela Allen-Stevens**

Photo by Showcase Associates, Inc.

The Federal Women's Program Committee (FWPC) will celebrate Women's Equality Day on Wednesday, August 26th with a luncheon and a celebrity guest speaker. The President of the United States has traditionally proclaimed August 26th as Women's Equality Day in recognition of the passage of the 19th Amendment to the Constitution—a significant event in our country's history. This amendment became law on August 26, 1920. The luncheon will be held in the NADC Dining Room at noon and the guest speaker will be Sheela Allen-Stevens.

Stevens has been a feature reporter for WCAU-TV, since 1977. Prior to coming to the Philadelphia area, she was a morning news anchor, reporter and weatherwoman in Buffalo, New York. Before that, she was a reporter anchorwoman in Syracuse and Utica, New York. Initially, her career began as a disc jockey in Utica, New York.

Raised in New York City, Stephens graduated from Queens College in Flushing, New York, at the age of 19, with a Bachelors degree in English. In 1976, she received the Negro and Professional Women's Clubs "Professional Woman of the Year" award. In 1984, she received an Emmy for the Best

Reporter in Philadelphia. Also, she has been honored with a scholarship in her name by the Women's ORT/America, the world-wide organization of Rehabilitation Through Training.

For luncheon reservations, contact Marie Lane, Ext 3061 or Karen Wilsen, Ext. 3926.

NEW ASSIGNMENTS ON CENTER

CDR Wayne Vanderslice has been named Head of the Engineering Support Group replacing CDR Donald Clark who transferred recently. Vanderslice still retains his responsibilities as Supply Officer.

LCDR Jamie Burd has relieved CDR William Mugg as Vertical Flight Program Director.

LCDR Leo Dacey has replaced CDR Kenneth App as the CF-ASWM Program Director.

Graduate study awardees selected

by Edward Calvello

The Center is sponsoring five personnel for the 1987-1988 Graduate Study Award Program (GSAP). This academic year's selectees are Roland Cochran, Doris King, Lorraine Lasorsa, Michael Schneckner and John Williamson.

The GSAP provides an opportunity for competitively selected Center employees to acquire critical, urgently required state-of-the-art knowledges and skills in areas essential to accomplishment of the Center's mission.

Normally, selectees are sponsored for up to one academic year of full-time graduate level training with related authorized academic expenses paid, while receiving their full salary. Applicants must be permanent full-time employees and submit to a comprehensive application review/selection process.

Roland Cochran, a materials engineer in the Aerospace Materials Division of the Air Vehicle and Crew Systems Technology Department, will undertake an interdisciplinary program of study in materials engineering at the University of Delaware. This training will assist him in the development of new composite materials which will significantly impact the implementation of thermoplastic materials on naval aircraft.

Doris King, an electronics engineer (EE) in the Communication Technology Division of the Communication and Navigation Technology Department, will study signal

processing and communications theory at Drexel University. Her studies will provide her with significant additional signal and communication theory capabilities required in endeavors such as the Aircraft Electromagnetic Communications Block and High Frequency Anti-Jam Program.

Lorraine Lasorsa, a computer scientist in the Software and Computer Technology Division of the Systems and Software Technology Department, will study Computer Software Engineering at Villanova University. Her program of study

will enable her to lead efforts in support of the development of weapons systems software for numerous critical Navy-wide projects including LAMPS, P-3, ASP CV, and the S-3.

Michael Schneckner, an EE in the Microwave Technology Division of the Mission Avionics Technology Department (MATD), will study electrical engineering with an emphasis on signal processing at Georgia Institute of Technology. This training will assist Schneckner in the development of the next generation airborne

early warning radar which will make extensive use of signal processing techniques for target detection.

John A. Williamson, an EE in the Electro-Optics Development Division of the Mission Avionics Technology Department (MATD), will study electro-optics and remote sensing at the Naval Postgraduate School. This training will assist Williamson in the evaluation of the Navy's medium-range remotely piloted vehicle proposals and the development of a reconnaissance capability for naval aircraft.



Photo by JO2 Todd Lufkin

L. to r.: Center Commander CAPT Edward Sturm, Michael Schneckner, John Williamson, Lorraine Lasorsa, Roland Cockran, Doris King and Guy Dilworth, Technical Director.

Letters to the Editor

Letter to the 'I wonder why morale is bad' column . . .

Picture this . . . You arrive at NADC in a raging rainstorm and park in lot #2 (the back lot). You get out of your car and wade through the many rivers in the lot. No problem for you have been doing that for years! You arrive at the gate, with briefcase in one hand and umbrella in the other. The rain is pouring and the wind is blowing. There is a line at the one gate as the people ahead of you put down their briefcases and run their card through the narrow gate. Finally you made it through! Quite a way to start your day.

This is not a fairy tale. It is how life will be at the lot #2 gate. Do you wonder who

designed, or at least approved the design, of this gate? Well it was fellow employees. The great service departments of NADC. In this case the Public Works and security departments. Yet another example of poor planning. Obviously those who should have reviewed the plan either knew no better or did not care. What should be done is that every department head, branch head and other managers should be required to go through the exercise as described above!! We have them to blame. Thanks for making NADC a better place to work. Oh yes and you cannot use security as an excuse here. It just doesn't hold up!

THE FEELINGS OF MANY EMPLOYEES



Photo by Jim Kingston

WARMINSTER ROTARY DINES AT NADC GALLEY

On July 7th the Warminster Rotary visited the NADC Galley for their weekly luncheon meeting. Above, Rotary officers discuss the election of next year's officers as part of the day's business.

Editorial response

Dear Feelings of Many Employees:

Remedial action is in process. Thank you for your concern.

Dear Editor:

Perhaps you can clarify for me and other Reflector readers, the motives behind the restrictions on acceptance of promotional material from airlines, car rental agencies, etc. I am referring to the article entitled "Give 'me Your Gimmicks, Gadgets, and Giveaways" on page eight of your November 1986 issue. Let us consider, for example, bonus tickets and mileage credits. Such items are offered to individual travelers, providing them with discounted travel and accommodations on future trips.

I agree one hundred percent that such items, if transferable and useful to the government, should be turned in. The taxpayers paid for the travel and should receive the benefits, if possible. If the government can realize discounted travel through these programs, then it should by all means.

I do not understand, however, why a traveler should be required to turn over items that are of absolutely no use to anybody else, including the government. For example, airlines will usually open frequent flyer bonus accounts in the name of an individual and only that individual is permitted to

exercise the benefits thereof. In this case, the government (taxpayers) has nothing to gain from the individual traveler's frequent flyer benefits. In the name of protecting against fraud, waste, and mismanagement, we are saying that nobody can take advantage of these benefits. That is a waste in itself.

I do not see how acceptance of such awards could be considered a violation of SOC, either. We are often restricted in our choice of airlines along a particular route by Travel in order to ensure the lowest cost to the taxpayers. When we do have a choice, if it would not otherwise matter which airlines or hotel was chosen, why should we be restricted from choosing the best service and accommodations, which would include promotional items? And, since these perks are available to all travelers, they could not possibly be given to influence government contracts.

Travelling and being away from family at times is part of working at NADC. These perks could help make up in a tangible way, at no cost to the taxpayer, for the inconvenience of official travel. Why do we deny them to our people?

An NADC Traveler

Promotions

William Bailey, Nora Beck, Dennis Bellevou, Mary Bruno, Laurie Bryner, James Campana, Barbara Canada, Charlesann Canada, Peter Carroll, Susan Casagrand, David Choi, William Clark, Laurence Coar, Jeffrey Cook, John Cyprus, Harry Deal, Mark DiBellis, Alexis DeLeon, Steven DeLuca, Carol Ann DiCicco, Rosemary Dominic, Paul Drexler, Ida Duncan, Gary Dunn, John Eckert, Lynne Edwards, Michael Elser, Catherine Fertner, Brian Fillette, Patrick Ford, Joseph Frisco, Tommy Gardner, Christopher Giranda, Raymond Glemser, Thomas Gould, John Greiner, Garry Gross, Alicia Harper, Janice Hinchliffe, Otis Johnson, Ann Kehan, Barry Kirsch, Paul Kulowitch, Leslie Kuntz, Paul Labonski, Herbert Leitsch, Steven Lyness, Christopher Malitsky, Lindsay Markus,

Milan Maxtura, Robert Marzacco, John Mayo, John Mikulich, Michael Mocenter, Theodore Morrison, Robert Nagy, Scott Natter, Kristina New, Junious Newman, Denice Parrish, John Petro, Charles Pizzichello, John Prendergast, Mykola Procyk, Jaime Puppek, Catherine Ramirez, Ronald Roadarmel, Nancy Rodriguez, Martin Ryan, Mark Salamon, John Savage, Christopher Schaefflein, Michael Schultz, Edward Seibert, Michelle Smith, Martha Snyderwine, Charles Supinski, Asha Varma, William Vaughan, Maryann Vernot, James Ward, James Waugh, Lewis Wertley, Stephen Wichrowski, Mary Williamson, Carole Wilson, Joseph Wolfe, Frank Yelinek, Edward Zantek, Theresa Zoltowski, Angelo Zuino.

Editorial response

Dear NADC Traveler:

The article which prompted this letter accurately sums up the rules regarding the handling of frequent flyer coupons and other bonuses and promotional items involved with Government travel. At this point, the rules themselves are pretty well established. The reasons behind the rules are not as clear.

One thing which many people don't realize is that frequent flyer coupons and credits, even when not transferrable, can be used by that particular employee on future Government travel, and I understand that employees are expected to turn these in to the Travel Office for possible utilization on future trips.

In those cases where it is clear that the employee will not be going on official travel before the expiration date of a coupon, and thus, if he does not use the coupon for his own personal use, it will simply be wasted, what harm is there in his using it himself? Although it can be argued that this should be allowed, the rules are clear that this is impermissible. The rules have been developed in various decisions of the

General Accounting Office (GAO), the recognized authority on matters such as this. GAO has consistently cited the following two reasons for this restriction.


(1) A real or perceived conflict of interest can be created when an employee accepts any sort of benefit from a private source. The fear here is that the decision of which airline or other carrier to use when making travel arrangements, or even whether to travel in the first place, might be dictated by the employee's personal desire for certain travel benefits, without regard for what is best for the Government.

(2) Acceptance of such benefits amounts to a double reimbursement to the employee from the Government and a private source. There is a statute which prohibits the supplementation of an employee's salary by private sources, and GAO has stated, "If a free flight for personal use was given to an employee by an agency, this would be tantamount to an illegal supplement of the employee's salary."

It may help to remember that these sorts of benefits are earned as a result of the

performance of official Government business, which is paid for by Government money. While it would certainly be nice if Government travelers could make personal

use of these benefits, GAO has decided that in view of the possible dangers inherent in such use, only the Government itself may take advantage of these.



Reflector

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

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Commander, NADC	CAPT Curtis J. Winters
Technical Director	Guy C. Dilworth, Jr.
Public Affairs Officer and Editor	James S. Kingston
Associate Editor	Mary Ann Brett
Assistant Editor	JO2 Todd Lufkin

'Young engineers' compete at NADC

The Greater Philadelphia Section of the American Institute of Aeronautics and Astronautics (AIAA) held its First Annual Young Member Paper Competition on June 17th and 25th in the NADC Dining Room. Presentations covering a variety of aero topics were made by nine of the Center's top young engineers. Also featured at each of the luncheon meetings were keynote addresses including one by Anthony McVeigh of Boeing Vertol on the V-22 Osprey, and by Dr. Donald McErlean, Director of the Air

Vehicles and Crew Systems Technology Department who gave a rousing talk on technology and innovation.

The Philadelphia AIAA has been very active at NADC this past year and as a result has grown considerably in local membership. This competition was an educational activity designed to provide a forum for members to gain local recognition as well as to improve the overall quality of technical papers for national competition. The presenters were judged on their visual

aids, preparedness, impact, delivery, poise, and response to audience questions. The panel of judges included Dr. Edward McQuillen, Richard Mitchell, Michael Herskowitz, Nick Ororato, and Thomas Fenerty, who had a difficult time selecting winners from the many excellent briefings given. Although the winners of the written paper competition have not yet been determined, the winners of the oral presentations are as follows:

(continued on page 7)



Tony McVeigh Boeing Vertol V-22 Program Manager addressed the AIAA luncheon meeting at NADC.

Category I— Less than 10 years since Bachelor's Degree

1st Prize:



Judith Kayser

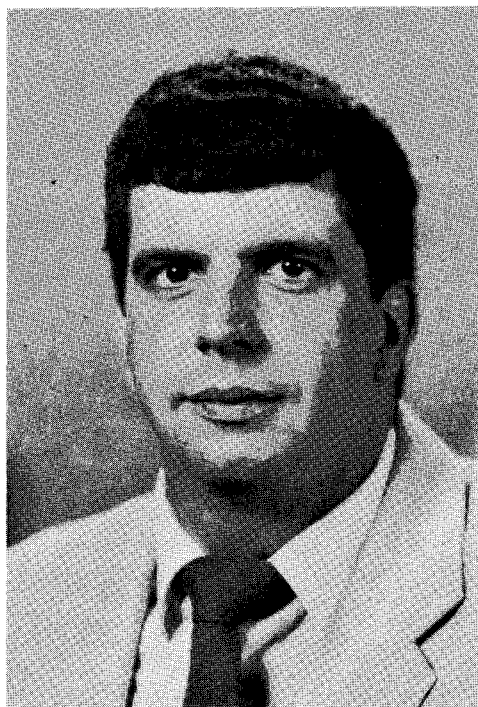
TITLE: An Approach to Compensation Of Actuator Rate Saturation

AUTHOR: Judith Koper - NADC (Code 601)

Rate limiting occurring in the flight control surface actuators can cause unsatisfactory flight control performance and in many cases pilot induced oscillations. The problem is particularly acute in the power approach configuration when surface effectiveness is reduced. Results of a study using non-linear actuator loop closures that compensate for rate saturation by trading "gain" for "phase" were presented. Utilizing a rate limited actuator model, a comparison of a rate limited response with a compensated response was made. Tools used for comparison include time histories for identical actuator commands and computation of mismatch parameter of a level I aircraft and a rate limited actuator with and without a compensator.

Category II— More than 10 years since Bachelor's Degree

1st Prize:



Bill Flannery

TITLE: Lightning Protection of Aircraft
AUTHOR: Bill Flannery - SEMCOR, Inc.

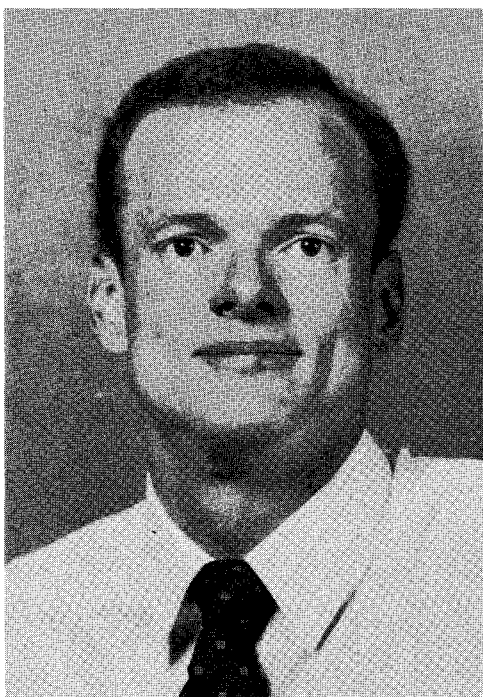
This presentation discussed lightning and its effects on aircraft. The electrical and physical characteristics of lightning were discussed as well as the conditions under which aircraft are most likely to receive strikes. Lightning/aircraft contact including its effects on fuel, electronics and the airframe were mentioned.

2nd Prize:

TITLE: Top Assembly Drawings of Aircrew Personnel Configurations: New Items To The Fleet In Less Than Half The Time

AUTHOR: Michael P. Cannon - NADC (Code 6033)

The Life Support Engineering Division is developing Top Assembly Drawings (TAD) of Aircrew Personnel Configurations (APC) that will specifically describe each crew station in every naval aircraft for each season (summer and winter) and condition (over land and water). Development of these drawings will provide an easier means of managing and modifying existing and future APC's. In addition, it will provide the potential for a faster introduction of new items of Aviation Life Support Systems (ALSS) for in-service use via Engineering Change Proposals (ECP's). As a result, the introduction of new ALSS items can be accomplished by processing engineering changes via ECP's against the "top assembly" of the specific aircrewman. This process will provide new or improved systems for operational use in less time required for traditional full scale Research and Development/Acquisition programs. Further, it will encourage the submission of changes from the Fleet for operational ALSS items they are using and from industry for ALSS items they are producing.



Michael Cannon

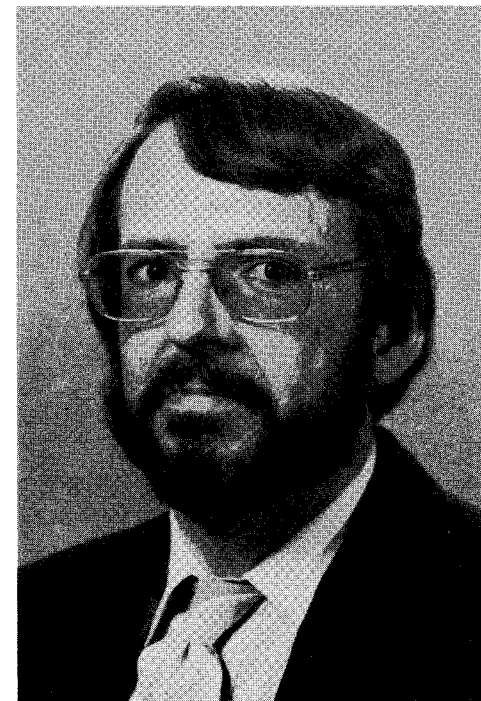
2nd Prize:

TITLE: Abstract Design And Analysis Of Thick Airfoils For A Long Endurance Vehicle

AUTHOR: Doug Hall & Sam Greenhalgh - NADC (Code 6051)

A thick airfoil study is being conducted to support the development of a long endurance vehicle. For the vehicle's mission an airfoil is required to maximize endurance at subsonic Mach numbers and to be thicker than conventional airfoils. The airfoil study includes the analysis of published thick airfoils and the design of several thick airfoils.

The results of the analyses were presented as sectional lift versus sectional drag. Published data were compared with the results of the analyses. As a measure of the contribution of the airfoil to the endurance of the wing, the sectional lift to the 3/2 power versus the sectional drag (the "sectional endurance") were presented for each analyzed airfoil. The Marsden airfoil was found to have the best sectional endurance.



Doug Hall

Tenth Annual Commander/Technical Director Achievement Awards



Capt. Edward J. Sturm
Commander

“It is with great pleasure that we present to you the 1987 Naval Air Development Center Awards

”
... ”

Scientific Achievement Award

The Scientific Achievement Award is presented to that individual who has brought significant recognition to him or herself and the Center for a major scientific achievement.

Georg D. Frisch of the Human Factors and Protective Systems Division received this award. Frisch's independent development of the Bioman Mathematical Modeling System resulted in the biofidelity manikin and crash recorder spinoff programs which are the first of their kind and are recognized as significant contributions to the state-of-the-art. They have generated extensive interest in the user community and form the basis for several joint programs, both within DOD as well as private industry. Frisch used the model to evaluate and define pilot crew station accommodations for F-18, TF-18, and AV-8B ejection dynamics and clearance envelopes. He developed analysis techniques which have been formally incorporated into pilot screening procedures and the evaluation of escape systems. It was estimated his isolation of pilot clearance saved \$50 to \$100 million in potential retrofit costs. A most important recent application of Frisch's Bioman model is in the evaluation of NASA's Orbiter escape system. The ability to address these problems in detail exemplifies the scope and sophistication of his contribution.

Engineering Achievement Award

The Engineering Achievement Award is presented to that individual who has brought significant recognition to him or herself and the Center for major contributions to advanced technological engineering.

Gerald D. Ferguson of the Electro-Optics Development Division received this award. Throughout Ferguson's entire career at the Center, he has been active in the development of lasers and electro-optical devices and instrumental in making the Center a leader in the field of blue-green lasers. Ferguson's earliest work

dealt with advancement of photo reconnaissance systems used effectively in Viet Nam. Of significance is his engineering of a high powered laser for ranging through the water, and his laser enhancements leading to a successful demonstration of submarine detection from an SH-3 helicopter. Ferguson also designed and constructed a 400 HZ, 22W prototype laser to operate in a mode capable of generating the extremely short pulses needed for airborne ocean bottom mapping that was later used by the Defense Mapping Agency in a hydrographic airborne laser sounder system. He has made significant contributions in other laser applications including components for submarine laser communications, and electro-optic countermeasures. Ferguson's numerous reports and patents earned him national recognition, placing NADC at the forefront of laser technology for Naval applications.

Project Leadership Award

The Project Leadership Award is presented to that individual who has brought significant recognition to him or herself and the Center for major achievements through project leadership.

LCDR Timothy Singer of the Human Factors and Protective Systems Division received this award. Singer's inspired and innovative leadership as Block Program Manager and Advanced Development Program Manager for Air Human Factors Engineering (HFE) increased the operational capability of the Navy. He successfully conceptualized, planned and managed the execution of a new program which reduced the time required to transition decision aids to actual Fleet use. A striking example is the transition of a Sonobouy Pattern Analysis Decision Aid (PANDA) from the 6.2 state to Fleet use in only 9 months. Singer supervised 14 separate teams of scientists and engineers from the NAVAIRDEVCCEN, NAVWPNCEN, NAVAIRTESTCEN, PACMISTESTCEN, NAVAEROMEDRSCHLAB, New Mexico



Winners of the 10th Annual Commander/Technical Director Achievement Awards display their plaques, certificates and checks on the stage after the ceremony. L. to R.: CAPT Edward Sturm, Gerald Ferguson (\$4,000 Engineering award), Ira Bellew (\$2,000 EEO award), Georg Frisch (\$4,000 Scientific award), John Harding (\$2,000 EEO award), Marlene Grubb (\$2,000 Administrative

State University, along with joint efforts with the U.S. Army and U.S. Air Force. His expertise significantly helped Fleet Safety when his development of a Field-Of-View Evaluation Apparatus, in its first field test, resulted in the redesign of the V-22 windscreen prior to the final design freeze, thus avoiding an unsafe Field-of-View problem. Singer's professional attitude, management qualities and personal standards raised morale, improved inter-laboratory communications and cultured excellent relationships with the Center's sponsors.

Analysis/Analytical Achievement Award

The Analysis/Analytical Achievement Award is presented to that individual who has brought significant recognition to him or herself and the Center for major achievement through the application of engineering or scientific analyses.

Joe Phillips of the Systems Analysis Branch received this Award. Phillips analytical abilities led to significant enhancements of the weapons simulations used in the Tactical Aircrew Combat Training System (TACTS) and Integrated Tactical Decision Aid (ITDA) Program. He analyzed and developed more than 60 weapon simulations and computer programs for solving TACTS problems. His efforts enabled use of the TACTS simulations in other applications including a Short Range Missile study, Phoenix Missile Improvement study, AMRAAM studies and Harpoon Fire Control simulations. Phillips developed

techniques enabling more efficient use of computer memory and throughput which are the forerunners of the High Speed Reduced Core Reentrant programs now being developed. His work on the AAW-ITDA resulted in a complete redesign of the AAW module to provide the Fleet with programs which improve the speed and accuracy of AAW tactical decision making. Phillips outstanding abilities and conscientiousness enhanced the Navy's military position and brought credit to the Naval Air Development Center.

Aviation Support Award

The Aviation Support Award is presented to that individual who has made an outstanding contribution to the technical research development, or evaluation mission through personal endeavor in the maintenance, modification, installation or logistic support of aircraft assigned to this Center.

AE1 David Dickson was presented this award. Dickson's expertise on P-3 electrical systems, coupled with his duty as a P-3 flight engineer, has resulted in significant improvements in the Center's aviation program. His contributions have touched all aspects of aviation support from conducting scheduled and unscheduled maintenance on Center aircraft to providing technical assistance for project installations and conducting project tests as a flight crew member. Some of his most noteworthy accomplishments include supervising the reworking of the fuel quantity indicating

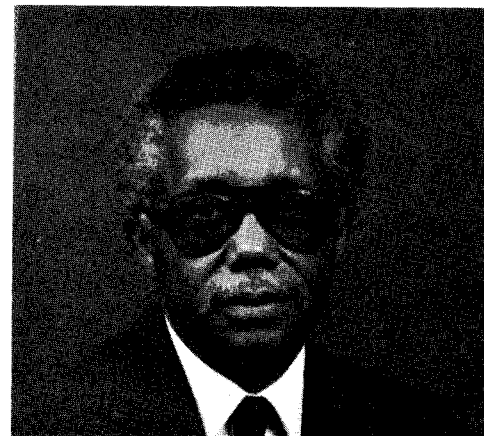
★ ★ ★

Congra

Under/Technical Director Awards Presented



“We are proud to recognize you as an important and valuable member of the NADC team



Guy C. Dilworth, Jr.
Technical Director

”
... ”

Edward J. Sturm
EDWARD J. STURM
Commander

Guy C. Dilworth
GUY C. DILWORTH
Technical Director

Equal Employment Opportunity Award

award), Larry Edwards (\$2,000 Technical award), LCDR Timothy Singer (\$4,000 Project Leadership award), Michael Wolfe (\$2,000 Administrative award), Joe Phillips (\$4,000 Analysis award), and Guy Dilworth, AE1 David Dickson (\$2,000 aircraft support award) was not present.

system on several of the Center's P-3 aircraft, normally a Depot-level maintenance function, and recommending modifications to a magnetic compass planned installation which enhanced the precision and accuracy of this unique system while saving valuable time and cost. Dickson's dedication, motivation and professionalism continue to show his commitment to the Center's aviation program. Through your efforts many of our projects have had successful flight phases which have measurably enhanced the reputation of this Center.

evaluation, ALW-149 communication jammer and numerous advanced sonobuoy antenna designs. The fact that Edwards is frequently consulted by personnel from other Navy laboratories and contractors on technical details of particular antenna and radome designs as well as on test facilities and techniques is recognition of his demonstrated contributions in the field. Additionally, Edwards still finds time to be associated with junior engineers and co-op students, guiding and teaching basics in communications and antenna design.

was Grubb's ability to sustain the superior operation of two concurrent personnel data bases. To integrate this second conversion with the Center Office Automation System she chose to deviate from the recommended Navy configuration and adopted a locally oriented system which still complied with all of the Navy requirements. Despite this expanded scope of the conversion, her efforts in converting to NCPDS still resulted in the earliest drop of the older NACMIS experienced by the Department of the Navy. Grubb's expertise in NCPDS conversion is recognized throughout the Navy laboratory community as evidenced by the consultation and guidance she provided to other commands through individual visits and formal presentations and workshops which she conducted.

This award is presented to the individual who has brought significant credit to himself or herself and the Center for major achievements in promoting Equal Employment Opportunity.

Ira Bellew and John Harding shared this award.

Bellew served as Center EEO Chairperson, as an instructor in the Minorities in Engineering Program and as an EEO Counselor. He is continually sought out by employees who place their trust in him because of his ability to identify himself with their feelings, thoughts and attitudes in solving interpersonal problems. Bellew's efforts in this area are marked by compassion for fellow human beings as he works behind the scenes and outside the glare of public recognition. His record of helping others less fortunate than himself extends beyond the Center to conducting group therapy for drug addicts and alcoholics at the Good Friends Halfway House and to counseling, instructing and befriending juveniles at the Philadelphia Youth Study Center, Seighton Farms for Girls, Holmesburg Prison, Camp Hill Prison and the Philadelphia Detention Center.

Harding's excellent leadership and inherent commitment have been responsible for numerous successes in the Center's Equal Employment Opportunity Program. In the areas of recruiting and hiring his example serves as a model for all supervisory personnel. Harding represented the Center and led negotiations to have the Naval Air Development Center included in a Logistics Intern Training Program in which the Center committed itself to recruiting, selecting, hiring and training minority engineers. He made numerous visits to predominantly minority group colleges and universities to recruit students majoring in engineering and the sciences. His efforts on behalf of the Center as part of the Navy-sponsored Shore Equal Opportunity Program and Cooperative Educational Programs have reaped significant tangible results in the development and training of minority personnel. In the area of community outreach programs, Harding has been the driving force in the Center's involvement in the Philadelphia Regional Introduction for Minority Engineering (PRIME) and Space Research Capsule (SPARC).

Wolfe made major contributions to the effective financial management of the Naval Air Development Center. In a financial control environment which requires direct transmission of financial information to the NAVCOMPT computer data base, he consistently prepared high quality guidance to all cost center managers. Their inputs have consequently required a minimum amount of revision in preparation of the overall budget. In the past two years his efforts enabled overall Center manpower estimates, a critical factor in establishing a sound budget, to be within one percent of target. Previously, his analysis of the Center's financial performance compared to other Navy laboratories identified the need to improve overhead expense and labor rates. Wolfe's work sparked a sustained period of improved financial management which today makes the Center one of the most cost-efficient operations within the laboratory community. His deep personal involvement in the recent Manage-to-Payroll process is especially noteworthy in that it enabled the Center to continue to operate efficiently and effectively in spite of the enormously complicated data conversion and analysis requirements. Wolfe's efforts played a truly major role in helping Center managers develop sound budgets and conduct financial operations and have given the Center a reputation of being able to respond with accurate and timely information to even the most complex request for financial data.

Technical Support Award

Administrative Support Award

The Technical Support Award is presented to that individual who has brought significant recognition to him or herself and the Center for major contributions to the support of the Center's technological achievements.

The Administrative Support Award is presented to the person who has made significant and identifiable administrative support contributions to the smooth and efficient operation of his or her Department or the Center at large.

Marlene J. Grubb shared this award with **Michael L. Wolfe**.

Lawrence V. Edwards of the Microwave Technology Division received this award. Edwards participated in state-of-the-art development of multiband feed antennas for use in gathering electronic intelligence data and established a full scale aircraft test facility at this Center which enables both antenna and full up system test of communications and electronic warfare equipments on the actual platform where they will be eventually housed. His contributions to project work are also significant in the development of the ALQ-86 center line pod for the A-6A, A-4, A-6 and A-7 aircraft, the LAMPS APX-82 and APX-76 radar, MIBAR pod design and

As a key part of the Civilian Personnel Department, Grubb made significant contributions to the Center and the Navy in developing and operating a high quality, responsive computerized personnel data system. In the past five years, responding to Navy directives, she planned and executed two separate conversions of the Center's civilian personnel data base, first to the Navy Automated Civilian Management Information System (NACMIS) and then to the Naval Civilian Personnel Data System (NCPDS). Each effort was enormous in terms of the volume of information and complexity of the conversion. Especially noteworthy during the conversion to NCPDS

Sports

Bandits could steal championship

by Charlie Destra

The first-year Bandits were perched atop the league's standings at press time, with the teams approaching the stretch run of the season. They were cruising along with only one loss in 12 games and punching out 16 runs per game, tops in the league.

It's unheard of for a new club to post the season's best record, or go on to win a championship, but the Bandits have a legitimate shot at accomplishing those feats. They've shown they can play with anybody, knocking off several tough, established teams.

With all due respect to manager Pete Carroll, who's handled the helm superbly, Rick Sames gets high marks for recruiting and molding, a quality team that plays as though they've been grouped together for years. The Bandits' strengths are their hitting, which doesn't seem to let up throughout their lineup, and their overall team speed, which they use to good advantage with aggressive and daring baserunning. With seven games left on their schedule a lot can still happen, but they won't be easy to catch.

Already, there's a growing interest in the Bandits' upcoming matchup against the Granfalloon (which will have been played by this printing), and the feeling here is that the game will represent their real test. The defending champs will set out to make a statement to the entire league—that they're still the team to fear. A loss could negatively affect the 'Falloon's confidence, and

ultimately, their hopes of repeating as champions. A win for either team could put them in the driver's seat in the playoffs.

Trailing the Bandits by just a few percentage points is another new team, the Misfits. Manager Jim Kearney has reunited some former Misfit players and added some key others to blend together another superior club. Two veteran squads, the 8th Inning and Nightriders, are just a half game off the Misfits' pace at 11-2. All of these teams are right on the Bandits' heels, and are genuine threats to reach the top position.

And then we have the Granfalloon at 12 and 3, but don't let that record fool you. Although they probably won't wind up with the best record, they know—and the rest of the league knows—that the tangibles and intangibles should favor the 'Falloon against any opponent in playoff competition. They have a storeload of pride and confidence, and have defined and epitomized the meaning of character in this league over the last decade. And, they still have the premier fastballer on the mound in Greg Heydet. As strong and gifted as the previously mentioned clubs are, they would face a difficult task in topping the 'Falloon in an extended playoff series.

Nonetheless, not much separates the top five teams by way of statistics. They all average between 13 and 16 runs scored per game, and between 3 and 6 runs surrendered. They all have the tools to go all the way and one of those teams should be drinking the champagne in August.

Still dangerous, but seemingly lacking a killer instinct, are the Bearcats (9-4) and

Druids (10-5), next in line. No one would be surprised if either of these teams drift deep into the playoffs, but the Druids aren't quite scoring like they used to, and the 'Cats have been letting their opponents cross the plate too much.

The Devils and CSC (8-5) follow, and should also seal up playoff spots. The Devils get into a lot of high-scoring slugfests, but sometimes they take more punches than they dish out. CSC (a new entry) played together last year in another league, and it shows. While their offense is a little shy, their defense is quite good. That would leave one available playoff position left.

Five teams, fairly evenly matched, are grabbing for that last straw. Signs, however, are pointing primarily to the Pacer (6-5) and the rejuvenated and surging Guzzlers (6-6). The Pacer has the good pitching with Rick Brodeen on the mound and a fine defense, but off-season defections have significantly reduced their run-scoring ability. The Guzzlers are suddenly back in the picture, thanks chiefly to the recent acquisitions of a couple of new players who wield very lively bats. Their renewed confidence, along with their experience and winning tradition, may prove to be strong allies—and the difference—at crunch time. Working against them, however, is a very tough stretch-run schedule.

The Rebels (7-9) and Renegades (5-7) follow, and both have been beset by some hard-to-swallow, close losses this year. Yet they are opportunistic teams with tough, winning mentalities, and could reverse those losses down the stretch. Orange Crush, at 4-7, though mathematically alive, seems to be too soft defensively to challenge. They are giving up 14 runs per game, which shouldn't be good enough to finish in the upper half.

The remaining group (Dawgs, Rumlbers, Cellar Rats, Phantoms, Analytic Animals, and Dyna Tigers) are out of it, but can salvage disappointing seasons by assuming a spoiler's role in the remaining games.



July 4th

Happy Birthday America

by JO2 Todd Lufkin

There was confusion as when to celebrate the birthday of the United States.

The Continental Congress, meeting in Philadelphia, approved a resolution for independence on July 2nd, 1776, adopted the formal Declaration of Independence and read it to the assembled Philadelphia citizens from the steps of the Pennsylvania State House (now Independence Hall) two days later on July 4th. The actual signing of the Declaration took place the next month on August 2nd, after the document had been transcribed onto parchment.

John Hancock, the President of the Continental Congress, was the only one to sign the original rough on July 4th thus legitimizing the document; he and 51 other delegates later officially signed the parchment copy on August 2. The last of the 56 signers, Thomas McKean of Delaware, didn't sign it until 1781.

You can see why the birthday of American Independence could just as easily be celebrated on July 2nd, July 4th or August 2nd! Philadelphia arbitrarily chose July 4th.

The initial Fourth of July celebration, took place on the first anniversary of the Declaration of Independence, in 1777. Boston, New York City and Baltimore celebrated mainly with sermons, while many places didn't celebrate at all. Philadelphia, being the Revolutionary capital, had a huge celebration, that included sermons, the ringing of bells, candles lit in

every window, bonfires, planned and impromptu 13-gun salutes, countless speeches, an official dinner, a captured German band playing patriotic tunes — and fireworks. For over two centuries fireworks have been a part of the Fourth of July, partly because they represented the musket and cannon fire of the Revolutionary War and partly just for fun.

Though 1776 saw Philadelphia occupied by the Redcoats, the celebration had spread to other parts of America. By the late 1790s the day was referred to as Independence Day; by the 1820s it had been shortened simply to "the Fourth."

Benjamin Franklin attended some of Philadelphia's July 4th festivities during the Constitutional Convention in 1787. It is said that some delegates were assigned to attend the functions with Franklin to try to deter his almost unstoppable tendency to violate the convention's rule of secrecy.

Two other signators of the Declaration, Thomas Jefferson and John Adams passed away on the 50th anniversary of the signing.

By the early 1800s patriotic speeches, especially anti-British ones, ruled the day. By the 1840s the religious overtones of the holiday would be replaced with the now-traditional Fourth of July picnic and the every popular sports and games.

In 1941, President Franklin D. Roosevelt proposed and Congress overwhelmingly passed legislation making July 4 a federal legal holiday.

Happy 211th Birthday America!



Photo by JO2 Todd Lufkin

"STRIKE UNIVERSITY" VISITS NADC—CAPT Robert Brodski of the Naval Strike Warfare Center (NSWC) in Fallon, Nevada briefed interested employees at NADC on the warfare center's capabilities. This Nevada Center has primary authority for strike warfare tactical development. Attendance at their special training sessions has increased dramatically in recent years, i.e. approximately 300% since 1984. Training concentrates on scenarios in the A-6, A-7, and F-18 aircraft.

Commander Salutes

Tim Armstrong (Code 83): For initiative and Public Works expertise which enabled the Center's EEO Program to expeditiously identify and implement action on non-accessible areas for handicapped persons.

Maureen Marrow (Code 03): For contributing to the success of the "Management and Leadership Development Seminar" for the Office of Civilian Personnel Management.

Kathleen Gause (Code 03): For contributing to the success of the Philadelphia Area Navy EEO Council's Sixth Annual Manager's EEO Training Workshop.

Margaret Clark and Carol Beckett (Code 0000): For fine performance and assistance to Reserve Unit 0193.



Anorexia and Bulimia

Eating yourself to death is easy to deny

by Evelyn D. Harris

American Forces Information Service

What if you could eat all you want and not get fat?

Some people think they've found the secret for how to do just that, but soon discover that "eating and purging" can become an addiction and a trap.

Bulimia — the name for this — is more common than many people think, because its victims are good at hiding the problem. For military people, hiding it is a necessity, since service members who cannot be cured of the disorder can be medically discharged.

Eight percent of American 13- to 18-year-olds and as high as 20 percent of college students have some degree of bulimia.

Bulimia is the more common of two eating disorders. Anorexia nervosa, which affects up to 3 percent of Americans, is an obsession with thinness. About 15 percent of anorexics starve to death. Its primary victims are adolescent girls.

Bulimics are less likely to die from the disorder, but are condemning themselves to a living hell. They "pig-out" and purge themselves either by vomiting, taking laxatives or fasting, combined with extreme exercise.

Bulimics tend to be older and are often successful in their careers. They are primarily female, but there are some males. Male bulimics tend to prefer fasting and extreme exercise to other methods of purging themselves. Many anorexics periodically binge and purge, but there are many bulimics who are not anorexic.

Bulimics tend to be high achievers with obsessive personality traits and are perfectionists in performance and appearance. They often come from families with other compulsions, such as alcohol or drug addiction and obesity.

It's easy to deny that there is a problem, especially in the early stages.

A case history illustrates this point. At age 15, A young girl started taking diet pills to

lose her "baby fat." Since the pills made her nervous and unable to sleep, she began to go on food binges and purged herself with laxatives and diuretics — pills that cause the body to lose fluids. She also ran six miles a day and ate only grapefruit. But she didn't think she was sick. She just thought she had "peculiar eating habits."

She binged and purged for six years, once gaining 40 pounds on a binge. She was always able to lose the weight, but the pattern was ruining her life. She felt as if she couldn't go to lunch or dinner and feared evening social contacts because they might start a binge.

Many bulimics maintain normal weight. The visible symptoms of the disease are puffiness around the eyes, ankles and feet; broken blood vessels on the cheeks; dry skin, rashes and pimples; swollen salivary glands; and bad teeth. Actress Jane Fonda, who was bulimic from the age of 12 until she

conquered the disease at 35, noted that the older she got, the more it showed.

The constant bingeing and purging upsets the body's chemical balance, and can upset heart rhythms. Other possible effects include weakness, stomach and kidney disorders, irreversible tooth damage and depression. Sometimes bulimia and its side effects can lead to death.

One dangerous practice of some bulimics and anorexics is taking syrup of ipecac to induce vomiting. Syrup of ipecac is meant to be given only when a non-caustic poison is accidentally ingested. Abuse of ipecac is dangerous and is believed to have played a role in singer Karen Carpenter's untimely death.

Treatment varies according to the individual and the severity of the disease. If caught very early, attending groups such as Overeating Anonymous may be enough. Otherwise, psychotherapy or even hospitalization may be necessary.

If the SOC fits

by Robert Janes

Probably the most fundamental tenet of the Navy Standards of Conduct (SOC) is to void any actions that create or may appear to create a conflict of interest between one's government duties and one's personal interests. The most common situations where this rule comes up are where an employee holds stock in a private company, or is negotiating with an outside firm for future employment. In both these instances, the employee must avoid any on-the-job activities that may help or hinder the company involved. Indeed, this prohibition applies not merely to the interests of the employee himself, but extends to the interests of the employee's spouse, minor children and other household members. It is

thus a conflict of interest to deal on the job with any company with which one of these people has an interest. Where family or other household members are concerned, the conflict of interest problems normally involve their employer.

We recently had a case where an NADC employee was working on a contract with a company with whom her husband was employed—a clear violation of the conflict of interest rules. The employee had advised her supervisor of the situation, but he had a personnel shortage at the time, and allowed her to continue doing the work, thinking that since he would have the opportunity to review and approve any actions she took, that would serve as a check on any

conceivable favoritism she might show the contractor. Despite his views, we had the employee discontinue her involvement with the company as soon as we learned of the situation.

In a similar case in one of the technical departments, an employee was proposed to serve as COTR on a contract with a small business in which his brother held an influential management position. Since these two gentlemen were not members of the same household, there was no technical violation of the Navy's SOC instruction. Nevertheless, this situation created at least an appearance that the engineer involved might treat the company more favorably than would otherwise be warranted. We,

therefore, had him immediately discontinue all on-the-job dealings involving the company.

Ironically, in each of the above instances, the immediate supervisor noted that the NADC employee was an especially scrupulous individual who would bend over backwards not to show any favoritism toward the particular company. More often than not, however, the SOC deal with matters of perception and appearance rather than any actual impropriety, and because of the mere appearance these situations might create, especially to competitors of the companies involved, it was imperative that each employee be removed from all duties involving his relative's company.



Photo by JO2 Todd Lufkin

TACAMO/GPS LAB OPENS—CAPT Edward J. Sturm joins William Grey, president of G & C Enterprises (building contractor), and Congressman Peter Kostmayer in cutting the ribbon on the new \$3.9 million facility. Construction began in April 1986 and was supervised by LCDR Dennis Hess of the ROICC office. Bill Donnelly was construction manager on site and inspection was done by Dale Comisarow also of the ROICC office.

Young engineers compete

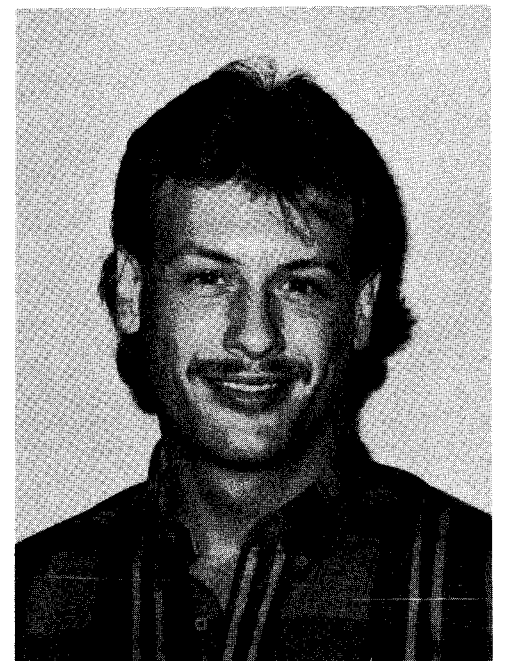
(continued from page 3)

3rd Prize:

TITLE: Evaluation of proposed Bandwidth Criteria for Hover Flying Qualities Prediction Utilizing a Unique Simulation Technique

AUTHOR: Marshall S. Hynes - NADC (Code 6053)

A hover simulation was conducted on a Large Amplitude Research Simulator (LARS). The simulation was developed to evaluate attitude response bandwidth as a predictor of Vertical or Short Take-Off and Landing (V/STOL) aircraft flying qualities in hover flight. Aircraft dynamics were simulated using a convolution technique applied to controller step responses in each axis of motion (motion signatures). Low-order dynamic models were used to generate time history signatures of motion in each axis. Attitude command and attitude rate command response types of varying frequency and damping were simulated in the pitch and roll axes. Pilot commentary indicated the criteria used to develop the rate and attitude command models was deficient. Handling qualities ratings showed good correlation with attitude bandwidth for systems with adequate damping



Marshall Hynes

characteristics. However, for attitude command systems a minimum damping level must be specified to supplement the bandwidth criteria for systems that meet minimum bandwidth requirements but still are significantly underdamped to cause an undesirable response.

Two cited as Navy Superior Civilians

By Mary Ann Brett

Aaron Burstein and Richard Norford were identified by Vice Admiral Glenwood Clark, Commander of the Space and Naval Warfare Systems Command, as deserving the Navy Superior Civilian Service Award.

Indicative of the stature of this award, Captain Edward Sturm, Center Commander, said he had presented only one other award of this type during his three years at the Center.

Burstein of the Systems Analysis Branch of the Tactical Air Systems Department received the award for his work on the Advanced Air-to-Air Warfare Working Group. As Head of the Cost Analysis Team for this Group, Burstein was responsible for preparing all cost data published in the Development Options Paper for the Outer Air Battle Weapons Systems. This task was extremely large and had to be accomplished in time to support a mid-1986 Navy Program Decision Meeting, a goal which was construed as unattainable. According to the Admiral, Burstein's successful competition of the cost analyses was due to his extraordinary competence and forceful leadership.

See Richard Norford in the August REFLECTOR.



Photo by JO2 Todd Lufkin

Richard Norford and Aaron Burstein congratulate each other after receiving their awards.

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disclosure of contents or reconstruction of the documents. THEY MUST NOT BE DISCARDED AS TRASH.

Gallagher bids farewell to NADC and Navy

CAPT Thomas Gallagher, Deputy of the Air Vehicle and Crew Systems Technology Department, recently retired after a 31 year Navy Career and more than six years at the Center.



Photo by JO2 Todd Lufkin

Captain Thom Gallagher at the podium.

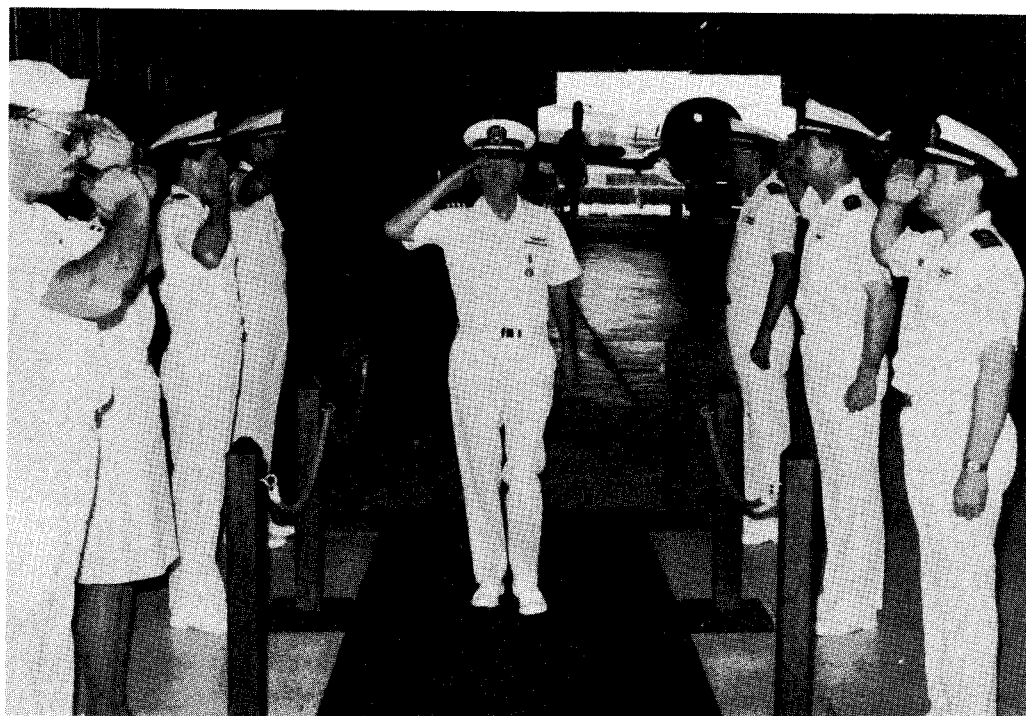


Photo by JO2 Todd Lufkin

Captain Thom Gallagher gets piped over the side, a traditional Navy retirement ceremony.



Reflector

Volume 32 Number 8

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER PA.

August 1987

In This Issue:

Human Resources
A 'Penn' in hand
Change of Command
All-Star Tourney
Crews' Rest

When is a T-2 aircraft not a T-2 aircraft?

By JO2 Todd Lufkin

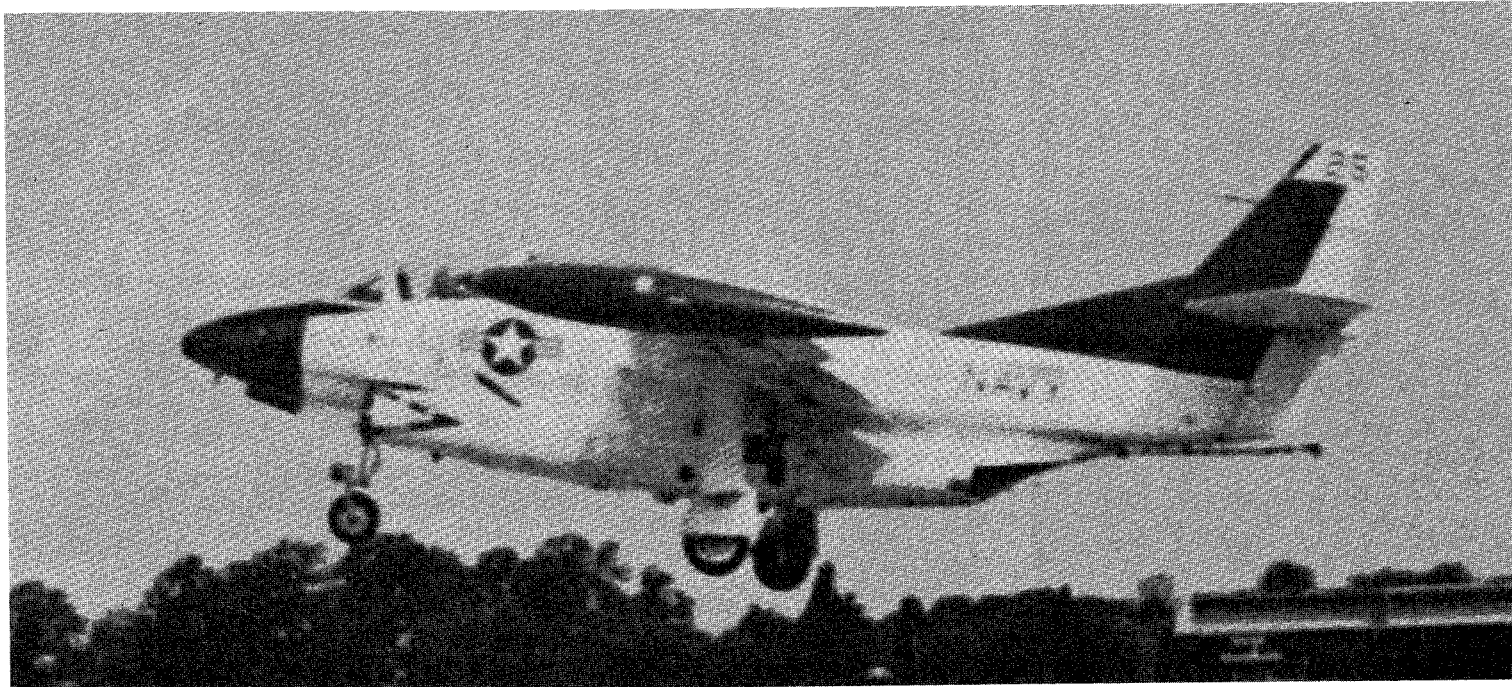
"It looks like a T-2, but it isn't a T-2," said CDR Roger Hill, test pilot here at the Center.

The Tactical Air Systems Department Deputy was referring to the Center's recently reconfigured T-2 aircraft, which began test flights July 15 after being grounded for the past nine months undergoing major test equipment installation. "The aircraft is truly one-of-a-kind, with several modifications which demonstrate advanced technologies and which are candidates for incorporation into future tactical aircraft," Hill said.

"After an airplane is down for that long," he continued, "it usually has a million things that have to be fixed before we can fly it again, but this aircraft was ready to fly right away. That's quite a tribute to the maintenance personnel and technicians who installed the new equipment and put the aircraft back together."

The project, headed by engineers Dave Keyser and Frank Yelinek of the Air Vehicle and Crew Systems Technology Department, is demonstrating flight application of an 8000-PSI hydraulic system with dual fluidic flight control and an electric fly-by-wire flight control system.

Most current aircraft have 3000-PSI hydraulic systems to power the flight controls and utility systems such as the



NADC's T-2, like the one shown here, has been modified into a one-of-a-kind aircraft featuring an 8000 PSI hydraulic system and fluidic flight control and electric fly-by-wire control systems.

landing gear and flaps. "The advantages of an 8000-PSI system are that it decreases weight and increases combat survivability by reducing the size of the hydraulic lines," said Hill. "Of course, the lines, actuators and seals are under tremendous pressure in an 8000-PSI system. This test program is demonstrating the technologies required to operate and maintain a reliable, flightworthy high pressure

system."

The second major modification to the T-2 is the installation of a fluidic flight control system and an electric fly-by-wire control system in place of the aircraft's conventional mechanical flight controls. Hill explained. "As tactical aircraft become more maneuverable, they also become more unstable. The new aircraft, such as the FA-18 and F-16, are so unstable as to

require a flight control computer to aid the pilot to fly the aircraft. In these aircraft, the pilot is merely a voting member — he moves the stick, the computer does the rest. All kinds of flight data are also being used by the flight computer to determine which aircraft surface to move to get the desired response. For instance, at high speeds, the elevators may move

(continued on page 7)

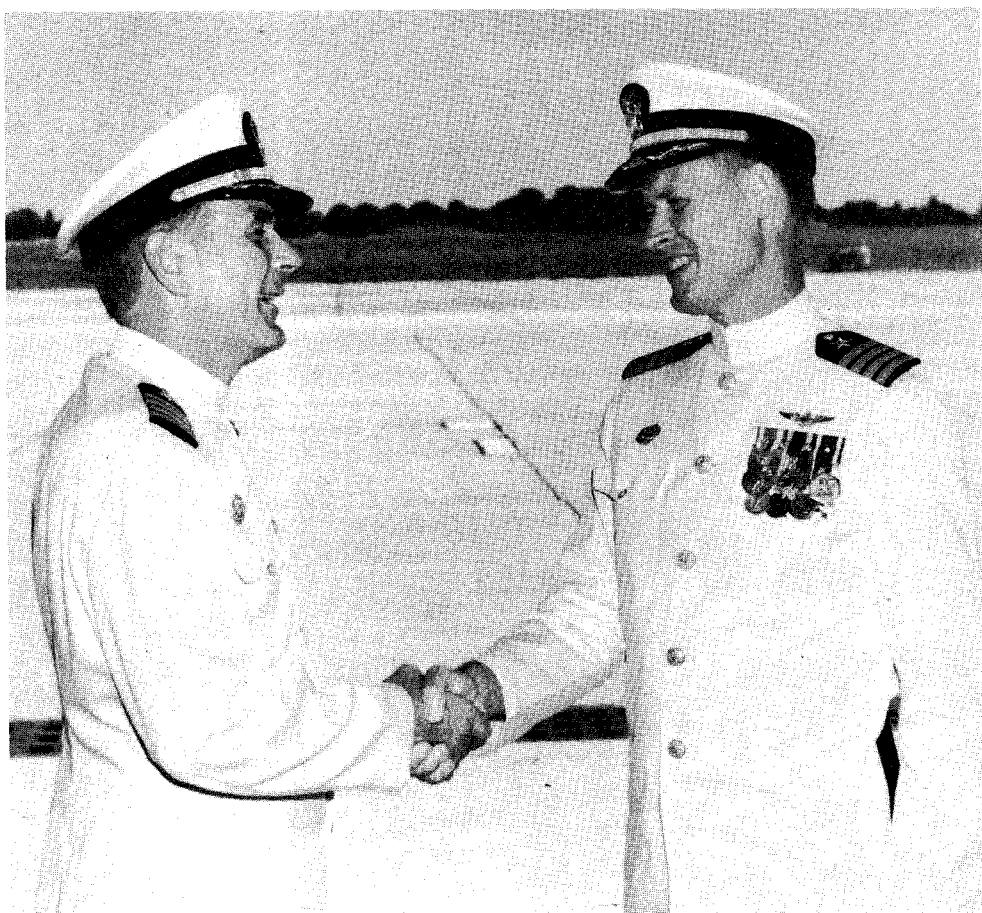


Photo by NADC Photo Lab

SEALED WITH A HANDSHAKE — *Outgoing Center Commander, Captain Edward J. Sturm and new Center Commander, Captain Curtis J. Winters exchange congratulations and best wishes after the NADC change of Command ceremony on July 17th. (See photos page 4-5)*

Helen Ling selected NADC's Woman of the Year

By Mary Ann Brett

Helen M. Ling of the Systems Technology Division was named 1987 Woman of the Year at NADC during the Human Resources Recognition Day ceremony. She was selected for her achievements in recruiting and encouraging women and minorities into professional careers.

The award citation praised Ling for her professional, caring attitude and deep commitment as recognized by her subordinates, peers, and managers. She said, "There are many others who also deserve this award, perhaps more than I, but I am grateful for the honor."

Nine years at the Center, Ling said, "I never thought about EEO until I got to NADC. My first appointment to the Women's Advisory Committee really opened my eyes," She subsequently thought about it to such an extent that she received a Navy EEO award in May of this year.

Ling has recruited at City College of New York and Drexel University and has participated in the Center's

Minorities in Engineering Program. She is a member in the Center's Career Readiness Core Group and has lectured at minority and female high schools on rewarding careers in science and math.

A supervisory engineer in charge of systems integration and software development in the ASSET laboratory, Ling has a BS in Math and an MS in Electrical Engineering.



Photo by NADC Photo Lab

Helen M. Ling

Command Corner



CAPT Curtis J. Winters
Center Commander



Guy C. Dilworth, Jr.
Technical Director

The Naval Air Development Center EEO policy, consistent with the Department of the Navy (DON) policy, confirms that all persons will be accorded equal opportunity in all civilian employment matters. We are firmly committed to ensuring that race, color, religion, national origin, age, mental or physical handicap, and gender are not considerations affecting equal opportunity for any Center employee or applicant for employment and that the work environment is free from sexual harassment and reprisal for prior EEO involvement.

Underrepresentation will be reduced and/or eliminated by innovative measures and special efforts of affirmative action to make certain sufficient diversified applicant pools are available and actual or perceived barriers to equal opportunity are removed.

The obligation to support the EEO Program and to carry out a successful affirmative action effort is shared by all personnel (both civilian and

military). We expect that managers, supervisors, and EEO officials will work as a team to provide the leadership to ensure that the spirit and intent of EEO will be interwoven, on a continuous basis, with all actions affecting Center employees. This will provide the best possible utilization of available knowledge, skills, and abilities to complete the mission of the Center.

We look forward to your full cooperation and achievement consistent with the high standards of the DON.

C. J. Winters
C. J. WINTERS
Commander

Guy C. Dilworth, Jr.
GUY C. DILWORTH
Technical Director

Letter to the Editor

Dear Editor:

The Food Services Board and Service America Corporation are to be commended for having identified separate spaces in the cafeteria for their non-smoking patrons.

However, they can do better. Let me identify two situations that some of us find objectionable. At present, persons waiting in the cashier lines are forced to breathe cigarette smoke that drifts over from the smokers sitting at adjacent dining tables. Also, since the non-smoking area is at the far end of the cafeteria, the non-smokers pass through clouds of smoke as they walk past the smokers to reach the non-smoking area.

Here's how they can improve the cafeteria services:

Identify the area adjacent to the cashier booths as non-smoking and move the smoking area to the rear of the cafeteria (exactly the opposite of the present arrangement). Rather than penalizing the non-smokers by locating them in the rear of the cafeteria, encourage use of the non-smoking spaces by locating them most conveniently, that is, in the area just past the cashier booths. This would place the smokers remotely from the checkout area. This would greatly increase the accessibility of the non-smoking area. Given this new accessibility, I believe that the

majority of the cafeteria patrons would opt to use the non-smoking area and would gladly take advantage of the convenience and the clean air that it offered.

Respectfully submitted,

Ed Emery

Dear Mr. Emery:

We discussed your suggestions with the Food Service Board. They feel your points are well taken. Here is their decision.

Editor.

The Food Service Board is sensitive to the issue and has decided to double the size of the non-smoking area.

Mr. Emery's suggestions will be implemented in accordance with the latest SECNAV and SPAWAR Smoking Instructions.

Food Service Board

Security Reminder

Exterior doors, other than those that are primary entry/exit points will not be left open/unlocked and unattended. Office and lab doors must be locked during the day when left unattended and always at the end of each work day.

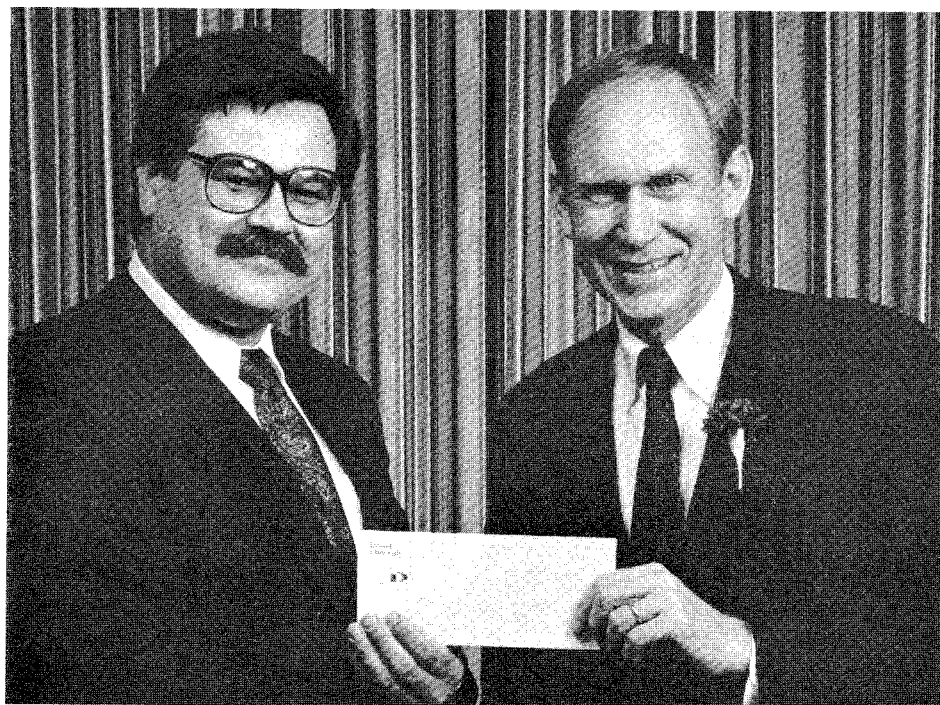


Photo by NADC Photo Lab

HREBIEN RECEIVES DREXEL AWARD—Dr. Leonid Hrebiien, assistant department head and adjunct professor of electrical engineering in Drexel University's Evening College, receives the 1987 Laura S. Campbell Award from Drexel President William S. Gaither. The award is presented annually to encourage and reward outstanding teaching by a member of the Evening College faculty. A research physiologist at the Naval Air Development Center, Hrebiien is investigating the effects of acceleration on aircrew personnel. A Drexel alumnus, Hrebiien has been a member of the Drexel faculty since 1976.

Promotions

Rose Aquila, William Arnold, John Berry, Carol Blizard, Marie Bodkin, James Campanile, Carl Campbell, Rosa Cerankowski, Brian Clapper, Edward Coleman, Denise Davis, Joanne Digirolamo, Michael Doncevic, Jr., Mary Elsworth, Ricky Fillhart, James Hardy, Jennie Harris, Diane Heal, Mary Hilger, Marlene Ierardi, David Jenkins, Jon Jones, Michael Juscak, William Knebel, Robert Kowalik, Keith Kreider, Jeffrey Lamb, Danny

Ma, Wilson Mackrell, Jr., Saroja Mahadevan, Linda Malloy, Jeffrey Mansfield, Larry Mark, Michael Miller, Robert Murnin, William Myers, Jr., Carol Newman, Carmel Owens, Diane Palmer, Jaime Pupek, Elizabeth Randazzo, Suzanne Reeps, Norbert Reis, Michael Rinelli, Debra Rubin, Joyce Shields, James Smith, Susan Smith, Karen Thomas, Barbara White, John Williams, Steven Wormser, Joanne Young, Christopher Zech.

Norford receives Navy award


By Mary Ann Brett

Richard F. Norford, received the Navy Superior Civilian Service Award for his outstanding work with the Space and Naval Warfare Systems Command's (SPAWAR) Advanced Air-to-Air Warfare (AAW) Working Group.

Now retired, this former Head of the Systems Analysis Division in the Battle Force Systems Department served as a senior analyst performing

assessments of various Outer Air Battle Weapons Systems for the group.

Vice Admiral Glenwood Clark, SPAWAR Commander, approved the award and attributed Norford with "... supreme competence, analytical skills, ... exceptional professional knowledge, superior personal industry and leadership ... You played a major role in defining the AAW systems which will defend the fleet into the next century."



Reflector

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Commander, NADC	CAPT Curtis J. Winters
Technical Director	Guy C. Dilworth, Jr.
Public Affairs Officer and Editor	James S. Kingston
Associate Editor	Mary Ann Brett
Assistant Editor	JO2 Todd Lufkin

People are our business . . .

Human resources highlighted at NADC

By Mary Ann Brett

A Human Resources Awareness (HRA) Week is set aside each year at NADC to broaden our equal employment opportunity (EEO) awareness and to celebrate our EEO accomplishments.

Each day of the HRA week in July held a string of special activities, highlighted by the distribution of EEO awards and visits by retired Rear Admiral Grace Hopper and most decorated Vietnam veteran, David Christian.

Films such as "Passion for Excellence," "Anderson Platoon" (Black veteran accomplishments), and "Beyond Fear" (Red Cross video on AIDS), were scattered throughout the week. Seminars and workshops addressed the topic of Deaf Culture and Sign Language Communication as well as how to gather information for merit promotion vacancies. And, to honor all military veterans, an elaborate exhibit of NADC veteran memorabilia was displayed on the wall near the solarium.



Technical Services' Richard Savory, one of the Honorary EEO award winners, was presented the Handicapped Employee Award.



Dr. Donald McErlean, Head of Air Vehicle and Crew Systems Technology, accepted the EEO Group Award to be shared with Thomas Shoppell and the Comptroller Department.

Vietnam — a lasting impact on Finkelman

By JO2 Todd Lufkin

Although the hostilities in Vietnam ended well over a decade ago, the veterans of that conflict are only now beginning to be recognized and honored by the American public.

One such veteran is Robert Finkelman, Computer Department head, who had several momentoes including the Bronze Star Medal posted on the Center's Veteran's Board.

Finkelman was an Army ROTC cadet in college. In June 1968 while he was working here on Center he was called on active duty and served between 1968 and 1970.

In 1969 he went to Phu Loy, Vietnam, with the 610th Maintenance Battalion. "My job was to provide all support functions for all units that weren't part of the division," Finkelman said, "supplies, food, laundry, weapons, vehicle maintenance and graves registration."

In Vietnam Finkelman served as Executive Officer of Maintenance

Company and as Technical Supply Officer. "I had a lot of responsibility for being only 24 and right out of college," Finkelman admitted.

He also admits that the experience taught him how to work and a lot about leadership in difficult situations. "I put in more than 12 hours of work a day and supervised 300 soldiers," he said. "I got to where I liked a lot of things happening at once — personnel and management problems."

When he returned to NADC his job consisted of sitting at a desk all day long doing equations. This didn't set too well with him. His reaction was, "This was too tame after what I had done in Vietnam. It was just too calm. I wasn't dealing with people or problems."

In 1974 he went to work in the computer department. "I worked with computers while I was in Vietnam," he said, "I couldn't resist getting back into that field again."

Finkelman is quick to point out that his service experience had a direct and lasting impact on his civilian career.



Robert Finkelman, Computer Department Head, reminisced with David Christian, touted as the most decorated Vietnam veteran, at the NADC Veteran Memorial Display. Finkelman's decorations and memorabilia were displayed beside the memories of more than 60 Center employees. Robert Clegg and Edward Siski co-chaired the Veterans; Committee responsible for coordinating this extensive effort.

DeLuccia lends William Penn a hand



Dr. John DeLuccia recently enjoyed a bird's eye view of the city while hand-in-hand with the historical William Penn statue above Philadelphia's City Hall.

By Mary Ann Brett

When Philadelphia city officials came looking for a metallurgical authority to help with the William Penn restoration project, John DeLuccia jumped at the chance. In fact, he "jumped" up about 500 feet to take a look at the historic statue above Philadelphia's City Hall. DeLuccia said it was fascinating to see Penn from that vantage point. "If nothing else," he noted, "it proved I'm not acrophobic." (He doesn't have a fear of heights.)

The city's Architecture and Engineering Department of Public Property needed DeLuccia's expert advice on the cleaning methods and chemical repatination for the 98 year old cast bronze statue. DeLuccia explained that the combined effects of time and environment caused the surface of the statue to experience uniform corrosion, as well as pitting on its surface. He was concerned because, if left unattended, pitting (especially in the crevice areas), would cause perforation and structural deterioration of the 3/8" thick bronze.

When DeLuccia examined the statue, he found the corroded surface to

be vulnerable in many areas. Accumulated rain water in the catchment area of the hat was tested for acidity. It showed a pH reading of 4.5. This measurement gives evidence of corrosive acid rain, common in this industrial atmosphere.

As a result, DeLuccia recommended a restoration process consisting of removal of the green-black corrosion and repatination of the fresh bronze surface. Since volunteer fund-raisers intend to ensure Penn's upkeep, he recommended a yearly hot wax treatment and provided city officials with a detailed analysis of his findings.

DeLuccia and other members of the Aerospace Materials Division provided their services, including lab work, under the Center's technology transfer program. Dr. Asha Varma provided analysis of the corrosion products. William Weist performed scanning electron microscopy of the statue's surface. Lee Biggs performed the metallography required and Vince Novielli assisted in the site visit and sampling techniques.

As far as science and engineering go, DeLuccia and crew gave William Penn a clean bill of health.

Naval Air Development Center has 19th Change

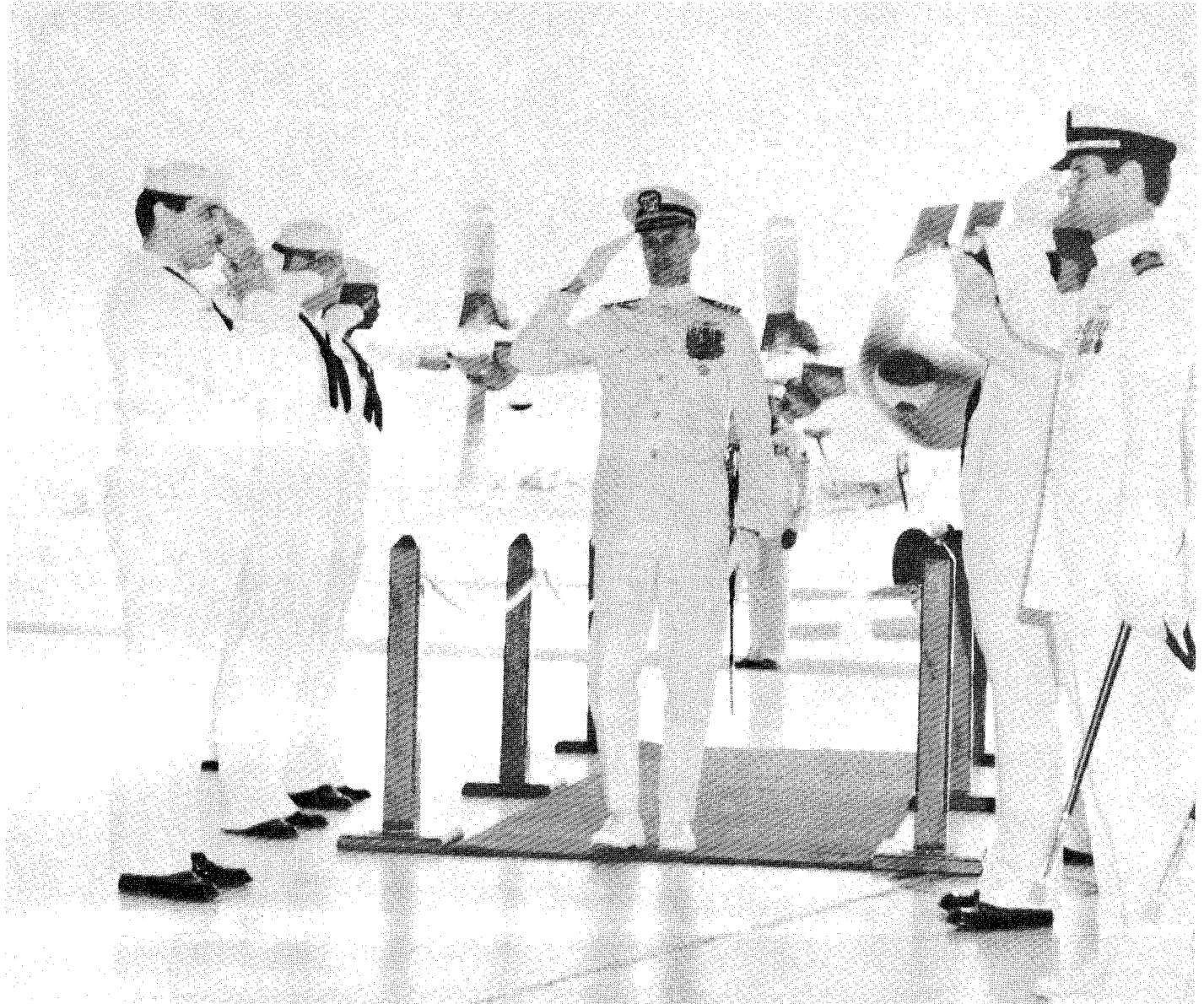
By Margaret Vigelis

On July 17, NADC witnessed its nineteenth Change of Command Ceremony. The day dawned bright and clear, a good omen for this auspicious occasion.

More than 700 people, including family, friends, and employees watched this moving event. The stirring strains of martial music, the proud marching color guard, and the military in their spotless white uniforms standing in formation were an inspiring sight.

Vice Admiral Glenwood Clark, Commander Space and Naval Warfare Systems Command, presented the prestigious Legion of Merit Award to CAPT Sturm for his many accomplishments while at NADC.

Then the inevitable moment arrived, CAPT Edward J. Sturm read his orders and turned over NADC's helm to CAPT Curtis J. Winters, its new Commander.



Vice Admiral
Systems C
the Legion

Photo by NADC Photo Lab

Piped aboard as "Captain, United States Navy, arriving," Captain Curtis J. Winters was only minutes away from ceremoniously accepting his orders as Commander of the Naval Air Development Center.



Photo by NADC Photo Lab

A part of the traditional Change of Command ceremony, Captain Edward Sturm inspects his sailors before releasing responsibility to the incoming Center Commander.

ment Center of Command

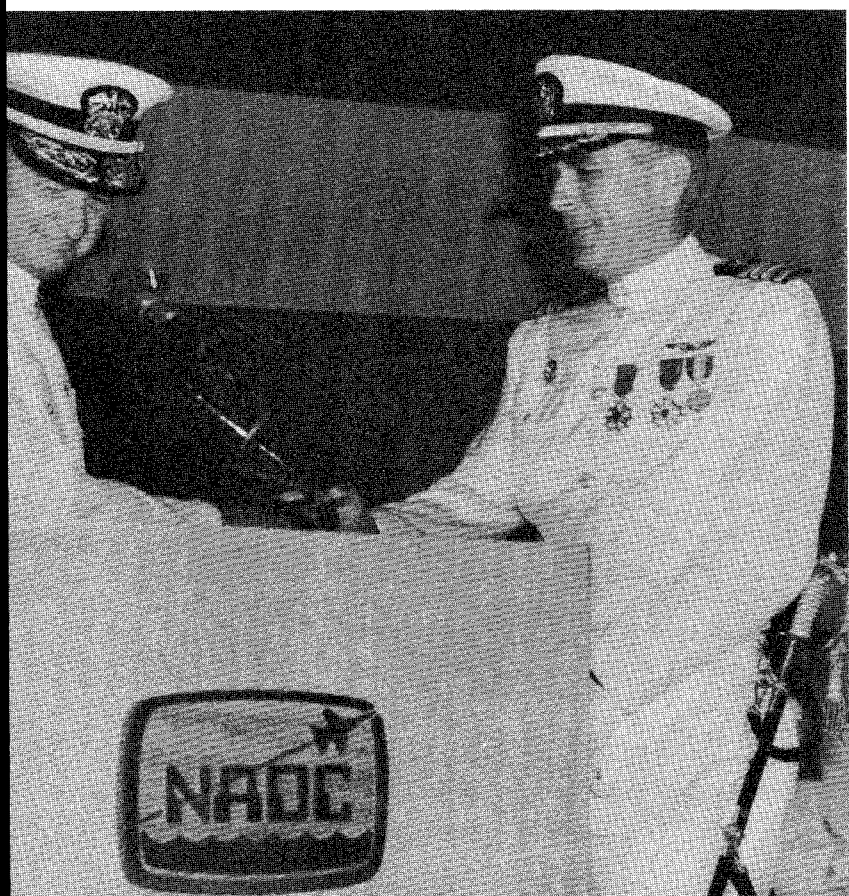


Photo by NADC Photo Lab

Benwood Clark, Commander of the Space and Naval Warfare Command congratulates Captain Edward Sturm after awarding him Merit Award, during the ceremony.

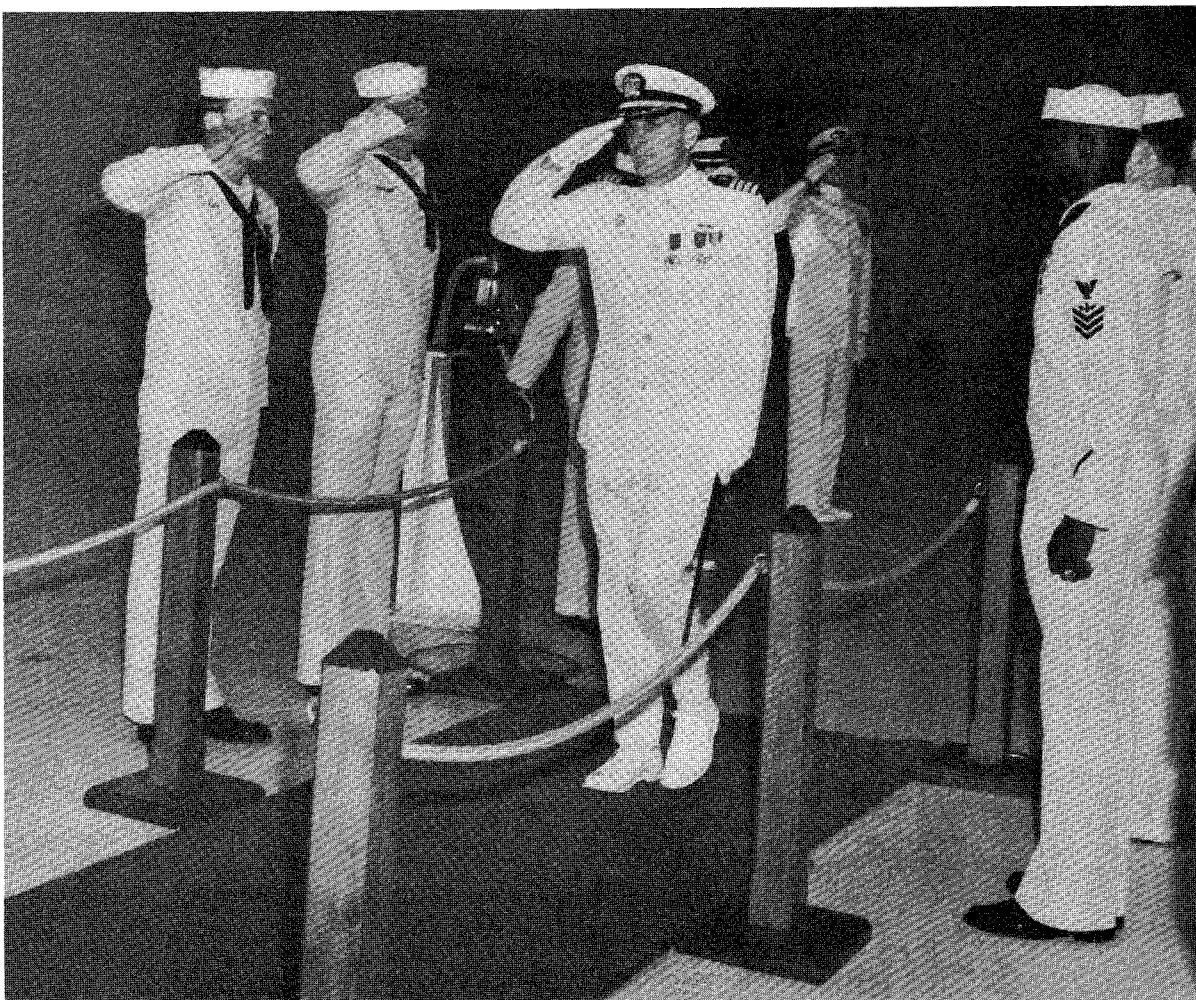


Photo by NADC Photo Lab

Captain Edward Sturm solemnly departs the ceremony and his position as Commander of NADC.

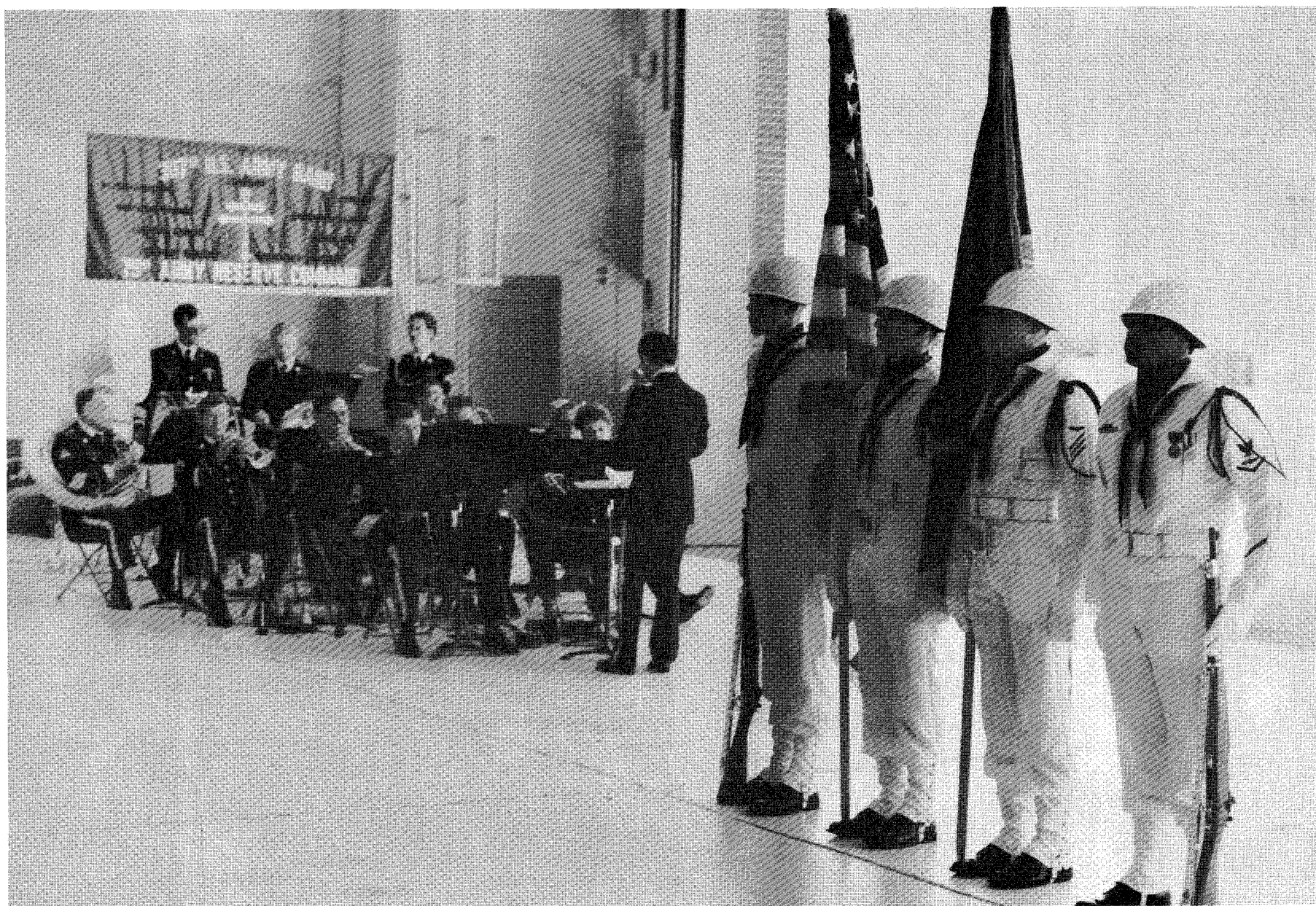


Photo by NADC Photo Lab

Looking smart and standing tall, NADC color guard members AT3 John Twiest, AW1 James Edwards, AEAN Jerald Myer and EW3 Anthony Tallie prepare to step off to a march by the 307th Army Band.

Sports

Season ends as teams gear up for playoffs

By Charlie Destra

The NADC softball league's regular season finally came to an end at press time and the ten teams that made the playoffs (scheduled to begin on August 3) were set and preparing for post-season play.

The Bandits, who took over first place midway through the season, hung on to that position and wound up with the best record at 17 and 2. Their only losses over the long season were to the Rebels and Granfalloon. Their loss to the 'Falloon, a 4-3 nailbiter, was everything it was cracked up to be, and may turn out to be a preview of a possible upcoming Bandit-Granfalloon playoff matchup.

The Misfits finished strong with an identical 17-2 mark, but placed second because they lost to the Bandits. The Granfalloon also came up big down the stretch and took third place with a 16-3 record. The 8th Inning snuck into fourth (15-4) thanks to two late season losses by the Nightriders (to CSC and the Misfits), who finished at 14 and 5. The Druids came in sixth (13-6) to escape the wildcard game that teams seven through ten had to play.

In the wildcard set up, team seven

plays team ten, and team eight plays nine, while teams one through six sit back for a brief rest and watch. Then, team one takes on the survivor of the wildcard game with the worst record, team two plays the other survivor, three plays six (Granfalloon-Druids), and four faces five (8th Inning-Nightriders) in three-game quarter final matches. Following that are the semifinals and the final five-game championship duel.

In the wildcard games the seventh-seeded Pacer (12-7) was pitted against the tenth-seeded Devils (11-8) and the 12-7 Bearcats (eighth finishers) went up against the ninth team, CSC (11-8). All four of these teams have their unique strengths and picking a winner is a toss-up proposition. And the teams these winners will have to play, the Bandits and Misfits, will have to be on their toes.

Just missing out and finishing in a tie for the eleventh position were the hard-luck Rebels and Renegades (9-10), who, were it not for a bounce here and a bounce there, could have been in the limelight as well.

The final season standings are posted below.



Rick Sames (Bandits) nearly bagged the league's triple crown — his .700 average and 43 RBIs led the league but his 11 homers placed him second to the Nightriders' slugger, Mike Greco (13) ... Sames would have to be considered for the mythical MVP award along with Tom Weiss, who led a heavy-hitting Granfalloon team in virtually every offensive category (HRs, RBIs, average, hits, runs) ... Top rookie easily goes to Greco, who finished among the leaders in all the major categories. Watch out for next year ... What's the value of power in this league? Every one of the top ten home run hitters belongs to a playoff team. Eight of the 10 are on top five teams ... Strange but true category: Ron Garber of the Cellar Rats had 11 hits this year yet scored 16 runs ... The Rats were the only team to go homerless (the Rats need bats) ... The Falloon's Greg Heydet recorded a stunning 62 strikeouts in 44 innings pitched ... If you've noticed that the league leader board doesn't have any 8th Inning players, it's because the team doesn't keep stats. Manager Fred Kuster tells me that it's because they downplay individual achievements and emphasize team play. It's actually Fred's euphemistic way of saying he's lazy ... The Phantoms, decimated by the loss of 12 players from last year's team, had 37 different players on their revolving-door roster this season. The Guzzlers, who suffered a similar fate, had 28 different players. The irony is that both of them had trouble fielding a team for games this year ... And the other irony is that many of the ex-Guzzlers/Phantoms are now playing for the mighty Bandits (who live up to their name) ... Mr. Consistency, Mark James ('Falloon) snapped his streak of three consecutive nine-home run

seasons. He got eight ... Strange but true category #2: the Rebels were the only team to finish the season on time (July 10), with no cancellations or rainouts ... Home runs were low this year, especially considering the league played three more games and had a diluted field ... Joel Wexler delivered a great pitching performance in the Misfits' final regular season game by no-hitting a high-scoring Nightrider team, 5-0. The saving play was Greg Askew's smash up the middle that nearly decapitated Wexler and caromed directly to third baseman Steve Hynes, who threw a dart to nip the fleet Askew at first on a bang-bang play. Wexler had two whiffs and was two walks away from a perfect outing ... Family ties: In his final game as a Guzzler, Bill Mulley Sr. socked the only home run of his career off his son's team (Cellar Rats) in his first at bat. Thus, Mulley capped his fine career, and his 30th season (1957-1987) in grand style ... The Guzzlers (8-11) failed to make the playoffs for the first time in their history ... Also retiring this year are two good friends of mine and former All-Stars who've had long and storied careers: John Markow (Guzzlers) and Nelson Torres (Nightriders). Out with the old, guys; in with the new.

Team	Won-Lost	Pct.	Games Back	Runs For	Runs Against	Av Runs For	Av Runs Against
Bandits	17-2	.895	—	258	97	13.58	5.11
Misfits	17-2	.895	—	267	81	14.05	4.26
Granfalloon	16-3	.842	1.0	273	70	14.37	3.68
8th Inning	15-4	.790	2.0	265	127	13.95	6.68
Nightriders	14-5	.737	3.0	256	125	13.47	6.58
Druids	13-6	.684	4.0	216	110	11.37	5.79
Pacer	12-7	.632	5.0	186	153	9.79	8.03
Bearcats	12-7	.632	5.0	221	149	11.63	7.84
CSC	11-8	.579	6.0	232	160	12.21	8.42
Devils	11-8	.579	6.0	203	176	10.68	9.26
Rebels	9-10	.474	8.0	197	212	10.37	11.16
Renegades	9-10	.474	8.0	214	154	11.26	8.11
Guzzlers	8-11	.421	9.0	175	232	9.21	12.21
Orange Crush	7-12	.368	10.0	183	261	9.63	13.74
Rumblers	6-13	.316	11.0	214	278	11.26	14.63
Analytic Animals	5-14	.263	12.0	177	247	9.32	13.00
Dawgs	4-15	.211	13.0	136	300	7.16	15.79
Cellar Rats	2-17	.105	15.0	103	304	5.42	16.00
Phantoms	1-18	.053	16.0	88	382	4.63	20.11
Dyna Tigers	1-18	.053	16.0	93	342	4.89	18.00

No winners in All-Star tourney

By Charlie Destra

The All-Star Game became the All-Star Tournament this year (played July 16), featuring four teams in a first-ever round robin format. Due to the hefty size of the league (20 teams) the idea of a single game became unacceptable. With three players representing each team it would have

resulted in an unwieldy 30 players per roster. So, Commissioner Jim Kearney dreamed up the unusual concept of four different teams battling for one championship. The only problem was that no real winner emerged because the championship game was called on account of darkness in the sixth inning.

If you take out your calculators, you might be able to understand how the

teams were put together. Each of the four teams (A, B, C and D) was comprised of three representatives from five of the league's 20 squads. The talent pool, theoretically, was spread out evenly among the four teams, based on positionings in the league standings. Team A, for instance, consisted of the teams that were first, eighth, ninth, 16th and 17th in the standings, Team B was made up of the second, seventh, 10th, 15th and 18th teams, and so forth. In semifinal matches, Teams A and D played on the Inertial field while teams B and C locked horns on Tyler field. The winners played each other for the championship; the losers for the consolation game. The teams were managed by those managers whose teams were positioned one through four in the standings.

If you have all that, the action went like this: team B (managed by Jim Kearney) clobbered team C (managed by myself) 25-5 on Tyler field. At Inertial, Tom Walsh's team D overtook Pete Carroll's team A, 5-3. Thus,

League Leaders (End of Season)

HOME RUNS

M. Greco, Nightriders	13
R. Sames, Bandits	11
J. Price, Misfits	10
T. Weiss, Granfalloon	9
D. Kimelheim, Nightriders	9
M. James, Granfalloon	8
M. Rudock, Misfits	7
C. Packer, Bearcats	6
M. Dungan, Bandits	6
A. Redd, Devils	6

RBI's

R. Sames, Bandits	43
T. Weiss, Granfalloon	38
J. Price, Misfits	37
G. Askew, Nightriders	36
W. Everett, Rebels	36
M. Greco, Nightriders	35
M. Dungan, Bandits	34
S. Natashin, Rebels	33
G. Willis, Granfalloon	30
G. Heydet, Granfalloon	29

BATTING AVERAGES

K. Sames, Bandits	.700
S. Zajdel, Bandits	.675
C. Packer, Bearcats	.647
S. Natashin, Rebels	.645
M. Dungan, Bandits	.630
J. Mitchell, Orange Crush	.600
J. Ward, Guzzlers	.600
T. McGovern, Bearcats	.600
D. Dummeldinger, Druids	.595
G. Askew, Nightriders	.593
T. Weiss, Granfalloon	.587
E. Coleman, Orange Crush	.586
M. Greco, Nightriders	.574
C. Volker, Rebels	.565
F. Hollenback, Rebels	.565

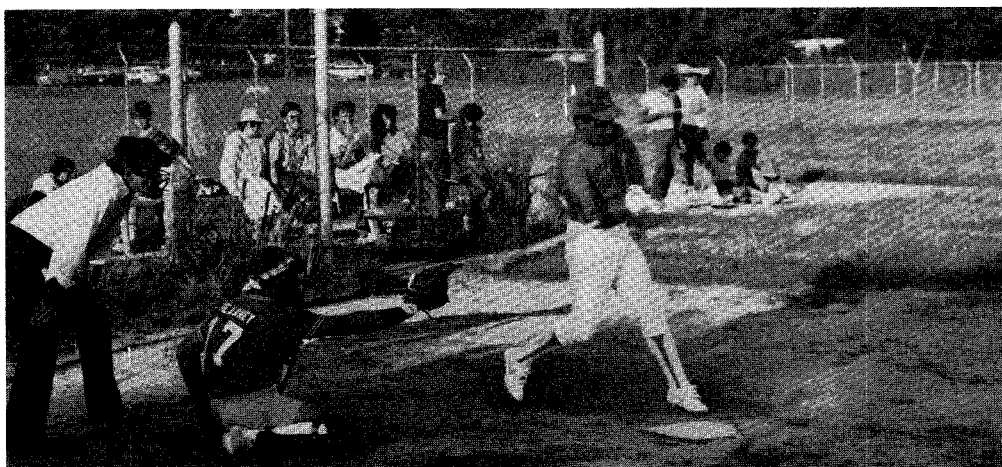


Photo by John Bowes

Misfits' Jim Kearney catches while Dan Schmidt of the Guzzlers takes a swing during the All-Star game.

(continued on page 7)

Commander Salutes

Edward Swiski, John Hannon and Crew (Code 83); Robert Clegg (Code 84); Ross Barcklow, Kenneth Smith, Philip Joiner, Dolores Mitchell, and Linda Calderwood (Code 81); Ira Bellew (Code 50); Joan Fallon (Code 05); Rita Brownlee and Judy Scott (Code 03); James Kingston and PAO Staff (Code 04): For time, energy and expertise greatly contributing to the success of the Annual Human Resources Awareness Week.

Dr. John Smith, Sidney McLeary, and Frank Mullholland (Code 50): For dedicated support of the Microwave and Millimeter Wave Monolithic Integrated Circuits program.

Harry Karl Schmidt, Ross Barcklow, Kenneth Smith, Linda Calderwood (Code 81); CWO Robert Toth (Code 82): For excellent assistance in making the 1987 Commander/Technical Director Awards Celebration so memorable.



Photo by NADC Photo Lab

ALL MY CHILDREN — Command Master Chief Nelson Williams, public works officer LCDR Earl Smith, former Center Commander CAPT Edward J. Sturm and Chief Staff Officer CAPT Fred Wright are present at the ground breaking ceremony for NADC's military youth center. The single story, 2000 sq. ft. building designed by Burkavage Design, Inc. should be available to the approximately 600 children residing in NADC military housing by spring of 1988!

No winners in All-Star tournament



Photo by John Bowes

8th Inning's Fred Kuster is catcher during this All-Star game; this time Dean Mondelblatt is up to bat.

A T-2 or not a T-2?

(continued from page 1)

differently to roll the airplanes; at moderate speeds, the ailerons roll the airplane; and at slow speeds, the rudders may roll the airplane. It's the flight control computer that determines which surfaces move."

All conventional aircraft flight control computers are powered by the aircraft's electrical system. However, electric flight control computers present a common failure mode which will result in loss of aircraft control. If the airplane loses all electric power, it loses its electric flight control computer. Backup electric power sources can be affected by the same failure mode which resulted in loss of primary electric power. Fluidic flight control computers can solve this problem. Hill stated, "To our knowledge, our T-2 is the first aircraft in the world to fly with a fluidic flight control computer as a primary flight

control mode." The fluid that runs the computer is compressed air from the aircraft engines. "It functions very similarly to the electric system except it runs on engine bleed-air rather than electricity," he added.

Results thus far in the test program have been encouraging. "The flight control characteristics in the new flight control modes appear excellent and the new hydraulic system has worked flawlessly," said Hill. "The new configuration actually flies better than the production airplane."

Testing will continue for approximately four more months. Then the modifications will be removed and the aircraft will revert to its original configuration. A final report detailing test results will indicate if the technologies demonstrated are mature enough for potential incorporation into future aircraft and retrofit into existing tactical aircraft.

(continued from page 6)

Teams B and D played each other on the Inertial field for first place, while teams A and C fought it out for third place on the adjoining field.

While teams A and C finished their game (a tight, tense 8-4 win by team A decided on four unearned runs in the last inning), teams B and D never finished theirs. It too was a close contest, with Team D leading 8-5 going into the bottom of the sixth inning. The fairest conclusion one could make was that it would have been tough for team B to muster three runs (especially at twilight time) going up against

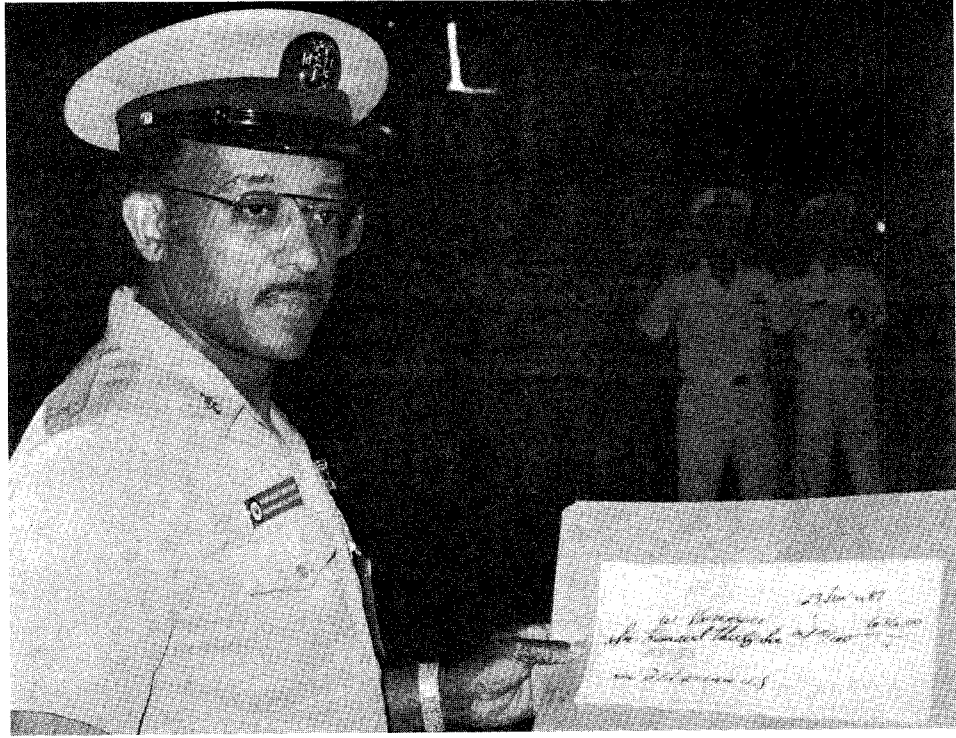
fireballer Greg Heydet. A three run cushion for Heydet is tantamount to money in the bank, all stars or no all stars. Heydet, in fact, looked destined to be the All-Star MVP, having clubbed a homer and double in the game (he also homered in the first game) and appeared primed to close out the contest on the mound.

Strangely, about the only thing that was decided was that team A finished third, and team C ended up last. And although I had the distinction of losing both games, at least I finished mine.

Below are the teams/players who participated in the tournament.

All-Star Tournament Teams and Players

A	B	C	D
P. Carroll, Mgr.	J. Kearney, Mgr.	C. Destra, Mgr.	T. Weiss, Mgr.
Bandits	Misfits	Nightriders	Granfalloon
M. Dungan	M. Brown	G. Askew	S. Fleischut
R. Sames	M. Rudock	M. Greco	M. James
S. Zajdel	J. Price	D. Kimelheim	T. Weiss
CSC	Druids	Bearcats	8th Inning
E. Delgado	D. Dummeldinger	A. Hribar	J. Santini
J. Nottage	P. Winiarczyk	T. McGovern	R. Mohica
D. Pierce	R. Yeager	S. Van Sant	R. Seltzer
Devils	Pacer	Guzzlers	Rebels
A. Redd	T. Risbon	J. Eck	K. Kreider
G. Reichl	D. Speidel	R. Geyer	D. Popeck
E. Zawatski	M. Stevens	D. Schmidt	C. Volker
Rumblers	Dawgs	Orange Crush	Renegades
P. Richardson	J. Campana	D. Bancroft	W. Brower
E. Empert	J. Whalon	J. Donahue	S. Holloway
T. Haug	A. Carroll	N. Reis	M. Lilly
Cellar Rats	Phantoms	Analytic Animals	Dyna Tigers
R. Garber	M. Devlin	M. Bien	T. Bailey
W. Mulley, Jr.	R. Lubanski	S. Finkelstein	J. Bradley
T. Vollmar	T. Matthews	E. Haas	R. Krasnansky
Pitchers	Pitchers	Pitchers	Pitchers
D. Mondelblatt	J. Wexler	J. Sniscak	R. Larr
(Bandits)	(Misfits)	(Bearcats)	(8th Inning)
D. Whitenack	R. Brodeen	J. DeValle	G. Heydet
(Bandits)	(Pacer)	(Nightriders)	(Granfalloon)
		W. Mulley, Sr.	
		(Guzzlers)	



A BIG CHECK FOR NAVY RELIEF —
 Command Master Chief Nelson Williams displays an oversize check for \$636 to be donated to Navy Relief as a result of various fund raising activities coordinated by the NADC Chief Petty Officers Association.

Crews Rest to cost more; becomes self-supporting

By JO2 Todd Lufkin

If you've been to NADC's club "Crew's Rest" lately, you may have noticed two things. One, the club is undergoing massive refurbishing and, two, the prices have gone up.

From this you conclude the price rise is because of the renovation. A good conclusion, but — wrong!

The price rise is Navy-wide at installations both here and overseas.

In this Gramm-Rudman era, the Congress has restricted the use of appropriated funds (APF) for military welfare and recreation (MWR) activities such as the Crew's Rest. Navywide, this cost reduction will amount to \$43 million in FY87.

Currently the club receives nearly \$70,000 of APF support. However, NADC has been designated a "metropolitan" command (while Willow Grove is considered to be "rural"). Because of this distinction, effective October 1, 1987, the club will no longer be eligible for these funds. As a result, the Crew's Rest must become self-supporting. If it fails to make it on its own, it could be forced to close!

To recover from this lost revenue, MWR will receive a small percentage from a Recyclable Materials Program which already exists here on Center and a soon-to-be established non-official travel office.

Findlay writes winning paper

By Mary Ann Brett

David B. Findlay was selected winner of the 'best written paper' award during the Greater Philadelphia Section of the American Institute of Aeronautics and Astronautics (AIAA) Young Member Competition. As mentioned in July's REFLECTOR, this was the last category of the competition to be judged.

Findlay, of the Aero Analysis Division in the Air Vehicle and Crew Systems Technology Department, authored the winning paper entitled, "Applications of Locally Induced Onset Flow in Aerodynamic Panel Methods."

The paper discusses computational fluid dynamic panel methods commonly used to produce aerodynamic characteristics of various air vehicles and an alternative or option to this, known as locally applied onset flow or local onset. By using the local onset option in certain cases, savings in both time and computer charges can be realized. One particular case where computer charges can be cut dramatically by applying the local onset method is when calculating aerodynamic influence coefficients for use in an aeroelastic analysis.



David B. Findlay

Integrity Alert

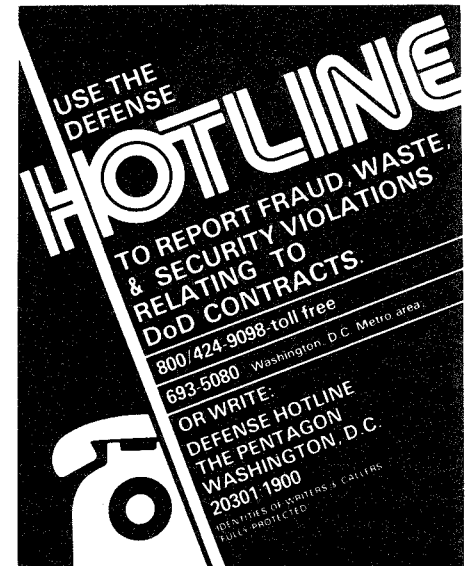
Use of Civilian and Military Titles or Positions in Connection with Commercial Enterprises

By Ron Kabin

All DOD personnel, except special government employees (certain temporary employees), are prohibited from using their titles or positions in connection with any commercial enterprise or from endorsing any commercial product. This does not preclude author identification for materials published in accordance with DOD procedures.

All retired military personnel and all members of reserve components not on active duty are permitted to use their military titles in connection with commercial enterprises provided they indicate their reserve or retired status. However, if such use of military titles in any way discredits the military departments or the Department of Defense, it is prohibited. The military departments may further restrict titles used by retired military personnel and by members of Reserve components not on active duty or in overseas areas.

If in doubt about a particular situation, contact the Center's General Counsel, Code 095 extension 3000, or the Internal Review Office, Code 00R, extension 3033.



But this alone won't be enough.

"The rise in club prices will help," said Ron Brewer, head of Recreational Services, "and the club's new look will hopefully bring in additional clientele."

The Crew's Rest is open to the entire Center for lunch and dinner Tuesday through Sunday and only dinner Monday. For additional information call 441-7651.

The Club also now offers catering packages which are competitive with outside establishments.

Some of the further refurbishing will include a lighted dance floor, wall-to-wall carpeting and brass planters and plaques. The club will also be expanded with an additional eating and private party area which will overlook the pool. This

construction has been funded by a grant from the Naval Personnel Command.

Brewer added that the club especially benefits those living in the barracks in that they can utilize the club and walk home. It also benefits basewide morale and, even with the current price rise, the prices are lower than out in town.

If you haven't used the club in the past or if you have, and weren't impressed, stop in now and let the club's staff serve you and make a new impression. If you have any suggestions for providing better service, the club is eager to hear from you.

The club can only be self-supporting if *we* (all of us) support it by using it regularly.

If the SOC Fits

By Robert Janes

In past columns on the Standards of Conduct (SOC), we have discussed some of the recent revolving door legislation which restricts the activities of former government employees. Another recently enacted law which has gotten less publicity is a portion of the 1986 Defense Authorization Act which increased and strengthened reporting requirements concerning defense related employment.

There are two categories of people who must file a DD Form 1787 each year to report their defense related employment — certain people who leave the government and go to work for major defense contractors (i.e., contractors receiving more than \$10 million in DoD contracts annually), and certain people who leave a major defense contractor and come to work for the government. The departing employees who must file these forms are those former officers with at least 10 years of active service who attained the pay grade of O-4 or above, and those former civilians whose pay at any time during the three years before leaving DoD was at or above the minimum rate of a GS-13 (currently \$38,727). The incoming employees who must file are

those civilians whose pay at any time is at or above the minimum rate for a GS-13 and who, within the two year period before coming to DoD, were employed by a major defense contractor at an annual pay of at least \$25,000.

These reporting requirements have been around for several years, but have been enforced rather haphazardly. The 1986 Authorization Act amendments display a renewed emphasis on these requirements on the part of Congress. Among other things, Congress has increased the amount of information to be reported, and has imposed an administrative fine of up to \$10,000 for failure to file a report. DoD in turn has modified the format of the DD Form 1787, and recently instituted a mass mailing to 25,000 former employees reminding them of the requirement to report. It should be noted that this DoD Form 1787 filing requirement is distinct from and in addition to any possible requirement to file other SOC forms, such as DD Form 1555, SF 278, and DD Form 1357. I encourage any of you with questions about this requirement — whether new employees, departed employees, or those contemplating departure — to contact either the Office of Counsel or Mrs. Gerry Keenan in the Personnel Office for additional information.



SECNAV Fellowship awarded
EEO awards presented
Shops overhaul P-3
New VS Program Director
Football forecast

Shuttle escape system developed at NADC

By Mary Ann Brett

NADC and the National Aeronautic and Space Administration (NASA) are once again working jointly on solving a space-related problem.

A method for emergency escape from the Space Shuttle is high on NASA's priority list. To help in this endeavor, the Johnson Space Center (JSC) brought in experts from both government and private industry across the country. As a result, NADC's Escape Systems Branch (ESB) has been assigned a key role in the development of a potential ejection-type escape system.

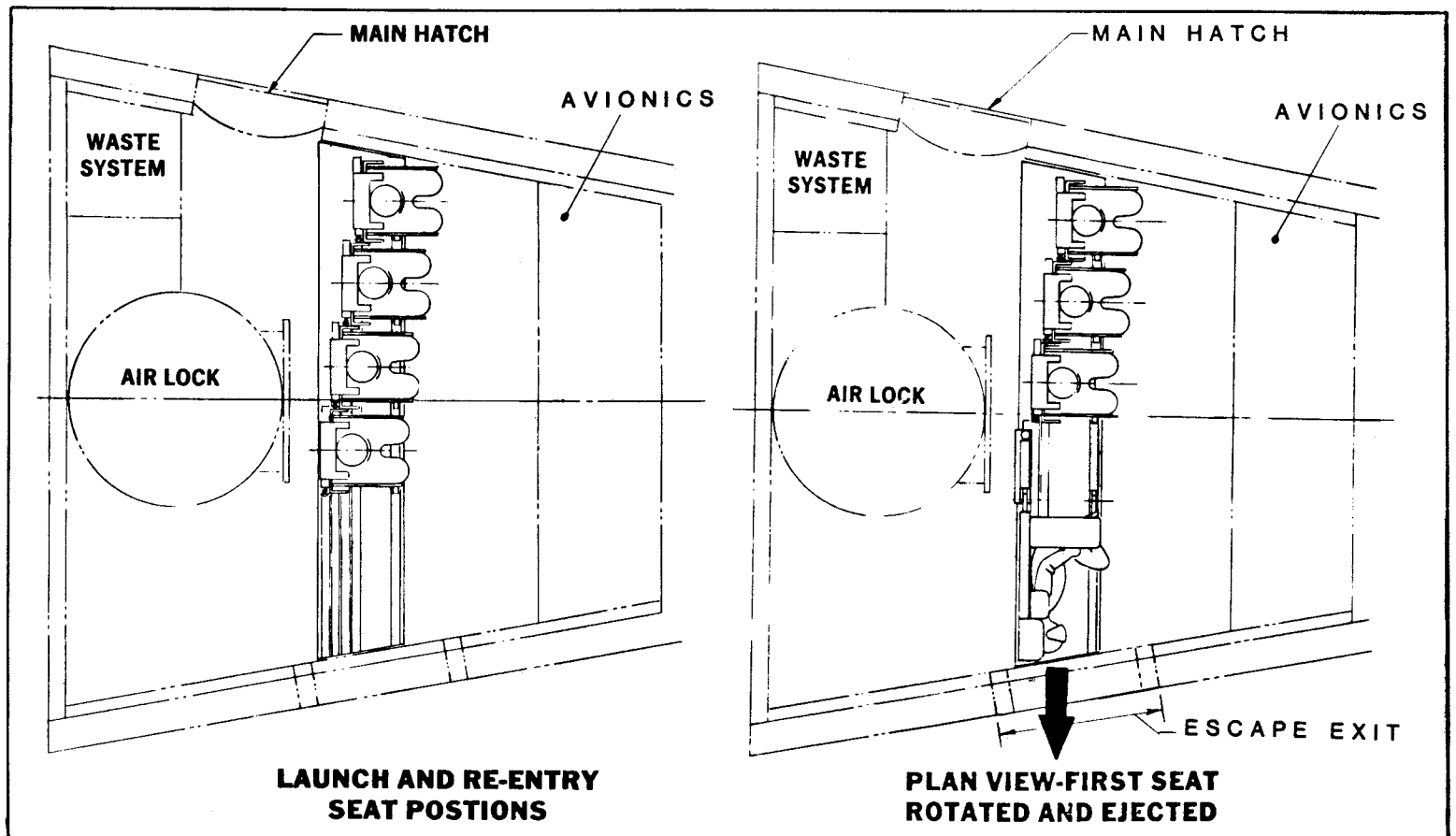
After traditional escape systems were mixed, NASA decided on a two-phase program. Phase I was to develop a bailout type system to aid the crew on descent only if it became obvious the orbiter could not return to a landing site. This option solved only a small portion of the potential danger facing the crew. So, JSC implemented Phase II to evaluate automated escape alternatives of benefit during both the ascent and descent phases of the orbiter mission. This Phase II committee is co-chaired by Peter Ayoub and Alan Cantor of ESB. Team members include Ray Tung, Gregg Sweriduk, John Quartuccio, Tom Zenobi, Peter Yost, Lou D'Aulerio, and Georg Frisch, all from the Air Vehicle and Crew Systems Technology Department.

This Phase II committee decided that during ascent, ejection-type escape is feasible from the pad to 100,000 feet above the earth, and, on descent, from 100,000 feet all the way back to the landing strip, for a crew of as many as eight astronauts. They reached this decision by carefully defining the problem and then developing concepts, physical layouts and mechanism designs usable in such an emergency.

The group determined the key ingredient for successful escape is to place the crew on the shuttle's two operational decks — the flight deck and the mid-deck (previous studies only considered the flight deck). Using this approach, the escape system could consist of a combination of a mid-deck system capable of ejecting three to four crewmembers, and a flight deck system capable of ejecting four to five crewmembers.

Subcommittees considered alternatives systems for each of the decks. While NADC played an overall role, its principal job was to develop the mid-deck concepts, mechanisms, and designs.

NADC's engineers contended that an area on the right side of the mid-deck could be ballistically removed to enable ejection. A meeting with JSC and Rockwell structural engineers confirmed this. NADC was then faced



with how to package, locate, and eject three to four crewmembers on the mid-deck.

A leading escape concept developed at the Center involves three or four seats in the current orientation to the orbiter (seated with the back at a right angle to the floor and facing forward). The seats are positioned along side each other, staggered in the "x" direction (horizontally), and just forward of the airlock.

This orientation affords the crew comfort for both the ascent and descent phases of the mission. Furthermore, the shuttle mission impact is

minimized in the areas of ingress/egress procedures, stowage space, airlock position, and life support systems.

At ejection, however, the escape system gets even more complex than those used in current tactical aircraft. First ballistics remove an escape exit on the side of the orbiter. Then each seat would, in turn, rotate onto its side, connect to its guide rails, and eject along the floor through the escape exit. One of many actuation systems may be employed to rotate the seats in a controlled manner. After full rotation, the catapult ignites, giving the seat its

initial velocity as it exits the orbiter. These catapult tubes remain in the shuttle but do not interfere with the oncoming seats since the seats were initially staggered. After leaving the orbiter, the seat would then employ state-of-the-art propulsion, sensing, stabilization, recovery (parachute), and survival systems to safely return the crew to Earth and sustain them until rescued.

In early October the committee will present its findings to NASA at JSC in Houston, Texas. If NASA accepts these results, it is likely that NADC will play a role in the full scale development of this shuttle emergency escape system.

Their name is "MMUD"

By Jim Kingston

Although they answer the telephone, "Hello, the world-famous MMUD," their fame may not have spread quite that far . . . but around here, their name really is MMUD.

MMUD is the Naval Air Development Center's newest acronym and stands for: Mobile Maintenance Unit — Deployed. Strip away their dubious world-famous status and they are, in reality, the Aircraft Maintenance Material Control Division of the Center's Aircraft Department.

During the current shutdown of the NADC runway, the aircraft maintenance function has had to shift its operations to a remote area of the Naval Air Station, Willow Grove (NASWG). The change of location required the combined efforts of our Aircraft Maintenance Division. Public

Works, Supply, Small Purchase, Security, and Operations; NASWG's Public Works; the Pennsylvania Air National Guard's 111th Tactical Air Group; and the 79th Army Reserve Command's flight facility.

Exemplifying the joint-service nature of this venture, the ground area where the MMUD facility is located is normally a training area of the Army Reserve, our two jet aircraft (A-7 and T-2) are housed and serviced at the Air National Guard Facility, and our P-3's are parked on one of NASWG's taxi strips.

Making the move to the new area was like blazing a trail through the jungle or across the desert . . . there was nothing existing but open space. Tie-downs had to be installed for the P-3's, telephones, communications equipment, antennae, intercoms, (Continued on page 8)



Photo by Jim Kingston

THIS WAY TO MMUD-ville.
For those who don't know MMUD from a hole in the ground, this sign marks the spot.

Letters to the Editor

To the Editor

Coming to work Thursday morning, 27 August 1987, at 0620 was an experience that I do not wish to repeat.

It was raining extremely hard and thundering when I entered the parking lot. I parked across the street and crossed the first bridge (off of Street Road) crossing Jacksonville Road. I was unable to enter the turnstile with my umbrella raised. Needless to say when I put it down in order to pass through, I got drenched. After surviving that ordeal, I encountered a flooded parking lot (poor run off) off of gate 9 that I had to cross to enter building 2. Thank God it wasn't cold because I had to remove my shoes to cross the flooded area. In the Winter this area is extremely icy. More than one early arriving employee has fallen on this surface.

Finally I enter building 2 angry and wet and proceed to climb the stairway located near the TV studio to get to the second floor. To add insult to injury someone locked the door at the top of the stairs and I had to slush my way back down again to find another way to get to the second floor. At this time I was seriously thinking about going home and back to bed.

Now I ask you, is this anyway to treat an employee?

Barbara J. Kempf

Dear Barbara:

The similarity between your actual experience and the hypothetical scenario in a letter to the editor last month is uncanny. Unfortunately, yours was compounded by a second problem.

The matter of the turnstiles on the pedestrian bridges is already being addressed in the form of a proposed roof design to eliminate the possibility of future drenching like yours.

Editor.

Dear Editor:

The May issue of the Reflector carried an article titled "Integrity Alert, Use of Center Phones." This article stated that the center is billed "in excess of \$600 a month" for directory assistance calls. It was strongly implied that this is deemed excessive. By my calculation this comes to less than thirty cents a month per employee, or about one directory inquiry per month per employee.

Your suggested solution to this "extravagance" is "researching phone directories." My experiment with this resulted in the use of four minutes to locate a directory (a world record for NADC where these books do not abound) and one minute to locate the number, plus half a minute to replace the directory. The grand total is five

and one-half minutes. The average federal employee earns approximately \$23,000 per annum. Cost to the government is the wage plus overhead (about 100%) resulting in a charge of thirty-seven cents per minute. My experiment with the phone directories thus cost the government \$2.03, hardly a cost saving over a thirty cent directory assistance call that takes less than one minute to complete (estimated total cost of sixty-seven cents).

Telephones are a vital part of modern business practice and communications and the costs associated are part of the basic costs of doing business, as are the costs of adequate parking lots, sufficient lighting, air conditioning and heating, etc.

I would appreciate your response to this letter in the Reflector. Please note that this letter was written on my own stationary, on my personal time and at no cost to the government.

Sincerely,

Peter Paul Fischer
Code 4013

Dear Mr. Fischer:

Thank you for your letter. We referred your comments to Bob Angiolillo, the Center's Telecommunications manager for his reaction. Here is his reply.

Editor.

Thank you for your letter to the Editor in which you addressed the article in the May 1987 Reflector on directory assistance telephone calls. This article was run, not to influence people not to use directory assistance, but to alert them of the cost of this service when other means would suffice. In addition, a recent audit by the Regional Audit Team, Camden, NJ suggested that in order to educate personnel as to the costs of services, we make available this information. Your point is well taken when comparing costs per hour of employees vs costs of directory assistance calls. However, use of other means to secure telephone numbers, such as recording telephone numbers of frequently called contacts, writing down numbers from letter-heads and correspondence, etc. is good, sound administrative practice. Prudent use of such services is an advantage in business as well as the US government but I would be remiss if I didn't convey, to users useful information such as costs for a service that many people took for granted prior to the divestiture of the telephone company in 1983.

Again, thank you for your interest. If I can be of any further assistance please call me at extension 2175.

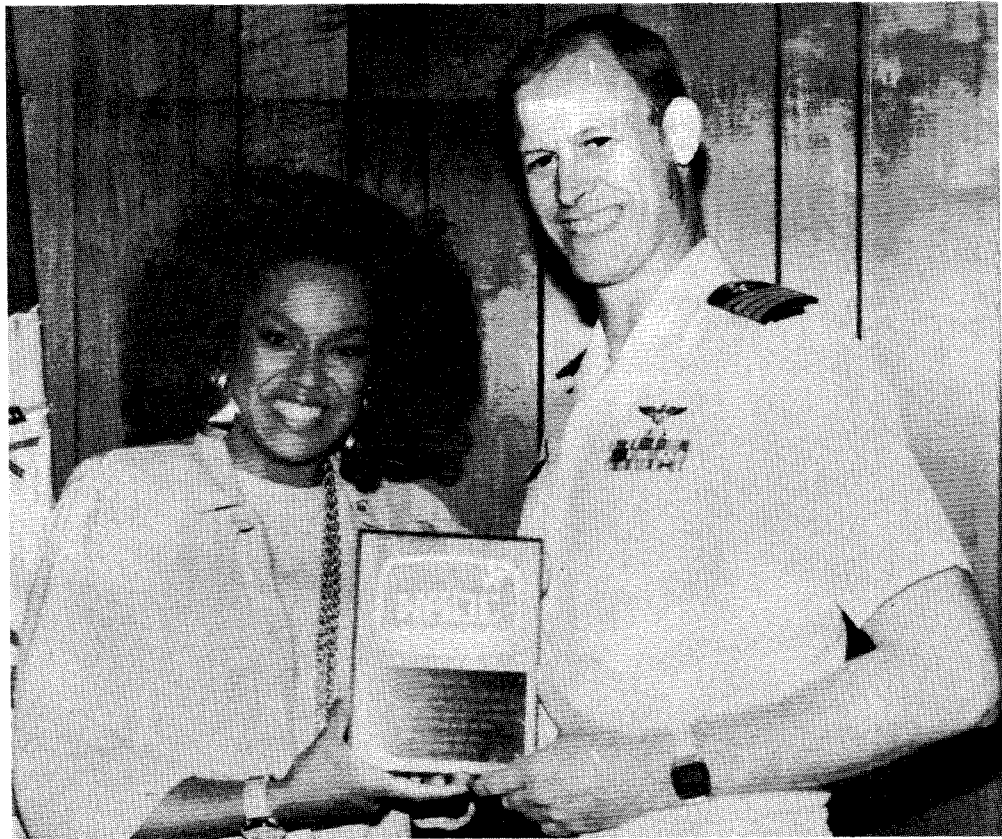


Photo by NADC photo lab

National Security Defense Course offered at NADC

For the past 24 months a number of NADC employees have been involved in a rigorous academic program sponsored by the National Defense University and is one of the highest level professional military education courses offered. The program is open to both military officers and civilians on Center. There are numerous exams and a research paper required. The seminar enables the participants to focus on the big picture of our national defense security. You start to get insight for how decisions are made at the national level.

This year's class produced two outstanding graduates: Robert Jankiewicz of the Systems and Software Technology Department and LTC Larry Wills, a reserve officer.

Both of these outstanding individuals join a list of such distinguished graduates throughout the world, as Henry Kissinger.

Since the program has been offered at this Center, there have been seven such outstanding graduates making NADC one of the leading seminar sites for outstanding performances.

If you've wondered about why the Korean Air Line Flight-007 was shot down, what went wrong with the Iranian hostage rescue attempt or the problems of the Grenada invasion, you're invited to join the seminar group and learn the answers.

This is part of an in-service course offered on Center — Ed Tankins is the course instructor. Call him on extension 2075.

TELEVISION PERSONALITY, Sheela Allen-Stevens entertained a full house of NADC employees in the Center's Dining room on August 26th in honor of Women's Equality Day. Captain Curtis Winters, Center Commander, presented Stevens with a plaque commemorating her visit which was coordinated by the Federal Women's Program Committee.

No rest for the Crew's Rest

By JO2 Todd Lufkin


The August Reflector reported that NADC's enlisted club was to become self-supporting October 1, 1987 due to Congressional restrictions on usage of appropriated funds (APF) service-wide.

However, pressure from the armed forces brought about a 5% reduction, as

opposed to the proposed 40%.

"This will have no impact on the Crew's Rest," said Ron Brewer, head of Recreational Services, "it only affects recreation services operations and clubs in non-metropolitan areas."

The club still needs everybody's help, especially yours.



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NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

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Commander, NADC	CAPT Curtis J. Winters
Technical Director	Guy C. Dilworth, Jr.
Public Affairs Officer and Editor	James S. Kingston
Associate Editor	Mary Ann Brett
Assistant Editor	JO2 Todd Lufkin

Annual EEO awards presented

Four individuals and two departments received this year's Equal Employment Opportunity (EEO) Awards presented during Human Resources Awareness Week.

Frances E. Caffrey, a Program Analyst in the Public Works Department, was nominated by her employees and co-workers, with the endorsement of her Department Head, for the Manager/Supervisor Award. Caffrey has been the supervisor of the Administrative Staff Branch for the past six years. Her employees are always eager to do their best as she shows that she not only cares about their work performance, but, also about them as individuals. Although she sets the guidelines, she gives them enough room to develop their own approach in the performance of the task, after assuring that they have the necessary on-the-job training or outside courses. According to one employee, he has never seen a "harder working or more considerate individual in his career." With such high marks from those who work with or for her, it is easy to see why she was chosen EEO Supervisor of the Year.

Personal Incentive Awardee **Carol Taylor-Blakey** has a genuine concern and a high degree of commitment to advancing equal opportunity here at NADC, in her local community, and as far away as Chile. Taylor-Blakey, an Electronics Engineer for the Digital Technology Development and Application Branch of the Missions Avionics Technology Department, has been very active with the Center's Special Emphasis Recruitment Program. She has recruited at a number of minority schools to obtain high quality applicants for our Science and Engineering (S&E) positions. She has also been the instrumental force in

planning, teaching, recruiting, and administrating the award winning Minorities in Engineering Program, which gives local high school students technical and career planning lectures and in-house, hands-on experience workshops to introduce them to S&E careers. Taylor-Blakey was on a month long missionary assignment from her church to Vina del Mar and Santiago, Chile at the time of the award ceremony. She is involved in numerous other activities including organizing prison visits and tutoring prison inmates in high school equivalency studies. All this, as well as her professional contributions on the job, have brought credit not only to Taylor-Blakey, but also to NADC and the Navy.

Richard Savory, a Management Assistant for the Electronics Standards and Issue Branch of the Engineering Support Group, received the Handicapped Employee of the Year Award. He performs his duties with a great deal of resourcefulness, relentless initiative, and exceptional devotion. He has repeatedly demonstrated his ability to produce exceptionally high-quality work and is never satisfied with a mediocre product. Savory, who was injured in a 1977 motorcycle accident, has the courage to persevere no matter what the odds and not surrender to his handicaps.

Helen Ling, as reported in the August Reflector, was selected as Woman of the Year.

This year, the Group Award was won by two departments, the **Comptroller Department (CD)** and the **Air Vehicle and Crew Systems Technology Department (AVCSTD)**.

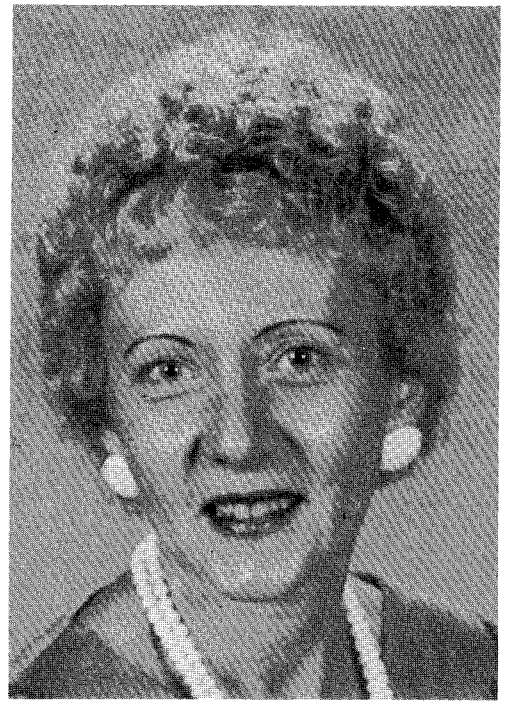
The CD has taken a proactive approach to developing a highly qualified and diversified work force,



Carol Taylor Blakey

including use of both the Upward Mobility and the Financial Management Training Programs as well as such pipeline programs as Federal Junior Fellowship, Worker-Trainee and Stay-in-School. Nearly 75% of their work force is female. Employees on an individually requested part time work schedule comprise ten percent of their work force. Seventeen out of twenty of this year's outstanding performance ratings were earned by females. Their actions personify the spirit of equal opportunity and demonstrate a wholehearted integration of affirmative action objectives.

AVCSTD's outstanding achievement in the area of EEO is demonstrated by the consistently high level of performance of its employees, supervisors, and managers who actively participate in many phases of



Frances Caffrey

the Center's EEO Program. They have been involved in Philadelphia Region Introduction of Minorities to Engineering and Space Research Capsule Programs through Northeast High School as well as other school and community groups, giving presentations and tours or providing expertise in S&E areas. They continue to lead the Center in the Mentor Program to provide orientation assistance to new employees. They have made continual use of Upward Mobility, Federal Junior Fellowship, Worker-Trainee and Handicapped Programs to attract and retain good minority S&E's and administrative personnel into their permanent work force.

All of the award recipients should be proud of their accomplishments, as should the Center in knowing that these people are representative of our work force.

SECNAV Fellowship for Knehnetsky



Photo by NADC photo lab

Irene Knehnetsky

By Mary Ann Brett

Irene Knehnetsky, a Budget Analyst in the Comptroller Department, was selected to participate in the 1987-88 Secretary of the Navy (SECNAV) Career Fellowship in Financial Management. This SECNAV Fellowship allows civilian professionals to pursue studies to enhance their capabilities and utility to the Navy. Selectees are sponsored for up to one academic year of full-time graduate level training while receiving full salary and related, authorized expenses.

A 1981 graduate of the University of Delaware, Knehnetsky has been at the

Center for six years. Under this SECNAV Fellowship, she will study financial management at Temple University. This training will assist her in high priority areas including asset management, current and potential changes in the Center's financial system, and the rate of cash flow/outlays as it pertains to unbilled balances, a critical area throughout the Government as well as NADC

Mike Wolfe, head of the Budget and Financial Analysis Division, and Knehnetsky's immediate supervisor, said he was thrilled at her selection. He also said, "She's an expert in many financial areas, and I'm counting the days 'til she returns!"

POW/MIA Day Set

National POW/MIA Recognition Day is Sept. 18, 1987. It's a day set aside to remind people of the pain and suffering that thousands of American prisoners of war endured in all the wars in which the United States has participated.

It is also a day established by Congress and proclaimed by the president to call attention to the fact that 2,413 American military men and women and civilians are still missing or unaccounted for in Southeast Asia.

Integrity Alert

By Ron Kabin

POLITICAL ACTIVITY

With very few exceptions, all civilian employees in the executive branch of the Federal Government, including part time or temporaries, are subject to the provisions of the Hatch Act which limits the political activities of Federal civilian personnel.

Members of the Armed Forces are subject to the same basic limitations as other Federal employees. DODD 1344.10 provides detailed guidance in this area.

Political Do's and Don'ts for Federal Employees

Can do:

- Register and vote as they choose.
- Assist in voter registration drives.
- Express opinions about candidates and issues.

Participate in campaigns where none of the candidates represent a political party.

Contribute money to political organizations or attend political fund raising functions.

Wear or display political badges, buttons, or stickers.

Attend political rallies and

meetings.

Join political clubs or parties.

Sign nominating petitions.

Campaign for or against referendum questions, constitutional amendments, and municipal ordinances.

Can not do:

Be candidates for public office in partisan elections.

Campaign for or against a candidate or slate of candidates in partisan elections.

Make campaign speeches or engage in other campaign activities to elect partisan candidates.

Collect contributions or sell tickets to political fund-raising functions.

Distribute campaign material in partisan elections.

Organize or manage political rallies or meetings.

Hold office in political clubs or parties.

Circulate nominating petitions.

Work to register voters for one party only.

If you have any concerns about your particular situation please contact the Center General Counsel, Mr. R. Janes extension 3000 or the Internal Review Office, Mr. R. Kabin extension 3300.

NADC Shops overhaul oldest P-3A

Middle age spræad is often the first sign that one better get back into condition but that isn't the case for P-3A aircraft number 148883. Yes, it does have an enlarged midsection, but it's not fat, it is a tough, firm fiberglas radome giving it more muscle for NADC. At 27, it may be the oldest P-3 aircraft in the Navy, but inside it is bright and trim, ready to get back into active service for research and development projects.

It took nearly a year for a team of more than fifty engineers, designers, planners, technicians, and mechanics to restore the P-3's good looks. The simplicity and clean lines of the interior give a false impression that little has been done to the aircraft other than a complete cosmetic overhaul. But once you look behind the panels and see the extensive electrical rework, or look beneath the floor to examine the complex structural modifications, it becomes evident a high quality design was followed up with top quality electrical and mechanical installation work by the NADC shops.

Dennis Bellevou, the Lead Project Mechanic said, "We are proud of this work because it represents one of the most extensive aircraft modifications the Center has accomplished in the past thirty years." Dan Lorch, the Lead Installation Design Engineer said, "The best part of this job was the fine sense of cooperation between the engineers, designers, and shop personnel. A job like this is a big responsibility because we have to produce something tangible, not just

paper. If the design has shortcomings everyone knows where to point the finger of blame. But on the other hand, we and the shop personnel are very fortunate to be able to see our work turn into solid hardware. It certainly provides more satisfaction than writing a contract and watching someone else do the work. What also makes this project so unique is that all of it was done within the Center. This includes fabrication of the radome by Betty Harvey, Joe Miller, and Jack Hickman; upholstery by Rod Pursell; all the way up through Flight Safety Certification by Phil Kaufman." Jerry Duley, the Project Electrical Engineer also had some comments about the project. "It took a long time to firm up the electrical requirements for this job. The project sponsors and the radar contractor introduced a great many changes right up to the end so I was busy right up until the aircraft left on its test flights. The electrical shop provided great support and we were able to get everything efficiently installed."

The aircraft will soon be outfitted with a Synthetic Aperature Radar (SAR). The SAR Program Managers Chuck Haney and Joe Schanne from the Tactical Radar Branch expect to utilize the aircraft as a testbed for a variety of radar experiments starting this fall.

A project of this magnitude has many people associated with it, both directly and indirectly in the planning, design, fabrication, installation and inspection stages. They could not all be mentioned by name.

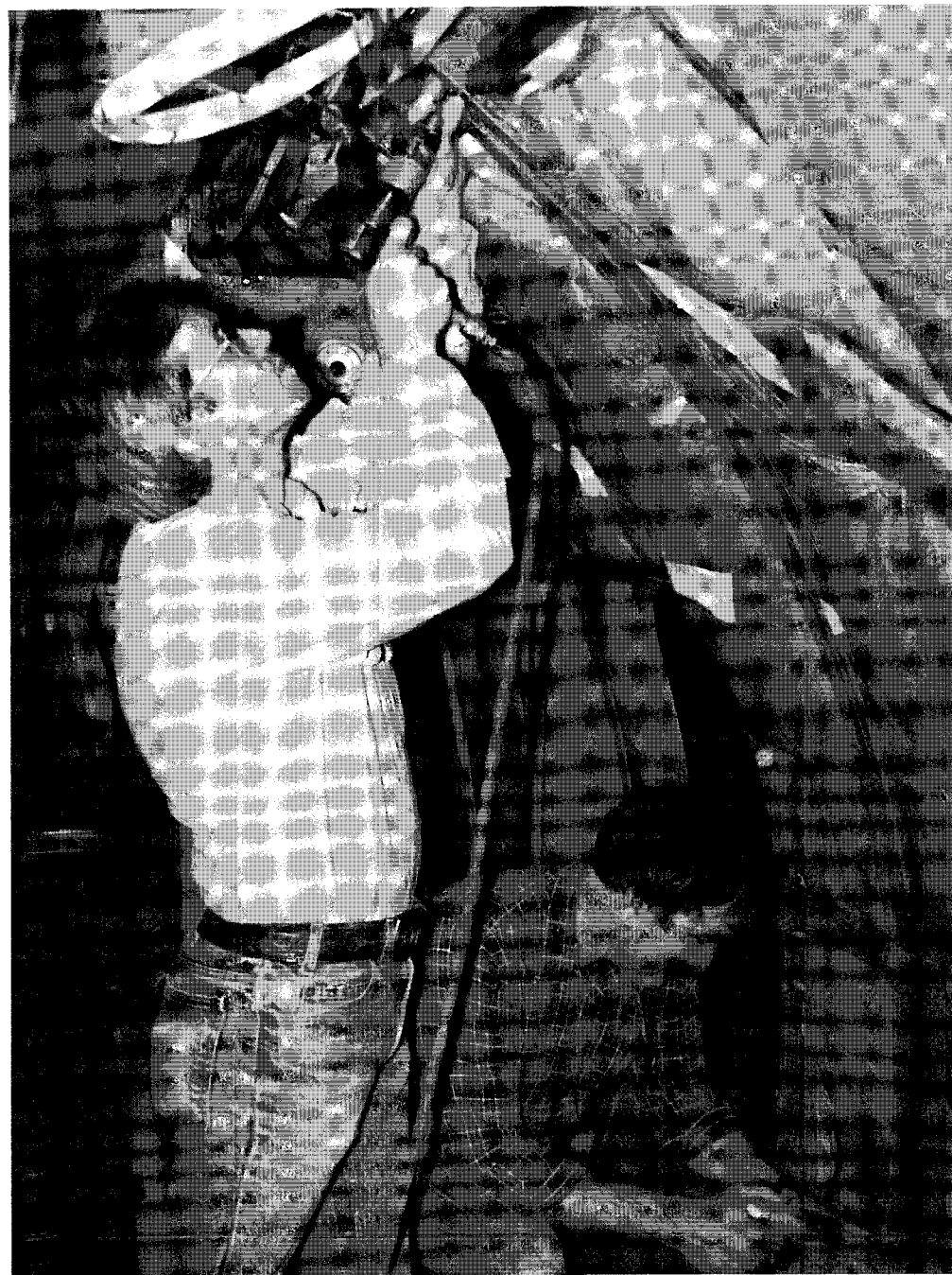


Photo by NADC photo lab

Lead mechanics Dennis Bellevou and Bill Williams prepare the aircraft for new interior panels.

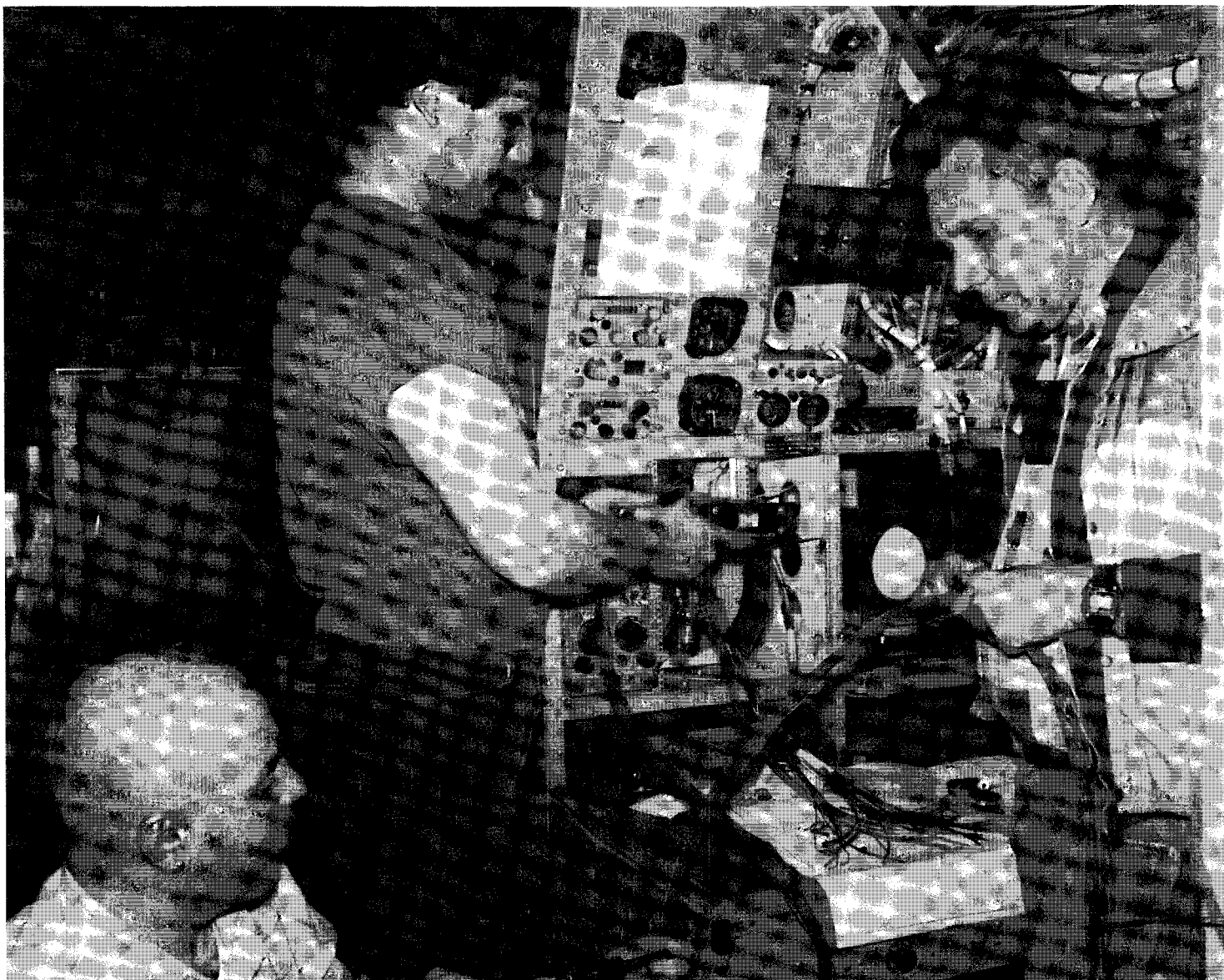


Photo by NADC photo lab

Tony Marinelli, Mark Polo and Henry Muir assemble an avionics station in the project SAR aircraft.

Promotions

Susanne Baier, Mary Benhayon, Natalie Bitny, Julieta Booz, Rita Brownlee, Nicholas Bruno, Neal Carper, Rebecca Carr, Patrick Clausius, Stephen Cloak, John Connors, Mary Conyers, Michael Costanzo, Michele Costello, Samuel Delsarro, John Devalle, Helen Eddowes, Joseph Empert, Anthony Eng, Dolores Falco, Darren Fields, Scott Finken, Susan Fisher, Steven Fleischut, Joseph Flynn, Patricia Foley, William Geissler, Marlene Giordano, Beth Goldberg, Michael Greco, Eileen Griffin, Michelle Grob, Laura Huber, Jacqueline Hutflus, Timothy Keck, Dawn Keiser, Hilda Kelly, George Klima, Ann Kolb, Gregory Kovach, Stephen Krasznay, Richard Kulp, Yoram Levy, Maryanne Mahoney, John Markow, Russell McWilliams, Robert Muller, Diana Mulley, John Nugurny, David Nethropp, Jeffrey Newcomer, Velia Nicolai, Evan Nosel, Donald Okowski, Evelyn Paiste, Frances Pannell, Karla Parsons, Bryan Rittenhouse, George Robinson, Joanne Rossbach, Richard Runyen, Stephen Sanelli, Francis Sanger, Michael Schneckner, Sandra Schwartz, Lamar Seiffuddin, Elliott Sidevater, Richard Stewart, Pablo Suarez, Joseph Tangye, Carol Vanwyk, Thomas Volmar, John Wilks, Debra Wood, Constance Wos, Pundat Wu.

1000th Personal Computer arrives with fanfare

By JO2 Todd Lufkin

Janetta Rose Greene of the Human Factors and Protective Systems Branch was slightly overwhelmed at the entourage of people who arrived with her new personal computer (PC). "I was a bit surprised with the amount of people who delivered my PC," said Greene, "I was expecting two at the most, but it seemed as though everyone but God was here!"

The reason for all the special attention was the fact that she was the recipient of the one-thousandth PC to be installed on Center. The unit was accompanied by two installers, the Computer Department Head, Bob Finkleman; Dan Tarrant, COAS Coordinator; and the Public Affairs Officer, with camera.

Greene, who is an engineer psychologist and has been on Center for three years, uses the PC to type reports, set up charts and plan programs. "It's a good feeling to type up a preliminary report without having to wait for someone else to do it for you."

"One of the highlights of my morning is turning on my PC — I absolutely love it!"

Greene feels that it is an asset and that "everybody should have his own."

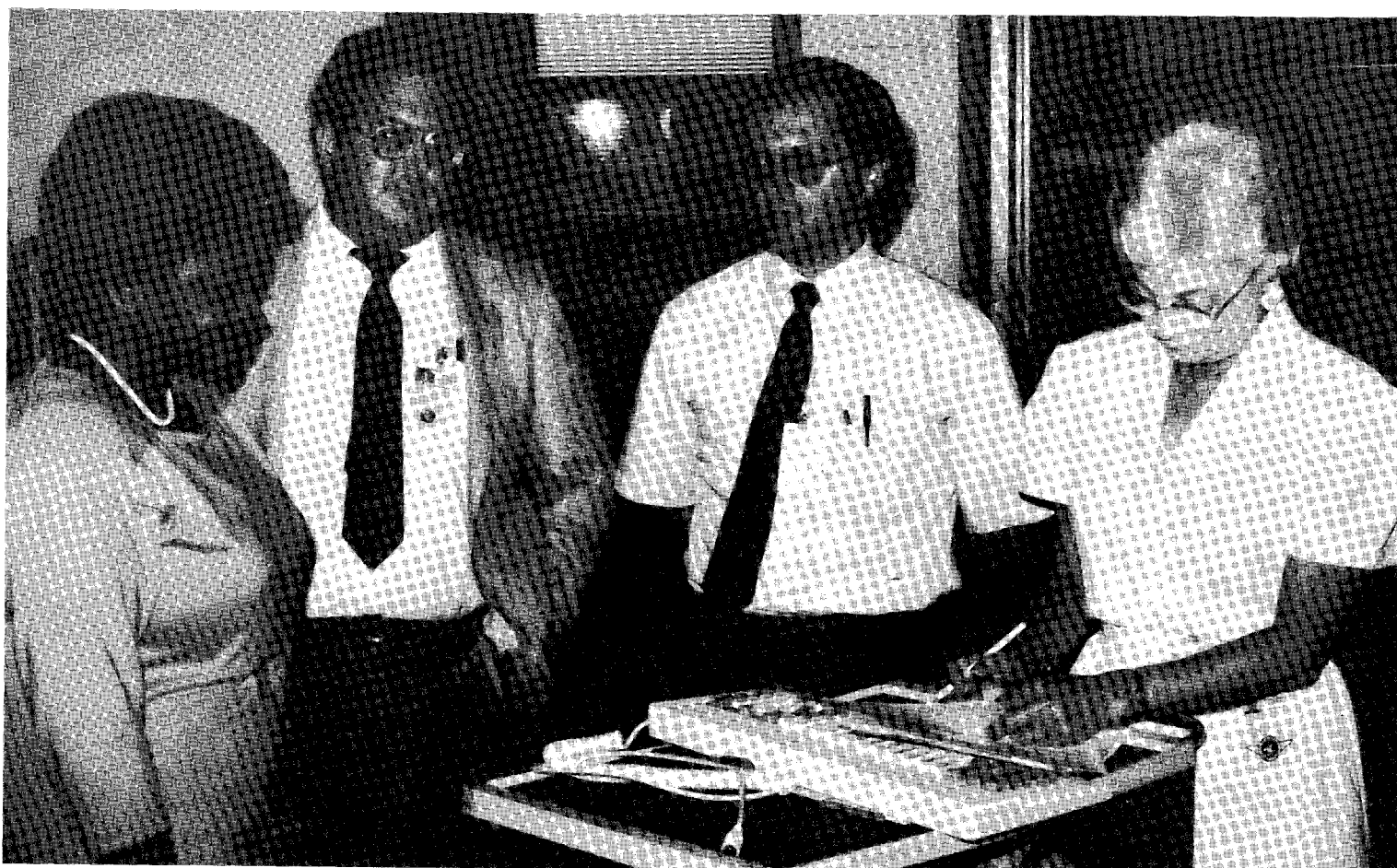


Photo by Jim Kingston

Janetta Greene, Robert Finkelman, Dan Tarrant and Ann Gillotti see to it that 1,000th PC is delivered in proper working order.

Muth named VS program director



Photo by JO2 Todd Lufkin

Commander Michael Muth

By Mary Ann Brett

Commander Michael A. Muth recently reported for a three year tour as VS Programs Director replacing Captain (select) Wayne Savage, now AntiSubmarine Warfare (ASW) Systems Department Head.

Muth and his team of seven are responsible for supporting the Naval Air Systems Command and the Fleet with Center people and assets primarily in software development and life cycle management of the S-3 carrier based ASW aircraft. "To me," said Muth, "providing our expertise, knowledge, and resources in support of sponsor requests is our main thrust."

Virtually all of Muth's eighteen-year Navy career has been spent in the ASW arena. Most recently he was stationed at Sea Strike Wing One (VSW-1) at the Naval Air Station, Cecil Field, Florida. There he spent eighteen months as Officer in Charge of the VS Support Unit which has recently been redesignated VS-27. It is this operational Fleet experience he feels is most important to his new position. "NADC's ability to integrate both the technical expertise and current information or problems experienced in the Fleet is the key to providing the best product possible," explained Muth. Only someone with

recent Fleet exposure can provide this input.

Immediately before arriving at NADC, Muth attended the Defense Systems Management College in Fort Belvoir, Virginia, an experience he considered most beneficial.

Originally from Mansfield, Ohio, Muth received a BS in Aerospace Technology from Kent State University, Ohio in 1969 and an MS in Systems Management from the University of Southern California in 1979.

Muth's wife Carol and their three children will join him to make their new home in Warrington township.

Commander Salutes

Anthony D'Adezzio (Code 10): For dedication and diligent efforts as a senior design engineer for the CV-ASW Module Program contributing to the development of a new digital television display for shipboard use as part of the family of Navy standard AN/U/Q-21 Display systems.

AT1 Donald Boyer, AMH2 Dean Countz, AMS2 Charles Ewing, AEAN Jerald Meyer, AME2 Timothy Olson, AD2 William Rogan (Code 82): For support and professionalism displayed during the Wings of Freedom airshow in Mercer County.

ADSC James Snow, AMH2 Mark Gray, AE1 David Beaudry, AT1 Kevin Landis, AMET Jeffrey Delcamp, AD1 Cardy Hughes, ADAN Alex Bauzon, AMS2 Jeffrey Mancuso (Code 82): For success in preparing P-3A Bu No 152150 for flight from Davis Monthan Air Force Base to this Center.

Thomas Long (Code 30): For superior performance and contributions as the Communications Technology Engineer and Deputy Project Manager for the Joint Tactical Information Distribution System.

Stan Dunn (Code 10): For outstanding program management, technical, and administrative Foreign Military Sales Case support to the Royal Australian Air Force P-3C aircraft.

LCDR Timothy Singer (Code 60): For an enthusiastic presentation at the June 1987 Operational Problems in Aerospace Physi.

HMC David Becker (Code 60): For professional assistance to the Food Services Board.

Sydney Oliver and Groyun McConnell (Code 60): For expert assistance provided to the Naval Air Systems Command as a member of the Nondestructive Inspection Review Team.

Security Reminder

Proper use of the new Security Check Procedures form facilitates close of business security checks and enhances area security. The form is mandatory in all government agencies.



ASTRONAUT SHUTTLES TO NADC — NASA astronaut and Mission Shuttle Specialist Guion Bluford visited NADC while visiting this area to receive an AIAA award. Bluford, first Philadelphia native, black astronaut, spoke in the Center Auditorium on the effects of weightlessness.

Granfalloon sweeps through softball playoffs

By Charlie Destra

It's that time of the year when I take out my broken record and play that same old song — "the Granfalloon takes softball championship." Yes, the 'Falloon once again defended their championship, this time knocking off the 8th Inning in just three games, capping an unblemished string of seven straight playoff victories.

The 'Falloon, winners of six titles in the last nine years, appeared stronger than ever by besting some stiff competition in dominating fashion. They did it with a balanced attack and contributions from virtually the entire squad, scoring a total of 80 runs and giving up a mere 19 in the playoffs. Once again, however, it was perennial MVP candidate Greg Heydet who led the charge. Heydet hit the opposition from both sides by punching out 28 strikeout victims in 34 innings and drilling a team-high six home runs. He also led the team in hits (10) and tied Tom Weiss for the top RBI total (10).

The 'Falloon's streak began with a bang and with Heydet setting the tone. They erupted for seven first inning runs (three run Heydet homer) in their first game of the quarterfinals against the Druids enroute to a 15-3 win (Heydet, nine KO's, 4 hitter). Steve Torok then threw a six hitter for a 10-4

win to close out the series. The easy drubbing of a tough and seasoned Druid team did not bode well for future opponents.

Meanwhile, another quarterfinal matchup was taking place between the Nightriders and 8th Inning (the 'Falloon's eventual championship series opponent). And in the first game, the 8th Inning were being tatted by the Nightriders, 16-6 (Dean Kimelheim, two home runs). But they gathered their composure and rebounded to win the next two games, 12-8 and 8-3. In what developed into a rugged series, experience was the key to their comeback.

In the pivotal third game their defense, mainly in the form of third baseman Dean Stroehle, made the difference. In the third inning with two on and one out, Stroehle cancelled out an extra base hit down the line with a quick-as-a-cat headlong diving catch. But the big play came in the fourth (bases loaded, two out) when John Fitzpatrick roped a shot to left that was rising rapidly and appeared to be ticketed for extra bases. Suddenly, Stroehle climbed a ladder to the sky and miraculously hauled the ball, ice-creamed coned in the glove, back down to Earth. All the air then came out of the Nightrider bag. In the only

quarterfinal series to go the distance, Joe Klicka (three home runs) was the big gun at the plate for the survivors.

In other quarterfinals, the second-seeded Misfits pummeled the Pacer in two straight, 20-12 and 31-11. (The Pacer advanced to the quarterfinals by beating the Devils, 10-7, in a one-game wildcard matchup.)

The top-rated Bandits also looked strong by sweeping CSC (20-8 winners over the Bearcats in the wildcard game), 10-7 and 16-0 (Dave Whitenack, four hitter). CSC fought back from a big deficit in game one and had a rally brewing in the last inning when a base-running boner cost them the last out of the game. From there it was downhill and the Bandits advanced on to the semifinals.

The semifinals pitted the 8th Inning against the Bandits and the Granfalloon against the Misfits. All four teams were looking invincible and the Bandits and Misfits (who finished one-two in the standings) theoretically had the edge. But the 8th Inning and Granfalloon had tradition on their side, and were fine-tuning their engines and ready to fly in high gear.

Buoyed by their great quarterfinal comeback, the 8th Inning swept the Bandits, 17-8 and 5-2. And they did it without their manager and key hitter, Fred Kuster, who couldn't make the games.

Meanwhile, the 'Falloon kept up the pace with 12-3 (Heydet, eight KO's) and 15-0 (Heydet, four hitter) wins over the Misfits. No one expected the 'Falloon to win this series so easily and dominantly, and the signs were clear that they were at the top of their game and that their confidence level was at that rare peak when great teams do extraordinary things. They were hitting with power (Mike Bubb, two of five series homers) and for average, getting exceptional pitching and playing standout defense.

Extraordinary is what it is to sweep a team like the 8th Inning, who have been down this road a few times before and were playing like champs in their own right. The 8th Inning were without a vacationing John Bechtel, which put a strain on pitcher Bob Larr

who had to be called on to toss every game. So, the first game was a key game for them in this five-game championship series, and they needed to win it.

Once more it was Larr versus Heydet, speed against speed, the league's equivalent of Gooden versus Scott. The expectations were high.

But the 'Falloon, in their toughest playoff game, survived, 6-5. Losing 5-1 going into the last inning, the 8th Inning scored four times to tie. But the 'Falloon loaded the bases in the bottom of the inning and won on a Dave Jenkins RBI walk. As if that wasn't depressing enough for the 8th Inning, they failed to score a single run earlier in the fourth despite a base hit and two doubles. The killing blow came when Larr was tossed out at the plate on a fine throw by Tom Weiss. Heydet racked up seven more whiffs and launched another homer for the winners. Joe Bebey and Jack Connors got three hits each for the losers.

Teams just don't rebound from that type of loss, and the 'Falloon proceeded to wipe out their foe in the next two games by identical 11-1 scores. Torok tossed a six hitter in game two, aided by three double plays. Heydet gave up six hits in game three and the 'Falloon hit five more roundtrippers (two each for Heydet and Weiss).

Along with Heydet, Weiss and Steve Fleischut (9 RBI's, .600 ave.) played big roles throughout the playoffs. And once again, the 'Falloon drinks the champagne.

Time to put that broken record away. Maybe I'll play it again about this time next year, who knows?



I thought I'd express some opinions this time around, rather than the mundane statistical fare you normally get . . . The spirit of former Granfallooner Jerry Guarini (1956-86) will live with this league for as long as it exists. The high standards, exemplary conduct, good will, and quality of performance on and off the (continued on page 7)



Steve Fleischut fills the victory cup with teammates Mike Bubb and Tim Weiss ready to enjoy.



The winning Granfalloon team members are: (standing) Pete Shaw, Pat Finnegan, Greg Heydet, Mike Warren, Mike Bubb, Glenn Willis, Garth Torok, Dave Jenkins, (kneeling) Tom Weiss, Steve Fleischut, Buzz Cerino, John Tralles, Carlton Brown, Gary Marinelli. (Not in photo; Steve Torok and Mark James)

Mixed Bowling News

By Tom Reiter

The ball will start rolling on Wednesday night, September 9th at the newly renovated Thunderbird Street Road Lanes. Since the shopping center has been completed, the lane manager, Steve Faunce, has promised us a more pleasant atmosphere to enjoy our bowling.

Remember the ringer that John Bowes slipped in on us last season? Steve Metcalf, after two back to back 700 series settled down to finish the season with only a 182 average. Well, the Who Cares roster for this year shows Garth Torok and Annemarie Reiter — Yo . . . John, gimme a break.

In some off-season news, Mike Dent has been burning up the summer tour — winning more than \$400 in local individual match play.

Here is a list of the captains and their teams for this year. The

parentheses show last season's finishing positions in each Division.

Ed Gifford	Dynamic Duos (B-11th)
Bob Geyer	Alley Cats (B-2nd)
Helene Goldstein	Eleventh Frame (B-1st)
Mike Troyansky	Les Champignon (B-8th)
Donna Morgan	Spare Us (A-5th)
John Bowes	Who Cares (B-9th)
Bernie Weber	Warveyhallbangers (A-3rd)
Carla Mackey	Bullshooters (A-12th)
Tom Reiter	Red Winos (A-2nd)
Sue Casagrand	Big Spenders (A-4th)
Les Smith	Neiners (B-3rd)
Mike Daulerio	Blips (B-6th)
Jim Mitchell	Strange Brew (A-6th)
Steve Jerdan	Falcons (B-7th)
Neil Weinman	Magic Markers (League Champions)
Cathy Burian	Lucky Strikes (A-7th)
Pat Tease	Screwballs (B-10th)
Rick Uppright	White Winos (A-9th)
Dave Whitenack	Destroyers (B-5th)
MariJane Maloney	Lane Brains (A-8th)
Lorraine Kittner	Nine Pins (A-10th)
Al Knobloch	Goofers (A-1st)
Dave Williams	From the Gutter (A-11th)
Liza Johnson	Pinheads (B-12th)

Falloon favored for Fall football, fans

By Mark Lilly

Here he is folks — from the land of mystics, prognosticators, and others who try to tell people what they want to hear — Carnak the Great, to predict the outcome of the 1987 NADC Football league season . . .

Answer: The Bridgeton, Mr. Mooney, and Paul McFadden.

Question: Name a tanker, a banker and a shanker.

Now, seriously sports fans, even though I didn't answer that question by touching a sealed envelope to my forehead, here are my predictions and some comments on the 1987 season.

The odds-on-favorite to win the championship this year has to be the perennial NADC sports team powerhouse, the Granfalloon. The Falloon dominated the league last year with an undefeated season and has won the championship in four of the seven years of the league's existence. They are led by Tom Weiss, the league's best quarterback and rusher, and have two of the most dangerous receivers in the league in Matty Brown and Mike Warren. Their offensive punch, coupled with the stingiest defense in the league, make the Granfalloon the team to beat this season.

The second place finisher should again be the Barking Spiders. They have excellent team speed and have few weaknesses on their offensive or defensive units. Quarterback and captain Ken Koper found more success during the 1986 season after abandoning the long ball offense that he had used in seasons past. Koper has a competent receiving corps that includes Scott "Fingertips" Fowler and Rob Turzanski. Team spokesman Mike Costanzo has assured me that star receiver and defensive back Bill Schork would jet in from Istanbul in time for the Spiders' first game against Gang Green. At press time, I understand the fleet-footed and sure-handed Tim Foley was trying to sign the Spiders to a multi-year deal worth an SSP award. However, sources close to negotiations have informed me that the Spiders front office has only offered a cafeteria special lunch pass and a chance to roll up the new lighted dance floor at the Crew's Rest.

Third place will probably go to a rejuvenated Blue team. Blue failed to make the playoffs for the first time in their history during the 1986 season so I look for them to come back with a vengeance during the 1987 campaign.

A year of experience should help quarterback Mickey Rudock become more effective since Blue's offense sputtered at times last year. A lot of Blue's fortunes will ride on the playing time of captain Fred Kuster. Kuster, who has been one of the league's best possession receivers, is questionable since he injured his foot in an overtime game during the 1986 season. Even without Kuster the player, Kuster the manager should be hard to beat.

The fourth playoff spot is up for grabs with the Renegades and Gang Green vying for the last position. The Renegades seem the most likely contender since their playoff team from last year is still intact. They have Steven Hynes, who is capable of generating an explosive offense, and defensive standouts Jerry Costanzo and Jeff Price. Gang Green finished the 1986 regular season in third place but have had some key off-season personnel losses, such as quarterback Phil Sapovitz, which are likely to make their playoff chances rather tenuous. One bright spot in the green team's off-season trading was the signing of the multi-talented Jeff Glatz. Glatz, undoubtedly the fastest man in the league, was stolen right out from under the noses of the Barking Spiders.

The Lasers, Dragons, and Druids have a smaller chance of making the playoffs. The Lasers have improved a lot during their second season in the league and with more playing time could give some teams trouble. The Dragons have some talented veterans, such as Tom McGovern and Adrian Hribar, on their squad but once again half the team is new. The Dragons need to improve their defense if they are going to be contenders since they tallied the second highest points against total last season. The Druids seem destined to finish last in the standings once again. They didn't win a game during the 1986 season and they lost a number of players during the off-season which means trouble in a league where experience wins football games.

That concludes my predictions for the 1987 season of the NADC Football League. I hope I don't look too bad after the water passes under the bridge but that is the gamble of conjecture. With the guesswork aside we can put on our spikes and play the game. Enjoy. (P.S. Monetary contributions for favorable and very biased reporting may be sent discreetly to me via the inner office mail system.)

Center a winner in YMCA's "Battle of Businesses"



Photo by NADC photo lab

NADC's "Battle of the Businesses" team display medals, certificates and team T-shirts after a victorious competition.

POP - UPS

(continued from page 6)

field that Guarini stood for were symbolized and recognized last season when a worthy Steve Torok was chosen to be the recipient of the first annual "Jerry Guarini Sportsmanship Award." The 'powers that be' in the league this year presented the honor to a former teammate of mine and long-time Guzzler, Bill Mulley. Mulley's hanging up the spikes after 30 years of play (more like 'hard work' for a guy his age), and all I can say is this: if you could put on the field a team comprised of ten Bill Mulley's you'd have a dependable team that makes few mistakes, guts out every game, gives it its best shot every night — and

wins. Congratulations to Mulley and the braintrust that made him the choice . . . Congratulations also to Commissioner Jim Kearney for putting so much time and effort into his position, especially in this, the most problematic year in memory. Kearney, who sometimes upsets people with his forceful, demanding style, nonetheless gets results and his many changes and improvements during the last couple of years are noteworthy and have made this league stronger and better . . . Tom Weiss (Granfalloon) gets a vote here as top manager this season. The Whitey Herzog of the league knows the technical aspects of the game as well as anyone, and rarely makes mistakes or

misses a trick when managing. And, he keeps winning titles . . . Speaking of managerial prowess, I'm still wondering what Fred Kuster said to his 8th Inning team after my Nightriders beat them in the first game of our quarterfinal series. With my team loudly celebrating, and myself as a curious onlooker, Kuster huddled his group at the bench on their side of the field and delivered a quiet and serious two-minute speech to a sunken bunch of egos. They sat there and listened to him very intently and coincidentally or not, went on to win the next two games . . . I'd pick Greg Heydet to start a team, followed by Rick Sames. Give me Jeff Price and

The Naval Air Development Center was one of 17 participants in the recent Central Bucks YMCA "Battle of the Businesses." Welfare and Recreation sponsored the Center's team for the four-day competition. Making up the NADC teams were: Eileen Beans, Liz Haney, Lorraine Lasorsa, Joyce Moore, Mary Ellen Grady, Craig Elicker, Scott Holloway, Kevin Birney, Mike Lanier, Larry Coar, and it was captained by Steve Bazow.

Events included basketball, volleyball, swimming, simon says, tug-of-war, 100-yard dash, sack race relay, soccer dribble, obstacle course and a one-mile relay. NADC took first place in volleyball, giving up only 5 points in 6 games. The Center also took first in the soccer dribble, fourth in swimming, fifth in the sack race relay, seventh place in the obstacle course and seventh place in the one-mile relay.

Overall NADC took sixth place in the competition. The "Battle of the Businesses" was enjoyable and gave local businesses the opportunity to meet each other in friendly competition.

Stan Zajdel and any other six guys and I'd have a first place team. It would, at a minimum, have leadership, superior pitching, great speed, a left-right power combination and excellent defense in key spots . . . The 'Falloon hit 37 homers in 19 regular season games, and 14 in 7 playoff games, two per game, no matter how you slice it (had to toss in one stat). See you next year.

Their name is "MMUD"

(continued from page 1)

loudspeakers, lighting, power sources, storage, office space . . . everything had to be brought in, set up, installed, purchased, borrowed or rented.

The first challenge to NADC's sailors was setting up General Purpose (GP)-Medium Army tents. According to Chief Warrant Officer Bob Toth, "We never saw one before, nobody ever set one up!" Toth said that the tents were acquired from the Defense Property Disposal Center and came with no set of instructions, but it was clear to everyone that those three frightening words were applicable: "Some Assembly Required." They successfully assembled not just one, but three GP-Medium tents. The site quickly took on the appearance of TV's M*A*S*H complete with signs reading 'the Swamp' and 'Col Sherman T. Potter.' The fun was followed closely by the reality of heat, humidity, rain, and real mud (with one 'm'). The biggest scourge of the area has been the rampant poison ivy which has affected virtually everyone.

Across from tent city, three rented office trailers were brought in to house communications and records as were

conex containers for storage. A 'water buffalo' was borrowed from the Air National Guard to have a supply of drinking and washing water. Portable toilet facilities were also rented. Even recreation was not overlooked as a basketball hoop with backboard was installed and horseshoe pitch set up. To help beat the heat somewhat, the Navy Exchange installed a soda dispensing machine on MMUD's main street. The local food vending truck has also found a new market for its services. To carry off the debris of this operation, dumpsters and a trash removal service were contracted.

Performing maintenance out of doors is often risky business, particularly when aircraft have to be jacked up. A single gust of wind could cause a plane to slip from its jacks. Arrangements to time-share hangar space with VP-66 were made. Still, work had to be done — with or without benefit of hangar protection. The MMUD folks have already performed two outside engine changes; prop dome; prop changes; and main gear check, removal, and replacement. By any standards, that's a pretty good showing. In fact, these accomplishments under such adverse field conditions may just make them 'world-famous.'

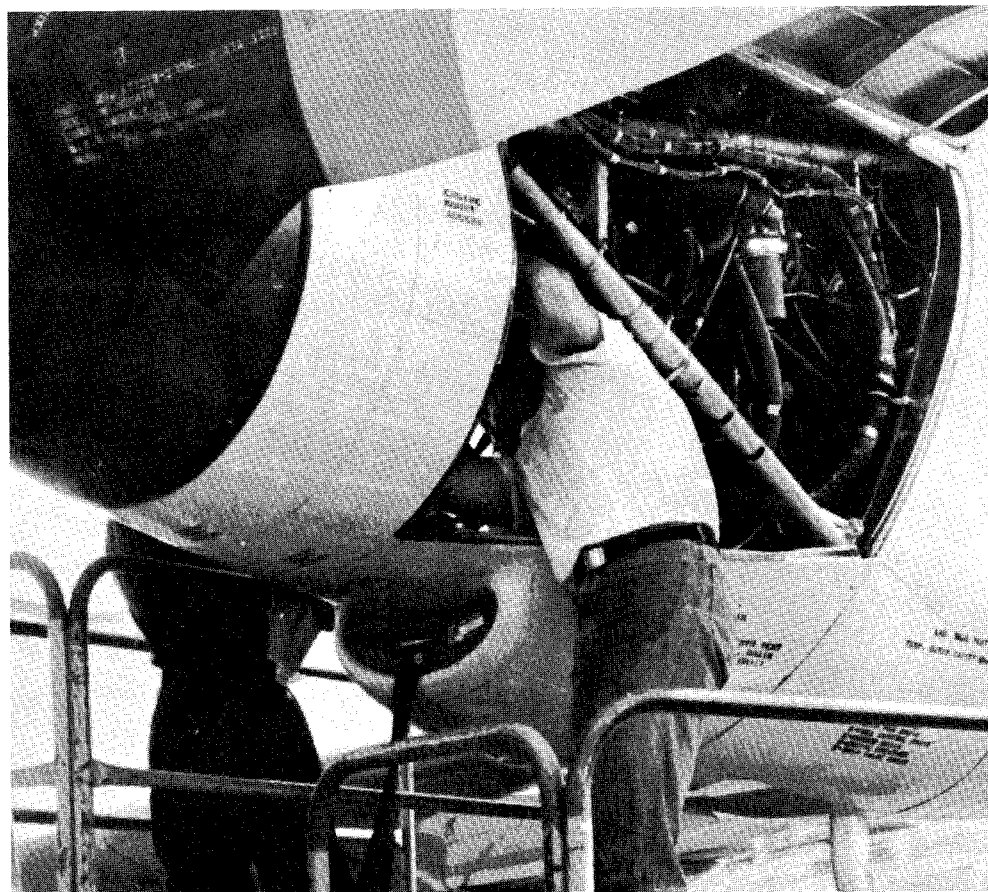


Photo by JO2 Todd Lufkin

OUTDOOR MAINTENANCE is one of the demands met by NADC's MMUD mechanics. Here AD3 Dave Jackson and ADAN Alex Bauzon work on a P-3 engine.



Photo by AMSC Michael Divona

"SOME ASSEMBLY REQUIRED" is the order of the day as AX3 John Bates and AO2 James Phelan erect an Army tent.



Photo by Jim Kingston

GETTING WATER FROM A "BUFFALO" is as easy as opening a faucet for AT3 Edward Herrmann. The "water buffalo" was supplied by the Air National Guard.



Photo by Jim Kingston

IT'S THE REAL THING — a Coke machine brings a degree of civilization to the MMUD and Mike Kindsey of Dyna Corp.



Photo by Jim Kingston

R&R AT MMUD was not forgotten. A basketball hoop and horseshoe toss attract AD1 Henry Kawalewski and AD1 Cardy Hughes.



Reflector

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Humphrey in the White House
Golf Championship
Understand the Handicapped
For Women Only

Volume 32 Number 10

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER PA.

October 1987

GEN-X marks the spot

New expendable decoy developed at NADC

By Mary Ann Brett

Our tactical aircraft need protection against an array of surface-to-air and air-to-air missile threats. As these threats grow in number and sophistication, our technology to counter them must grow at the same or faster rate.

NADC's newest contribution to electronic countermeasures is the Generic Expendable Decoy (GEN-X). Program director, Joseph Laska of the Mission Avionics Technology Department (MATD), led the effort to design, develop, package, fabricate, test and evaluate the GEN-X, an expendable active electronic device to counter a specific class of missile system.

Describing part of the problem, Laska said, "Suppose the jammer on any given aircraft were not doing its job. One of the more sophisticated threats, if not fooled by the jamming signal, could use the signal to its (continued on page 3)



Photo by JO2 Todd Lutkin

Bill Hicklin, John Oakley, Sid McLeary, Joe Laska, Bill McLaughlin, and Harry Ricca discuss design advantages of various decoys. Laska holds a GEN-X prototype in hand.

Smith designated "Certified Plant Engineer" by AIPE

By Mary Ann Brett

NADC Public Works Officer (PWO), Lieutenant Commander Earl Smith, Jr. was recently designated a Certified Plant Engineer (CPE) by the Certification Board of the American Institute of Plant Engineers (AIPE).

Not without prior recognition, this new credential is still important to Smith. "It's based on my broad experience and background", he said, "and it shows that a standard of professionalism does exist in this business. It also indicates that

maintaining Navy plants is at least comparable to private industry facility management and requires a qualified professional to do so both effectively and cost efficiently."

Smith has been a member of the Navy's Civil Engineering Corps for 19 years and is already a licensed professional engineer in California. He arrived at NADC in July 1985 and supervises nearly 200 people in his positions as PWO and Resident Officer

in Charge of Construction. Smith has a Master of Science degree in Management from the Naval Post Graduate School in Monterey, CA and a Bachelor of Science degree in Mechanical Engineering from the University of California.

AIPE, with more than 8000 members across the U.S. and Canada, is America's only association dedicated exclusively to the plant engineering profession. AIPE certification was

established in 1975 and quickly became a standard of excellence for the plant engineering profession. The initial process of certification requires either a combination of engineering education and experience or a passing grade on a comprehensive seven-hour written examination. To date, approximately 1,700 plant engineers in the U.S. and abroad have been certified.

Fireman wins national collegiate scholarship

By Mary Ann Brett

NADC Fire Fighter Richard Valesky recently won the U.S. National Collegiate Scholarship awarded by the U.S. Achievement Academy.

Valesky has been attending evening classes for four years and is only nine credits away from receiving a degree in Fire Science Administration (FSA) from Holy Family College in Philadelphia. The FSA coordinator there nominated Valesky for this scholarship which will cover his

remaining tuition.

Although Valesky considers himself a part-time student, he has attended Holy Family, Montgomery County Community, and Philadelphia Community Colleges concurrently! He has maintained a 3.5 G.P.A. through the FSA curriculum which includes the theory of fire fighting, building construction, and fire extinguishing systems.

His goals include fire investigation and, perhaps, teaching. Valesky also intends going for a Master's degree.



LCDR Earl Smith, USN



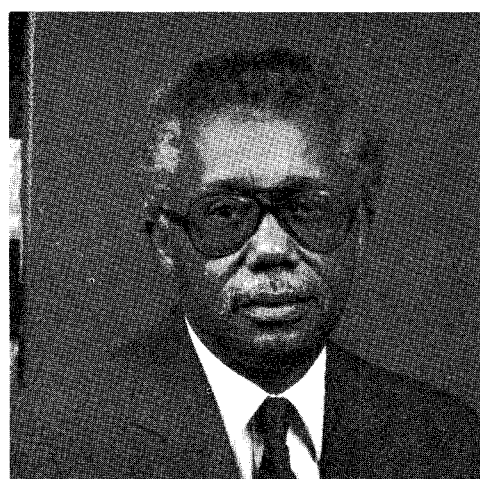
Richard Valesky

**ENERGY AWARENESS WEEK
19-23 OCTOBER 1987**

Command Corner



CAPT Curtis J. Winters
Center Commander



Guy C. Dilworth
Technical Director

To all hands:

As the new Center Commander, I think it's important as well as appropriate to state now, at the beginning of my tenure, my policies and my expectations.

As I view it, NADC is a unique facility. It's a blend of civilian and military; men and women; scientific and support, management and labor; all working on theoretical, developmental, or actual flying aircraft. The Center has a rich heritage of technical accomplishments plus a well-deserved reputation for having a talented workforce and being a well-run organization.

Here, in essence, is how I intend to operate:

Quality of Life

One of my goals is to make NADC an even better place to work. It's my belief that the better an organization treats its employees, the more productive, efficient, and responsive both they and the organization become.

Teamwork

The task of each individual is important. No one group, work center, or person can be totally successful without the assistance of others. Everyone must believe that his / her job is important.

Equal Opportunity

We will continue to take affirmative action to eliminate underrepresentation at all levels within our work force.

Innovation

Naturally, we must comply with, support, and enforce the rules and regulations of our superiors and the people who pay us. However, I believe there is still adequate flexibility within existing rules and regulations for us to be innovative as well. We must also be open-minded, imaginative, and quick to see the potential of new concepts and ideas. We must continually search for more productive ways of doing things.

Communications

Many problems are either caused or aggravated by poor communications. Managers and supervisors must be well-informed of failures as well as successes. I want to be prepared, in a timely fashion, to be responsive to both good and bad news.

Details

Someone must clearly be responsible for the details in every endeavor. Very often the difference between failure and success is strict attention to details. I will be concerned with the details in your area of responsibility only when I believe that no one else is looking after them.

Important and exciting new aircraft systems are already being developed at the Center and more will certainly follow. For these programs to succeed, we must have the full commitment, talent and support of the entire NADC team. Our future as an organization hinges on our performance as a team.

C.J. Winters
CURTIS J. WINTERS
Center Commander



— 212th —



Photo by JO2 Todd Lufkin

TAKE CARE OF TACAIR: Rear Admiral G. H. Strohsahl (right) NAVAIR's Program Director for Tactical Aircraft visited NADC in September 1987. The Admiral and NADC's Commander Roger Hill, Deputy of the Tactical Air Systems Department enjoy a break between briefings.

Commander Salutes

Ken Clark (Code 60): For expert and timely assistance to the Naval Air Systems Command to resolve P-3 aircraft wing corrosion problems.

John Connors (Code 60): For valuable assistance to the U.S. Small Business Administration Breakout Representative.

Edward White (Code 60): For chairing the Aircraft and Associated Ground Power Supplies Committee and the Aircraft Power Systems Committee for the Naval Air Systems Command.

William Mawhinney and John Tyburski (Code 60): For support to the Naval Air Systems Command on the H-46 Helicopter Emergency Flotation System.

Carl Reitz (Code 60): For outstanding support provided to the Unmanned Air Vehicle Program.

Joseph Colombo (Code 20): For outstanding support at the DoD Independent Research and Development On-Site Review at Rockwell International - North American Aircraft Operations.

Stan Olenick (Code 30) and **Glen Savage** (Code 40): For superior performance and successful completion of JTIDS Class II Multiservice Development Test Evaluation.

Anthony Mickus (Code 30): For contributions to the successful achievement of many of the David W. Taylor Naval Ship Research and Development Center wargaming objectives.


W. Herbert Heffner (Code 20); **Kenneth Foulke, William Ailes, and Paul Prichard** (Code 50): For dedication to duty and outstanding support of high priority Naval Air Systems Command programs.

Marlene Grubb (Code 03): For assistance and advice to the Naval Civilian Personnel Data System Center.

Dave Bailey, Jim Weikert, Maria Hura, Paul Gasuk, Dick Desipio (Code 30); **Randy Huckaba** (Code 50); **Richard Adams, Ed Deska, Mike Strizak, Keith Sansalone, Eleanor Vadala, Joe Franz, Ed White, Toney Lee, Robert Santmann** (Code 60): For invaluable service and a job well done on behalf of the Navy Airship Program Source Selection Board.

CDR Timothy Cudia (Code 82): For developing the Aircraft Department's fine reputation in the VP Community.

HM3 Joseph Kailis and HM3 James High (Code 60): For assistance during the NAVRESREDCOM Trauma Management Weekend.



Reflector

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

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Commander, NADC	CAPT Curtis J. Winters
Technical Director	Guy C. Dilworth, Jr.
Public Affairs Officer and Editor	James S. Kingston
Associate Editor	Mary Ann Brett
Assistant Editor	JO2 Todd Lufkin

New expendable decoy developed at NADC

(continued from page 1)

advantage by locking on to the jammer signal and hitting the aircraft. If you could kick the jammer off the aircraft, its signal would pull the missile with it and away from the plane. If the missile hits the decoy instead of the plane, the decoy has done its job." This is the theory that led to the development of the expendable (one shot) counter-measure.

"There's no such thing as a 'silver bullet' in electronic warfare," said Laska, "... no one answer to all the problems." In the development of the

GEN-X, the problems included designing a cost effective, expendable decoy jammer with virtually the same capability as an on-board model. That meant compressing the electronics and housing from 1 to 2 cubic feet down to a 1-1/2 x 6 inch container.

The GEN-X owes its miniaturization to monolithic microwave integrated circuitry. This circuitry is powered by a self-contained battery which is activated when the cartridge is dispensed. The GEN-X has no external connections or controls and is stored in a thin-walled tubular cartridge and then loaded into a dispenser. After the

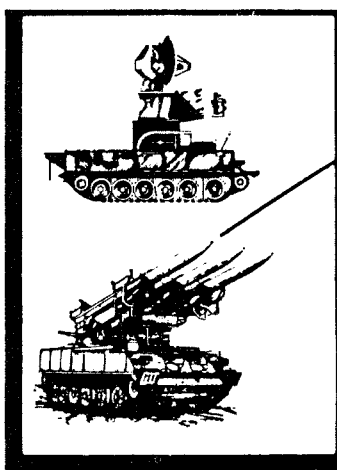
pilot launches the GEN-X, it operates automatically. It receives a radio frequency (RF) signal from a recognized threat, makes necessary adjustments to the signal, and then retransmits a more powerful RF signal, appearing to the threat as a better target than the aircraft.

The GEN-X is the first major follow-on to the Prime Oscillator Expendable Transponder (POET) developed at NADC by MATD electronic engineers Bill Hicklin, Bill McLaughlin and Harry Ricca in 1976 and produced in 1978. POET was the first RF expendable decoy to be

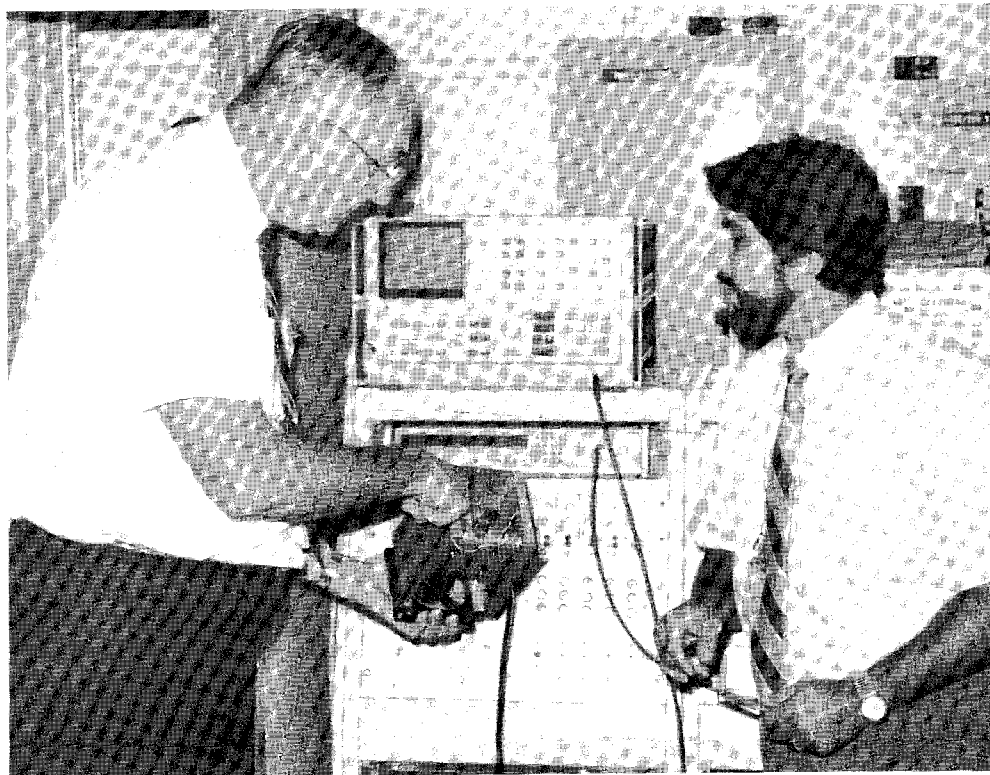
produced. In fact, it was POET's success that formed the foundation for the expendable decoy work now done at the Center. Through these efforts, NADC has been able to maintain its status as the lead lab responsible for the development, production support and inventory determination of miniature expendable jammers.

Laska said expendable counter-measures are not intended to replace on-board jammers, but, complement them. In some cases, either an on-board or an expendable version would suffice. In other cases, both are needed ... it all depends on the threat.

DECOY OPERATION



- RECEIVES ILLUMINATOR SIGNAL
- LOCKS ON TO THAT SIGNAL
- TRANSMITS A DECEPTIVE SIGNAL MATCHED IN FREQ BACK TO MISSILE
- MODULATION IS IMPOSED ON THE DECEPTIVE SIGNAL
- THIS DISRUPTS THE MISSILE'S VELOCITY AND ANGLE TRACKING MECHANISMS
- CAUSES MISSILE TO TRACK DECOY INSTEAD OF A/C



Harry Ricca and Joe Laska inspect the spectrum analyzer which checks radio frequency output.

Photo by JO2 Todd Lufkin

Be aware — be ENERGY SECURE

Energy Awareness Week begins October 19th. This year's theme is ENERGY SECURITY, emphasizing awareness of how energy affects our daily lives and national security and how vulnerable our energy resources are to foreign influences.

The United States uses more crude oil than it produces. Today, imports from foreign sources account for more than 40 percent of the petroleum required to fuel our industries, heat and cool our homes and office buildings, power our means of transportation, and support our defense systems. Any major or prolonged disruption in our imported oil supply would affect our way of life dramatically.

Energy security is attained by reducing our dependence on imported oil. It seems simple. But, why then doesn't the United States produce more crude oil? Why don't we use other forms of energy instead of oil? Why would foreign countries supply us with less oil than we need? Don't they need our money in return? When you try to answer these questions, you see how complicated the problem really is.

Only a limited quantity of oil remains in the earth, some probably yet undiscovered. Ironically, most of the remaining large deposits of oil are found in less developed countries, and

not in the major industrialized countries that need sizable quantities to fuel their economies.

The question remains: Why not use other forms of energy? This is definitely the way to go; however, it takes major investments of time and capital. The United States has huge resources of coal, oil shale, and geothermal energy, aside from renewable sources like the sun, wind, and ocean. Technologies are being developed to harness the energy from these sources and make it usable. But it will be well into the 21st century before any of these alternatives can replace substantial amounts of oil and then only if the government and industry begin intensive development programs now. Today's relatively low cost and abundance of oil have made many forms of alternate energy sources uneconomical and impractical.

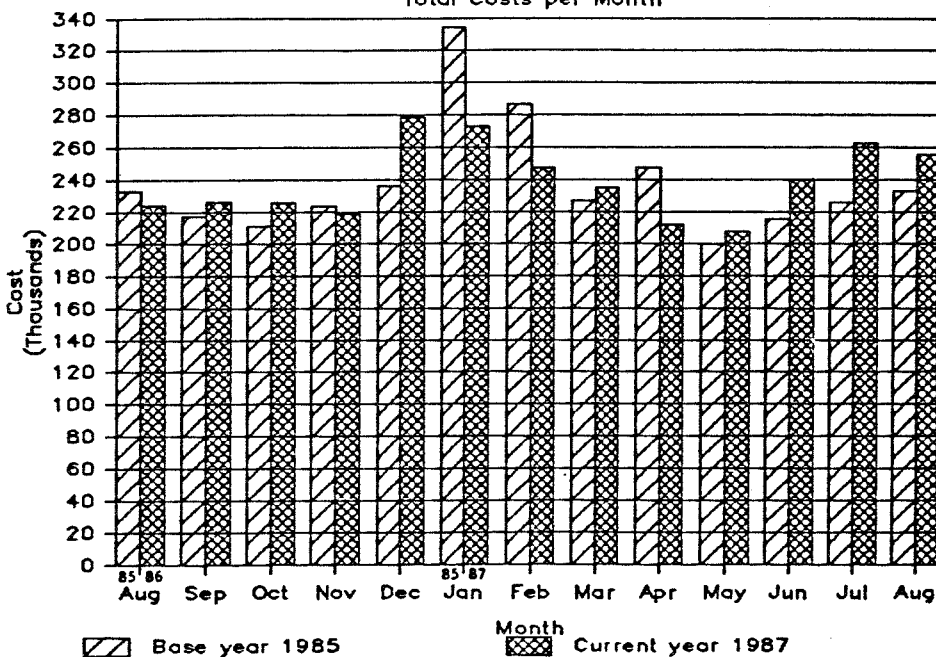
In the meantime, we are vulnerable and must conserve energy. Every barrel of oil, gallon of gasoline, or kilowatt-hour of electricity conserved means an equal amount of energy need not be imported and more energy will be available in the future. Not everyone can help discover new oil reserves or develop alternative energy sources, but every American can reduce energy demand by using energy wisely and conserving whenever possible.

Energy Facts

- The U.S. imports more oil today than in 1973 or 1979, 6 million barrels a day.
- Over 80% of the Navy's energy is from petroleum.
- Oil prices are slowly rising from a low of \$10 a barrel in 1985 to \$21 a barrel today.
- There is lack of new domestic and non-OPEC sources.
- By the mid 1990's OPEC will control virtually all of the world's excess oil capacity as existing non-OPEC fields dry up.

NADC Energy Usage 1987

Total Costs per Month



Another Humphrey in the White House

By JO2 Todd Lufkin

What Center employee has socialized with the last three Presidents and seen rooms of the White House the average Washington visitor never sees? Our own Greg Humphrey of the Materials Application Branch of the Aircraft and Crew Systems Technology Department. How did he manage this, you ask? Because he's lucky enough to have a sister who's with the management of Ford's Theater.

Recently Humphrey attended a gala sponsored by Ford's Theater to raise money for the arts. The entertainment included "Miami Vice's" Don Johnson, "The Golden Girls's" Bea Arthur, magician David Copperfield and singer Glenn Cambell.

The three-day affair included receptions that started at the Capitol,

moved to Ford's Theater and ended in the Green Room of the White House.

"As a public building, the White House is very livable," stated Humphrey, who also visited the Oval Office and the Reagan's private quarters on the second floor. "It's a beautiful house."

Humphrey has met the Fords, the Carters, and now the Reagans. "The President and Mrs. Reagan are sociable people—very nice. They made everyone feel welcome and at home."

"I was intrigued looking out the White House windows and seeing the people who were looking in. They would wave at us because they thought we were important. So we waved back."

Humphrey is looking forward to meeting the next family who moves into the White House.



Official White House Photograph

NADC's Greg Humphrey gets up-close and personal with the First Lady and President Reagan.



Photo by Jim Kingston

TELLING IT LIKE IT IS, Captain Curtis J. Winters gives an NADC orientation to members of Warminster's Rotary during a recent luncheon meeting.

Minority enterprise week held

Congress has designated the week of October 5th 1987 as National Minority Enterprise Development Week. In honor of this occasion, the Small Business Office will publish a directory of minority- and women-owned businesses. This directory will assist in implementing the Center's Small/Disadvantaged Business Programs, especially the new Small/Disadvantaged Business Set-Aside Program.

Supporting a minority business is no small matter at NADC. The ever-increasing support for minority business has gone big — while having its roots firmly planted in the Small Business Program.

Congress mandated that 5% of all DoD contract dollars be awarded to minority businesses for fiscal years 1987 through 1988. To emphasize its support for this goal, NAVSUP gave NADC a 7.7% goal for FY87. As of the end of August we had awarded more than 9% of our direct purchasing dollars to minority business and most of the contracts were won competitively. The contracts awarded span a wide range of disciplines such as library services, engineering support, and design of Global Positioning Satellite equipment.

For additional information contact the Small and Disadvantaged Business Office on extension 2456.

If the SOC fits

By Robert Janes

SECNAVINST 5370.2H, entitled, "Standards of Conduct and Government Ethics," is the primary Navy instruction in the area of the Standards of Conduct (SOC). This instruction is available in General Files (extension 2763) and should be consulted for guidance on any SOC questions. The Office of Counsel (Code 095) is likewise available to provide advice and guidance on these matters, and I urge any of you with SOC questions to call our office on extension 3000.

One of the enclosures to the SOC instruction, entitled the "Bedrock Standards of Conduct," provides a concise summary of the entire instruction. Those bedrock standards of conduct are:

1. Avoid any action, whether or not specifically prohibited, which might result in or reasonably be expected to create the appearance of:

- Using public office for private gain,
- Giving preferential treatment to any person or entity,
- Impeding Government efficiency or economy,
- Losing complete independence or impartiality,
- Making a Government decision outside official channels,
- Adversely affecting the confidence of the public in the integrity of the Government.

2. Do not engage in any activity, or acquire or retain any financial interest which results in a conflict between your private interest and the public interest of the United States related to your duties.

3. Do not engage in any activity that might result in or reasonably be expected to create the appearance of a conflict of interest.

4. Do not accept gratuities from defense contractors.

5. Do not use any official position to influence any person to provide any private benefit.

6. Do not use your inside information to further a private gain.

7. Do not use your rank, title, or position for commercial purposes.

8. Avoid outside employment or activity that is incompatible with your duties or that may bring discredit to the Navy.

9. Never take or use Government property or services for other than officially approved purposes.

10. With limited exceptions described in the instruction, do not give gifts to your superiors or accept them from your subordinates.

11. Conduct no official business with persons whose participation in the transaction would be in violation of law.

12. Seek ways to promote efficiency and economy in Government operation and public confidence in its integrity.



Security Reminder

Protect foreign "Restricted" material, for which there is no U.S. equivalent, the same as U.S. Confidential.

Protect typewriter ribbons used in

typing classified material the same as the highest level of classification for which they have been used. Refer to Paragraph 1102.d, of NAVAIR-DEVCONINST 5510.13C.

Sports

The Divots did it in the dark

By Ken Clark

The Divots did it! They won the 1987 Nick Murphy Trophy, that is. For those of you not up on your NADC edition of Trivial Pursuit, the Nick Murphy Trophy is awarded annually to the NADC Golf League Championship Team—this year the 1987 Divots. While former team captain Bob Lutz pulled a tour of duty as this year's league president, Ken Clark filled in this year as the team's match master. With stalwarts Bob Melby, Linda Clark, Ron Whitsel, Joe Cody, Dick Crosbie, John Kolb, Dutch Krauss, Chris Stehnach, Bill Hicklin and Wayne Everett, the Divots managed a close second place finish in their division, entitling them the post-season ball beatings. Convincing wins over the Stokers, the 19th Hole, the White Division Champion Mulligans, and the Red Division Champion Hobbits, gave the Divots their second championship in five years.

The final round of the '87 playoffs was a nine-against-nine slugfest, featuring

air support from Bob Lutz as he circled Northampton Country Club in the NADC Flying Club plane on his way back from a Boston trip. Also missing from the finals were Bill Hicklin (on travel in Paris, France) and Linda Clark (the team's low handicapper). When play ended in deep twilight, the Divots had survived everything including Hobbit dust, Steve Cloak's one iron and Abe Berman's thrashing of Wayne Everett on the club tennis courts (which was where Waynes driver maneuvered three consecutive tee shots). The playoffs are not a new experience for the Divots, who had won the title twice previously. The Double Eagles have won the most league championships with five, followed by the Divots and Greenies tied at three each. After the Divots '83 win, they gained the second round of the playoffs in '84, the first round in '85 and the third round in '86 before winning in '87. Next year, they are hoping for more of the same—taking long walks and hitting things with a stick.



Photo by Dick Crosbie

THE 1987 DIVOTS CHAMPIONSHIP GOLF TEAM. Ron Whitsel, Chris Stehnach, Ken Clark (Cpt.), Bob Melby, Joe Cody, Dutch Krauss, John Kolb, Dick Crosbie. Not shown is Wayne Evertt, halfway down the first fairway with his best tee shot of the day.

Renegades — surprisingly good football in 1987

By Mark Lilly

All right, so I blew a few of the predictions that I made in the last article. I suppose it's a good thing that I'm an engineer and not an oddsmaker. The most notable discrepancy from my predictions was my guess that Blue would finish in third place. Well, there's a pretty good chance that won't happen, since they don't have a win in four

contests. Two other deviations from my soothsaying endeavors, albeit to a lesser extent, are the sudden success enjoyed by both the Renegades and the Lasers (the former I can live with). Below is a list of the standings through Week 4 of the 1987 season.

Team	W	L	T	Points For	Points Against
Renegades	4	0	0	92	12
Granfalloon*	3	1	0	63	15
Barking Spiders	3	1	0	71	53
Lasers	3	1	0	56	56
Dragons	1	3	0	45	96
Pit Bulls	1	3	0	37	72
Gang Green	1	3	0	35	65
Blue*	0	4	0	26	56

*Forfeit Game - No Points Assessed

The Renegades, probably the most suprising team of the 1987 season, were leading the pack through week 4. They were undefeated through the first four games and that streak included a gutsy win over an always tough Granfalloon squad. Coming into that game, the Renegades had outscored their opponents 79-0. The Falloon had put up some equally impressive numbers, plus they were riding a 17 game winning streak that dated back to the fourth game of the 1985 season when they lost a close game to Gang Green. The first half was a defensive struggle with the score tied at zero going into halftime. The Falloon were lead defensively in the half by Tom Weiss, who blocked four Steve Hynes' passes, and Mike Bubb who intercepted two more. The second half started with a bang as the Renegades' money player, Jerry Costanzo, returned the opening kick-off for a touchdown on a lateral from Jeff Price. The extra point was converted on a Hynes to Scott Lassen pass reception making the score 7-0. The Falloon, always strong in the second half, came back to take a 12-7 lead on two touchdown passes from Weiss to Steve Fleischut. The Renegades came back to win the game 13-12, on a long pass from Hynes to rookie sensation Mike Elser.

The game was well played by both teams, especially in the second half, and portends to another match-up in post-season play.

The Barking Spiders were in third place through week 4 and seemed to be heading towards another playoff-bound year. The Spiders opened up the season looking rusty in a 13-8 win against Gang Green and they didn't look much better in a 25-0 loss to the Renegades. However, week 3 saw the Spiders bounce back with a vengeance as they beat the Pit Bulls 32-7. During the contest Bill Schork was a one man wrecking crew as he tallied four touchdowns against a completely astonished Pit Bulls team. The fourth

week pitted the Spiders against a winless Blue team. The Spiders won easily 26-13 to take a 3-1 record into the second half of the season. One final

(continued on page 8)

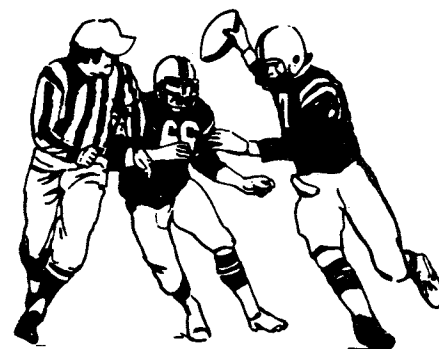


Photo by Phil Richardson

The Renegades' Scott Lassen seems to dive for no apparent reason in front of the Pit Bull's Darren Fields.



Photo by Phil Richardson

Pit Bull Steve Spadafora tries to catch the ball with his eyes closed as Renegades' Steve Hynes and Scott Lassen defend.

Mixed Bowling News

By Tom Reiter

The new season ended its first month with interdivisional matches. The A Division won the first encounter by winning 28 total game points to the B Division's 20 points. Going into October, the Red Winos are atop the A Division and the Goofers have again taken over the lead on the B side.

The standings and highest individual scores bowled by each team are:

A DIVISION		B DIVISION	
Red Winos	Mike Dent - 230	Goofers	Wes Gleason - 221
Neiners	Elaine Granieri - 190	Lucky Strikes	Lorraine Reidinger - 166
Warveyhallbangers	John Vincent - 230	Strange Brew	Art Duhaime - 184
Alleycats	Nelda McMillan - 179	Lane Brains	Cathy Burian - 168
Bullshooters	Mike Lizbinski - 250	Magic Markers	Scott Kee - 214
Spare Us	Granny Tierney - 174	White Winos	Debbie Wood - 153
Eleventh Frame	Jack Eyth - 219	Screwballs	Hank Lystad - 205
Les Champignon	Kathy Barnes - 190	Pinheads	MariJane Maloney - 168
Blips	Larry Coar - 181	From The Gutter	Ed Beach - 193
Dynamic Duos	Eileen Cunnane - 160	Nine Pins	Andrea Sicher - 157
Big Spenders	Bob Connison - 178	Destroyers	Tom Vollmar - 193
Who Cares	Donna Morgan - 157	Falcons	Carolyn Kolb - 164
	Allen Goldstein - 199		Jack Horning - 201
	Helen Halko - 173		Pat Tease - 146
	Joe Lindinger - 205		Bob Parsons - 204
	Claire Simon - 162		Lisa Johnson - 146
	Jim Tidwell - 208		Rick Yeager - 222
	Karen Messina - 151		Lorraine Williams - 168
	Nick Doto - 189		Steve Palumbo - 180
	Janice Hinchliffe - 148		Linda Stickney - 180
	Bob Leidy - 185		Dave Whitenack - 172
	Sue Casagrand - 153		Lorrie Dunn - 177
	John Bowes - 221		Steve Jerdan - 193
	Barb Fleischut - 144		Carole Calkins - 158

Guzzler open won in sudden death playoff

By Charlie Destra

The annual Guzzler Open, a team competition this time around, was won by the foursome of Pete Carroll, Bob Parsons, Rick Sames, and Mike Janinek in a sudden-death playoff in which five teams participated. The winners were the only team to reach par on the extra hole to capture the championship.

Fifty-three golfers, and would-be golfers, tee off for the big prize—the 1987 Guzzler Cup—a brand new concept dreamed up by tournament director John Markow, and likely to become a regular feature in future open tournaments. The field was the largest ever for a Guzzler event.

The outing took place on September 3rd at the tiny but deceptive Horsham Valley Golf Course, with its narrow fairways, tight greens, abundance of trees, and dangerous water holes.

Scores were based on the International Scoring System (eagles = 5, birdies = 3, pars = 1, and anything below bogey meant subtracting points). The best score of each foursome per hole was used, but there was a twist in the system—every player's score on each team had to be used at least four times. (The complicated set up resulted in many teams spending about as much time figuring their score at the end of the event as they did playing golf.)

Teams were asked to represent a particular country in the spirit of the international format, and many responded with some interesting golf garb. Among the entrants was "Austria" (clearly the best outfitted), "Fireland" (members work fireman's hats), "The Nightrider Nation" (softballers in their uniforms sporting flags), and "Kuwait," who came with a slogan (as told by Al Koch): "We'll play under the American flag and promise to get tanked."

When the tournament ended and the scores were figured, Markow decided that any team with 10 or more points would battle it out in a playoff. So, even though the Parsons-Carroll-Sames-Janinek teams had posted the highest score (+19), it wasn't good enough, and they had to win it the hard way.

Participating playoff foursomes were asked to pick two golfers to represent their team, and do alternate shots on the relatively easy par three, 165-yard 10th hole. But when the action began, the "so-called" best golfers of the event hit some of the worst shots, with a howling gallery of golfers laughing and looking on. Pop-ups, grounders, slices and hooks were the rule — except for the steady Parsons and Carroll of the winning team. The others that represented their foursomes on the extra hole were Mike Bubb and Jim Eck, Dean Mondelblatt and Steve Metcalf, Bob Pearce and Doug Leidy, and Dick Chern and John Markow. Markow and Chern presented the best challenge — a mild one at that — to the winners.

The Open, in its sixth year, is the second step on the Guzzler tour, Preceded by the Spring Invitational, and followed by the Fall Classic, upcoming October 29th at Fox Hollow Golf Club. Contact John Markow, extension 1026, if interested in

participating. Players, scores, and rankings are listed below:

Team	Score
P. Carroll, R. Parsons, R. Sames, M. Janinek	+19
D. Mondelblatt, S. Metcalf, G. Kovak, R. Osborne	+13
D. Leidy, R. Pearce, R. Tausek, W. Jones	+12
M. Bubb, J. Eck	+10
L. Morris R. Geyer	+10
J. Markow, R. Chern, R. Pomrink, E. Fulmer	+10
W. Latosh, J. Scott, W. Mulley, J. Spiecker	+9
S. Fleischut G. Torok, G. Willis, P. Finnegan	+9
B. Price, A. Koch, K. Miller, R. Monaco	+8
K. Mergner, H. Frost, J. Frost, M. Weik	+5
J. Eyth, C. Destra, S. Jerdan, P. Arbuckle	+4
F. Ewing, B. Hamilton, M. Holden	+2
J. Bowes, J. Ward, K. Stingel, L. Vollrath	0
N. Torres, J. Else, W. Gleason	-1
B. Cerino, A. Hribar, W. Walsh	-7



Photo by Matt Markow

TEAM AUSTRIA: Great outfits, not so great golf — J. Ward, J. Eyth, J. Bowes, K. Stingel. Eyth "defected" to play for one of the two Nightrider Nation teams.

A POETIC TRIBUTE TO THE SOFTBALL LEAGUE

By Charlie Destra

The league was swelled to 20 teams that had high hopes and playoff dreams.

But the season was troubled with its share of woes: rainouts, lack of fields and ump no-shows.

Though we got through it all with some despair, no other league really can compare.

Who needs Maris and Mantle or Lynn and Rice, when you have Dungan and Sames, Rudock and Price?

Who needs the Babe, the Bull, the Clipper, or Lou the Lip, when there's the Fly, Rock, Iceman and Skip?

And "Yankee Pride" and "Dodger Blue" can throw in the towel when pitted against "Guzzler Magic" and "Nightrider Know-how."

So we have it all, and deserve some hands, except for the fact that we don't have the fans!

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DAYLIGHT-SAVING TIME ENDS

FALL BACK

1 HOUR · OCT. 25th

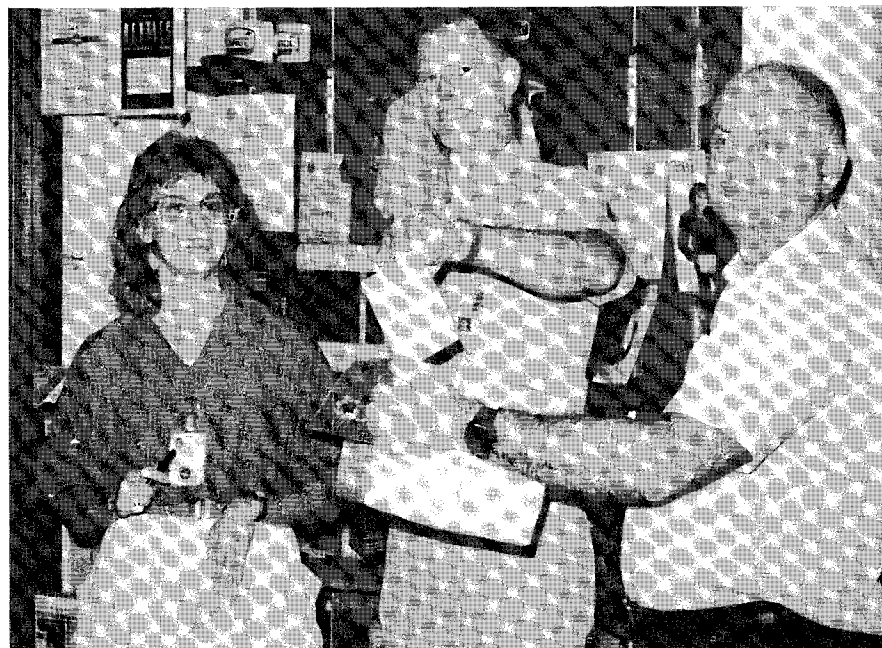


Photo by Mary Ann Brett



Photo by JO1 Todd Lufkin

AND THE WINNER IS: (photo left) Captain C. J. Winters draws a winner from among the employees who donated blood during the last drive. Janet Wild, Treasurer, and Len Roach, President of the Welfare and Recreation Association (W&R), help distribute three prizes provided by W&R. (Photo right) Joseph Clay was quick to claim his 1st place prize, a microwave oven.

Physical readiness . . . a top Navy priority



Photo by JO2 Todd Lufkin

NADC's nearly 250 military personnel lunge into a 1-1/2 mile timed run, part of the mandatory semi-annual physical fitness test.



Photo by JO2 Todd Lufkin

"Couldn't you count in 2's?" is what Captain C. J. Winters might be thinking while doing 82 sit ups (considered outstanding for his age group).



Photo by JO2 Todd Lufkin

Low body fat measurements are an important part of the overall program.

Promotions

Patsy Schaeffer, Dickson Alley, Nancy Alley, Patricia Aspinall, Joseph Bebey, John Boodey, Mary Buck, Robert Casagrand, Vincent Catone, Alice Colyar, Elizabeth Decker, Theresa Dedominicis, Robert Dillingham, Susanna Dougherty, Francis Flannery, Steven Gabai, Armando Gaetano, Ronald Garber, Attilio Gatto, Kris Gigliotti, George Gluz, Nancy Harned, Marilyn Hatzenbeller, Ellen Hayes, William Hudson, Anna Jordal, Dale Kostenbauder, Steven Kravats, Phyllis

Kuhn, Jane Libbos, Roger Liu, James Louie, Jeffrey Lytle, Robert Lubanski, Joseph McFadden, Norwood Metcalf, Claude Mobley, Donna Morgan, Sydney Oliver, David Popeck, Eric Preissner, John Reeves, Carolyn Richards, Michael Rinelli, Joy Risko, Regina Rodak, Janet Russell, Martin Ruzansky, Richard Savory, James Sheehy, Davene Sheppard, Ronald Simononis, Y Trung Tran, Michael Troyanosky, Janet Wild, Christina Zaccaria.

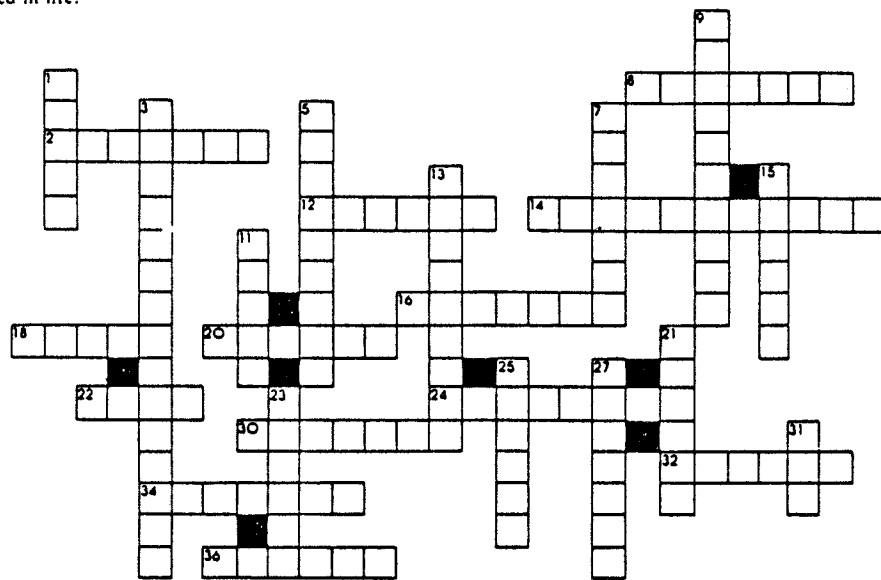
Understanding; not pity helps the handicapped

The first barrier to freedom for the handicapped is in the minds of ordinary individuals. One of the most effective ways of tearing down this barrier is through understanding. Few people know very much about the handicapped; even fewer people have had a significant contact with that segment of the population which is considered handicapped. To many people, handicapped individuals are to be pitied, to be helped,—this attitude is not a productive one for either the

handicapped individual, or the non-handicapped person. Handicapped men and women are leading full and independent lives throughout our great country. They go to schools, jobs, buy homes and cars, participate in community activities, and raise children. Sound familiar? It should. There's no better time than now to recognize that those individuals with handicaps are people—just like anybody else.

Positive Images of Disability

Great contributions have been made by men and women who have been affected by disabilities. See if you can identify them in this crossword puzzle, keeping in mind that people challenged with disabilities don't necessarily have to be famous to succeed in life.



DOWN

- Born a dwarf, he became one of the most successful "little people" to gain popularity in the media industry. He is Billy _____.
- His growth curbed, Henri de _____'s paintings in the Moulin Rouge made him a notable in the 18th century.
- Challenge him with infantile paralysis, and vote him in as the only U.S. President to be elected to four terms, and you have Franklin D. _____.
- A victim of a war injury that left him without use of his hands, his administrative talent and wit elevated him to Chief of Staff to California's Governor. He is B. T. _____.
- Having an ileostomy does not prevent a professional football career with the San Diego Chargers for _____.
- Remove the sight from one eye and he still becomes one of America's most famous all-round entertainers - you have Sammy _____, Jr.
- Deafen a genius composer who continued to compose some of the world's most beautiful music, and you have a Ludwig van _____.
- A hearing loss didn't slow this actress and comedienne from a successful show business career. She is Nanette _____.
- Blind at birth, he went on to become one of today's most popular song artists. He is Stevie _____.
- Give her cerebral palsy, a great sense of humor, timing, and delivery, and feature her on the television series "Facts of Life", and she's Gen _____.
- Take away her hearing but give her the successful adventure packed life of a stunt artist and race-car driver, and you have Kitty _____.
- Sustaining a back injury on PT 109, John F. _____ succeeded in attaining the Presidency of the United States.
- After losing a leg to cancer, Terry _____ attempted to jog across Canada. He successfully raised \$21 million for cancer research.

ACROSS

- Challenged by the crippling effects of polio, Wilma _____ developed and conditioned her body and became an Olympic Gold Medal winner and intentionally known track athlete.
- Following a devastating accident, Jill _____ Olympic skier, restructured her life and attracted film-goers in "The Other Side of the Mountain."
- Amputate the arm and leg of an aspiring young actor after a motorcycle accident, and you have a James _____.
- One of the little people, Herve _____'s career was highlighted by his famous "de plane, de plane" on the television series Fantasy Island.
- Take away his vision, but let him provide the world with the best of soul and you have Ray _____.
- Even though diabetes threatened to limit her, she succeeded as one of today's most popular actresses. She is Mary Tyler _____.
- Give her multiple disabilities, let her continue to promote laughter, and you have Totie _____.
- A victim of a debilitating stroke, she fought her way back to a successful career as a senous actress. She is Patricia _____.
- Call him a slow learner and write him off as ineducable, but let him become a physicist to develop the theory of relativity, and you have an Albert _____.
- Paralyze him with polio, give him the ability to be a famous concert violinist, invite him to inaccessible concert halls, and you have Itzhak _____.
- The light bulb was developed by a deaf man, Thomas _____.
- His hands amputated from a service-related injury, he became an academy award winning actor and Chairman of the President's Committee on Employment of the Handicapped. He is Harold _____.
- Blind and deaf at birth, she inspired, lectured and taught so that others likewise disabled could communicate and contribute to society. She was Helen _____.

CALIFORNIA GOVERNOR'S COMMITTEE FOR
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By: Hope Yasui and Aiko Kurosaka

<p>ACROSS</p> <p>2. Wilma RUDOLPH</p> <p>8. Jill KINSMONT</p> <p>12. James STACEY</p> <p>14. Herve VILLECHAIZE</p> <p>16. Roy CHARLES</p> <p>18. Mary Tyler MOORE</p> <p>20. Totie FIELDS</p> <p>22. Patricia NEAL</p> <p>24. Albert EINSTEIN</p> <p>30. Itzhak PERLMAN</p> <p>32. Thomas EDISON</p> <p>34. Harold RUSSELL</p> <p>36. Helen KELLER</p>	<p>DOWN</p> <p>1. Billy BOBY</p> <p>3. Henri de TOULOUSE-LAUTREC</p> <p>5. Franklin D. ROOSEVELT</p> <p>7. B. T. COLLINS</p> <p>9. Rolf BENIRSCHKE</p> <p>11. Sammy DAVIS, Jr.</p> <p>13. Ludwig van BEETHOVEN</p> <p>15. Nanette FABRAY</p> <p>21. Stevie WONDER</p> <p>23. Gen JEWELL</p> <p>25. Kitty O'NEILL</p> <p>27. John F. KENNEDY</p> <p>31. Terry FOX</p>
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ANSWERS

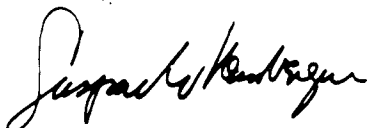
1987 Veterans Day Message from the Secretary of Defense

It is entirely fitting that we pause each November 11 to honor our veterans, for they have honored us. With devotion and, too often, with blood, American veterans have secured those rights and liberties defined in our Constitution, whose bicentennial we celebrate this year.

That great document promised freedoms which were truly revolutionary, but we should always remember that promises, to be kept, must be secured. From the Revolutionary War that produced the Constitution, to the terrible Civil War that nearly consumed it, to those who proudly wear the uniform today, American servicemen and women have answered the call. Every day that Americans breathe free and enjoy peace is a day of tribute to our nation's veterans and to the soldiers, sailors, airmen, Marines and Coast Guardsmen who are tomorrow's veterans.

Veterans often fight in war, but their greatest legacy is peace with freedom. We look to a day when mankind can finally declare eternal peace. But, until that declaration carries the guarantee of freedom, we must sustain the strength which our veterans embody.

I join the men and women of the Department of Defense, and Americans everywhere, in declaring profound gratitude to these heroes of liberty.



Caspar W. Weinberger
Secretary of Defense



Photo by Cathy Burian

OMBUDSMAN APPRECIATION — In Honor of Ombudsman Appreciation Week, Captain Winters honored NADC's Ombudsman Vickie Sparkman during a ceremony in his office.

Renegades — a surprise in '87

(continued from page 5)

note: the Spiders Jim "Hollywood" Henderson has been unanimously inducted into the NADC Football Hall of Fame (based at China Lake, CA) after a long and glorious career making life difficult for opposing quarterbacks and low flying birds.

As I mentioned before, another big surprise this season has been the inspired play of an up-and-coming Lasers team. The Lasers have improved dramatically since their first year in the league; they have as many wins in the first half of the season as they did during their first two years in the league combined. The Lasers seem unaffected by the loss of Curt Swatchick, perhaps their best player, who sustained a season ending injury in an opening day win against the Dragons. The Lasers will probably clinch the final playoff spot since four wins usually obtains a playoff bid.

The next three teams in the standings are the Dragons, Pit Bulls and Gang Green. All are dark horses

since they need to win their final three games to have any kind of shot at making the playoffs.

Finally there is the Blue Team. Blue, which have won three of the league's seven championships, have fallen on hard times. They are winless in four games with one of the losses a season opening forfeit to the rival Granfalloon team. Blue has been hurt by the retirement of some key personnel, most notably Captain and team guru Fred Kuster. Kuster, who cited a knee injury and family commitments as reasons for his retirement, will be genuinely missed around the league. Also on Blue's retirement list are John Bechtal and Moise Devillier, both big losses. Kuster's mammoth shoes will be filled by veteran John Santini, who will obviously need at least one season to get Blue back on track.

That is the status of the NADC Football League through Week 4 of the 1987 season. The playoff picture is coming into view, even without my crystal ball. See you at playoff time.

For women only

Women who drive alone . . .

can increase their personal safety by following a few simple rules to protect themselves.

- Keep your car in good mechanical condition so you won't have a breakdown in a lonely or dark place. You will also be able to move away quickly from a bad situation if your car's engine is in good working order.

- Hold your car keys in your hand as you approach your parked car. Don't wait until you reach the car to grope around in your purse. Experts say you're most vulnerable to harm when you enter or leave your car.

- Check the back seat before entering the car, even if you've left it with the doors locked.

- Lock all car doors and roll up the windows while you drive.

- Keep the phone number of your AAA emergency road service in the car as well as in your purse.

- Never pick up hitchhikers.

- Sound the horn in potentially dangerous situations.

- Consider having your car equipped with an alarm that goes off a few seconds after you enter the car unless you switch it off. This can help deter abductions in your own car.

- If your car becomes disabled, lock yourself in and turn on the fourway flashers until the police come.

- Be wary of using a citizens' band radio to call for help. Calls are sometimes answered by people with the wrong motives. If you **do** use your CB radio, don't leave your car until a **uniformed** police officer comes.

- If you drive alone in the winter, keep such items as a traction mat, a shovel and a bag of sand or kitty litter in your trunk. Other useful emergency equipment includes flares, blankets, water, flashlight, canned food and a reflectorized sign that asks for help.

- If you have a flat tire in a dark or dangerous location, drive slowly to the nearest service station or public place.

Even if you ruin a tire, you have not risked your life.

- Always park in a central, well-lighted place, preferably where there are attendants on duty or people passing by. Try to park so that you will approach the driver's side of the car when you return. You won't be surprised by someone who has crouched by the door.

- Avoid shortcuts that take you through unfamiliar or unsafe areas.

- If you notice someone acting suspiciously near your car, walk in a different direction toward a public place and seek help.

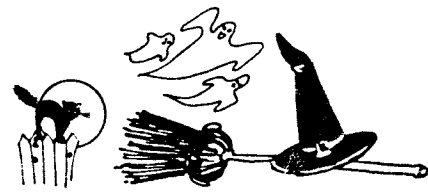
- Beware of men in civilian clothes driving unmarked cars who flash what appears to be a police badge. Don't roll down your window or get out of the car. Instead, request that a marked police car be called.

- If your car is rammed from behind and the hit seemed to be deliberate, always stay in the car with the doors locked. Wait for the police to arrive.

- Most police experts **do not** recommend that you carry weapons in your car. They suggest that some everyday items can be used for protection. These include flashlights, rat-tailed combs, pens, keys and screwdrivers.

- If someone forces you to drive your own car in an abduction, try to attract the attention of the police by turning off the lights, speeding, driving as if you were intoxicated, or run into something.

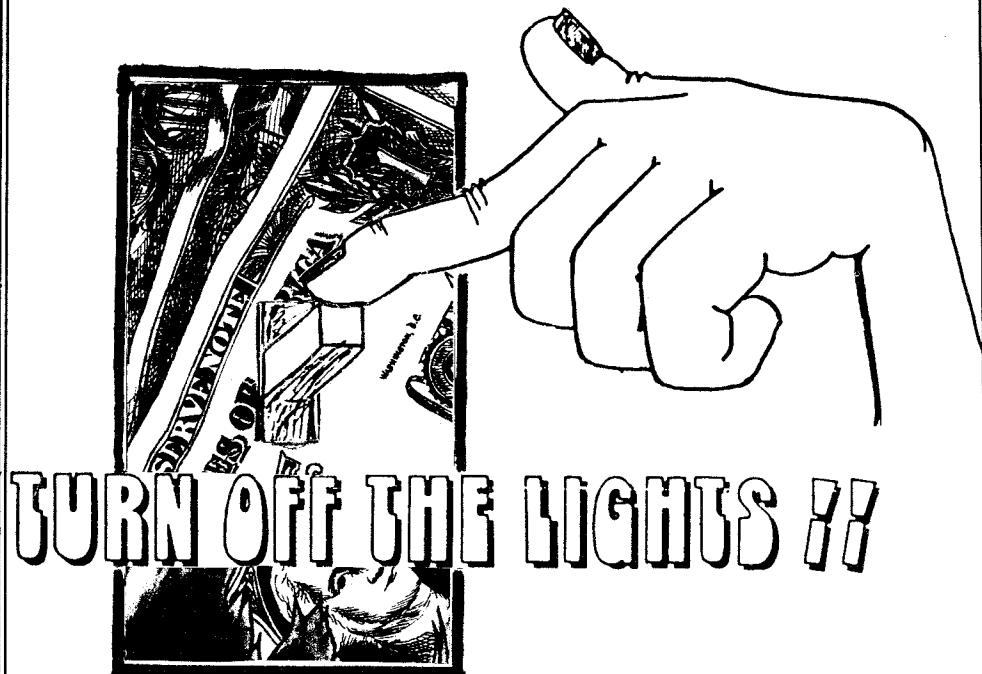
- Never follow a stranger who offers to help you find your way on an unfamiliar road or street. Wait in your vehicle and ask for directions.



HALLOWEEN

It only takes a second

Does a fluorescent light have to be turned off for a half-hour before the energy saved equals the energy used in initially energizing the light? No! But many people think so. The truth is fluorescent lights have to be turned off for only ONE SECOND in order to save the amount of energy that will be expended when the lights are initially turned on again.





Presidential Message
Largest contract awarded
\$1000 Bene Sugg
Volleyball Champs
Crew's Rest Party

A unique bird

NADC plays major role developing "Osprey"

By Mary Ann Brett

The V-22 "Osprey" is the Navy's first new airplane in development since the F-18 in the early 1980s. It is a tilt-rotor aircraft that can lift off vertically like a helicopter and then convert to level flight for the high speed and long range of a turbo-prop. While the Naval Air Systems Command (NAVAIR) maintains overall Navy management of the program, NADC has been playing a major role in the overall development of this unique tilt-rotor aircraft. The Center has prime responsibility for defining the V-22's operational concepts, missions and scenarios, and generating effectiveness analysis.

The Center's V-22 program manager Donald Furmanski, of the Tactical Air Systems Department (TACAIR) said, "The V-22 program was initiated several years ago as a triservice concept called 'JVX,' and it literally cuts across every technology area of expertise here at the Center." NADC provides significant engineering support in materials, structures, avionics architecture, crew systems, and automatic flight control systems.

"Most of NADC's work has been on aircraft in existence for some time," said Furmanski, referring to the P-3, S-3, and F-14. "This is our opportunity to get involved from the ground up in the development of an exciting new aircraft; one of the very few aircraft that will be used by all the DoD armed services."

continued on page 4



Artist's rendition of airborne V-22 Osprey with dipping sonar hovering over submerged submarine.

Shelby heads Engineering Support

By Mary Ann Brett

The USS NADC? . . . conjures up an interesting image. That's how Commander John D. Shelby, new head of the Engineering Support Group (ESG) relates his past experiences to his job at the Center. "NADC is very similar to a ship," said Shelby, "they're

both self-sufficient, especially where technical services and public works are concerned."

ESG is one of the Center's largest and most diverse departments. But Shelby sees "diversity" as less of a concern than "large." Having supervised as many as 500 people in previous assignments, Shelby considers personnel management-type challenges as the most enduring and complex.

"Recognition helps," said Shelby of managing his group, "it's very important. Everybody hears about the one trouble call slow to be answered or the one contract slow to be let and they forget about the literally thousands of calls and contracts that are satisfied. But," he added, "that's the nature of the support business."

Most of Shelby's eighteen-year Navy career has involved A-7 and F/A-18 aircraft. He was assigned three times to Cecil Field, Florida with VA-174 and Light Attack Wing One and completed

continued on page 4



Photo by NADC Photo Lab

ASST. SECRETARY OF DEFENSE (for Production and Logistics) Dr. Robert Costello (second from left) and party visited NADC November 2nd. Briefings included advanced avionics, remotely piloted vehicles, fiber optics and the dynamic flight simulator.

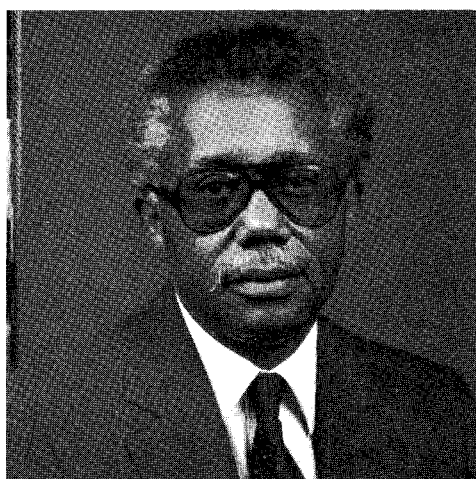


CDR John D. Shelby

Command Corner



CAPT Curtis J. Winters
Center Commander



Guy C. Dilworth
Technical Director

To all hands:

The IG inspection is over! That usually elicits sighs of relief from just about everyone. Actually, I believe the reality of an IG inspection is not nearly so bad as the anticipation of one.

However you feel about IG's, I believe one thing about this one: that is, that all of you who had a part in it are to be commended. I'm very impressed with the exemplary manner in which all Center personnel prepared for the inspection, as well as the courteous reception and forthright responses given to the inspectors. The inspectors made a special point of commenting to me about the positive attitude displayed by all Center personnel.

You're probably aware that the final report is not yet released and, further, that regulations limit distribution of the results, therefore we can't discuss the actual outcome. I'm sure that those of you who were direct participants are astute enough to have a reasonably good idea of how your area fared.

For those not so familiar with the purpose and function of an IG

inspection, here's a brief explanation:

First of all, the inspection ensures that an organization is being run according to regulations, instructions, and established procedures. Next, the inspection examines the organizational efficiency and sometimes points out better ways and means of doing business. Finally, it serves to listen to the individuals at an activity. It gives the people who are doing the job an opportunity to make suggestions as to how jobs or operations may be improved. The kind of feedback received from our people serves as a measurement of the morale and general well-being.

Our congratulations on a job well done!

C. J. Winters
C. J. WINTERS
Commander

Guy C. Dilworth
GUY C. DILWORTH
Technical Director

THE WHITE HOUSE
WASHINGTON

Thanksgiving Day Message for the
Armed Forces, 1987

On Thanksgiving Day, Americans pause wherever they may be to thank God for all the blessings He grants us and our land of liberty. Around our Nation and around the world, you who defend us in arms pause, too -- in thanks, in prayer, in thoughts of home. As your Commander in Chief, I'm proud to express to you the heartfelt appreciation of the American people for hearing and answering our country's call. You who safeguard our blessings, and the families who support and inspire you in your many responsibilities, are yourselves a true blessing to this land.

You amplify our debt of gratitude with your every deed of solemn duty. In barracks and bunkers, on flight decks and parade grounds, in command centers, cockpits, and engine rooms, you daily carry out your mission to preserve and protect our security, our liberty, and our bounty. You make routine the exemplary self-sacrifice and devotion to duty that have always been the watchwords of the American military. That dedication has carried our country through periods of crisis and peril, purchasing, often at great cost, the security that enables all our citizens to pursue their lives in liberty and peace.

Happy Thanksgiving to all of you and to your families. To those of you serving on ships at sea and at isolated or dangerous outposts around the globe, Nancy and I send our very special greetings.

Ronald Reagan

Promotions

Douglas Bancroft, Carlton Brown, Carla Crist, Maria Cusanelli, Eduardo Danganan, Julius Drelick, Ellen Garofalo, Regina Gasuk, Thomas Gilligo, Ronald Guignard, Marie Gunter, Adrienne Harrington, Robert Janes, Helen Keller-Surman, Nancy Lindsey, Victoria Matthews, Stephen Natishin, Dominic Nguyen, Donna

Nicolo, Kevin Parson, Stephanie Riddle, Selina Ridpath, Thomas Ryan, Jeannette Schenk, Andrew Schmith, Steven Scott, Scott Shaner, Claire Simon, James Tidwell, John Tye, Bernadette Weber, David Williams, Mary Wixted, Marlene Worden, Angelo Zuino.

Security Reminder

DISPLAY YOUR BADGE

A pass or badge must be displayed at all times. Every employee should challenge any person who is not displaying identification. This is especially critical during non-working hours.



Photo by JO2 Todd Lufkin

FOOD SERVICE WITH A SMILE — Galley personnel Cathy Coulon, contractor and SK2 Jean Rodriguez, records keeper, receive third quarter Food Service Achiever Awards from CDR John Shelby, Head of the Engineering Support Group.



Reflector

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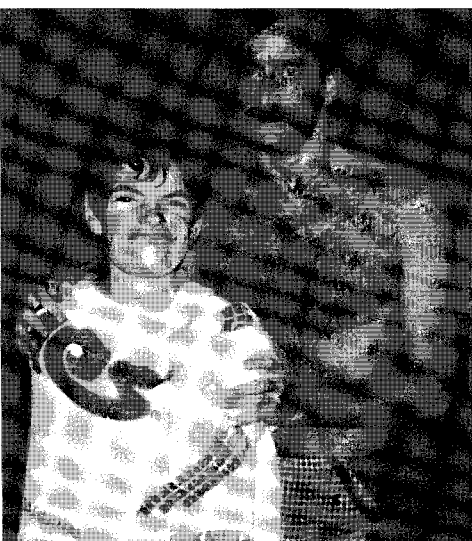
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Commander, NADC CAPT Curtis J. Winters
Technical Director Guy C. Dilworth, Jr.
Public Affairs Officer and Editor James S. Kingston
Associate Editor Mary Ann Brett
Assistant Editor JO2 Todd Lufkin

In the swim

Bergan keeps handicapped children afloat



Bill Bergan and smiling student Stephanie Wilson.

By Mary Ann Brett

If we took a poll of everyone's Friday night activities, the results would probably range from boring to down right dull. But one of us, NADC contract administrator Bill Bergan, spends it at the Abington High School pool teaching temporarily and permanently handicapped children how to swim.

Bergan supervises the one-on-one swimming instruction of ten handicapped "children" whom he affectionately calls "his kids," although they range in age from 7 to 32. "I've been doing this for twelve years now," Bergan said, "and it's still the highlight of my week."

Over the years, Bergan has worked

with victims of cerebral palsy, muscular dystrophy, Down's syndrome, mental retardation, deafness, blindness and accidents. "It's a surprise to many people," he said, "but, these children are able to swim quite well. Some of them are entering competitions and swimming as much as a quarter mile."

Bergan explained almost anyone can learn at least some aspects of swimming. "Where arms and legs don't coordinate, we find a modified stroke that still enables the child to move effectively in the water. If there is any physical ability evident, we start with that," he said, "but most often we start them floating on their backs because beginners find it easier not to have to worry about breathing techniques. It also provides a comfortable point of return if somebody should get confused in the excitement."

Bergan, himself, is a graduate of this very program. As a child, he had an undetermined amount of nerve damage in his leg and a doctor recommended swimming therapy. "It gave me an unexpected amount of emotional and physical strength," said Bergan. Now

he returns some of that emotion and strength every Friday night.

"It's not always easy," he admitted, "but the children aren't easily upset and they have so much patience — a virtue they've acquired trying to accomplish other difficult tasks." Some of "his kids" have been in the program for as long as ten years, so, it has become a social and recreational treat for them.

"We don't call this a 'handicapped' program," Bergan said, "we'd rather stress 'abilities.' Their tremendous ability to give love and affection greatly surpasses any seeming disabilities."

Bergan says there is pool space available to invite more participants. However, for each beginner he needs a volunteer adult (no experience necessary) to maintain the individualized instructions. Bergan asks that anyone at the Center who has or knows of a disabled child who might benefit from this training, call him on extension 1885 or 886-4529. Likewise, anyone with questions or interest in volunteering is invited to call.



Kevin Clinton, John Baus, Stephanie Wilson, Ralph Linse and Keith Will dry off for a spell.



Student David Dove and his father practice floating.

NADC awards largest fixed price contract

By Jim Kingston

"It's one of the largest contracts ever awarded by NADC," said Contracting Officer, Tom Karr. "Certainly, it's the largest fixed-price contract."

Karr was referring to the \$117 million, 23-phase contract recently awarded to Texas Instruments, Inc. (T.I.) for engineering development and initial production of GEN-X, the generic expendable decoys. The GEN-X is an electronic countermeasure device designed to be launched from tactical aircraft to decoy surface-to-air or air-to-air missiles. (REFLECTOR — October 1987)

According to Karr, this contract traces its roots back to the 1980-81 time frame when three firms — including T.I. — competed under a study contract of design concepts for this electronic counter-measure device. T.I.'s design was selected. The electronic firm was subsequently awarded an \$8 million Advanced Development Model contract for 40 feasibility demonstration models. Our Mission Avionics Technology Department, together with Texas Instruments, brought development and demonstration of the device to a successful conclusion leading to this landmark award.

The contract became a full-time task for NADC Contract Negotiator, Mark Drager who spent six months working exclusively on this. In fact, Drager said other staff members in the Contracts Office picked up his regular work load in order to free him to devote his time and energies to this deal.

Interestingly enough, bidding on this contract was subject to full and open competition with data on the results of all development and demonstrations available to prospective bidders. However, because of the unique technology involved, only Texas Instruments bid on the job. T.I.'s edge was its commanding position in Monolithic Microwave Integrated Circuitry (MMICC — called: "Mimic") which is the key to the GEN-X design.

One innovative aspect incorporated into this contract is the "leader/follower" concept. This places the responsibility on T.I. to select and train another contractor to produce the GEN-X according to the same specifications. In effect, it requires T.I. to develop its own competition. The leader/follower concept is not new in the contract negotiating field, but Karr and Drager both found that there was a definite lack of guidelines or an established plan. Their solution was to

develop their own guidelines and draw up the details of the plan for T.I. to implement.

Karr and Drager agreed that a contract of this magnitude is difficult to

negotiate. What's more, they point out, fixed price contracts are always more difficult, even at best. Consequently, they said, this contract "... required

continued on page 5



Photo by JO2 Todd Lutkin

Frank Drummond, Tom Karr and Mark Drager discuss the GEN-X contract.

NADC plays major role in "Osprey"

continued from page 1

Not to be compared with AIRWOLF, last season's television version of a state-of-the-art helicopter, the V-22 can fly at more than three hundred knots, twice the speed of any helicopter, and has the added advantage of maneuverability.

During take off, the twin wing mounted, 38-foot rotors point upward for vertical take off like a helicopter, rotate forward — in less than 12 seconds! This tilt-rotor concept dates back to the late 1940's, but only recently became viable and successful because of advances in lightweight materials and propulsion systems. One of its very few disadvantages lies in its fuel consumption which doubles during the hovermode. "If we use it in too many hovering operations," said Furmanski, "its useful mission time will be considerably less."

NADC has played a major part in the selection of materials for this unique aircraft. It is sometimes called "the plastic aircraft" because it will be the first DoD airframe made 100% of graphite epoxy composites which were also largely developed here at the Center, including epoxy chemicals that can be stored at room temperatures. "We are also heavily involved," said Furmanski, "in a material repair program for these composites. You can't just slap on a piece of sheet metal and rivet it into place."

The Center is also investigating the cost effectiveness of an SV-22, the Osprey's ASW variant. The results of this investigation will be used to determine whether or not to continue the preliminary design phase of this particular version. "In the ASW variant," said Furmanski, "the empty cabin of the V-22 holds

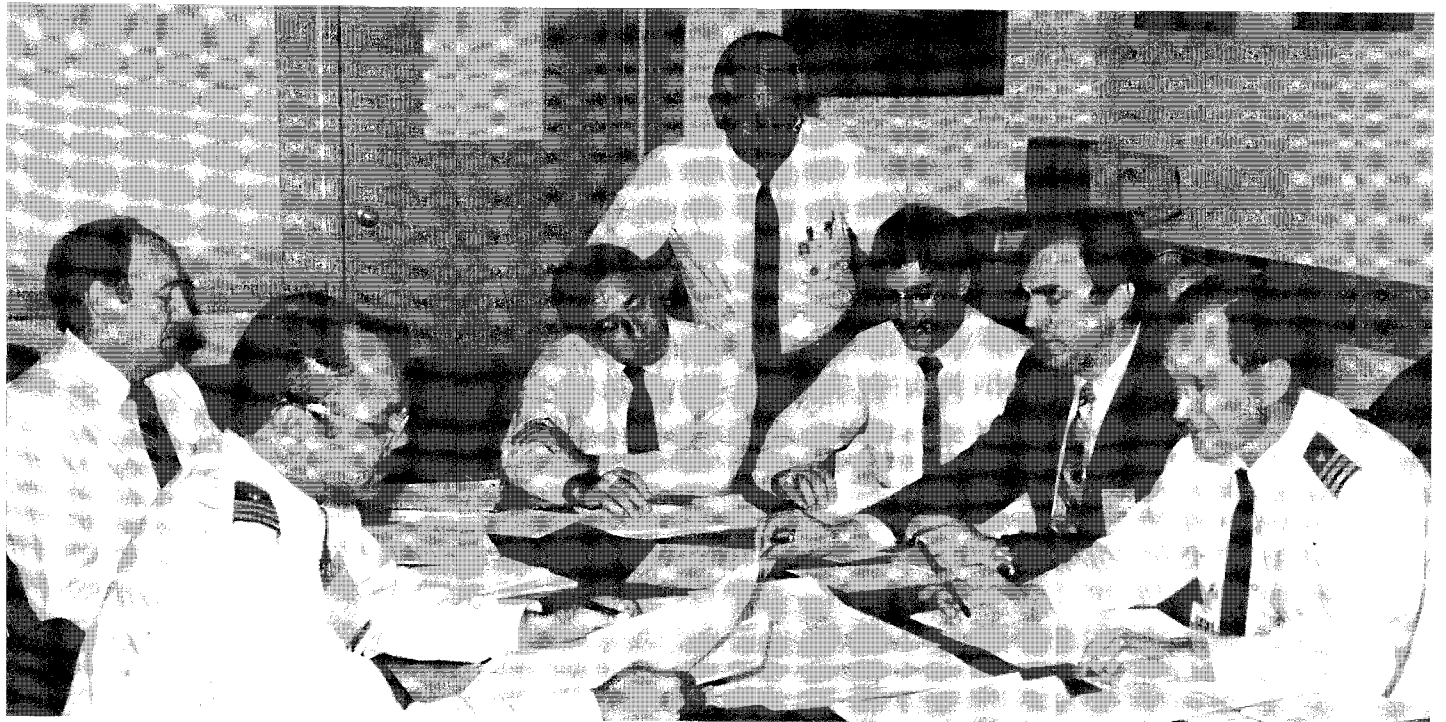


Photo by JO2 Todd Lufkin

Donald Furmanski (standing) meets with Washington, DC sponsors and NADC personnel on the V-22. (L to r) James Zoog, CDR Ed Dumas, Dick D'Africo, Donald Furmanski, Bob Lehman, Frank Deprospero, and CDR Steve Fahrenkrog.

avionics systems for monitoring ASW sensors. NADC has been given the responsibility for generating the ASW avionics system specification that will be submitted by the Navy to industry.

"In the interest of commonality, we are trying to use the same technology developed for the P-3 Update IV ASW aircraft."

From the standpoint of ship compatibility, the Naval Sea Systems Command has already determined it will cost relatively little to modify the LAMPS Mark I and III ships to accommodate the V-22 for its ASW role.

Furmanski feels the V-22 program will become a staple at NADC. In FY-87 and 88, NADC's V-22 team ranged from 30 to 50 people, supporting 19 tasks, with an

annual budget of \$5.2 million. The first V-22 full scale development prototype is expected in the spring of 1988 and scheduled to fly in June. Production costs for this aircraft are expected to run approximately \$25 million.

"The platform itself could have an excellent application in the commercial passenger transportation industry," said Furmanski, "it would provide the capability of taking 25 people from Center City

roof top to Center City roof top at high speeds, saving hours of shuttle time to remote airports. If we can control the cost and effectiveness of this aircraft to the point where it would be economical to haul passengers," Furmanski said "it would provide the U.S. with an outstanding vehicle for airline operations."

Editor's note: The Osprey is a large hawk that feeds primarily on fish.

Commander Salutes

LCDR Brian Gritte, Austin Gleason (Code 10): For outstanding performance in the technical proposal evaluation of the Full Scale Engineering Development phase of the P-3C Update IV Avionics Program.

Stephen Bazow, Eileen Beans, Kevin Birney, Lawrence Coar, Michael Lanier (Code 50); Scott Holloway, Mary Ellen Grady, Lorraine Lasorsa (Code 70); Craig Eilicker (Code 40); Joyce Moore (Code 10): For personal time and effort as the NADC team competing in the "Battle of the Businesses."

Maureen Marron, Bettie Simpson (Code 03): For participation in the 1987 Labor Negotiations Seminar for the Office of Civilian Personnel Management.

David Schimsky (Code 70); Richard DeSipio and Morton Metersky (Code 30): For papers presented at the NATO Advisory Group for Aerospace Research and Development.

Michael Saitta (Code 30): For contributions to the Naval Warfare Development System for the Space and Naval Warfare Systems Command.

Janice Gess (Code 10); Bruno Cavallo, Alan Victor (Code 30): For dedication and contributions to the Global War Games at the Naval War College.

LCDR Peter Letarte (Code 60): For outstanding efforts as program coordinator for the first meeting of the Fleet Project Team for the Human Acceleration Trainer.

Shelby heads ESG

Continued from Page 1

quick to admit, "There's a lot more going on here that I just wasn't aware of and I'm really very impressed." Shelby is a history buff, specializing in the Civil War era. "I collect all I can read," he said. His interest is partially prompted by his great, great, grandfather Joseph (Jo) Orville Shelby, the only Confederate officer who did not surrender during the Civil War.

Temporarily living at NAS Willow Grove, Shelby will be joined by his wife Martha, and their two sons, at the end of the school year.



Photo by NADC Photo Lab

GETTING A TASTE OF CREST — COLs Lewis Rice, U.S. Army, and Joseph Alexander, USMC, Deputy and Director of Development, respectively of the Marine Corps Development and Education Command, are briefed by Jim Brindle and John Ryan in the CREST Lab in October.

Erney rewarded for beneficial suggestion

By Mary Ann Brett

Modelmaker James Erney of the Technical Services Department recently received a Beneficial Suggestion Award of \$1000 for his adopted suggestion entitled, "Focus Plate Roller Bearing Support."

While working with the Reconnaissance Surveillance Branch on an aerial camera system, the Tactical Optical Surveillance System (TOSS), Erney noticed a potential problem area. "The additional weight of cameras and film magazines on motorized sliding focus plates," he said, "caused more friction than we expected." Erney explained that this friction-produced resistance put extra strain on the small, low-torque motor causing it to jam. Erney suggested fabricating and

installing a roller bearing to support the added weight, allowing free movement of the focus plate and less strain on the motor.

Erney's forethought significantly reduced the repair and maintenance time on TOSS. He improved the system's quality and saved the Navy manhours, money and time.

Erney was surprised and pleased with his award. "I knew the suggestion was valuable," he said, "but I didn't expect anything like \$1000."

An employee at the Center since 1970, Erney explained, "I came to NADC on a temporary appointment and stayed seventeen years!" Erney was quick to add that he has enjoyed every minute of them.



James Erney receives Beneficial Suggestion Award and \$1,000 during a ceremony with Captain C. J. Winters.

Photo by NADC Photo Lab

Largest NADC contract

continued from Page 3

some very innovative solutions." One hurdle they had to get over was approval from the lofty heights of the Office of the Assistant Secretary of the Navy (OASN). Their success in accomplishing that feat they attribute, in part, to Frank Drummond, Contracts Division Head, who played a key role during the final stages of the negotiations. It was Drummond who gave the briefing to the OASN and got approval in *one-day!*

Above all, Karr credited technical staff cooperation as the single most important key to total success in negotiating a contract of this size and technical nature. Because contract negotiators are not usually technicians or engineers, Karr said, "Cooperative relationships are what we stress ...

what we try for. Without the aid of the technical folks, we can't always get the best deal for the government."

Navy's smoking lamp dims

In March of 1986, Secretary of Defense Caspar Weinberger issued a new Health Promotion Directive to all branches of the military mandating "activities intended to support and influence individuals in managing their own health through lifestyle decisions and self-care." The DoD Directive focuses in large part on smoking prevention and cessation programs.

As a result of this Directive, all branches of the military have been

actively planning new smoking control initiatives. Smoking is no longer permitted in official military vehicles, auditoriums, conference rooms and classrooms.

Here at the Center, smoking areas will be limited to enclosed, private offices where smoke does not interfere with surrounding workers and to designated areas such as those in the cafeteria and dining room. Additional smoking areas will be identified in the near future.

Credit Union Holiday Hours

First Atlantic Federal Credit Union holiday closing schedule.

NADC Office Closed:
26 November 1987
25 December 1987

Willow Grove Office Closed:
26 November 1987
25 & 26 December 1987
Open on 28 December 1987

VIEWPOINT

Question: How do you feel about the Navy's new 'No Smoking' policy?

Prepared by Mary Ann Brett and Margaret Vigelis



"The new policy is great because I don't smoke. However, it might infringe on the individual rights of the people who do smoke."

Eli Ingram

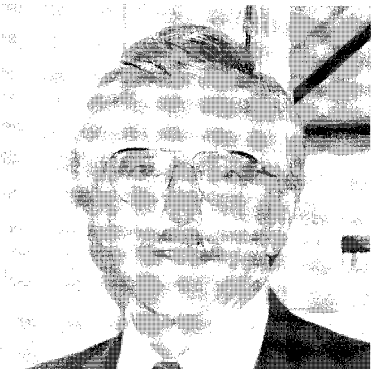


"The new policy considers everyone's feelings. It forces smokers to be considerate to non-smokers. No more smoke while you're eating or having it blown in your face. Before the day was out you felt as though you had a cigarette and smelled like you did."

Christine Minor

"I personally do not smoke in the office. A designated smoking area is fine with me."

Kathleen McCloskey

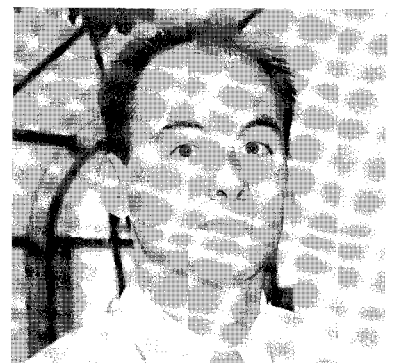


"I think the new smoking policy is great — maybe the designated areas should all be on the airfield."

Hank Stuebing

"As a non-smoker I favor rules limiting my exposure to smoke. Although it is a personal prerogative to smoke, others should not be subject to the odors if they are offended. Banning smoking in general offices will promote a more comfortable and productive environment."

Tom Weiss



Sports

Final Football Statistics

By Mark Lilly

Let me tell you how the last half of the regular season ended and then I'll give you a summary of the league semifinal games. Here is a list of the 1987 Final Regular Season standings:

Team	W	L	T	Points For	Points Against
Renegades	7	0	0	163	43
Granfalloon	6	1	0	190	15
Barking Spiders	5	2	0	128	79
Lasers	4	3	0	64	100
Gang Green	3	4	0	79	115
Blue	1	6	0	84	101
Dragons	1	6	0	58	207
Pit Bulls	1	6	0	49	129

The Renegades finished the regular season in first place by going undefeated. They were led by franchise quarterback Steve Hynes and the strong offensive and defensive play of football deity Jerry Costanzo. The Renegades have a chance of taking the championship, even though they finished the season on a shaky note. They gave up more points (31) in the last two games than they did in the first five games combined (12). By finishing in first place, the Renegades get the number one seed and play the fourth place Lasers in the league semifinals.

The Granfalloon shook off a fourth week loss to the Renegades and came back to beat their next three opponents by a cumulative total of 105-0. In their final game the

Falloon beat the Dragons 49-0 in a nail-biter. Better luck breaking 50 next year, guys. The Granfalloon are strong candidates to take the league championship due primarily to their great amount of playoff experience. They have made six league championship appearances and have taken the title away four times.

The Barking Spiders finished the regular season in third place by compiling a 5-2 record. The Spiders have been effective due to the strong arm of quarterback Ken Koper and the big play tandem of Cincinnati Kids, Scott Fowler and Bill Schork. Anyone who has been following these articles might have surmised that Bill Schork had taken me up on my offer of returning biased reporting for monetary contributions sent to me via the inner office mail system. Well, let me nip the rumor in the bud; Bill doesn't have to use the inner office mail system since he works in the same division as I.

Fourth place belongs to the Lasers who made the playoffs for the first time since they've been in the league. The Lasers went 1-2 down the home stretch with identical 19-0 losses to the Renegades and the Spiders and a close 8-6 victory over the Pit Bulls. The Lasers have been led by the competent play of Keith Faller and Paul Krebs, who is probably one of the league's better



Photo by Phil Richardson

The Laser's Paul Ondeck pressures Pit Bull's quarterback Bill Brower.

players. They also have baseball-cap adorned middle linebacker Mike Wagner who is undoubtedly the most competitive person in the league.

The fifth spot was occupied by Gang Green who finished the second half of the season with a 2-1 record. They tallied close wins over Blue and the Pit Bulls and played the Renegades tough by scoring three touchdowns in a losing effort. NADC sports mystery: Shouldn't a team with the fastest man on Center finish higher than fifth place in a league where speed is essential for success?

Blue finished the season at 1-6 but showed signs of life in a convincing 24-6 victory over the Dragons and in a 21-13 loss to the Renegades. Look for these guys to come on strong next year. Greg Mitchell. There you go, Greg.

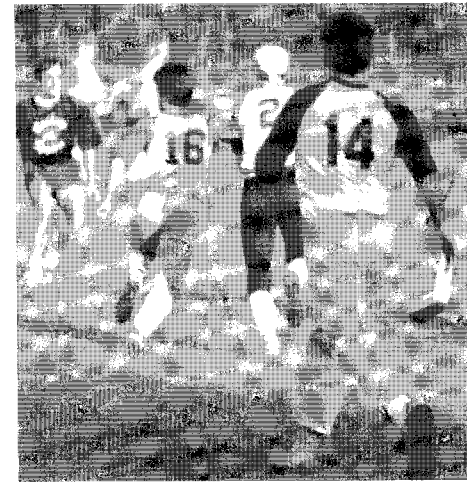


Photo by Phil Richardson

The Barking Spiders' Bill Schork takes on the Granfalloon.

The Dragons also finished the season at 1-6. This team is an anomaly. They have some of the better athletes on Center but, for the life of them, cannot keep the opposing team out of their end zone. You figure it out. The Pit Bulls likewise finished the regular season at 1-6. There's probably not a nicer guy in the whole league than Pit Bulls Captain Darren Fields but, you know how the saying goes. The Pit Bulls Steve Bazow played only three games during the regular season but intercepted opposing quarterbacks 10 times during those games. Looks like Baz is almost as proficient at picking off as he is at picking up.

That concludes my comments on the 1987 regular season. I think I can speak for most of the league when I say that it was fun for everyone who didn't get injured.

Pow! Smash! Spike! Holy Pink Batman



Photo by JO2 Todd Lufkin

Renegade Champions: (front row) Team Mascot Spuds #1, Patty Aspinall, Steve Bazow, Al Beans, Team Mascot Spuds #2; (back) Jim Mitchell, Kevin Birney, Craig Eilicker, Mark Lipacis (Mary Sanders and Bill Mulley not present).

By Jeff Glatz

The 4th season the NADC volleyball league culminated with a championship win for the Renegades, who avenged their narrow loss from last year's championship. This is the Renegades third trip and second win for the Fall championship. Once again the Marauders won the regular season title, only to fall short in the finals (five times in the Summer and Fall leagues).

Despite adverse playing conditions (controversy once again reared its ugly head in the finals), the Renegades, captained by Steve Bazow and rallying

behind the strong setting of "Papa" Al Beans, Mary Sanders and Patty "Nice Set" Aspinall, conquered the Marauders in three straight games: 14-4, 15-12 and 15-13. The Renegades depended on strong spiking from Craig Elicker and Steve Bazow to carry them through the season. Mark "I'm here" Lipacis also contributed slightly to the championship.

Recap of the Season

The Free Agents "acquired" three players: Wayne "Large Gap" Everett, Mike "I could have been a champion" Lanier and Jeff "Journeyman and

Fastest man on Center" Glatz. However, they failed to make the playoffs, showing once again there is an "I" in win but not in team.

Once again, Commander Salamander made it to the semi-finals, but lost to the Marauders who had lizards for lunch in the playoffs. A good effort was put in by Bob "There is no way on earth they will sweep us" Murvin and Pat "By collarbone is fine, really" Ford. The Marauders, captained by Doug Lundberg and led by the Commissioner Mary Ellen Grady, once again must wait until next year.

Bowling News

Two Great Series

By Tom Reiter

The men's league and the mixed league both caused some action at the Thunderbird Street Lanes in October. Joe Leonard, the men's league terror, crushed with a 289-247-237, 773 series. Wes Gleason, bowling for the dreaded Goofers in the mixed league, rolled a 220-226-245, 691 series. Congratulations are in order, that's pro-style bowling.

After eight weeks of fun and games in the mixed league, only 4 points separate the top 6 teams in each 12 team division. It's a long season, and we all know it's never over until the heavy lady sings, but unless the Who Cares (2-30) come up with another secret weapon, almost any of the other 23 teams have a shot at our coveted League Championship.

The Gumbies, the finest and tallest team on paper, had the second best regular season record. The Gumbies again proved volleyball is a "team" effort, and are looking forward to revenge next year.

Network, once a powerhouse in this league, certainly missed Jeff Glatz this season. They are only four players short of a playoff team.

The rest of the league was rounded out by the Court Jesters (Jim Campana), Equalizers (Helen Keller-Surman), Netwits (Vice President Rick Stickney) and Ramblin Wrecks (Tong Eng).

Sports

Football league semifinal score recap



The league semifinals took place on October 30. The matchups included the first place Renegades versus the fourth place Lasers and the second place Granfalloon versus the third place Barking Spiders.

In the first game, the Renegades started the scoring as they took the ball on their second possession and drove the length of the field. The drive was culminated when Steve Hynes found Mike Elser for a 10-yard score. A missed extra point made the halftime score 6-0. The Renegades struck first blood in the second half also, as Hynes found Jerry Costanzo for a 50 yard bomb. A Kevin Birney extra point made

the score 13-0. The Renegades put the nail in the Lasers coffin as Hynes again found Mike Elser for a 10 yard touchdown making the score 19-0. The Lasers scored near the end of the game as they drove the length of the field and found Keith Faller for a five yard score. A Paul Ondeck extra point made the final 19-7.

In the other semifinal game, two of the three touchdowns were made via the big play. A Tom Weiss to Mike Warren 10-yard pass opened the scoring and a missed extra point made the score 6-0. The Spiders tied the game when Ken Koper found Mike Costanzo flying down the right sideline to even the contest 6-6 at the half. The second half saw Weiss

complete a bomb to the irrepressible Steve Fleischut. A Matty Brown extra point made the score 13-6. The Spiders threatened to make the score 13-12 late in the second half when they had first and goal on the Falloon's one yard line. However, two Spider's miscues cost them the game as time ran out making the final score 13-6.

That is a quick summary of the NADC Football League semifinal action that took place October 30. My final article will contain an overview of the league championship game between the Renegades and the Granfalloon and some retrospective comments on the 1987 season. See you next month.

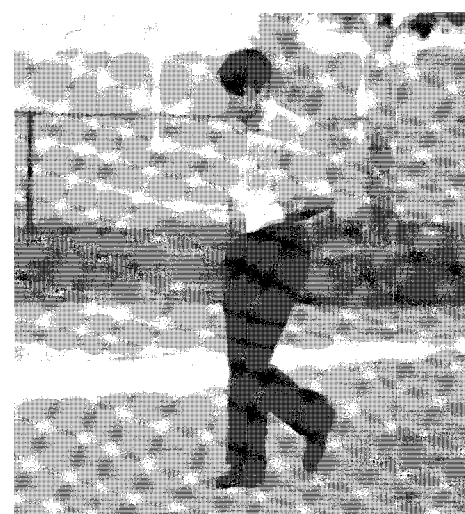
Footballers go for broke — OUCH!

By Mark Lilly

The scene: Warminster General Hospital Emergency Room. The Barking Spiders' Jack Connors overhears the physician tell an associate that the patient's smallest finger has to be "reduced." Jack's heart races as he imagines the social discomfort he will feel as he tips his glass to take a drink and people notice that he's half the pinky he used to be. After a frantic minute, Jack seeks justification for such drastic action.

After all, he thought he only had a broken finger (which he fractured trying to throw a block on an interception return against the Dragons). Whew! Jack breathes a huge sigh of relief as the physician explains that "reduced" is doctor talk for setting a broken bone. This season there have been an inordinate number of injuries to the league's players. As I mentioned in the last article, the Lassers' Curt Swatchick broke his collar bone in a collision with Mother Earth, also in a

game against the Dragons. It doesn't take a physics major to determine who will incur the most damage in that inelastic collision. In another incident the Renegades stalwart receiver Jeff Lytle injured his knee in a preseason game against Gang Green. Well, about five weeks into the season Jeff reinjured the knee removing his sneaker. I've cast a wary eye at my Nikes ever since. That about does it for the Injured Reserve report for the 1987 season.



Jack Connors survives injury.

If the Soc fits

By Robert Janes

A friend of mine who is employed at another Navy activity recently told me about a Flyers game he had attended in another city. The ticket had been given him by a government contractor with whom he had just completed negotiating a contract. When I questioned his judgment in accepting this, he said the negotiation had already been consummated, he had done an excellent job in the government's behalf, and it was ridiculous for anyone to think he could be bought for the price of a hockey ticket. While his position was not without some logic, the fact remains

that his action clearly violated the Navy's Standards of Conduct (SOC). While he knew, and I knew, that his personal integrity was beyond question, a competitor of the company involved may not have seen this the same way. In the SOC area, perception is critical, and his acceptance of the ticket just didn't look good. Upon reflection, he acknowledged that his action had been ill-advised.

The prohibition against accepting gratuities from government contractors is one of the major facets of the SOC. The gratuities we hear about are most often things like meals and small gifts (such as a hockey ticket),

but the term includes anything provided the DoD employee at less than fair market value. Not long ago, a senior GM-15 at another Navy activity chose to resign from his position, rather than undergo disciplinary action (quite possibly, removal from the job), when it became known that he had bought a car from a contractor with whom he dealt on the job, at a price roughly half the fair market

value.

Accepting gratuities is *sometimes* permissible, and the DoD and Navy SOC Instructions list several exceptions to the general prohibition. If one of those exceptions does not apply, however, the acceptance of a gratuity can be a very serious matter. If any of you have questions about this issue, don't hesitate to call the Office of Counsel (Ext. 3000) for advice.

Energy Usage 1987

Total Costs per Month

Prepared by Code 833

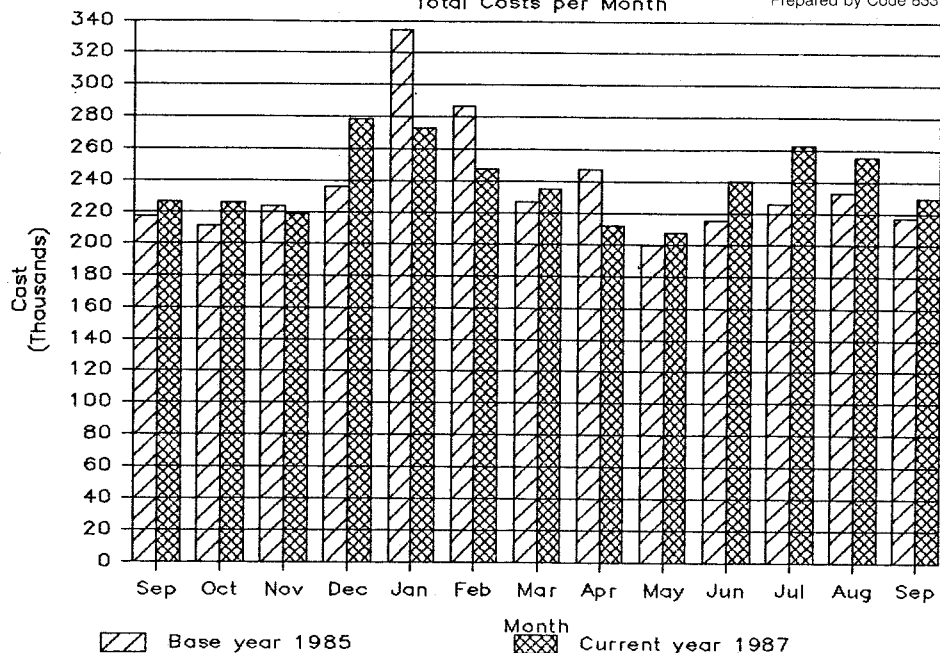
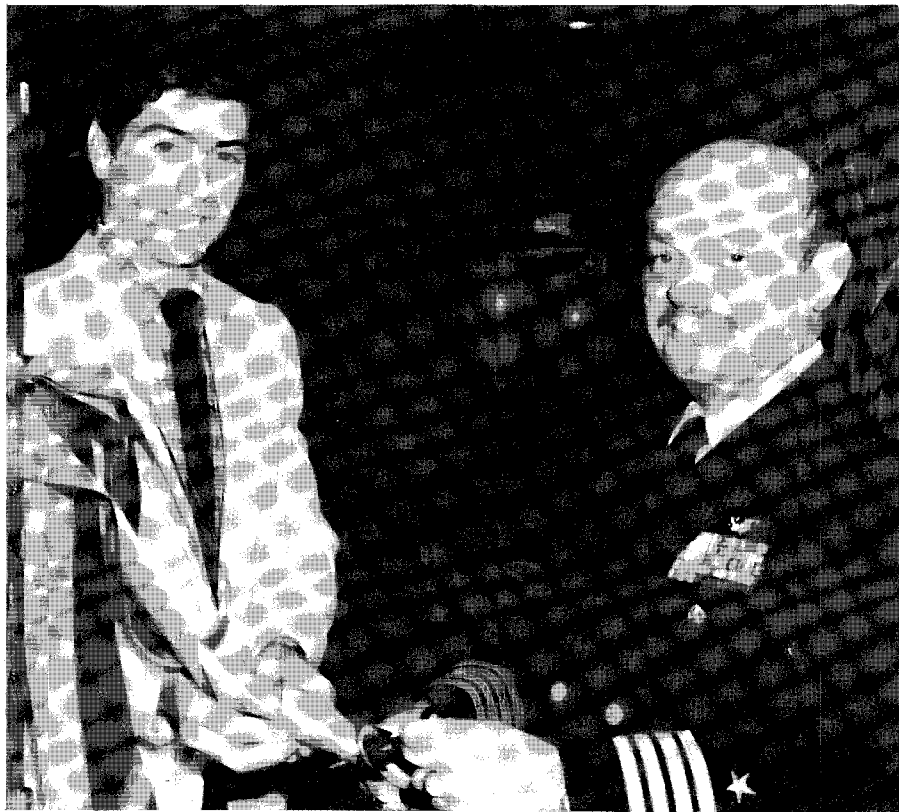


Photo by JO2 Todd Lufkin

RADM R. LEUSHNER, NAVAIR (PDA-13) listens intently to briefings presented by the Antisubmarine Warfare Systems and Mission Avionics Technology Departments on October 29th.

Crew's Rest Club re-opens to a party



David Candelori, Club Manager and CAPT Fred Wright, Chief Staff Officer, cut the ribbon officially re-opening the Crew's Rest.



LT Kathleen McCarthy, LT Walter Neboshynisky, LT Brian Bennet and LCDR Peter Letarte enjoy the party.

By Mary Ann Brett

The Grand Re-Opening of the Crew's Rest Club just happened to coincide with the Navy's 212th birthday and the return of the Mobile Maintenance Unit Deployed (MMUD) from NAS Willow Grove, creating three good reasons for a party. So, on October 15th, the newly refurbished Crew's Rest opened its doors and served a free buffet luncheon to all Center employees who came.

Chief Staff Officer Captain Fred Wright cut the re-opening ribbon, made ceremonial remarks in honor of the Navy's birthday and the MMUD's

return, and then made the first slice in two cakes. Nearly four hundred people enjoyed a Mongolian barbecue, accompanied by a steamship round of beef.

Did the new manager of the Crew's Rest, David Candelori, go to all this trouble out of the goodness of his heart? Not quite. He had a slightly ulterior motive: "Our vendors donated the food," said Candelori, "and together we hoped to demonstrate the quality food and atmosphere we are now offering. Don't forget — the Crew's Rest is now self-supporting and we need your help."

Photos
by
NADC
Photo
Lab



SQDLDR John Coote, MAJ Blaine Feltmate and Lusi Dunbar wait in line for their free lunch.

Let's talk TURKEY!

By Evelyn D. Harris
American Forces Information Service

Benjamin Franklin thought the turkey should be our national bird. And although the eagle's strong and vigilant image earned it "top bird" status, on Thanksgiving, it's the turkey who reigns on dinner tables wherever Americans gather.

Turkey, like other poultry, is tasty and nutritious. But like all high-protein food, it is especially vulnerable to microorganisms that can cause food poisoning. Here are some hints from food safety experts to ensure that you and your loved ones are not included in that number.

- Preparing — If you mix your stuffing a day ahead, premix only the dry ingredients and refrigerate them separately from the uncooked bird. That will keep any bacteria from entering the starchy dressing.

- If you're going to use the same knife to cut the vegetables that you used for meat, first wash it thoroughly. The same goes for cutting boards and all utensils.

- Cooking — Stuff the bird loosely just before you're going to cook it. That way, the heat from the oven has a better chance to cook the stuffing all the way through.

Check the stuffing with a meat thermometer after you take the bird out of the oven. Leave the thermometer in place for about five minutes for an accurate reading. To be fully cooked,

the stuffing should reach 165 degrees Fahrenheit, the bird 185 degrees.

- Serving — Serve the stuffing in a separate dish from the turkey. Don't leave the turkey and stuffing at room temperature longer than two hours.

- Refrigerating — If you don't want to debone the turkey right away, refrigerate the carcass. It is best to separate turkey into pieces, such as drumsticks, before refrigeration. But it will stay fresher if you don't slice it into very small pieces. The reason: You want it small enough to cool quickly but not so small that it is exposed to air at room temperature for long.

If you have large amounts of stuffing, divide them into smaller dishes. This speeds cooling. The key to food safety is to try to keep foods either hot (above 140 degrees) or cold (below 45 degrees). Minimizing the time food stays at room temperature increases safety.

- Freezing — If you can't eat leftover turkey quickly, freeze it. Cooked dry turkey keeps a month in the freezer. Turkey in gravy keeps up to six months. Freezing dries food out, but the gravy helps prevent this.



Crews Rest New Year's Eve Party

Thursday 31, December
6:00 p.m. til closing

★ ★ ★ ★ Everyone is Invited ★ ★ ★ ★

ADVANCE SALES TICKETS
\$20.00 singles, \$35.00 couples

TICKETS SOLD AT THE DOOR
\$25.00 singles, \$45.00 couples
if available

INCLUDES
Live Top 40 Band
DJ
Hors D'Oeuvres
All-You-Can-Eat-Bufferet
Party Favors
Bottle of Bubbly
Continental Breakfast
And Our Low Cash Bar Prices



Tickets are sold at the club bar during all hours of operation. Seating reservations are accepted with your ticket purchase so buy your tickets today to ensure seat availability. For additional information call the Crews Rest. Estension 441-7651. Holiday with US.

NADC to operate DoD magnetic tape lab



Gary C. Feuer

By Jim Kingston

The Center will soon be able to boast operation of another unique RDT&E facility. It is the only Department of Defense (DoD) magnetic media Research, Development, Test, and Evaluation laboratory and its role will be to support all present and future DoD data storage requirements. The new facility, scheduled to be completed and fully operational in early 1988, will be responsible for characterizing new media, generating technical specifications, developing modern test hardware, and conducting both

qualification and acceptance testing. NADC's function as Technical Agent will support the consolidated tri-service procurement activities of the Defense Electronics Supply Center (DESC) in Dayton, Ohio.

Specification, procurement, and testing of high quality magnetic instrumentation tape had previously been performed by the General Services Administration (GSA) before its test laboratory was closed. At that time there was only a single source of all magnetic instrumentation tape and there was no federal stockpile of this vital commodity.

NADC is also a prime user of magnetic instrumentation tape in anti-submarine warfare (ASW) applications. The Center will be in the unusual position of testing and evaluating new magnetic tape to be used in its Update IV avionics program for the P-3C ASW aircraft.

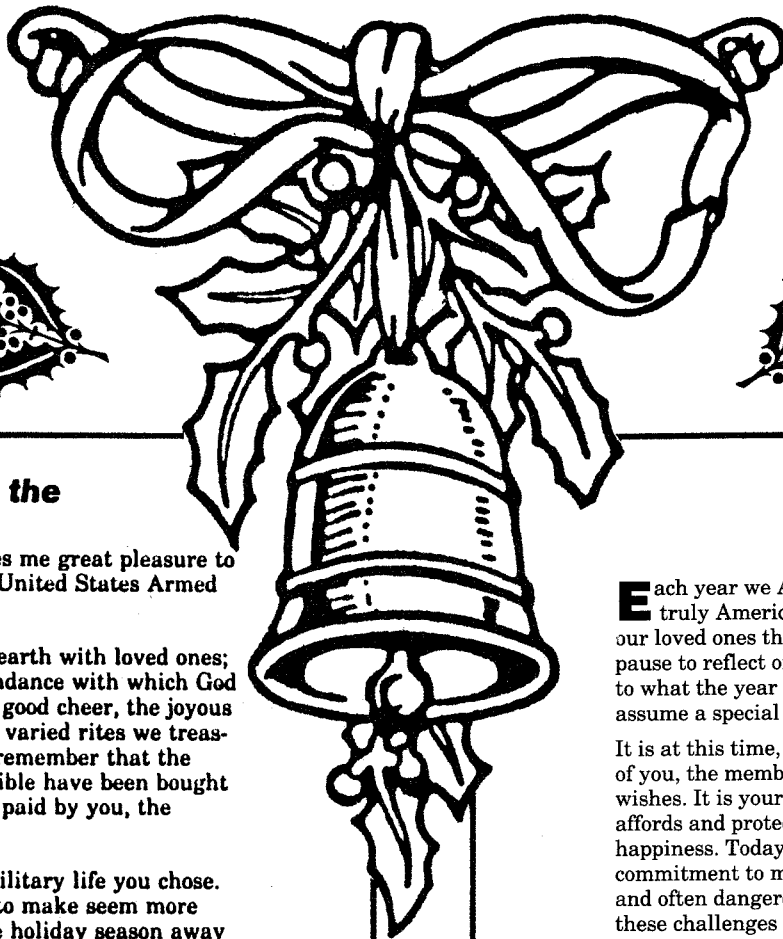
The new laboratory occupies approximately 5,000 square feet in Building #1 and will cost an estimated \$2.5 million for construction plus an additional \$1.5 million for highly specialized new equipment.

According to Gary C. Feuer, electronics engineer, the facility will have two laminar flow "Clean Rooms" — both a large Class 1000 and a smaller Class 100 — as well as a magnetics laboratory, an optics lab, tape storage, a security vault and strong room. Feuer said the laboratory will function with approximately 9 or 10 people including both NADC and contractor personnel.

The Center has already updated and revised the technical specifications for

continued on page 4

Happy Holidays



Holiday Message From the President

As Americans celebrate this joyful season, it gives me great pleasure to send heartfelt greetings to the members of the United States Armed Forces.

Traditionally, this is a time to gather around the hearth with loved ones; to celebrate and give thanks for the peace and abundance with which God has blessed this great land. But in the midst of the good cheer, the joyous reunions of families and friends, and the many and varied rites we treasure in these special times, it is appropriate also to remember that the freedom and security that have made them all possible have been bought for us at tremendous price. That price is still being paid by you, the guardians of our liberty.

All of you could have taken paths other than the military life you chose. During Yuletide the sacrifices you are called upon to make seem more acute, most especially for those who must spend the holiday season away from home and family. But each of you understands that the protection of freedom and democracy is a full-time job, that our readiness and vigilance must never be relaxed. The professionalism and spirit with which you maintain our defense are sources of deep and abiding pride in the hearts of all Americans. To you who willingly shoulder that burden, and to your families who stand beside you as you carry out your vital duties, I send the thanks of a grateful nation. No matter where you serve, your countrymen think of you.

As your Commander in Chief, I am proud to salute you. Nancy joins me in wishing you and your loved ones a wonderful holiday, and health and prosperity in 1988. God bless you, and God bless America.

Ronald Reagan

Ronald Reagan

Holiday Message from the Secretary of Defense

Each year we Americans take special comfort in the holiday season. In a truly American tradition, we gather with family and friends to share with our loved ones the joys and happiness that this special time brings all of us. We pause to reflect on the happiness and successes of our past and we look forward to what the year ahead may bring. At this time, peace, joy and happiness assume a special meaning for all of us.

It is at this time, our traditional holiday season, that I wish to extend to each of you, the members of our armed services and your families, my very best wishes. It is your quiet professional dedication and spirit of self-sacrifice that affords and protects the basic freedoms we celebrate with such joy and happiness. Today our great nation remains strong and free because of your commitment to maintain peace through strength. These are indeed challenging and often dangerous times. Much has been asked of you, but you have met these challenges and have given your loyalty and skills in full measure.

As is the very nature of a profession which demands constant vigilance, some of you will spend the holidays at sea or on watch or otherwise separated from your families and friends. Take comfort in knowing that the American people recognize and appreciate the extra measure you are giving to protect our great country.

America's armed forces have a vital responsibility. As a people, we have dedicated ourselves not only to preserving our own freedom, but to helping our friends and allies secure and safeguard their liberty. Your uncompromising professionalism and dedication to duty enable us to keep these promises to our friends, and to remain a bulwark against the enemies of freedom. For you, peace has a special meaning.

Whether you are celebrating this special time with your loved ones or at a lonely watchpost, you are in the thoughts of Americans everywhere.

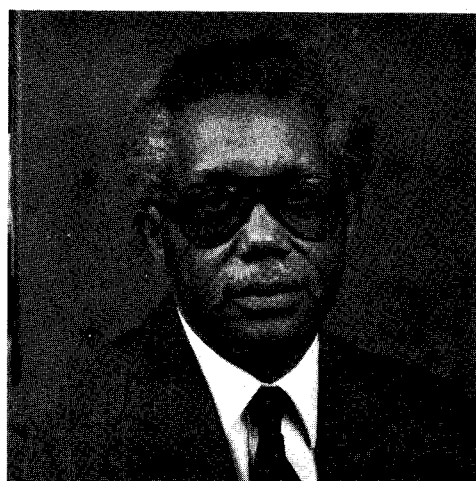
I am proud to be able to wish you a joyful holiday season and a Happy New Year. May the spirit of peace, joy and happiness that we celebrate be fully realized for each of you in the year ahead.

Frank C. Carlucci

Command Corner



CAPT Curtis J. Winters
Center Commander



Guy C. Dilworth, Jr.
Technical Director

To all hands:

Last year the Center published goals to make our safety and health program more effective. Here are the results of our efforts and new goals for FY-88.

Our first goal was to reduce our overall accident and injury rate by 10%. Here we have shown both significant improvement and poor performance. Our total number of injuries did, in fact, decrease by 20%, but, lost time injuries decreased by only 6% and workdays lost from these accidents actually increased 61%. In light of these figures, this year's goal will be an additional overall reduction of 10% in our injury rate, and a 25% reduction in lost workdays. Supervisors in particular must be increasingly vigilant in ensuring that their areas are as free from hazards as possible, and that their people perform all tasks in a safe manner.

Our second goal centered around the establishment of a coordinated Hazardous Material/Hazardous Waste program. This was done by appointing a program coordinator, publishing a revised program instruction, and establishing a coordination control center to ensure proper accountability for all chemicals entering or leaving the Center. However, many of our workcenters continue to maintain excessively large stocks of chemical materials and obsolete or no longer needed items. To alleviate this problem, I have set as a goal a 15% reduction in chemical inventories. Exceptions will be made in workcenters where supervisors can verify that all items on hand are necessary for normal operations. During July 1988, all

departments will conduct a self-inventory of their holdings, and the Safety Manager will advise me of any group falling short of this goal.

Last year's final goal dealt with improving safety and health training. Again progress was noted but emphasis is needed to ensure that employees attend all required training, and that supervisors take a more active role in providing and documenting training for their people. To measure compliance with this objective, the Safety Manager will include a review of safety training during routine workcenter inspections.

This year, to increase our awareness of the importance of safe performance, we are adding a goal. The annual evaluation of all personnel, particularly supervisors and managers, should reflect personal accountability for occupational safety and health with appropriate recognition for superior or deficient performance. While I do not expect a separate rating element to be developed for this item, I do expect it to be addressed as a measure of overall performance.

Have a healthy and safe New Year!

C. J. Winters
C. J. WINTERS
Commander

Guy C. Dilworth, Jr.
GUY C. DILWORTH
Technical Director

Command holiday message

As we approach this joyful holiday period, we wish you, the military and civilian men and women at the Naval Air Development Center, our thanks for your support.

There is something so very special about this season that, as it approaches, no matter how the rest of the year may have gone, there is a renewed spirit of hope and good will.

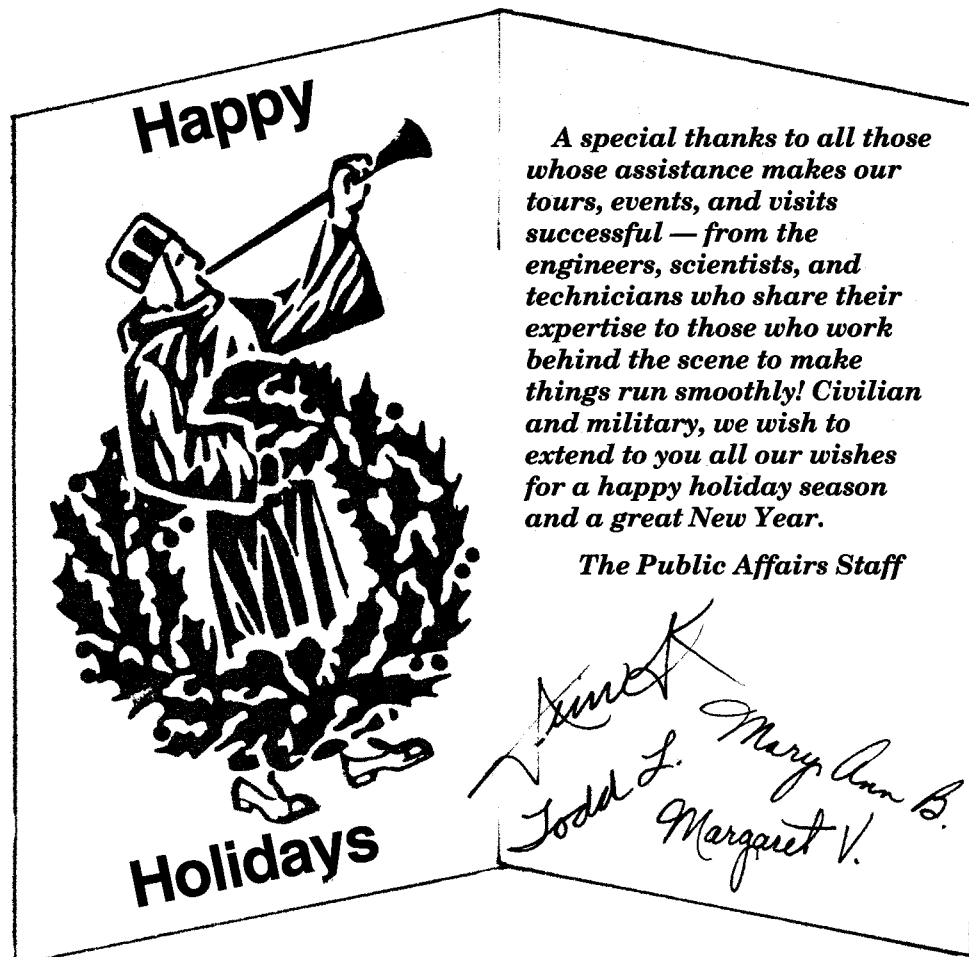
It is more than departmental parties, or a few days off from work. It is a time when people of diverse backgrounds and beliefs can share ideas and friendships, a time that brings us together, and lets us appreciate who we

are, where we are from, and what is really important to us.

As much as the festive side of Christmas and Hanukkah is an important part of our lives, even more important are the thoughts and concerns for our fellow man which should be continued throughout the year.

We send you, and your families, our best wishes for the Holiday Season and for health and prosperity throughout the New Year.

C. J. WINTERS **GUY C. DILWORTH**
Commander Technical Director



A special thanks to all those whose assistance makes our tours, events, and visits successful — from the engineers, scientists, and technicians who share their expertise to those who work behind the scene to make things run smoothly! Civilian and military, we wish to extend to you all our wishes for a happy holiday season and a great New Year.

The Public Affairs Staff

If the SOC fits

By Robert Janes


A major focus of the Navy's Standards of Conduct (SOC) is on contracts — ensuring that we obtain the maximum degree of competition in the award of a contract, and that we remain fair thereafter when administering the contract. I know of two instances in the last six months where, for one reason or another, contract coverage of a particular function had unexpectedly disappeared and the cognizant NADC engineer had been forced to hastily seek replacement coverage. In both instances, the engineer bypassed the Contracts Division because of perceived delays in the contract process, and instead simply arranged to have the work performed under some other existing contract. In each case, this resulted in a complaint from a competitor contractor, who claimed that the replacement contract did not encompass the services being provided. In one case the complainant was absolutely right, and we had no choice but to stop the work, and indeed did not pay the contractor for the work already performed. It was an embarrassing situation, and one that could very well have resulted in disciplinary action being taken.

When you find yourself in a situation where you need immediate contract coverage, I urge you to work with the Contracts Division, which will do everything possible to accommodate your needs in a legal manner. Obtaining services under a contract which does not provide for such services in a statement of work or similar contractual document is illegal, and is a sure bet to evoke complaints from competitors if they learn of it. Under normal circumstances, it can often take a very long time to award a contract, but where emergencies arise, the Contracts Division is prepared to move rapidly to accommodate your needs.

Energy Savers

• Keep appliances in good working order so they will last longer, work more efficiently, and use less energy.

• When buying appliances, read labels carefully. Compare energy use information and operating costs of similar models by the same and different manufacturers. The retailer should be able to help you find the wattage of the appliance.



Reflector

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.

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Commander, NADC	CAPT Curtis J. Winters
Technical Director	Guy C. Dilworth, Jr.
Public Affairs Officer and Editor	James S. Kingston
Associate Editor	Mary Ann Brett
Assistant Editor	JO2 Todd Lufkin

Take H.E.E.D.

NADC-developed device saves two lives

By Mary Ann Brett

"It feels great to know we actually made a difference," said George Gillespie of himself and the other employees at the Center who helped develop the Helicopter Emergency Egress Device (HEED). Gillespie, of the Life Support Engineering Division, is NADC's HEED program director.

According to a Pacific fleet message, this NADC-developed device played an instrumental part in the survival of at least two Navy aircrewmembers after an H-46 helicopter crash in the western Pacific. This was the first accident reporting the use of HEED while escaping from a sinking aircraft, resulting in saving two lives.

The message stated, "The co-pilot and second crewman both used HEED to escape. Following impact, the co-pilot was pinned in his seat by debris from a collapsed instrument panel . . . He was stunned and disoriented but . . . had no problem pulling the (HEED) bottle from his zippered vest . . . The second crewman in the cabin section was thrown from his seat to the cabin floor. He was on his knees in chest deep water as the aircraft sank . . . Dazed and disoriented . . . he reached for his HEED bottle . . ."

In both cases, the HEED bottle of

compressed air produced a calming effect allowing the crewmen time to become oriented and concentrate on egress procedures.

Gillespie explained that HEED is basically a modified version of commercially available scuba gear. The small tank, with its regulator on the top, weighs 1.5 lbs. and measures 15 inches in length and 2.5 inches in diameter. Although somewhat bulky, the tank is carried in the survival vest so it is readily accessible. Gillespie said this amount of bulk is considered an acceptable trade-off for added safety.

Developed in 1984 and available to fleet-deployed Navy and Marine Corps helicopter squadrons in December 1986, HEED provides three minutes of air in 55° water at a depth of 20 feet.

Gillespie described what typically happens, "Unlike other military aircraft, helicopter pilots do not have an option to eject because of the rotors overhead. Also, helicopters have little inherent buoyancy," he said. "More than any other aircraft, they 'ditch' or sink rapidly and tumble in the water because of their top-heavy structure." Survivor testimonies have stated that this situation, combined with cold temperatures, disorientation, panic, and sometimes very dark surroundings becomes overwhelming. "... A

minute's worth of breathing time could make the difference between life and death." HEED was designed in response to this need.

NADC helicopter pilot LCDR Jamie Burd of the Vertical Flight Office

logged nearly 2,000 hours in H-46 helicopters during the late 70's and early 80's. He recalled, "I've lost some good friends in helo accidents and I'm sure HEED could have made a difference."



Photo by NADC Photo Lab

TAKING HEED — Members of the Crash Safety and Survival Systems Branch inspect HEED units. Identical HEEDs recently saved the lives of two aircrewmembers.



Sailor and Blue Jacket of the Quarter named

By JO2 Todd Lufkin

Sailor of the Quarter

NADC's Sailor of the Quarter (SOQ) for the third quarter of 1987 is HM2 Mark Butler of the Air Vehicle and Crew Systems Technology Department (Code 60).

Butler has been in the Navy for 6½ years and here at NADC just over 2 years. "I like the Warminster area," he said, "it's great for sightseeing

(Philadelphia, the Poconos, the Jersey shore), although the area is a bit expensive." Prior to being assigned at NADC, he was stationed at VS-29, NAMI-Pensacola and Great Lakes.

"Basically, I joined the Navy because I was looking for an education," explained Butler. He became a corpsman because at the time he was interested in the medical profession.

The 25-year-old native of northern Virginia was "happy and surprised" that he made SOQ. "I had just made second class, and competed with people

with a lot more seniority," stated Butler, "Hopefully this will help me when it comes time to go up for first class."

Butler works at the Dynamic Flight Simulator (DFS) where he deals with aviation research for new flight gear and human testing in the environmental chamber. "We test gear to see if it is adaptable for the flying community," he explained, "we give suggestions and do further testing—some projects take longer than others."

The SOQ stresses that a person should "always look up, things will always get better . . ."

Butler plans on putting in his 20 years and will then decide where he wants to go from there.

He and his wife reside in Warminster.

work hard, the Navy will work hard. It works both ways."

A native of Columbus, Ohio, Sebring joined the Navy because he wanted to travel and see the world. He became a mess management specialist (MS) because he loves to cook and his ultimate goal is to become a professional chef.

Sebring works at the Galley as the "Jack-of-the-Dust" (storeroom custodian). He explained that he is in charge of fresh and frozen produce and dry goods, ordering and picking up goods, rotating stock and ensuring that the cooks have all the necessary ingredients for their recipes. "It's a demanding, hectic job," he said, "I work from 6:30 a.m. to 3:00 p.m., usually with no lunch. I go to the Philadelphia Naval Shipyard for dry goods and supplies weekly, receive fresh produce weekly and frozen produce monthly."

In his free time this BJQ lifts weights six days a week and runs two miles three times a week. He explained his philosophy: "Everyone in the service should be in top physical condition. It helps you mentally to do your job better. It also helps your social status—if you feel better about yourself, others will feel better about you."

Sebring's plans for the future include attending Bucks County Community College and receiving an Associate's or Bachelor's degree in Food Service/Hotel Management. "I'm also looking forward to making petty officer, spending the next 18 years in the Navy, and retiring in Bucks County."

"Jack of the Dust" is Blue Jacket of the Quarter

By JO2 Todd Lufkin

NADC's Blue Jacket of the Quarter (BJQ) for the third quarter of 1987 is MSSN Shawn Sebring. This 21-year-old sailor has been on Center for 2 years of the 2½ years he has been in the Navy.

Sebring was excited about making BJQ, "it just goes to show," he said, "that hard work does pay off. In the long run, people do notice what you do. If you



Photo by NADC Photo Lab

HM2 Mark Butler



Photo by NADC Photo Lab

MSSN Shawn Sebring

Falloon takes 1987 football championship



Photo by Phil Richardson

The Granfalloon's Steve Fleischut rises above the Renegades in the championship game.

By Mark Lilly

Well, the bad guys won the NADC Football League championship game. Just kidding. Most of you know of my bias towards the Renegades, who opposed the Granfalloon in the final. The game had all the trappings of a classic matchup: the two top defenses, a quarterback duel; Weiss versus Hynes, the physical matchup of Renegades speed versus Falloon height, and intangibles such as the Renegades hunger for a championship versus a vastly more experienced Falloon squad. However, as so often happens in big games, the actual contest did not live up to the expectations. Even so, the final score was close and the amount of disagreements on the field was minimal.

Now, if I told you that the Falloon and the Renegades had come into the contest averaging 27 and 23 points per game, respectively, and then I told you that the Granfalloon's Mike Bubb had scored all the points in the game. Well, you might conclude that Mike must be one of the greatest players in the history of the league, right? Well, he

has caught his share of passes but let's not retire his number just yet. Bubb caught the winning touchdown on the Falloon's opening drive, and that score held to help them win their third consecutive championship and their fifth in the last eight years. Thus, if you missed the first two minutes of the game, you missed all the scoring as the Falloon held on to beat the Renegades 6-0.

The weather conditions for the game were horrendous. The air temperature was below freezing and a 20 mph gust blew for the entire game. I guess we were lucky there wasn't a driving snowstorm (Does anyone like the idea of building a dome over Szymanek next year?). The wind played a big factor in the game. It constantly misdirected the ball, froze players' fingers, and made watching the game an ordeal.

The Falloon won the toss and elected to receive. The Renegades booted the opening kickoff into the driving wind which summarily pushed the ball out of bounds. The Renegades were assessed a penalty and had to re-kick. The second kick also went out of bounds — on the

Renegades 25 yard line. The Falloon took possession at that point and two plays later, Falloon quarterback Tom Weiss found Bubb at the back of the end zone for a 15 yard score. A missed extra point made the score 6-0.

That about sums up the scoring for the game. However, the Renegades did have a golden opportunity in the first half. The Renegades' Jeff Price intercepted a Tom Weiss pass at about midfield. Price then eluded three defenders before getting tagged on the Falloon five. On the ensuing play, quarterback Steve Hynes threw a strike into the gut of a Renegade receiver, whom we'll call Clutch Cargo. Clutch then inexplicably dropped the potentially tying touchdown pass. Three more tries and the Renegades still came up empty.

Now, I'd like to add some final comments on the championship game. The teams, as a whole, did not play particularly well. This was primarily due to the playing conditions. However, the Falloon had some individual performances whose play proved to be the decisive factor in the victory. First and foremost, there was Tom Weiss who put on a clinic from the rusher's position. Weiss stopped an incredible eleven Renegades' plays (4 sacks and 7 blocks) at their inception, adding to his ever-growing mystique as The NADC Sports Legend. There also was seasoned veteran Pat Finnegan who rebounded from a bad semifinal game against the Barking Spiders to intercept two, and almost three, of Steve Hynes' passes. And last but certainly not least, there was the omnipresent Bubb who caught the game's only touchdown. Now, only one more thing needs to be said. Congratulations, Granfalloon - 1987 NADC Football League champions. Why do I get this feeling of deja vu, for what seems like the fiftieth time, when I say the words Granfalloon and champions in the same sentence?



Photo by Phil Richardson

Falloon: (standing) Mike Bubb, Carlton Brown, Buzz Cerino, Gary Marinelli, Rick Werrell, Pat Finnegan; (front) Tom Weiss, Steve Fleishut, Matt Geyer, Matt Brown. (Missing: Mike Warren)



Photo by Phil Richardson

The Renegade's ever-elusive Jerry Costanzo returns an interception against the Granfalloon.

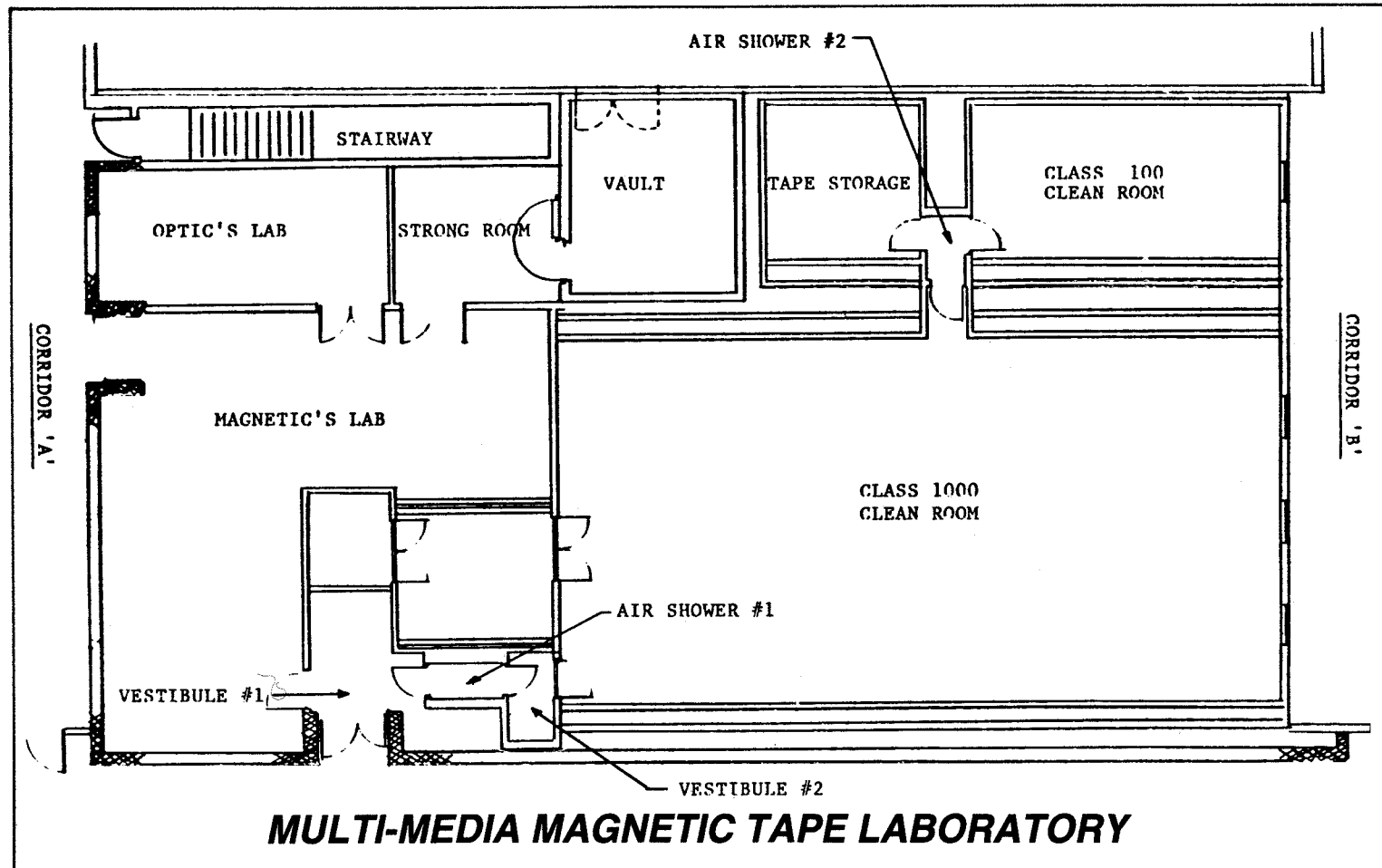
NADC to operate DoD magnetic tape lab

continued from page 1

analog instrumentation tape as well as tape reels and hubs. In addition, a computerized testing system to measure electrical performance parameters has been developed including a modular system for multi-channel drop-out testing.

While there is presently only a single source supplier of all instrumentation tapes DoD-wide, NADC is in the process of evaluating a second source. The lab uses four categories of tests in evaluating magnetic tapes: visual inspection, electrical performance, physical properties, and magnetic properties.

New parameter tolerances, sampling rates, and test methods will be included in the specification updates after the new facility is operational for a sufficient time to establish an adequate empirical data base to support tighter, but realistic tolerances.

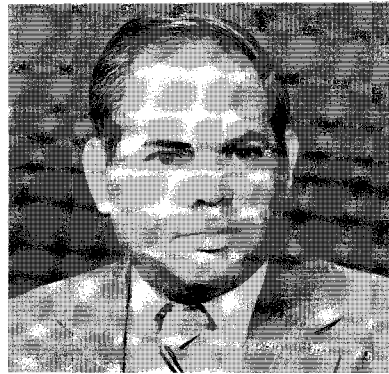


VIEWPOINT

Question: Based on recent media attention and information, how do you feel about the possibility of mandatory drug testing for federal employees in sensitive/critical positions?

Photos by Mary Ann Brett and JO2 Todd Lufkin

Prepared by Mary Ann Brett and Margaret Vigelis



"Reflecting on the current political environment in this nation, I consider the possibility more of a probability. A breakthrough in automated *real-time* analysis would be helpful to speed the process, otherwise they are going to have a hard time getting the required samples out of people. Overall, drug testing seems to be an issue whose time has come."

Stuart Simon



"I think it's an invasion of privacy and should not be initiated. If tests are to be conducted they should be mandatory for the private sector not just government employees."

Janice Stibling

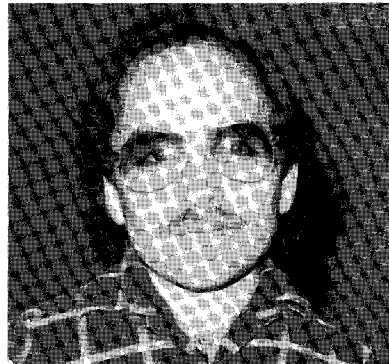
"No problem, until they consider Excedrin a drug."

Chris Andersen



"If drug testing is done correctly, I see no problem with it. However, there must be adequate controls and verification to assure that no mistakes in testing are made. The career of a good employee could be easily ruined by even the suspicion that he was using drugs."

Otis Johnson



"If it is decided that they will test for drugs, it should be for everyone. Not just a few."

Gerry Gallagher



Football fans vote for All-Stars

By Mark Lilly

Now for something completely different. As most of you know, the NADC Football League does not have an All-Star game. Thus there is no way of recognizing some of the league's better players. In lieu of that fact, I have taken it upon myself to conduct a fan balloting poll similar to Major League Baseball's All-Star selection process. During each game of the regular season, I discreetly handed out ballots to each of the multitude of fans. After the fans voted for their favorite players, I then, just as discreetly, collected the returns. The votes were tallied and below I present the results in alphabetical order (The top vote-getter in each category is denoted by an asterisk).

OFFENSE

Quarterbacks (Top Two)

Steve Hynes, Renegades
Tom Weiss *, Granfalloon

Receivers (Top twelve)

Matty Brown, Granfalloon
Mike Bubb, Granfalloon
Jerry Costanzo *, Renegades
Mike Costanzo, Barking Spiders
Mike Elser, Renegades
Steve Fleischut, Granfalloon
Scott Fowler, Barking Spiders
Bob Geyer, Dragons
Paul Krebs, Lasers
Jeff Price, Renegades
Bill Schork, Barking Spiders
Mike Warren, Granfalloon

DEFENSE

Rushers (Top One)

Tom Weiss *, Granfalloon

Linebackers (Top six)

Carlton Brown *, Granfalloon
Matty Brown, Granfalloon
Jack Connors, Barking Spiders
Steve Hynes, Renegades
Scott Lassen, Renegades
Jeff Price, Renegades

Defensive Backs (Top six)

Jerry Costanzo *, Renegades
Mike Elser, Renegades
Steve Fleischut, Granfalloon
Paul Krebs, Lasers
Bill Schork, Barking Spiders
Joe Wolfe, Barking Spiders

One last comment. A number of my faithful readers have noticed that I did not play a great deal during the 1987 season. Well, I'd like to shed some light on that observation and suggest a strategy for the 1988 season. Now, I realize and fully admit that I'm not one of the better players in the league. A smart defense will realize that and, when I finally enter the game, they should switch their coverage, from me, to one of our more dangerous receivers. I promise not to catch any passes — honest.

Alas, it is time to sign out for the 1987 season. This reporting business can be fun, especially since it lends itself to unilateral bantering. However, I do wish the job paid more. See you next season. The End.

Commander Salutes

Elliott Rissler and Leon Smith (Code 40): For outstanding assistance to the Office of the Under Secretary of Defense in reviewing and evaluating many proposals for the first phase of the Microwave and Millimeter Wave Monolithic Integrated Circuits program.

Steven Ganop (Code 40): For outstanding technical contributions to the Navigation Improvement project in the Pacific Fleet.

Jerry Polin (Code 50): For a briefing on proper Naval business procedures to Fairfield Industries.

Matthew Berenato and Brian Calderwood (Code 70): For contributions to the Consolidated Automated Support System source selection effort.

Scott Perry (Code 20): For contributions and performance to the Aerial Target Systems Program under the Naval Scientist Training and Exchange Program.

Ron Garber (Code 60): For valuable assistance to the Naval Air System Command regarding the SH-2F helicopter fuel tanks.

LT Richard Erickson (Code 60): For outstanding efforts as Agenda Chairman for the 21st Fleet Air Introduction/Liaison of Survival Aircrew Flight Equipment Working Meeting.

John Connors (Code 60): For dedicated assistance to the Naval Air Systems Command on the C-2A(R) ADDS/SEALS Project and the M/CH-53E Anti-Static Rescue Hoist Cable development program.

Jerome Bortman (024), **Michael Mocerter** (Code 50), **John Scott** (094): For technical assistance to the Hanover Police Department.

Stephen Campana, Michael Hess, George Shamlian, Harvey Sokoloff (Code 50): For outstanding technical support to the F-14 Infrared Search and Track System.

Robert Finkelman (Code 05), **Alan Victor** (Code 30), **Harry Heinzl** (Code 50): For significant ADP support to the Chief of Naval Research and hosting the ADP Steering Committee.

Michael Kijesky (Code 50): For performance as Team Leader of the Acoustic Subteam for the P-3 Update IV Program Source Selection.

Gary Davies (Code 70): For extensive contribution as an evaluator on the Software Subteam of the P-3 Update IV Program Source Selection Board.

Kathleen Gause (03E): For a presentation to the Advanced Equal Employment Opportunity Counselors Course.

Eugene Lehman (20): For performance as the BQM-126A System Safety Engineer at the Naval Air Engineering Center.

John Wood (20): For leadership and technical excellence on the BQM-126 Aerial Target Program.

Dr. Gilbert London (Code 60): For performance and contributions as a member of the ECR/2B Proposal Evaluation Team.

Dunn goes to Washington



Loretta Dunn

Photo by JO2 Todd Lukin

By Mary Ann Brett

Contract negotiator Loretta Dunn was selected for an NSTEP assignment to the Assistant Commander for Contracts at the Space and Naval Warfare Systems Command in Washington, D.C.

Dunn said the one-year assignment beginning in February '88 sounded interesting and fun. Jokingly she said, "The most challenging part of the assignment will be finding an apartment in D.C. and, then, adjusting to the faster-paced business and social atmosphere."

Dunn has been at NADC's contracting office nearly six years. "I like the people contact," she said, "I'm a people person and I'd be miserable staring into a machine all day long."

She expects this new position to provide her with a different perspective, a new and broadened overview with exposure to major weapon systems, acquisition plans and training. "Whatever I learn," said Dunn, "I'll share with my co-workers here and we'll all benefit."

FERS transfer deadline nears

Defense employees covered by the Civil Service Retirement System should remember that the deadline for making a decision to transfer to the new Federal Employees Retirement System, or FERS, is Dec. 31, 1987.

The open season, July 1 through Dec. 31, 1987, was set up to give employees hired before January 1, 1984, time to determine whether they would rather stay under the old system or transfer to FERS. Employees hired after Dec. 31, 1983, are automatically covered by the new system.

Your decision is important and

should be considered carefully, say defense personnel officials, since it is a decision that cannot be changed.

Both are good retirement systems, but some of the major differences are:

FERS employees are covered under Social Security plus a basic benefit plan; retirement annuities under the Civil Service Retirement System come entirely from the Civil Service Retirement and Disability Fund.

Unused sick leave may be credited toward length of service for retirement purposes under the Civil Service

Retirement System, but not under FERS.

Both systems allow you to participate in a savings plan, but there are more options under FERS.

Each person should have access to a FERS Transfer Handbook. It provides information about the differences between the two systems and shows which system might fit your career plans best.

If you don't have a copy of the transfer handbook or need assistance or further information, contact your personnel office.

Topics needed for the SBIR program

By Diane Heal

It's time to prepare your topics for the FY89 Small Business Innovation Research (SBIR) Program. Submit them to Code 501 (J. Polin) via your department director.

Congress established the SBIR Program to stimulate technical innovation by small hi-tech firms. DoD views SBIR as an opportunity to strengthen the role of small and disadvantaged business in defense-related R&D while increasing the commercial application of DoD research.

The program is divided into three phases. Phase I concentrates on providing the scientific and technical feasibility of the proposed effort. A follow-on Phase II award is directed toward producing a deliverable product or process. Phase III promotes commercial application from the government-funded research or further government development.

Each year topics are solicited on all areas of research and development. After review by NADC, the selected topics are submitted to the appropriate potential sponsors, who then submit their selections to SECNAV for final

approval. Once SECNAV has approved the topics, they are published in an annual DoD solicitation.

Funding for a project can come from any sponsoring systems command or OCNR/ONT. The overall program is funded by a 1.25% "tax" on the total DoD R&D budget. These funds are not subject to year end carry-over restrictions.

NADC is looking to expand its participation in this program. If you have any questions on SBIR, contact Jerry Polin (501, ext. 2316) or Diane Heal, Small Business Office, (094, ext. 2456).



Designated Drivers, Alternative Drinks

Who says drinks for designated drivers have to be dull? Mock margaritas and "virgin" or "bloodless" Marys are two popular non-alcoholic alternatives.

These drinks contain basically the same ingredients as the originals, minus alcohol. And you can still walk a chalk line and touch your nose blindfolded when you're done.

Mock Margarita

- 2 cups bitter lemon or lime soda
- 2 tablespoons sugar
- Juice of 1/2 lime
- Salt
- Crushed ice

Freeze soda in an ice cube tray; Blend lime juice, sugar and frozen soda thoroughly. Rub lime around rim of glass, dip in salt. Pour mixture over crushed ice in salted glasses. Makes two servings.

Bloodless Mary

- 6-oz. can tomato or mixed vegetable juice
- 1/4 cup club soda
- 1/2 teaspoon lime juice
- Dash worcestershire sauce
- Dash hot pepper sauce

Shake or stir to blend ingredients. Add ice, garnish with celery stalk. Makes one serving.



ENERGY QUIZ

QUESTIONS

ANSWERS

1. In 1977, the U.S. was dependent on imported oil for 49% of its petroleum consumption. What percentage of U.S. petroleum consumption was provided by imported oil in 1986?

- a. 24% b. 33% c. 40% d. 48%

2. What is the major source of energy to produce electricity in the U.S.?

- a. coal b. oil c. natural gas d. nuclear energy

3. Among the following economic sections, which consumes the most energy in the U.S.?

- a. Residential and Commercial
b. Industrial
c. Transportation

4. What percent of a typical shore station's budget is spent on energy?

- a. 10% b. 25% c. 33% d. 50%

5. What Navy activity gets all its heat from the earth?

6. How much more energy does the U.S. use today than it did in 1973?

- a. 0% b. 10% c. 12% d. 24%

1. (b.) 33%. At the present rates, however, the U.S. petroleum consumption provided by imported oil will be over 42% for 1987.

2. (a.) Coal provided 55% of energy for electrical utilities in 1985. Other sources are natural gas 12%, oil 4%, hydroelectric 13%, and nuclear 16%.

3. (b.) Industrial is the highest energy consuming sector with 28% of the total. The transportation sector is second with 27% and residential and commercial third with 20%. Losses in production and delivery of electricity account for the other 25%.

4. (c.) 33% This is one of the reasons energy management in the shore establishment is so important.

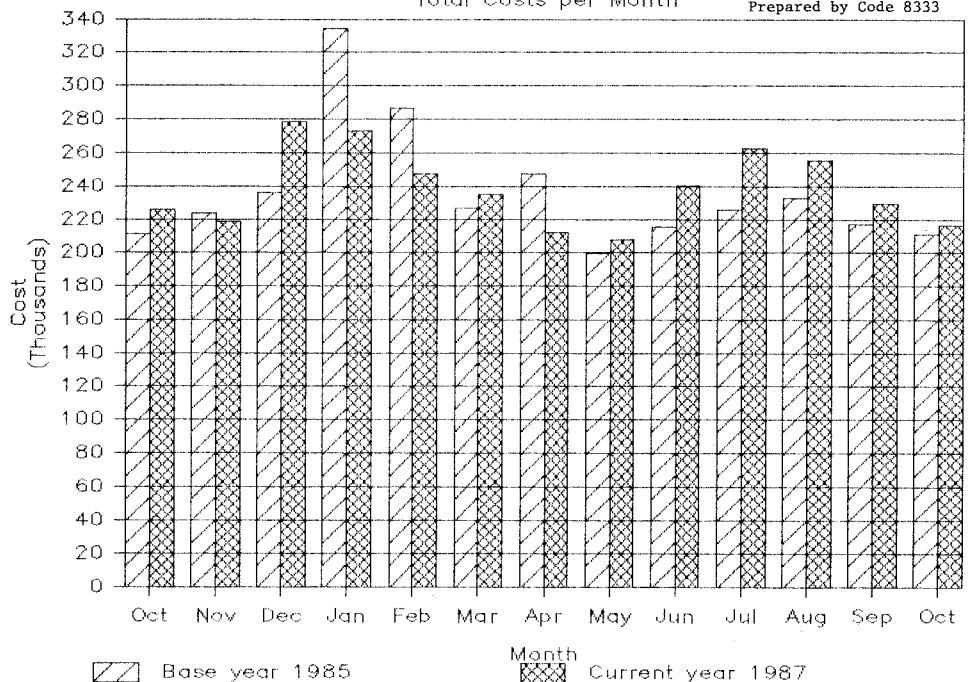
5. Naval Station Keflavik Iceland. Geothermal energy at Keflavik provides the Navy the equivalent of 90,000 barrels of oil each year.

6. (a.) 0%. Despite economic and population growth, the U.S. economy has demonstrated an impressive ability over the past decade to use energy efficiently and flexibly.

Energy Usage 1987

Total Costs per Month

Prepared by Code 8333



Martin Luther King, Jr.

By the President of the United States of America

A PROCLAMATION

Nineteen eighty-seven marked the first observance of the birthday of Dr. Martin Luther King, Jr. as a national holiday. It is a time for rejoicing and reflecting. We rejoice because, in his short life, Dr. King, by his preaching, his example, and his leadership, helped to move us closer to the ideals on which America was founded. We reflect on his words and his works. Dr. King's was truly a prophetic voice that reached out over the chasms of hostility, prejudice, ignorance, and fear to touch the conscience of America. He challenged us to make real the promise of America as a land of freedom, equality, opportunity, and brotherhood.

Although Dr. King was an uncompromising champion of non-violence, he was often the victim of violence. And, as we know, a shameful act of violence cut short his life before he had reached his fortieth birthday.

His story is well-known. As a 26-year-old minister of the Gospel, Dr. King led a protest boycott of a bus company that segregated blacks,

treating them as second-class citizens. At the very outset he admonished all those who would join in the protest that "our actions must be guided by the deepest principles of our Christian faith. Love must be our regulating ideal." Otherwise, he warned, "our protest will end up as a meaningless drama on the stage of history . . . shrouded with ugly garments of shame." Dr. King's unshakable faith inspired others to resist the temptation to hate and fear. His protest became a triumph of courage and love.

Almost 30 years ago, on January 30, 1956, Dr. King stood amid the broken glass and splinters of his bombed-out front porch and calmed an angry crowd clamoring for vengeance. "We cannot solve this problem through retaliatory violence," he told them. Dr. King steadfastly opposed both the timid and those who counselled violence. To the former, he preached that "true peace is not merely the absence of tension; it is the presence of justice." To the latter, he said that "in the process of gaining our rightful place we must not be

guilty of wrongful deeds."

Dr. King's activism was rooted in the true patriotism that cherishes America's ideals and strives to narrow the gap between those ideals and reality. He took his stand, he once explained, "because of my love for America and the sublime principles of liberty and equality on which she is founded." He wanted "to transform the jangling discords of our Nation into a beautiful symphony of brotherhood."

The majesty of his message, the dignity of his bearing, and the righteousness of his cause are a lasting legacy. In a few short years he changed America for all time. He made it possible for our Nation to move closer to the ideals set forth in our Declaration of Independence: that all people are created equal and are endowed with inalienable rights that government has the duty to respect and protect.

Twenty-three years ago, Dr. King spoke to a quarter of a million Americans gathered near the Lincoln Memorial in Washington—and to tens

of millions more watching on television. There he held up his dream for America like a bright banner:

"I have a dream," he said, "that my four little children will one day live in a Nation where they will not be judged by the color of their skin, but by the content of their character. . . . This will be the day when all of God's children will be able to sing with new meaning, 'My country 'tis of thee, sweet land of liberty, of thee I sing.'"

Let all Americans continue to carry forward the banner that 18 years ago fell from Dr. King's hands. Today, all over America, libraries, hospitals, parks, and thoroughfares proudly bear his name. His likeness appears on more than 100 postage stamps issued by dozens of nations around the globe. Today we honor him with speeches and monuments. But let us do more. Let all Americans of every race and creed and color work together to build in this blessed land a shining city of brotherhood, justice, and harmony. This is the monument Dr. King would have wanted most of all.

RONALD REAGAN



Photo by NADC Photo Lab

LOCKHEED CONTRIBUTES TO CFC — *Local Lockheed representative Jerry Sink (center) presented a \$440 check to CAPT Curtis Winters, Center Commander (left) and Ken Clegg, this year's Combined Federal Campaign Chairman. As of December 8th, 72% of the contributions totalled more than \$83,000 or 72% of the \$115,000 goal.*

Promotions

Peggy Bower
Catherine Burian

Andrew Carroll
Stephen Chung
Michael Daum
Patricia Davis

Dorothy Gramlich

Raymond Halchak

Gerald Iannelli

Scott Kee

John Lee
Lewis Lippel

Lynda Mancini

Peggy Newbrough

Kenneth Petri
Mark Polo

Michele Robinson

Robert Seltzer
Oliver Szeto

James Whinnery

Peter Youssef



Young receives award for management excellence

By Mary Ann Brett

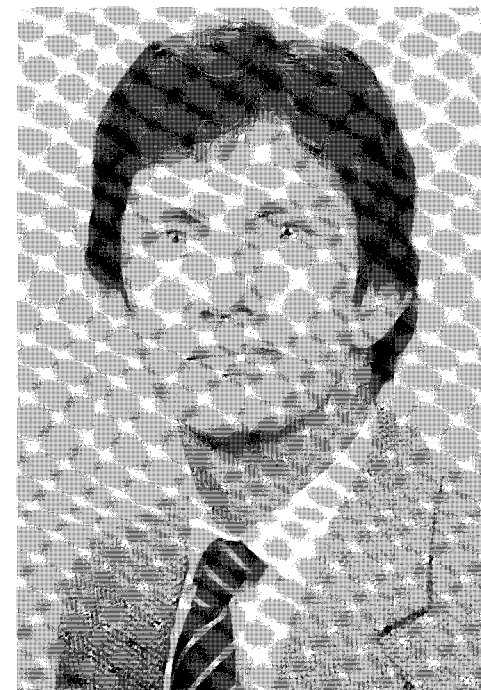
NADC Civilian Personnel Officer, Ronald P. Young, recently received the 1987 Board of Governors Award for excellence from the Office of Civilian Personnel Management for overall superior leadership, professional competence and capacity to innovate. He was commended for an outstanding civilian personnel program "... making a significant contribution to the mission accomplishment of the Center ..."

Young has a Master's Degree in Public Administration from the University of Southern California (1975) and has worked at the Center for eleven years. He said, "I was very pleased to receive the 1987 Board of Governors Award for Excellence in Civilian Personnel/Equal Employment Opportunity Management in only its second year of existence. I also believe that much of the credit for this award goes to my staff whose service orientation and willingness to innovate made this honor possible."

Young's accomplishments included successfully managing the recruiting of scientists and engineers (S&Es) which is considered especially difficult in light of private sector salary competition. He implemented such programs as SUBSIDY PLUS, which provides a bonus to graduating coops who choose

NADC as their permanent employer and NETWORKS, a reward system for employees who refer new S&E hires.

He was also credited with the Center's smooth conversion to the Naval Civilian Personnel Data System, an innovative Civilian Employee Assistance Program, the introduction of an Automated Position Description System, and a successful Equal Employment Opportunity program.



Ronald P. Young



Carlucci named 16th Secretary of Defense

By JO2 Todd Lufkin

Frank C. Carlucci III was recently sworn in as the nation's 16th Secretary of Defense (SECDEF), succeeding Caspar Weinberger.

The 57-year old is a native of Scranton, PA and a 1952 graduate of Princeton University.

Carlucci served as the Deputy Secretary of Defense from February 1981 to December 1982, when he was appointed National Security Advisor.

The new SECDEF also served as the Director of the Office of Economic

Opportunity (1971-73) and Under Secretary of the Department of Health, Education and Welfare (1973-75). Prior to being named Deputy Director of the Central Intelligence Agency, Carlucci was the American Ambassador to Portugal for three years.

Carlucci is the recipient of the Distinguished Intelligence Award, National Intelligence Distinguished Service Medal, State Department Superior Service Award and several honorary college degrees.

He and his wife, Marcia, have three children.



Photo by Mary Ann Brett

VISIONS OF SUGARPLUMS — appear more often this time of year especially during the NADC Officers' Wives Club annual bake sale. Homemade treats helped satisfy nearby sweet-toothed employees.

Combating holiday diet busters

(Armed Forces Press Pack)

Christmas and New Year's can be disastrous for dieters still recouping from Thanksgiving. Serious dieters need a strategy for combating those holiday temptations.

Here are a few suggestions:

- Eat fruit for dessert.
 - Skip the bread and gravy.
 - Use low-calorie salad dressing.
 - Count calories and eat smaller portions.
- If dining out:
- Avoid buffets and "all you can eat" meal deals.

- Order a la carte instead of a complete meal.

Security Reminder

Any form of contact, intentional or otherwise, with any citizen of a communist controlled country or country currently hostile to the United States must be reported to the Security Officer (Code 044). Refer to Paragraph 0502, NAVAIRDEVCEININST 5510.13c.

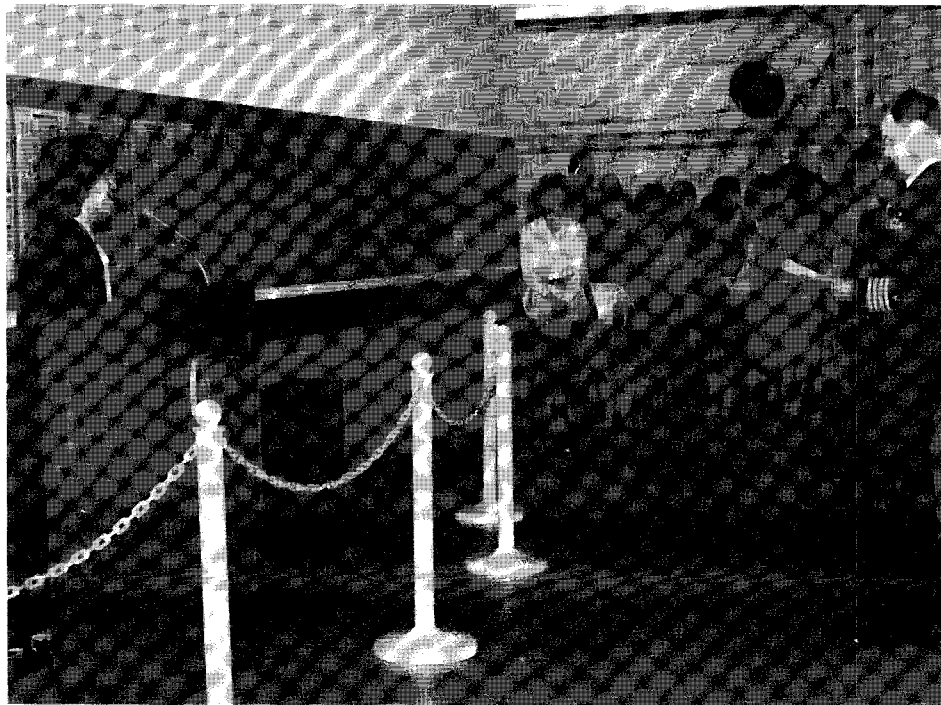


Photo by NADC Photo Lab

VETERANS REMEMBERED AT NADC

The Deputy Equal Employment Opportunity Office sponsored a veterans' memorial service beside the veterans display near the atrium. Remarks were offered by DEEO Officer, Center Commander CAPT Curtis Winters and Chaplain P. Schumann. Robert Clegg led the Pledge of Allegiance, and Lusi Dunbar, the Battle Hymn of the Republic.



Silence for 'Silent Night' carol

(Editor's note: The following was submitted to NADC PAO anonymously.)

The carol "Silent Night" might have disappeared from memory after just one performance, 160 years ago. But a stroke of fate brought Joseph Mohr, a newly-ordained assistant to the parish priest of Oberndorf, Germany in 1817. There he met Franz Xavier Gruber, who was a teacher at the local school and an organist at St. Nicholas Church there.

The Broken Church Organ

In the winter of 1818, the church organ began to wheeze and then died. Gruber sent for Karl Mauracher, a Tyrolean organ-builder from Fuegen in the Zillertal, a valley still famous for the families who make music there.

Mauracher pronounced the organ in need of a thorough overhaul. On Christmas Eve it was still out of order. Snow cancelled his plans to return home for Christmas and he attended the Christmas Eve service in the church.

Song Written for Guitar

Meanwhile, Gruber and Mohr had sorted through the music and concluded that without the organ they had nothing suitable for the Advent service. So, Gruber wrote a tune and Mohr provided the words. This carol, "Still Nacht," was rehearsed and performed for the first time on that Christmas Eve.

And so it might have ended, if organ-builder Mauracher had not taken a fancy to the carol and taken a copy back home to the Zillertal. There, one of the singing families, the Rainers,

performed the piece in the church at Fuegen the following Christmas and it soon became part of their repertoire.

Spreads Throughout Europe

In 1822, Ferdinand I of Austria and Alexander I of Russia spent Christmas in Fuegen castle. The Rainer family was asked to sing for them. The result was an invitation to tour Russia. On the journey, the family sang its way through Germany and Scandinavia, and even came to London, although the carol had not yet been translated into English.

By 1835 the carol certainly was known at most of the royal courts of Europe — except in Vienna. By then, however, the singers themselves had forgotten who had composed their most popular work. It took a special commission from the Prussian court to

dispose of all the rumors that it must be an anonymous product by a genius, such as Mozart, and to trace Mohr and Gruber, who had parted ways just a year after the carol was written.

English Version & Aftermath

It reached the United States in 1839 where, on the 21st anniversary of its composition, it was first performed in the English version we know today, "Silent Night."

The St. Nicholas Church in Oberndorf was demolished early this century because the local community could not afford the cost of renovations. The carol is performed annually, however, at Advent and commemoration services at the gravesides of the two men responsible for it.