NADC Reflector

Volume 34 Number 10 NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA. October 1989

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— Female aircrew gear developed
— 3rd Qtr. SOQ/BJQ named
— Mission Analysis explored

Twelfth Annual CO/TD awards presented

Color guard parades to full house in Hangar 3 during the awards day ceremony. Photo by NADC Photo.

By Mary Ann Brett

Hundreds of employees and friends witnessed the twelfth annual CO/TD awards presentation in Hangar 3 on October 4. The color guard paraded ceremoniously, CDR Wayne Vanderslice sang the national anthem and Associate Technical Director Robert Becker along with Center Commander Curtis Winters and Technical Director Guy Dilworth offered opening remarks to the audience and twelve unsuspecting winners. (See story /photos on pages 5 and 6.)

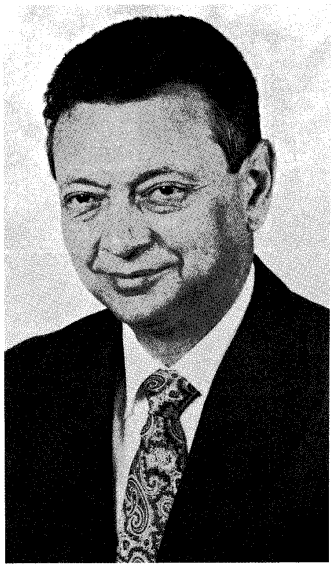
Metersky elected Vice President, Naval Operations Research Society

By Mary Ann Brett

NADC's Dr. Morton L. Metersky was elected Vice President of the Military Operations Research Society (MORS). Sponsored by the Army, Navy, Air Force and Assistant Secretary of Defense through a contract with the Office of Naval Research, MORS is a professional society whose purpose is to enhance the quality and effectiveness of military operations research by conducting classified symposia. According to MORS, its annual symposia are attended by as many as 900 civilians and military.

Metersky, presently head of Fleet Interface in the Warfare Systems Analysis Department, has worked at the Center for 29 years. He has an undergraduate degree in Aeronautical Engineering, Master degrees in Applied Statistics and Management Science and a Ph.D. in Business Administration.

Additional information on MORS is available from Metersky, Code 30D, extension 1817.



Morton Metersky
Photo by NADC Photo Lab

Hugo reeks havoc

NADC harbors St. Croix hurricane victims

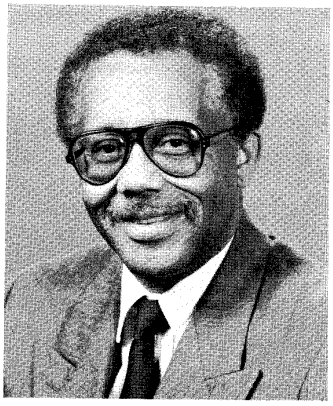
NADC had three research vessels and 17 contract employees in the St. Croix, VI area when hurricane Hugo developed in the latter part of September. All the crews were manned by General Offshore Corporation (GOC) contract personnel. The three vessels survived with no significant damage and none of the contract employees were injured although the majority of these employees who lived on the island were left without homes, food or water.

Fortunately, the vessels were preparing for upcoming operations and had received full provisions and fuel just prior to the hurricane alert. They were able to provide food and shelter for as many as 200 government related personnel and families per day with many remaining overnight. They also provided search and rescue support for the St. Croix public.

Front view of the Naval Avionics Center (NAC) Ham's Bluff test facility at St. Croix. The facility was used to test production sonobuoys (see add'l photos page 4). Photo provided by General Offshore Corp.

Command Corner

Captain Curtis J. Winters
Center Commander



Guy C. Dilworth, Jr.
Technical Director

To all hands:

Shopple to act as Associate TD

CAPT Winters and I are assigning Mr. Thomas J. Shopple the additional duty of Acting Associate Technical Director for an indefinite period. This assignment is effective 11 October 1989.

CAPT Curtis J. Winters
Center Commander

Guy Dilworth
Technical Director

Letter to the Editor

Dear Editor

This letter is written in protest to the current smoking restrictions at NADC. I am for total restriction of smoking at NADC. Although many companies in the area have enacted such a policy, NADC has not yet done so, but hopefully NADC will soon be smoke free.

The current regulations unfortunately have moved the smokers from the immediate workplace into the general population (hallways). In my division of about 75 persons few or none smoke. I was not exposed to smoke before the regulation, but now I am constantly exposed in the hallways. The areas that were selected for smoking, especially in building 2, are main hallways adjacent to heavily used entrances. I come into work in the morning and the first thing I am exposed to upon entering the building is smoke and smell. I feel it is not a very good image to present to visitors. As well, it is a health concern. We have people walking in hallways smoking, cigarette butts thrown on floors and congregations of smokers in main areas.

I have made an informal complaint about this and I was told to file a grievance. I really do not want to do this. I have talked to many others with similar complaints. A petition was started about this but I do not think it was ever carried through.

The answer is simple! Smoking kills and causes immeasurable illness. I am not asking that those who want to do it stop. I am just asking that we set aside areas that do not cause the non-smokers to breathe the secondhand smoke. Common sense demands this. NADC's solution to the Washington mandated regulation was not, in my opinion, carried out properly. I wish that those who feel the way I do would speak up and be counted. It's your life and you have the right to breathe clean air!

Doug Crompton
Code 5051

Commander Salutes

Donald Furmanski (Code 20): For your superior performance in support of the V-22 OSPREY program.

Nicholas Coggia (Code 50): For "extraordinary and unsolicited support" in restoring failed ASW Recording Equipment to operational status.

LCDR **Michael Messick, Edgar Reed, III** (Code 20); **William Bogdan** (Code 30): For outstanding contribution to the Advanced Tactical Surveillance briefing to aerospace industry representatives and military personnel.

LCDR **Michael Messick, Donald Gluter, Walter Beamer** (Code 20); **James Brindle, Lewis Lippel, William Mulley, Dr. Norman Warner** (Code 60); **Ralph Lachenmaier** (Code 50): For participation in briefings to Lockheed Aeronautical Systems and Sanders.

Stephan Bazow (Code 20): For invaluable assistance as the Acting Deputy Program Manager, Fleet Liaison and Logistics Manager for the Tactical Aircraft Mission Planning System Program.

If the SOC Fits

By Robert Janes

The big news this year throughout the government in the Standards of Conduct (SOC) arena has been the Procurement Integrity Law. Most of you have undergone the training and signed the requisite certificate since you are, on at least an occasional basis, procurement officials. Many questions still persist concerning the law. I addressed some of the most common questions in a 14 August memo that went out to each department. if you have not seen that memo and would like to, please call the Office of Counsel on extension 3000 and we can provide a copy for you.

This column will touch on some of those recurring issues regarding this law. There is still some confusion concerning the post-government employment prohibition on people who serve as procurement officials. The law does not prohibit *all* employment with a contractor with whom you had been involved as a procurement official on a government contract. You are prohibited merely from working *on that contract* for two years after your procurement official's duties ended. Service on other contracts is permissible. Although this is very clear in the law, there have been some misleading articles about it, and some resulting confusion among federal employees.

Another common area of questions concerns who is covered by the law. COTR's performing post-award COTR functions are not covered except when involved in a modification adding work to the contract, since the law only covers the period up until award of a contract (or applicable contract modification). People involved in the issuance of task orders are not covered, for those are post-award actions taken within the scope of an existing contract. in addition, the regulations provide that people who review a procurement solely for compliance with budgetary or administrative procedures are not substantially involved in that procurement and thus are not procurement officials.

One other big area of inquiry concerns the consequences of a failure to certify. If someone does not sign the certificate, what can happen? First, if the position does not involve duties as a procurement official, there is no need for the incumbent to sign the certificate. If, however, the position requires performance as a procurement official as an occasional part of the job (as is the case with most jobs at the Center), then signing the certificate may amount to a condition of employment, much like possession of a security clearance. In such a case, a person who refuses to sign is no longer capable of performing the job, and would need to be reassigned to another position where performance as a procurement official is not necessary. If no other such position exists, then removal from employment is the logical result.

GREAT AMERICAN SMOKEOUT — AMERICAN CANCER SOCIETY

TAKE A BREATHER

Join the Great American Smokeout on Thursday, November 16. Millions of smokers across the country will take a break and try not to smoke for 24 hours. How about you? Or, if you don't smoke, adopt a smoker for the day and promise to help that friend get through the day without a cigarette!

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A FEW QUIT TIPS

Hide all ashtrays, matches, etc.
Lay in a supply of sugarless gum, carrot sticks, etc.
Drink lots of liquids, but pass up coffee & alcohol.
Tell everyone you're quitting for the day.
When the urge to smoke hits, take a deep breath, hold it for 10 seconds, & release it slowly.
Exercise to relieve the tension.
Try the "buddy system," and ask a friend to quit too.

NADC Reflector

NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA

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All correspondence should be addressed to Editor, *REFLECTOR*, Code 041, Naval Air Development Center, Warminster, PA 18974-5000 (441-3067).

Commander, NADC ..... **CAPT Curtis J. Winters**
Technical Director ..... **Guy C. Dilworth, Jr.**
Public Affairs Officer ..... **James S. Kingston**
Editor ..... **Mary Ann Brett**
Assistant Editor ..... **JO2 Michael Delledonne**
Assistant Editor ..... **Margaret Vigelis**

Executive Leadership Development Program

Gause graduates; Alston begins

By Mary Ann Brett

Deputy EEO Officer Kathleen Gause was the first from NADC to participate in the DoD Executive Leadership Development Program (ELDP). The second is Jocelyn Alston of the Air Vehicle and Crew Systems Technology Department.

ELDP was designed to develop broad DoD leadership and management skills for selected civilian and military personnel by providing intensive exposure to and first-hand experience in state-of-the-art DoD management processes.

Gause discussed some of her experiences during the program. "We learned to work as team members," she said, "and that team results are greater than the sum of individual efforts." She added, "We learned to make mistakes, to take risks, not to take "no" for an answer, to delegate, and to remember there will always be fewer resources and time than we might like." Gause also said her 'hands-on' experience during the program gave her an appreciation for the dedication of men and women in the military.

Based on discussions with Gause, Alston said of her decision to participate in ELDP, "I was apprehensive initially, but I really expect it to be a wonderful experience. It will be very beneficial to have my strengths and weaknesses identified and to improve not only as an individual but also as a contributor to NADC."

Kathleen Gause
Photo by NADC Photo Lab

Jocelyn Alston
Photo by NADC Photo Lab

Alston, a mechanical engineer, has worked at NADC for nine years. For three of those years she participated in the Navy Civilian Logistic Intern Program which enables select participants to work at various government facilities across the country. Alston has a BS in Mechanical Engineering from Widener University, Chester, PA.

The five-phase Executive Leadership Development Program addresses subjects including communications skills, problem solving, interaction as team members, management techniques and understanding the DoD organization, operations and procedures. Phase I consists of completing reading assignments and self testing on the participant's personal time. Phase II requires about three days away from the office so current skills can be assessed through diagnostic instruments. Phase III is an extensive, on-site two-week training experience based on the Army's mandatory program that trains Captains to become staff officers. Phase IV covers essential areas such as the DoD structure, the national perspective, a Capitol Hill seminar, operational or corporate politics, and hands-on exposure to the operations of the Army, Navy, Air Force, Marines and Coast Guard. Phase V may be a first-hand look at how NATO operates in Europe, or it may be a case study briefed at high levels of DoD. For the past three classes, it was eight days, via a C130 aircraft, to military bases in Belgium, Germany and Italy.

If you would like additional information on the program, call the EEO Office, extension 3061.

Center develops aircrew gear for females

Air Vehicle and Crew Systems

By Suzanne Reeps

The number of United States Navy and Marine Corps aviation designated women has increased substantially over the past twenty years. Along with this increase has come the ever pressing requirement to provide these female aircrewmembers with safe and effective protective clothing and life support equipment.

Here at the Naval Air Development Center, engineers and scientists in the Human Factors and Protective Systems Division address the variety of problems which arise in trying to accommodate these female aircrew with clothing and equipment designed for men.

The Center has applied various methods and solutions that have been successful in addressing both the particular needs of individuals and the specific items of clothing and equipment.

Depending on the item of equipment or clothing, accommodation has been accomplished by the addition of smaller sizes, by Fleet installed modifications to improve fit and reduce size of standard issue items, by procurement of custom-made items based on individual body measurements, or by customized modifications developed jointly by NADC and Fleet maintenance personnel.

Based on reports and personal interviews with currently qualified female air crew personnel, problem areas remain such as the need for redesign of some critical performance items, such as anti-exposure suits to reflect female anthropometry. Also needed is the redesign of all aircrew clothing items to accommodate body waste elimination by females. These areas will provide the basis for work in this continuing effort.

(Editor's note; Suzanne Reeps is the team leader for aircrew protective clothing in the Human Factors Protective Systems Division, Air Vehicle and Crew Systems Technology Department.)

Statue of Liberty Symbolizes

". . . life, liberty, and the pursuit of happiness."

Statue of Liberty dedicated, October 28, 1886.

NADC hosts ATS briefing to industry

On 25 August 89, NADC hosted a briefing to over 300 industry personnel on the Advanced Tactical Surveillance system (ATS), a multimission system planned to replace the E-2C/EA-6B/S-3B/ES-3A aircraft. The briefing included acquistion strategy and system operational requirements and was highlighted by presentations from both RADM Friichtenicht (AIR-01) and RADM Taylor (OP-50). NADC presented the Top Level Performance Requirements document which was written by members of the Center's ATS design team. NADC has taken the lead in the definition and development of this new system which has been identified by OP-05 as a high priority for the future of carrier aviation.

January 1990 General Schedule Pay Chart

	1	2	3	4	5	6	7	8	9	10
GS-1	$10,581	$10,935	$11,286	$11,637	$11,990	$12,197	$12,544	$12,893	$12,910	$13,232
2	11,897	12,180	12,574	12,910	13,053	13,437	13,821	14,205	14,589	14,973
3	12,982	13,415	13,848	14,281	14,714	15,147	15,580	16,013	16,446	16,879
4	14,573	15,059	15,545	16,031	16,517	17,003	17,489	17,975	18,461	18,947
5	16,305	16,849	17,393	17,937	18,481	19,025	19,569	20,113	20,657	21,201
6	18,174	18,780	19,386	19,992	20,598	21,204	21,810	22,416	23,022	23,628
7	20,195	20,868	21,541	22,214	22,887	23,560	24,233	24,906	25,579	26,252
8	22,367	23,113	23,859	24,605	25,351	26,097	26,843	27,589	28,335	29,081
9	24,705	25,529	26,353	27,177	28,001	28,825	29,649	30,473	31,297	32,121
10	27,206	28,113	29,020	29,927	30,834	31,741	32,648	33,555	34,462	35,369
11	29,891	30,887	31,883	32,879	33,875	34,871	35,867	36,863	37,859	38,855
12	35,825	37,019	38,213	39,407	40,601	41,795	42,989	44,183	45,377	46,571
13	42,601	44,021	45,441	46,861	48,281	49,701	51,121	52,541	53,961	55,381
14	50,342	52,020	53,698	55,376	57,054	58,732	60,410	62,088	63,766	65,444
15	59,216	61,190	63,164	65,138	67,112	69,086	71,060	73,034	75,008	76,982
16	69,451	71,766	74,081	76,396	78,190	79,438*	81,708*	83,978*	85,470*	
17	79,762*	82,420*	85,078*	85,470*	85,500*					
18	86,682*									

*** The rate of basic pay payable to employees at these rates is limited to the rate for Level V of the Executive Schedule, which will be $78,200.**

Twelvth Annual Comm Achievement A

Captain Curtis J. Winters
Center Commander

"It is with great pleasure that we present to you the 1989 Naval Air Development Center Awards ..."

Winners of the 12th annual Commander/Technical Director Achievement Awards display their plaques, certificates and checks for $3,000 on the stage after the ceremony. L. to R.: Dr. James Sheehy (Junior Professional Achievement), Charles Haney (Project Leadership), Barbara Ward (Administrative Support), Joan Bilodeau (Administrative Support), Joseph Kaszupski (Equal Employment Opportunity), Thomas Polaneczky

Scientific Achievement

Dr. Leonard J. Buckley of the Aerospace Materials Division, Air Vehicle and Crew Systems Technology Department received the award for Scientific Achievement. This award is for bringing significant recognition to the Center for major scientific achievements.

Buckley was recognized for his investigation of conductive polymers resulting in materials possessing many unique physical properties leading to a wide variety of applicators for Naval aircraft. His efforts in this area generated several patents for the Navy. Buckley also led the development of a temperature stable epoxy resin system suitable for Naval aircraft composite repair. Repair techniques using his system are now in use at Naval Air Depots throughout the country. Buckley was cited for work vital to the continued safety and mission performance of Naval aircraft.

Commenting on his career and award, Buckley said, "I have enjoyed the freedom to pursue specific research projects, and the atmosphere, responsibility and people at NADC have provided me the vehicle for a successful career."

Buckley has worked at NADC for twelve years. He has a BS in Materials Engineering from Drexel University, an MS in Polymer Science and a Ph.D. in Materials Science and Engineering, both from the Massachusetts Institute of Technology.

Engineering Achievement

The Award for Engineering Achievement was shared by Thomas R. Polaneczky and David C. Miller. This award is for bringing significant recognition to the Center for major engineering achievements.

Thomas Polaneczky of the Acoustics Development Division, Mission Avionics Technology Department was credited for 24 years dedicated service in acoustic antisubmarine warfare. Polaneczky has served as the Navy's Senior Acoustics Engineer on most of the helicopter sonars presently or being introduced into the Fleet. Some of his significant engineering accomplishments are associated with the AN/AQS-13F helicopter sonar. Polaneczky personally conducted comprehensive engineering analyses to define all system requirements. His efforts convinced headquarters to reverse their decision and seek competitive development of the sonar with NADC serving as the lead laboratory. Polaneczky was recognized for his role in the Center's designation as prime laboratory for CV Helicopter Preplanned Product Improvement Program and his current role as Project Engineer for the Airborne Low Frequency Sonar.

David Miller of the Systems Technology Division, Systems and Software Technology Department was recognized for his efforts as a System Avionics Design and Development Engineer. He was one of the original ANEW P-3C designers and has continued to make contributors directly supporting the Navy's airborne antisubmarine warfare squadrons. The design and development of an Acoustic Generation System was touted as Miller's most significant engineering accomplishment. This system and Miller's efforts were acclaimed as resulting in providing the LAMPS, S-3A, P-3C, ADAPT, ASP and ASWEL labs with an acoustic simulator capable of supporting advanced development and Fleet support missions.

Miller's other accomplishments include designing and developing a microprocessor-based calibration unit for the BEARTRAP project resulting in a 20-to-1 time savings in mission pre-flight procedures as well as technology transfer development work on hearing and sight devices for severely brain-damaged children.

Aviation Support

The award for Aviation Support was shared by CDR David (Tim) Cudia, USN and AT1 Kevin S. Landis, USN. This award is for making an outstanding contribution to the technical research, development or evaluations mission through personal endeavor in the maintenance, modification, installation or logistic support of aircraft assigned to this Center.

CDR David Cudia was recognized for comprehensive knowledge of aircraft maintenance and supply procedures, coupled with a keen ability to obtain formal and informal support for Center projects and aircraft. His leadership was responsible for an unprecedented aircraft availability rate of 95% while the Navy-wide goal is 72%. Cudia was also credited for superbly managing the technical aspects of matching and installing NADC research and development projects with complex aircraft systems resulting in the timely completion of many highly technical projects.

A 34-year Navy veteran, Cudia will be assigned as Maintenance Officer at the Naval Air Station Brunswick, Maine late October 1989.

AT1 Kevin Landis was credited for his superior knowledge as an Electronics Quality Assurance Representative. He has conducted quality assurance inspections, provided technical assistance for project installations and conducted project tests as an In-Flight Electronics Technician. Landis was recognized for engineering of communications update for two UP-3A aircraft and the first AN/ARC 182 YHF/VHF radio installation in a P-3C aircraft.

Project Leadership

The Project Leadership Award was shared by Charles Haney of the Microwave Technology Division, Mission Avionics Technology Department and Squadron Leader John E. Coote, RAF. This award is for bringing significant recognition to the Center for major achievement through project leadership.

Charles Haney, who has been an NADC employee for 26 years, was credited for outstanding contributions to the Navy's Reconnaissance and Intelligence Systems including the P-3 Synthetic Aperture Radar (SAR) testbed. He was involved in virtually every phase from initial feasibility investigations, through assembly and integration of the state-of-the-art system into the P-3 aircraft, to eventual delivery and operation in several major test exercises. His accomplishments in these efforts proved critical to successfully resolving oceanographic uncertanties crucial to the Navy's over all mission.

Haney was cited for his professional attitude, management qualities and personal standards which raised morale, improved agency communications and cultivated excellent relationships with Center sponsors. He attributed his award to "excellent teamwork."

Squadron Leader John Coote, was cited for his efforts in the Antisubmarine Warfare Systems

★ ★ ★

Congra

ander/Technical Director vards Presented

(Engineering Achievement), LCDR David Cudia (Aviation Support), Dr. Leonard Buckley (Scientific Achievement), AT1 Kevin Landis (Aviation Support), Frank Scheetz (Analysis/Analytical Achievement), LCDR Brian Gritte for Squadron Leader John Coote, RAF (Project Leadership), David Miller (Engineering Achievement) not shown.

Department during the Channel Expansion (CHEX) software development and delivery from 1985 to 1989, the term of his assignment to NADC. He was credited for being the stabilizing influence and motivating force in getting the CHEX program into final Technical and Operations Evaluations. Coote set up a strategy to have CHEX independently evaluated by active Fleet units. These users confirmed the superiority of the product and elected to use CHEX software.

Junior Professional Achievement

Dr. James B. Sheehy of the Air Vehicle and Crew Systems Technology Department received the award for Junior Professional Achievement. This award is for bringing significant recognition on the Center and for significant professional achievements during the early portion of his/her career.

Sheehy was cited for accomplishments in visual performance and protection of aircrew personnel. His efforts have been instrumental in assuring that the design requirements for the new generation of night vision devices are based on enhanced rather than degraded visual performance. Sheehy also designed and implemented the Night Imaging and Threat Evaluation laboratory for the Marine Corps. This facility is now used to train all Marine Air personnel in the use of night imaging devices, the effects of laser irradiation on night vision goggle (NVG) performance and the interaction of laser eye protection with NVG resolution.

Recognized as an exceptional scientist and scholar whose work is essential in maintaining aircrew performance under conditions of degraded visual capability or optical threat. Sheehy said of his five years at NADC, "I enjoy what I do." Sheehy has a Masters degree in Human Factors Engineering from Rensselaer Polytechnic University and a Ph.D. in Visual Psychophysics from Pennsylvania State University, 1984.

Analysis/Analytical Achievement

Frank L. Scheetz, of the Tactical Air (TACAIR) Analysis Division, TACAIR Systems Department, was presented the Analysis/Analytical Achievement Award. This award is for bringing significant recognition on the Center for major achievements through the application of engineering and scientifc analysis.

Scheetz, an aerospace engineer who has worked at NADC for 21 years, was credited for gaining recognition at the Chief of Naval Operations, the Center for Naval Analysis, the Space and Naval Warfare Operations, the Center for Naval Analysis, the Space and Naval Warfare Systems Command (SPAWAR), and the Naval Air Systems Command (NAVAIR) for his development of analysis methods and for approaches to resolving complex analysis problems in the Tactical Air Warfare Mission area. These tools have been used successfully on the Naval Air Superiority Study Circa 2000, the on-going Carrier Air Wing Study 2010, the Strike/Anti-Surface Warfare (ASUW) Architecture project, and the A-12 medium attack aircraft development program.

As a key participant in the SPAWAR Strike/ASUW architecture project, Scheetz conceived and developed a highly innovative TACAIR intensive concept of operations employing hypersonic vehicles of various sizes, configurations, and capabilities to perform the various Strike/ASUW tasks.

In his role as Manager for Advanced Support Aircraft Systems, Scheetz was cited for his efforts as the technical specialist, advisor, and program manager in support of NAVAIR pre-milestone zero technology base studies for all Navy and Marine Corps support aircraft.

"We are proud to recognize you as an important and valuable member of the NADC team ..."

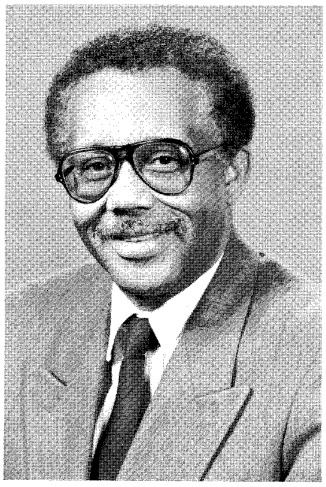
CAPT Curtis J. Winters
Center Commander

Guy Dilworth
Technical Director

Administrative Support

The Administrative Support Achievement Award was shared by Joan M. Bilodeau of the Communication Navigation Technology Department (CNTD) and Barbara Ward of the Civilian Personnel Department. The award is for significant and identifiable contributions to the smooth and efficient operation of the Center.

Joan Bilodeau was recognized for her capabilities and years of dedication and outstanding service as secretary to the Head of CNTD. She was credited for her assistance to the Institute of Navigation, expert interpretation of Center instructions, quality control of letters and documents, and expertise in the foreign travel field.



Guy C. Dilworth, Jr.
Technical Director

Bilodeau, who has worked at the Center for 16 years said, "This award is the highlight of my career I'm proud for my department, for the other secretaries and for myself. It will make retiring anticlimactic!"

Barbara Ward was credited for her accomplishments in managing the Center's recruitment program including meeting annual hiring goals for scientists and engineers (S&E) and exceeding goals for minority and female hires. Ward also conceived and implemented the Networks and Subsidy Plus programs and co-authored the Center's S&E Acquisition Plan.

Ward has worked at NADC for 16 years and is currently the Chairperson of the Chief of Naval Operations Cooperative Education Council. Earlier this year she received the Philadelphia Area Staffing Society First Excellence in Staffing Award.

Equal Employment Opportunity

Joseph Kaszupski of the Microwave Technology Division, Mission Avionics Technology Department (MATD) received the Equal Employment Opportunity Award. This award is for bringing significant recognition to the Center for major achievement in promoting Equal Employment Opportunity.

Among other accomplishments, Kaszupski was credited for serving on the Center EEO Committee and chairing both the MATD EEO Committee and the Center Handicapped Outreach Committee which encourages physically handicapped pre-college age students to pursue higher education in science and engineering. He was also instrumental in hiring a physically disabled college student majoring in engineering as a Center summer aid and organizing an aggressive campaign to recruit Hispanic scientists and engineers which resulted in hiring two engineering candidates.

In reaction to the award Kaszupski said, "It reflects on all those who helped me. When you work with good people, you can accomplish a lot."

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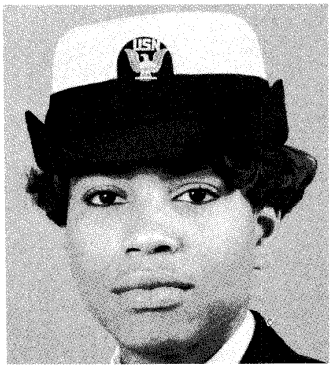
3rd quarter sailor and blue jacket named

AW2 Chris Henderson



AC3 Deidre Wilkerson

By JO2 Michael Delledonne

SOQ

"I was convinced the selection board wasn't going to choose me." That was the feeling of AW2 Chris Henderson on being selected as NADC's Sailor of the Quarter.

"They asked me if I wanted to be nominated, but I was a little apprehensive," said the 26-year-old from New York. "I decided to give it a shot. I knew the other nominees were going to be tough to beat."

A Navy veteran of five years, Henderson wasn't expecting anything. "Senior Chief Petty officer Markum called me into his office and told me I did a good job at the board, but he never mentioned anything about winning the award. Chief Hooper accidently told me at his going away party. I wondered if he had his facts straight."

Assigned to VP Projects, Henderson works on test and evaluation schedules. He also is a technical advisor to engineers on what might or might not work in the Fleet. "Basically my job is to let them know if what their planning will be practical or not."

I like NADC a lot," said Henderson, who has been stationed here for more than a year. "I enjoy working with the people, both military and civilian. The Center offers you the chance to get involved with different projects. You are unlimited in what you can do."

BJQ

One for one. AC3 Deidre Wilkerson is batting a thousand on being selected NADC Bluejacket of the Quarter on her first nomination.

The 22-year-old Detroit native was extremely happy on being nominated. "I was very excited, but I didn't know what to expect," said Wilkerson. "I wasn't sure what the board would ask, but I was told that my chances were pretty good."

Wilkerson, a Navy veteran of almost three years, said winning the award was bittersweet. "I felt really good when I won, but when I found out nobody else ran I was a little disappointed. I wanted to compete and test myself against somebody. No matter who it would have been I would have felt very confident of winning."

Stationed at NADC for over two years, Wilkerson described her job as a jack-of-all-trades. "I go to Philadelphia to pick up different charts, put NOTAMS (Notices to airman) on the board. Just a little bit of everything."

Wilkerson felt what helped her win the nomination was her being a people person. "If I see somebody not getting treated right I speak up and try to get things right. I just like to try to help out."

Volunteer gets chilled to the bone

By JO2 Michael A. Delledonne

You're on a helicopter when it goes down in Alaskan waters. The water temperature is 35 degrees F and the air temperature in 32 degrees. How long could you survive in this harsh environment? Not long! Here at the Center, human test subjects who particpated in the Cold Water Evaluation of Passenger Anti-Exposure Survival System (PAESS) actually volunteered to endure these conditions in the cold water chamber. One of them is HM2 Brian Brown.

Photo by JO2 Michael Delledonne

HM2 Brian Brown enters the cold water chamber.

The goal of the study was to develop a constant wear passenger anti-exposure survival system which could provide an individual with up to two hours of thermal protection. The system was to keep the individual's body temperature above 95 degrees and requires a minimal amount of training. The stages ranged from wearing just a flightsuit and winter flight jacket to a waterproof coverall worn over the standard flight gear. The individual entered the water where he would float for one minute then climb into a canopied raft.

"The first thought in somebody's mind is why would anyone go through this?" said Brown. "I asked myself that when I went into the water. I did this because the work they do here is fascinating and I wanted to be as much a part of the project as I could. This way, I could see the testing from the subject's point of view rather than just watching monitors."

The 24-year-old sailor, who has been stationed at NADC for almost a year, was still a bit apprehensive.

Brown noted the coldness of the air is what surprised him the most. "I knew the water would be cold, but the numbing chill in the air caught me off guard."

The six-year Navy veteran then experienced the brutally cold water for the first time. "I tried to walk into the water as normally as possible," he said. "For about a minute I was hyperventilating. I just couldn't seem to catch my breath. I could feel the heat leave my body. It--was--cold!"

The test ends when the person's core temperature reaches 95 degrees or at the two-hour time limit. The test subject can also request at any time to stop the run.

Brown lasted 30 minutes this particular run before his core temperature dropped to 95 degrees. "The first 15 minutes wasn't that bad once I got into the raft and sealed it up. But you're shivering so much that eventually your muscles give out. The last five or ten minutes was really tough."

After extraction from the water, which, as Brown put it, made him "way happy," the rewarming process began. "The medical personnel put you in 104 degree water in a bathtub and begin to pour water over the center of your body. It took about 45 minutes to rewarm me."

LT Richard Hamilton, NADC Flight Surgeon, said the subjects can't have a

Continued on page 7

Hugo reeks havoc at NADC St. Croix, VI

Photo by General Offshore Corp.

NAC southeast test range building (or what's left of it) where NADC engineers tested sonobuoys.

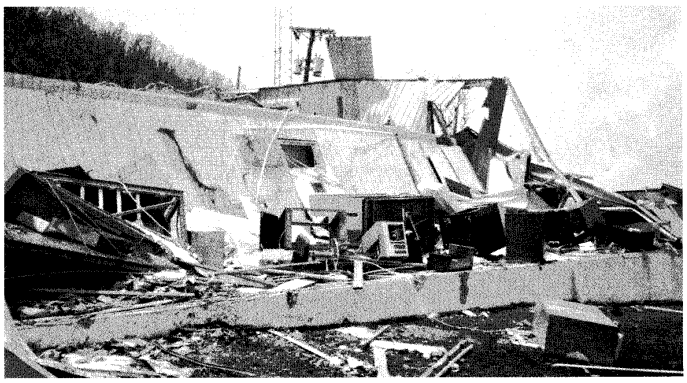


Photo by General Offshore Corp.

Rear view of front page photo shows in detail the devastation hurricane Hugo left as a calling card.

Integrated Tactical Training

NADC explores advanced mission analysis

Air Vehicle & Crew Systems TACAIR

By Norman Melling

The Air Vehicle and Crew Systems Technology Department with the Tactical Air Systems Department are assessing the potential implementation, demonstration and evaluation of the Advanced Weapon System Information Management Mission Analysis (AWSIMMA). This is a joint effort with the Naval Air Test Center to expand the role of the Tactical Training Mission Analysis (TTMA) capability being developed by the University of Maryland. TTMA is a concept to record all the information transmitted over the data bus of military aircraft for post flight analysis as feedback to improve mission effectiveness.

For the battle force to gain significant benefits from post time analysis, the entire sortie reconstruction needs to be performed in near real time. The problem of analyzing tactical aircraft performance on a sortie is compounded by the enormous amount of on-board real-time data being processed.

The AWSIMMA which uses state-of-the-art technology would significantly benefit training and provide operational deployment feedback.

Demonstrations on specific aircraft such as the F-18 leads to establishing interoperability, compatibility, and performance evaluation standards capabilities with our Tri-Service and NATO partners. As interoperability issues are identified and evaluated, it also lays the ground work for the Integrated Stike Planning System, performance requirements and deployed battle force model performance evaluations. This evaluation need not be limited to specific canned test ranges, but can allos fleet pilots, while deployed in distant areas such as the Indian Ocean or the South Pacific, to perform advanced tactical training and evaluations without test range restrictions.

"Train like you fight; fight like you train" aspects are operational benefits of AWISMMA incremental developmental approach. They evaluate pilot and system proficiency and establish data base requirements as well as provide total awareness of the sitaution at hand. In addition, the AWSIMMA tactical fusion processor can provide the key element for post time analysis of fleet exercises drawing close ties with the laboratory community.

Other Navy mission areas will be explored at the AWSIMMA capability is demonstrated. These include antisubmarine warfare, mine warfare, amphibious, arctic and survey operations.

(Editor's note: Norman Melling is a Navigation Systems Engineer in the Signal Processor/Computer Systems Technology Division, Mission Avions Technology Department).

Technical Highlights

Mission Planning

The NADC Tactical Aircraft Mission Planning System (TAMPS) is now operational in the Mission Planning Lab. This system will be used for IV&V of new TAMPS system enables a strike pilot to plan his mission for enhanced survivability by using digital terrain elevation data and intell data on threat locations and capabilities to plan a mission profile which minimizes threat exposure. The TAMPS system is currently deployed on all CV's in support of fleet ops and is used at a number of shore facilities for training.

The F/A-18 Data Transfer Equipment (DTE) has been installed in the Mission Planning Lab. The DTE provides mission planning and maintenance data download functions for the F/A-18. The DTE will be interfaced with TAMPS for loading mission planning data into the F/A-18 via the Data Storage Unit (DSU).

Medium Range UAV Initial Design Review

A NAVAIRDEVCEN contingent of 13 engineers and scientists, lead by Carl Reitz and John Metzer supported the Medium Range UAV initial design review at Teledyne Ryan Aeronautical, the prime contractor. The Joint Service Medium Range UAV employs the ATARS sensor suite and is a jet powered UAV with a gross weight of 1865 pounds and an operating range of 350 nautical miles. CAPT Olmstead, PMA-263 stated that the review met his highest expectations.

Improved S-3B System Test Software to TECHEVAL

The VS Branch has completed testing of the S-3B Fleet Issue B4.2.2 software. This program will provide greatly increased system test capability beyond the testing improvements included in B4.2.1. The program has been submitted to NATC for TECHEVAL. Fleet introduction is estimated for January 1990.

Testing Complete on LAMPS Mark III F.I. 19.0

The Vertical Flight LAMPS Mark III Branch has completed Computer Program Configuration Item testing along with functional, system and stress tests for F.I. 19.0. This issue of the LAMPS software includes a Deployable Proficiency Trainer for the acoustics operator, the LAMPS Mobile Tactical Trainer for the ESM and tactics operator, and corrections to the mid depth selection software in the Air Operational Program. The F.I. 19.0 software has been forwarded to NATC for pre TECHEVAL testing.

K4.6.C Program Delivered to TECHEVAL

The VP Program Office has delivered the K4.6.C software product to NAVAIRTESTCEN for TECHEVAL. This software is functionally equivalent to the L4.6.C, P-3C Channel Expansion Program, but is designed to run in an AnASQ)114(v)6 Digital Computer Set which includes a major memory upgrade. The upgrade incorporates CMOS technology which provides an increase of total random access memory from 64K to 1024K words. The physical size reduction, resulting from the use of CMOS technology, provides sufficient space for a 3 Mega-word bubble mass storage unit to be incorporated within the CP-901 mainframe.

Bone chilling

Continued from page 6

'tough-it-out' attitude. "These men represent the fleet. They need to ask themselves 'would I let my buddies wear this piece of gear.' Their reactions to this harsh environment are natural reactions but we wouldn't do anything that hurts them." He also noted that of all the programs, the cold water testing demands the most out of its subjects. "It's the most painful project they can go through. It requires the most discipline."

As with all the testing, subject safety is paramount. "The medical personnel here are very knowledgeable and very cautious," said Brown. "The equipment is checked, rechecked and checked again to ensure there's no risk to the subject. If I didn't have confidence in them I wouldn't have gone in."

After rewarming, Brown said fatigure sets in. "As the day goes on you start to wear down. You just feel tired." Maybe just a little bit cold too.

ALL THE WEIRDOS AREN'T COSTUMED — CHECK YOUR CHILDREN'S HALLOWEEN TREATS.

New Penn State graduate acoustics program to begin

By John Markow

Recently, the Center has collaborated with Penn State University to bring on-board their well-known Graduate Program in Acoustics. It is a complete Masters Degree of thirty credits.

This unique program is a combination of classroom training with a visiting professor from The University Park Campus, as well as live satellite instructional television (ITV) broadcasts from the University. The courses are offered one night a week for three hours plus study sessions. For the students' convenience, the technical classes are videotaped and can be viewed later should a participant miss a class or would just like to review a class.

The first course that is being offered this Fall is "Fundamentals of Acoustics." In the Spring 1990, Penn State will be offering two courses: "Analysis of Engineering Science" and "Structural Analysis."

If you would like to obtain additional information about the program, please contact John Markow of the Employee Development Division, extension 1026.

DAYLIGHT-SAVING TIME ENDS

FALL BACK

1 HOUR - OCTOBER 29TH

2 a.m.

SPORTS WORLD

W&R golfers scramble in final outing

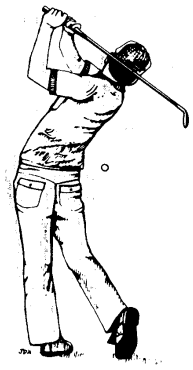
By Pete Brown

The final W&R outing for 1989 took place in October at Locust Valley Golf Club in Coopersburg, PA. Perfect weather (but no food or beer!) brought out a record 84 golfers to search the woods for lost balls.

First place was captured by R. Muller, B. Harvey, L. Thompson and R. Turzanski with a 12 under par 60 (net 53.875). Second went to B. Hines, B. Zarkowski, W. Miller and E. Boscola with a net 55.125. Five other teams shot under 60 with only 4 strokes difference between second and seventh place. (These scores prove that beer was not available!)

Closest to the pins went to R. Virga on #6, 9 ft; C. Swatchick on #9, 49 in.; P. Brown on #13, 40 in.; and L. Thompson on #17, 14ft. Longest drive went to Chuck "Iron-man" Bigley for a 300 yard—smash on #18.

That's it for '89—see you in March of 90 for the first W&R outing next season.



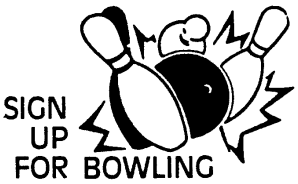
Mixed league bowling news New look for new season

By Tom Reiter

Welcome to another season. Again, the Mixed League starts the year with a new look. One and a half teams couldn't stand all the fun and had decided to take the season off. After some selective begging, we coerced new captains to enter the fray. Our military have decided to challenge the civilians and entered a team called the Ten Pinners. Good luck and welcome to Chief Dave Ader. Our other one-half of a new team has been taken over by co-captains Mary Williamson and Bob Smiler. After a shaky first week of searching for enough people to fill out their team, several of last year's renegades decided to return and compete again as the Bullshooters. The 24 team Division alignment drawing had a strange outcome. Seven of the ten top pinfall teams from last season drew positions in the A Division. Included are the League Champion Gutter Dusters and the Division champion Red Winos, two teams who, last season, won both halves and rolled off for the 88/89 top prize. The Goofers and the Alley Cats are the top seeds in the B Division. On the first night of interdivisional play the B people cleaned house. The results of the twelve matches - A Division 12 wins - B Division 36 wins. Bob Geyer's Alley Cats humbled Wes Gleason's League Champs 4-0.

After one month's action, some of our best results were:

	A Division	
High Single	Mike Dent	267
	Caroline Tierney	216
High Series	Mike Dent	649
	Lorrie Dunn	548
High Average	Mike Dent	191.8
	Wes Gleason	191.4
	Lorrie Dunn	165
	B Division	
High Single	Jack Eyth	235
	Barb DiLemmo	488
High Series	Jack Eyth	574
	Barb DiLemo	488
High Average	Rick Eppright	185
	Lorraine Reidinger	153



NADC in the NEWS

The big news is...

NADC will outfit F-14 with new radar, electronics
Warminster NADC starts upgrading F-14
In for tests
'Top Gun' comes to NADC for testing
Warminster NADC begins job of fine-tuning the F-14

News items about NADC appear frequently in the Intelligencer/Record, Bucks County Courier Times, Today's Spirit, and the regional edition of the Philadelphia Inquirer. However, more often news items about the Center are regularly found in trade publications such as Aviation Week and Space Technology, Naval Aviation News, Defense News, Aerospace Daily and the like.

As a means of assuring that NADC is, indeed, in the news, we will be listing here the kinds of news we have released and some of those publications where stories appeared.

The most recent news clippings include:

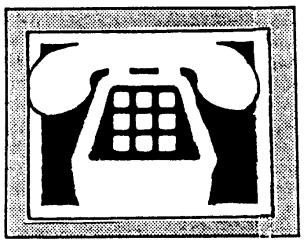
- Aerospace Daily, July 7, 1989, "Navy slates briefing on Advanced Tactical Surveillance (ATS) Plane."
- The Eagle, Naval Civilian Managers Association, Summer '89 Issue, "Standing Committee 'C' diligently at work;" "Convention Scenes."
- Inquirer, July 23, 1989 "Heads above the crowd - LCDR Tim Singer."
- Aerospace America, July 1989, "Aging Aircraft."
- Aviation Week and Space Technology, July 24, 1989, "The Naval Air Systems Command..."
- Today's Spirit, July 26, "Warminster honors firefighters."
- Defense News, July 31, 1989, "Navy Awards Contract for Helicopter Software."

NADC personnel complete Philadelphia distance run

By Fred Pappalardi

Among the approximately 6800 entrants in this year's Philadelphia Distance Run, held on 17 September, were nine NADC personnel and one on site contractor. The Philadelphia Distance Run is a half marathon, covering a distance of 13.1 miles. First time entrants in the race were Dorothy Gramlich (2022), Sue Coyle (20/02), Marge Steenhoff (4001P), Vida Komer (201), and Fred Pappalardi (4031). The remaining participants are all veterans of this competition. Larry Hart (5051) and Bob Polaneczky (1032) have each run in all twelve distance runs. Bob Richey (6041) and Roger Furlin (054) have run in eleven and eight of the runs respectively. Pat Insley, an employee of DSG, has participated in six distance runs. All of the NADC entrants and Ms. Insley were finishers and plan to compete again next year.

Heard it on the grapevine?

In any organization the size of NADC, a lot of things are heard "on the grapevine". Some are true; others false. At best, most are of questionable parentage or origin. Til now, there has been no quick and easy way to verify the fact or fiction of what you heard "on the grapevine".

The "Grapevine Hotline" is now in operation. Call X3088 with your questions or comments and someone will get back to you with the facts.