Our Aerospace

The V-22 - WHAT IS THAT THING?
New technology continues on course and speed toward milestones

V-22 Features

The V-22 tiltrotor is a revolutionary, advanced technology, vertical short take-off and land (V/STOL), multi-purpose aircraft with excellent high-speed cruise performance. It performs a wide range of VTOL missions as effectively as a conventional helicopter while achieving the long-range cruise efficiencies of a twin turboprop aircraft.

In plain english a 3.5 g / 250 knot turboprop truck that can hover.

The V-22 is powered by two Allison T406 turboshaft engines located in nacelles at the end of each wing. The T406 engines share the same core with the trusty ole T56 engines on today’s P-3 and C-130 aircraft. Unlike the engines in turboprops and helos, these engines also have to work while pointing straight up.

The engines drive two proprotors (about 38-foot diameter) through gearboxes that are interconnected to provide fail-safe engine power to both rotors. So imagine if you will the gear train of a helo shrunk and packaged to fit inside the interior of a wing. And yes, your eyes are not deceiving you. In the airplane mode the proprotors extend well below the reach of the landing gear, so obviously there is redundancy in the ability to get them up above that plane.

For the aerodynamacists in the crowd, the wing is an interesting blend of new and classic. It has lots of dihedral, is forward swept, and features vortex generators and wing fences to keep the flow straight and attached all the way down to hover. It is also all composite in construction, and incredibly stiff. Which makes sense if you remember that in a hover, all the lift is concentrated at the wing tip.

Onboard Central Integrated Checkout (CIC) and Vibration, Structural Life, and Engine Diagnostics (VSLED) systems are employed to provide continuous condition monitoring of the aircraft’s structure, engines, electrical systems, and dynamic components. The capability to expand mechanical diagnostics to the transmissions is a future growth feature.

The V-22 has a state-of-the-art avionics suite and a triply redundant digital fly-by-wire flight control system. In fact just about everything on the aircraft is computer controlled.

The conventional flight controls terminate under the pilot’s deck and transducers convert the pilots input into electrical signals for the flight control computers.

The flight control system is designed to change the flight control functions automatically and transparently as aircraft speed increases or decreases during conversion (transition between helicopter and airplane mode). The conversion procedure is accomplished automatically by the flight control system or manually by the pilot pressing a thumb switch on his thrust lever. The layout matches the philosophy of the AV-8 Harrier.

The V-22 is designed to carry 24 combat troops, palletized cargo, light wheeled vehicles, and up to 12 medical litters (20,000 lb. internally). It can lift 10,000 lbs. externally with a single hook and up to 15,000 lbs. with a dual hook arrangement. Each hook is independently controllable and can carry individual sling loads like a CH-47 Chinook. It has a max gross takeoff weight of 60,500 lbs. and a top speed over 300 kts. It has a ceiling of 25,000 ft and maneuvering envelope of 3.5 g’s to -1 g.

The V-22 is designed to take a pounding and aircraft has to incorporate both airplane and helicopter crashworthiness features in the areas of structural design, passenger safety, payload retention, fire suppression, and emergency escape. Being a combat aircraft designed for assault and other hazardous
duties it also incorporates a considerable amount of ballistic tolerance to go along with speed and maneuverability.

Large mass items (engines & transmissions) are located away from the occupied areas. The wing is designed to breakaway outboard of the wing/fuselage attachment and to take a lot of crash energy with it when it goes. The nose structure has an anti-plow bulkhead designed to prevent flipping during straight-in impacts. The cockpit and all the cabin seats are crashworthy, providing vertical stroke capability to absorb energy up to a 20g impact.

Most of the firefighting system for the engine/wing area is composed of automatic sensing and firing gas generator cartridges. The cartridges are adaptations of the type that inflate the air bags in your car. Traditional pilot activated bottles are also incorporated and positioned in the engine nacelles.

The V-22 Integrated Avionics System consists of a dual redundant MIL-STD-1553B multiplex data bus controlled by two fully redundant Advanced Mission Computers. The pilot's main flight instruments are displayed on four-blind vision capable Multifunction Displays and a NVD compatible Control Display Unit. To aid in navigation, the V-22 has a Forward Looking Infrared (FLIR), an electronic Digital Map System (DMS) that is eye watering in capability, and three Lightweight Inertial Navigation Systems (LWINS) coupled with GPS. The Electronic Warfare (EW) suite consists of a radar warning receiver, a missile warning receiver, a laser warning receiver, and a chaff/flare dispensing system. The Air Force version (CV-22) will have a fully integrated EW suite to include a RF jammer, Multi-mission Advanced Tactical Terminal (MATT), an enhanced DMS, two additional radios (for a total of four), and a Terrain Following/Terrain Avoidance (TF/TA) radar.

**Performance**

The V-22 is well on its way to achieving its required performance thresholds. While formal performance testing is scheduled for FY'99, latest data indicate that the aircraft will cruise above its 240-kts threshold. Level flight above 270 kts has been achieved. Maximum speed achieved in a dive was 342 kts. The aircraft has been flown at the 60,500 LB self deploy gross weight. The maximum altitude mark of 25,000 ft has been reached. Mission radius with a full load of 24 troops will be in excess of the 200-nm requirement. External loads testing with single hook, non-aerodynamic sling loads have been out to 220 kts in airplane mode, which we believe to be an unofficial world speed record for a sling load. External load tests have demonstrated a 10,000-lb lift capability at test day conditions. Dual point external load testing, which will include carriage of a HMMWV, is largely complete. Dry-plug aerial refueling in airplane mode behind a C-130 has been successfully conducted. Much of the intended envelope has been flown to and is now undergoing formal load survey. Ship trials are a major upcoming test event for 2Q FY'99.

**CDR(s) Don Mueller: Life as the Chief Avionics Integration Engineer**

The V-22 has been designed using the Integrated Product Team (IPT) concept. A typical IPT will have representatives from a variety of engineering design groups (structural, electrical, aerodynamic performance, weights, etc.), military technologies (survivability, vulnerability, crashworthiness), and integrated logistics support, along with persons from manufacturing, tooling, and other disciplines. IPTs communicate and exchange information through Analysis and Integration Teams (AITs). Each major component of the V-22 system has an associated AIT. The entire system is integrated through the Bell Boeing Air Vehicle AIT.

As the government lead of the Avionics Analysis and Integration Team, the V-22 Avionics System Project Officer (ASPO) is the chief integration engineer. The V-22 ASPO is an AEDO position assigned to support the Program Office. It is also one of the most challenging ASPO positions at NAVAIR.

Every program at NAV AIR uses the services of the ASPO in varying degrees of responsibility. The V-22 is one program that assigns the ASPO with all of the aspects associated with the avionics department: engineering, acquisition, budget, etc. Since the V-22 is heavily laden in avionics, the life of the V-22 ASPO is extremely busy, yet very satisfying.

**CAPT Dale Milton: Life as the Chief Engineer**

Being a real engineer, I waited for years for the right opportunity to be a part of the V-22 program. I had been aware for a long time of the technological challenges and opportunities associated with a tilt-rotor air platform. As a minor historical note, Bell performed the first rotor transition on the XV-15 the same year I earned my wings and I have a picture of it I picked up that year while at Whiting Field. Little did I know then I would one day be Chief Engineer on the program.

I was the 4th generation AEDO class desk on the V-22 program, and have since been
The V-22 program has been a fertile ground for trying out new ways of teaming people, streamlining processes, implementing acquisition reform initiatives and introducing new technologies. I inherited several cutting edge efforts from my predecessors and was afforded the opportunity to make contributions of my own. We also swapped notes with the F-18 development effort.

The V-22 program has been a fertile ground for trying out new ways of teaming people, streamlining processes, implementing acquisition reform initiatives and introducing new technologies. I inherited several cutting edge efforts from my predecessors and was afforded the opportunity to make contributions of my own. We also swapped notes with the F-18 development effort.

Process reigns supreme. The whole credibility of the engineering and flight test effort rests on having a controlled process for everything. Some are huge, like the all hands effort to getting to first flight. Some are big, like getting everyone ready for the next Critical Design Review. And some are smaller like weekly design video conferences, where teams play in or play out depending on the issue at hand.

Process is the means by which you bring in the company and government gray beards, the barnacle encrusted SESrs who have been-done that to look at what you are doing as a team and bless it back to the flag leadership. And process is how you bring in Operational Evaluators from USMC and USAF, way before OpEval on a regular contact basis to get their take on the design.

By putting the contractor and government engineers and testers together, everyone shares in the risk of decisions, and shares responsibility for cost and weight impacts. This is still an area of evolution for contractor and government alike. However, for a cost plus development contract it is the only way to go. The most important theme the Chief Engineer must hammer away at everyday is the money meter is always running.

O.K., so what does that translate into for a daily routine for the Chief Engineer. Well, ringmaster comes to mind. A large number of teams are working in parallel and you have to stay on top of the action. You need to be a good engineer yourself because you will become immersed in every aspect of design and test and will need to understand at a detail level what the IPT is trying to convey in support of their proposed solution. The entire day tends to be a non-stop series of meetings either to status progress or to bring the minds together for solutions to ‘anomalies’ encountered in test.

The old aviators saw of aviate-navigate-communicate becomes communicate-communicate.

It’s your job to ensure the herd is moving in the right direction, not breaking the bank, achieving acceptable levels of performance, and getting to where they should be more or less on schedule. I have frequently described it as herding cats across a pasture.

Is it busy? You bet it is. Every single day is action packed, and the days run long. Weekends are accentuated with calls to stay abreast of the action. Is it rewarding? Absolutely. Talk about scope: here you are on one of the few big-ticket programs on the street. And here you are acting just like one of the legendary aerospace engineers of old, bringing in a new technology that is going to change the way we do things on a national basis.

My tour as Chief Engineer was everything I thought it would be and I loved every second I was on the program. I have to grow up now and strive to become a PMA, but my time on the V-22 fulfilled a life ambition and gave me huge personal satisfaction.
component quals, design changes resulting from test, occasional brushfires, etc. As the Class Desk, I’m in the thick of it all, calling the shots along with my trustworthy Senior Engineer, Mr. Dave St Jean. Finally, although the immediate goals of the Class Desk may have shifted because of overall forward movement along the program schedule, the people resources within the IPT’s are still the keys to success at every stage. The V-22 IPT’s have without a doubt the finest quality people anyone could ask for.

In closing, it’s an understatement to say the job is busy, but it is also an understatement to say the job is fascinating. For anyone interested in a challenging, exciting and rewarding position, with a great deal of responsibility, a Class Desk billet, whether it be this one or some other, is tops.

**Delivering Aviation Solutions**

**RADM Craig E. Steidle**

**One Team Delivering Aviation Solutions . . . Enabling Dominance From the Sea**

Each of us has seen and heard the terms ‘do more with less’, reduced costs, reengineering, rightsizing, downsizing, resizing, shortfalls, affordability, lower overhead, reduced manpower, budget cuts, marks, wedges, realignment etc. The theme in most of today’s briefs includes one or more of these phrases. Briefs filled with these terms that do not provide solutions are in many cases nothing more than negative rhetoric. During my conversations with the members of our community and our URL counterparts, I have become concerned about a negative spin that is being adopted regarding the future of our business. There has been no time in my career that has held as many exciting and new opportunities as there are today (F/A-18 E/F, V-22, JSF, AIP, CASS, JSOW, AIM-9X etc. - see “Preparing for the 21st Century” below for more details). As the leaders at each and every level of Naval Aviation, it is vital for us to remember and emphasize the positive impact our community has contributed in providing solutions to enable Naval Aviation’s future.

NAVAIR’s mission statement, “The Naval Aviation Systems Team in partnership with industry serves the nation and the Navy by developing, acquiring and supporting Naval Aeronautical and related technology systems with which the operating forces, in support of the unified commanders and our allies, can train, fight and win” does not contain any of the terms from the opening paragraph. I suspect the mission statements that face our community allow AEDs and AMDs to take the leadership role in delivering aviation solutions that will enable our Navy’s dominance from the sea - today and into the future.

I am very proud to be a part of the success I see from our community – from the young Ensign Material Control Officer to the Commanding Officers, Program Managers and Flags. Our community is founded on building solutions for the challenges that face us and taking on the responsibility for enabling the future of Naval Aviation. “You get the best out of others when you give the best of yourself.”

The diversity of our community’s billets provides AEDs and AMDs a unique opportunity to set the climate of Naval Aviation and Space. Communicating the exciting future of Naval Aviation will influence the culture of today’s Navy. The young sailor and officer will follow your leadership.

Communication is a contact sport get out there!! An overview of the exciting challenges of Naval Aviation entitled “Preparing for the 21st Century” can be viewed at http://www.nawair.navy.mil/air00/objective.html. (From there click on Command Information). I ask you to take time and review this brief - contact me directly with your comments. Each of NAVAIR’s products has a future worth investing in - sea based aircraft and systems, air ASW/ASUW, maritime weapons, Marine expeditionary aviation systems and aircrew/maintenance training systems. For an equally exciting report on some of our activities in space, click on: http://www.spawar.navy.mil/corporate/spawarpao/newsreleases/ and read about our latest communications satellite launch from KSC.

Providing solutions for the warfighter was a challenge yesterday and will remain a challenge tomorrow. This is a great time to be a player in the future of Naval Aviation. You are doing something to be very proud of, and something that will make a difference. I need your support and leadership to get past the rhetoric and shape the future opportunities in Naval Aviation.

**NEW AIMD OFFICER POLICY**

**Board to Skip One Year To Accommodate O-5 Selection Results**

Cdr Fred E. Cleveland
Former AMDO Detailer

In the earliest days of the AMDO community the process of selecting major AIMD officers and ‘slating’ where they would serve was left to the detailer’s discretion. Subsequent to Commander Norm Blinn’s tenure in the early 1980’s, the BUPERS directed a “command screen” equivalent selection board for these coveted positions. We now hold both AIMD screening and slating panels to find the best-qualified officers to run our major intermediate maintenance hubs.

This change in procedure offered undeniable authenticity to our selection process and uncloaked any perceived secrets to success via the ‘good ol boy’ networking and similar speculation.

To set your course and speed for a Major AIMD we continue to profess and insist on following a protocol of good squadron level and AIMD experience predominantly based around carrier operations. Most importantly remains the absolute need for outstanding performance in an O-4 sea tour. A five-member selection board comprised of three AMDO captains and two unrestricted line aviators reviews these traits.

**Odes prep for hornets for another launch**

For the past three years, we have been conducting these boards without the results of
the O-5 board. This has complicated the process significantly. When the "no policy became strictly enforced, detailers were hard pressed to offer new Commanders more than one or two choices for service, usually based on promotion date alone. Although letters sent to perspective candidates listed 7 or 8 choices available, the reality was that we were promotion constrained. Sending letters to officers discussing what “might” be available "if" they are selected for commander can put false hope and innuendo into the minds of anxious wannabes and does not seem to be the professional thing to do.

For these reasons and a host of others we have received approval to hold the selection board and slating panel in the year following selection to commander. The immediate impact is the extension of three CV/N AIMDOs and one shore station AIMDO for up to 12 months. The next AIM officer selection board will be for FY 2000 for those officers selected for O-5 at the FY99 commander board. Of course all officers not in zone for captain that have previously been promoted to commander will compete as they do currently.

The feedback to date has been a resounding YEA from all corners of our community. This initiative has been worked by detailers dating back to then, CDR Steve Heilman. At long last we have an opportunity to make it work. The next board will be in the BUREAU’s new Memphis home and since it won’t be run any time soon, all the bugs should be worked out with the new selection board/tank procedures.

**AEDO’s in the National Reconnaissance Office**

The U.S. Navy is a partner in the National Reconnaissance Office (NRO), the organization - recently declassified - that has responsibility for the development, acquisition, and operation of the nation’s space reconnaissance systems.

AEDO’s make up twenty-one of the 201 Navy personnel who are permanently assigned to NRO. Serving in program management positions in space system development and acquisition, AEDO’s have significant individual responsibility, and the opportunity to work on large, advanced technology systems alongside CIA civilians and members of the other services.

Recently, a Panel chaired by retired Admiral Bill Smith studied the Navy’s role in the NRO. The Panel concluded that NRO systems are critical to integrated naval C4ISR; that naval involvement, end-to-end, in NRO programs is essential to ensure systems that are responsive to naval needs; and that Navy’s participation in the NRO should include an acquisition-qualified flag officer and be expanded to include all NRO programs. These recommendations are being implemented.

**Navy's Reputation in Space is Well-Founded**

Beginning with the TRANSIT and Fleet Satellite Communications Programs, Navy has long been involved in the military applications of space. Navy developed the earliest concepts for providing satellite-derived, time-sensitive information to tactical commanders, and has been a leader in the integration of space systems into military command and control systems.

In the NRO, Navy acquisition professionals are highly valued by senior managers because they have a military operational background, in addition to their acquisition and technology qualifications.

**AEDO’s Now Serve in All NRO Program Areas**

The primary focus of the NRO is acquisition, so nearly all of the key jobs are acquisition-related, and the headquarters complex has the feel of a large systems command. The NRO is organized into four large directorates that manage programs in Signals Intelligence (SIGINT), Imagery Intelligence (IMINT), Communications, and Advanced Systems and Technology.

With no permanently assigned billets in the NRO, Navy competes for positions on a "best-athlete" basis with Air Force, CIA, and other NRO mission partners. Navy fares extremely well in this competition. Current Navy assignments include one Major Program Manager-equivalent, and four that are candidates for Deputy Program Manager-equivalent.

AEDO Captain Matt Rogers, who relieved RADM Rand Fisher, is Program Manager for a major system now in Full Scale Engineering Development.

AEDO Captain Tom McKannon is Principal Deputy Director for the Systems Program Office which in the last two years completed five competitive source selections, pioneering the use of oral source selection as part of the NRO’s acquisition reform plan.

Until recently, Navy’s primary focus has been in SIGINT; now, based on an internal NRO restructuring, as well as the Smith Panel recommendation to broaden Navy’s participation, all NRO programs are open to Navy. As a result, Captain Pierre Thuot, AEDO and former astronaut, is serving as Program Manager of the National Space Communications Program. AEDO Commander Ken Heffernan has been named as Captain Thuot’s relief.

Navy people also serve in key Directorate management positions. AEDO Captain Dwight Denson is Chief of Staff of one of the largest Directorates. He also has a leadership role in SPAWARSYSCOM as head of the Program Directorate for Space Technology Systems (PD-14), which provides the majority of people in the NRO Naval Element.

**AEDO’s Work with Latest Technology and Joint Demonstration Techniques**

Opportunities for AEDO’s in the NRO vary from acquisition of satellite payloads, command and control, vehicle engineering, integration and testing to architecture development and advanced technology programs. NRO systems typically are large-scale, complex, and leading edge, and program management is streamlined, and fast paced.
AEDO’s use state-of-the-art and next-generation technologies to ensure tactical and national requirements are met. A feature of advanced development programs is teaming of NRO and DARPA, Navy, or Air Force on joint demonstration projects. Among these have been a number of “space

- TIPS (Tether Physics and Survivability Experiment) - Two separate space bodies connected by a 4 Km tether providing libration analysis and satellite laser ranging validation.

- ADEE (Advanced Tether Experiment) - A more sophisticated, 6 Km tether demonstration.

- STEX (Scientific Experimental Satellite) - A combination next-generation tether demonstration and an operational on-orbit repair of an aging satellite.

AEDO Career Interests

Initial Qualifications: AEDO’s on their first tour typically arrive from Naval Postgraduate School or USNA as graduates of the Space Systems Engineering, EE, IW or Computer Science curricula, or from Navy space-related activities, such as the UHF Follow-On Program Office. Defense acquisition training as well as continuing education are solid pluses for initial qualifications.

Tour Rotation. As with any Navy career field, a balanced rotational pattern is the key to success. As AEDO’s rotate between NRO and Navy jobs, they can be sure that NRO will continue to have positions available that are commensurate with their most recent grade and experience.

Promotion Potential. Based on records for the last five years, the Space AEDO promotion rate (including astronaut candidates) to O-5 and O-6 has been consistent with overall community rates. No significant change in these results is anticipated. Last year’s promotion of AEDO Captain Rand Fisher to Rear Admiral reflects the strong career opportunities in the space acquisition field.

Navy Wins Recognition

During the past 12 months:

- COMSPAWARSYSCOM received presidential recognition for its numerous contributions to national space programs during Navy’s long-standing partnership with the NRO.

- The Director of Central Intelligence awarded the National Intelligence Medal of Achievement to SPAWARSYSCOM civilian Mr. Tom Boyd, Director of the NRO’s Special Systems Program.

- The NRO awarded its highest recognition, the NRO Golden Medallion, to departing AEDO RADM Rand Fisher for his superior performance in managing the Advanced Satellite System.

Summary

AEDO’s who come to the NRO for a tour as a junior officer often choose to return for one or more tours for the increased responsibility and rewards of working in the conceptual-to-launch space reconnaissance programs. They like the leading-edge technology, streamlined management, and association with top professionals in the satellite reconnaissance field. Perhaps the most important of all, they are designing and building the surveillance and information systems that will support the “network-centric” Navy of the twenty-first century, and that will help achieve the national goal of global information superiority.

From the desk of The AED Detailer

Cdr Eli E. Hetz
AED Detailer

As your new detailer I would like to open with an introduction. Since our conversations will largely be discussing your career path both past and future, it is only fair that you know mine. I was commissioned through AOCS in 1981 at the “cradle of Naval Aviation”. I went on to graduate flight school from the jet syllabus in Kingsville, Texas. I stayed there as a SERGRAD in intermediate jets teaching in the T-2C then on to my first fleet tour flying A-7E’s out of Cecil Field, Florida. I made two full deployments embarked in USS SARATOGA with CVW-17 before moving on to the Naval Postgraduate School & Test Pilot School cooperative program. After a follow-on tour as a test pilot at Strike Aircraft Test Directorate in Pax River in the Ordnance Department, I returned to Cecil field for a Department Head tour with VFA-15, trading in the venerable Sea Harley for the Hornet. After two sets of workups and a deployment embarked in USS Roosevelt I transitioned to AED and moved on to the desert of China Lake, California. There I continued to fly and flight test the F/A-18 with newly formed Weapons Test Squadron China Lake working in the development, test and evaluation phase of the mission computer, weapons and sensor upgrades to the F/A-18 variants. From there I reported to Millington Tennessee in search of Elvis and ready to learn the trade of detailing. I am excited about learning more about our diverse community and looking forward to meeting and working with all of you during my tenure here in Graceland as your detailer.

Although I still haven’t spotted Elvis, I have been your detailer since April. While the only constant in life seems to be change, the last five months have brought many more changes in the personnel business than new detailers and a new roof over our heads. As you are probably aware, the Bureau has moved to the
base formerly used to train recruits, formerly known as NAS Millington, now known as NSA Millington, and soon to be known as NSA MidSouth. Just to keep the mix even more dynamic, the command that formerly was referred to as the Bureau of Naval Personnel has split with portions remaining in Washington, DC. As of 01 October the detailing shop, selection boards, and many other support offices residing in Graceland will be the Navy Personnel Command. Through all of this transition, the organization has experienced the same challenges a ship and airwing encounters when returning from a major deployment. Much of the corporate knowledge did not make the move to Millington. Many new faces have reported (approximately 60% new folks) to a newly refurbished building and, like myself, are fast on the learning curve. To those of you who had a need to work with the Bureau or me over the summer months, thanks for your patience and understanding. The good news is by the time you read this, the transition period will be complete and we are coming up to full speed quickly.

Our staffing and location are not the only changes in the personnel world. The Navy has reached a period in which the downsizing of the last five years is nearly complete resulting in a shift to a period of retention. This has resulted in a tangible shift in policy concerning requested retirements, separations and normal PCS transfers. As pointed out in the article on retirements in this issue, the future will require more advance planning and patience than in the past. You may have seen some of your peers that decided to retire or separate and were accommodated rather quickly. Requests in the future will be held to a Bureau policy of notification 9-12 months prior to desired separation date and will need to be submitted outside of 6 months prior to PRD. In addition, requests to rotate prior to programmed PRD are receiving higher levels of scrutiny by Bureau leadership.

In the AED community, our period of downsizing is nearly complete. At this point, we have reduced approximately 11% of the mandated 12% downsizing that began in 1992. As with any restructuring of this type, the transition has been, and remains challenging. Often the reduction in number of billets has lagged the reduction in number of personnel, leaving some unmet commitments and challenges in detailing. I continue to be impressed with the professionalism that our community maintains while grappling with these challenges.

Shifting our focus to the future, we continue to have many exciting opportunities before us. As the battlefield of the future shifts to one that is network centric, so shifts the engineering, development, procurement and management of the systems to support. With that shift follows our most valuable resource: the professionals that manage them. We will see increasing participation in space-based systems, UAV’s, along with continued participation in the aircraft and weapons that will take us into the next century. It will be my pleasure to help you find your place in that world.

To make that happen, please help me keep the lines of communication open by ensuring I have an up-to-date e-mail address and resume (Microsoft Word file is preferred), even if you are not coming up for orders in the near future. You can find me at eli.hertz@persnet.navy.mil Or p44Gb@persnet.navy.mil. Keep an eye on our web pages as exciting changes are in the works. I recommend that you call me 7 months out from your PRD and we’ll get started on your next opportunity. Thanks again for your patience and understanding during our transition period. I realize that it can often be challenging to reach me given the number and frequency of calls and e-mail I receive. I realize that your orders and future career path are of the highest priority to you. Please believe that they are of the highest priority to me as well, and I will get back to each of you as soon as I am able. I’m honored to have the opportunity to help each of you and look forward to helping you with your next set of orders.

Traditional folk wisdom states that there are two things one should not watch being made: fine sausage and a good marriage. The process is positively ugly, undeniably stressful, extremely time consuming and on occasion downright nauseating, but the results are often spectacular! It is my contention that one might add the development of an aircraft carrier to this list. This supremely unique and exceptional process leading to the birth of a magnificent leviathan takes about ten frustrating years, fraught with disappointment, financial labor pangs and contractual potholes that might wreck a more traditional or less robust weapons systems procurement program. At times it seems as if Jonah is again being swallowed by the whale, only to be belched out on the beach like a bit of undigested beef.

This past month I was fortunate to be onboard the USS HARRY S. TRUMAN (CVN 75), for Acceptance Trials conducted off the Virginia coast from Cape May to Cape Hatteras. She performed splendidly, much to the delight of her Commanding Officer, Captain Thomas G. Otterbein and RADM John T. Lyons III, President of the Naval Board of Inspection and Survey. TRUMAN is the eighth in the NIMITZ class series and will soon be followed by the RONALD REAGAN, to be delivered to the fleet in FY03. The delivery cost is approximately 4.27 Billion dollars and the current fifty year Life Cycle Cost of a NIMITZ Class carrier is about 25 Billion dollars. The process from womb to commissioning involves the Herculean efforts of a plethora of Systems Commands, Program Offices, Center for Naval Analysis, Office of Naval Research and of course the prime contractor, Newport News Shipbuilding, the only dedicated shipbuilding facility in America currently building nuclear aircraft carriers.
delivering on time and under budget, prior to hand off to Commander, Naval Air Force, U.S. Atlantic Fleet. PEO Carriers also provides a full spectrum of acquisition functions, logistics, technical, and financial cycle management and policy oversight in support of aircraft carrier programs. Part of this mosaic is PMS 312, the Aircraft Carrier Program Office, responsible for managing the planning for acquisition, conversion, overhaul, modernization, repair, activation, deactivation, maintenance and logistic support for new and in-service aircraft carriers and related programs. Within this labyrinth lies the Assistant for Aviation Maintenance, the focal point of all aviation shipboard related issues, concerns and proposals. Yes, Virginia, there is a “brown shoe” at NAVSEA! In fact, there are two; an LDO CDR working Arresting, landing and recovery equipment (ALRE) issues for NAVAIR PMA 251 and NAWC Lakehurst and an “OLD” 1520 CDR, ostensibly providing aviation maintenance liaison between OPNAV, SPAWAR, NAVAIR, NAVSUP, SUPSHIP (old PERA CV), Type Commanders, various Naval Air and Surface Warfare Centers, and of course individual fleet ships.

This crucial aviation billet has been a “dynamic berth” to many of our Aerospace Maintenance Duty community luminaries, such as Capt. Mike Kiem, Capt. Tom Snyder, Capt. Phil Smiley and Capt. Dave Cutter, lightning like Diogenes of old, a shining path to the 21st century. In Beltway vernacular, this is where SMART Ship meets SMART Squadron! As the BASF advertisement states, “we don’t make the product, we make it better”, though at times it may seem that we place more emphasis on PPBS financial and programmatic “prognostication, divination, augury and celestial interpretation” rather than delivering the bacon to the fleet. PMS 312 is the ultimate destination of fleet aviation Alteration Requests (A/Rs), Engineering Change Proposals (ECP), and classic Participating Acquisition Resource Manager (PARM) sponsored K/D Ship Alterations (ShipAlts), as they wind their path through the Justification Cost Form (ICF) process through to final Configuration Control Board (CCB) approval and assignment of a ShipAlt designation. It can be a time consuming and intensely laborious process, but one guaranteed to provide a technically well researched and logistically supported shipboard aviation installation. Fleet and TYCOM participation is critical to the overall success of this evolution. More than 10,000 Alteration Requests have been processed since 1974 and over 3,200 are still active. Ships have submitted 482 A/Rs in 1996, an average of 42 per ship. 1,506 A/Rs (equal to 20% of submissions) have been installed on aircraft carriers since January, 1986 (8,263 submitted).

The PMS 312 Aviation Maintenance desk is currently involved in the development of the RONALD REAGAN (CVN 76) New Construction Ships Outfitting Plan (NCSOP); NIMITZ and EISENHOWER Refueling and Complete Overhaul (RCOH) execution and planning; SPAWAR Naval Tactical Command Support System (NTCSS) and Information Technology 21 initiatives; NAVAIR PMA 260 future shipboard CASS installation plans; CVN 77 AIMD Trade and CAG/CVW Space Optimization Studies, including SMART and SUPER Squadron concepts and an AIMD Roll On/ Roll Off modular plan; EA-6B Shop 12 CVN complex installation; futuristic CVX Carrier Ship and Aviation Interface development; Joint Strike Fighter (JSF) and F/A-18 E/F shipboard integration and Pollution Prevention (P2) installations. On the more routine side, are Huntron 5100 Gold disk/2M technology integration issues, Battle Force Intermediate Maintenance (BFIMA) expansion, SH-60 aviation maintenance bridge crane, air conditioning proposals for Aviation Ordnance, Gun Shop, K Pool and CVW consolidated seat shop, and review of installed hard nitrogen lines to the consolidated calibration facility. Naval Sea Systems command PMS 312 remains an integral and vital part of naval aviation maintenance, providing that one-stop shopping, no nonsense approach to your emerging fleet AIMD and squadron requirements. The “not invented here” syndrome has no place in our lexicon. NAVSEA PMS 312 stands ready, able and willing to provide you that critical support you need on the pointed end of the spear!

Drop us an email at::
"ERIC.DEAN.CDR@HQ.NAVSEA.NAVY.MIL" or give us a call at DSN 332-0380, ext. 304 or Comm. (703) 602-7382; FAX (703) 602-1885.

If you are in Crystal City, we are located at 2531 Jefferson Davis Hwy, Building NC3, room 9N14, across the street from OPNAV N881 (NC1).

Effective 1 September 1998: visit our website at www.navsea.navy.mil and scroll down to Program Executive Office (PEO) Carrier section.

**Hard Lessons Come Early...**
**... an ENSIGN's first day**

Ensign Rob Teague
VFA-37 Bulls

Just before I graduated AMDO school in Pensacola, Florida, the 1520 detailer CDR Fred Cleveland and the career manager LCDR Curt Shanahan both showed up to give our class a briefing. The standard sales pitch was delivered covering the various aspects of the jobs we were about to venture to. The Q&A period came next, allowing us to ask specific questions about our individual situations. Since I was going to a Hornet squadron, I was interested in how I should expect to be utilized due to the fact that there was now an extra ground officer assigned.

As a final plea, we were asked as a class to provide a newly commissioned Ensign’s perspective on what the job of a ground maintenance officer would entail, and submit it as an article for the AED/AMD Newsletter. My first week at VFA-37 provided me with more than enough (more than I ever wanted) for that kind of article.

I checked into The Bulls the Tuesday after Memorial Day at NAS Cecil Field, Florida to find that they were just about to send a nine-jet detachment to NAS Fallon, Nevada for about a month’s worth of training with the rest of CVW-3. Being fresh from AMDO school, I clearly remembered the difficult planning involved with making an event such as this occur. Logistics, inspections, and personnel requirements were just some of the plethora of elements to be considered.
I watched as their planning and preparations seemed to proceed to fruition without any glitches, as eight of our jets took off as scheduled. Then the inevitable happened. Aircraft 307 went down for a flight control glitch, while our other three jets were down for parts difficult to acquire. “What would I do in this situation?” I asked myself. The first thing was obvious, and that was to fix 307. That’s what happened and the plane took off the next day for Fallon, with the bulk of the squadron’s personnel scheduled to leave on Friday’s C-9 airlift. “What about the other three jets?” I wondered. “Are we not going to have a backup?” I watched and listened as my companions went on between the squadron and the Type Wing to collect enough parts so we could put together another plane. The necessary parts came in, and the ball was once again rolling.

I most definitely wasn’t prepared for what happened next. As I was driving to work the next day, I was listening to NPR’s Morning Edition and heard the report that “...a Navy F/A-18 crashed overnight at a training facility in Nevada. The pilot was killed.” That sinking feeling in my stomach was unfortunately confirmed when I walked into maintenance and found out - yes, it was my squadron. I had been told the day before that my first assignment would be to assist the Division Officer with the AE’s and to my prior enlisted experiences as an AT. The pilot that didn’t make it just so happened to be my immediate boss, the AV/ARM Div o. I had been in squadrons where people were killed in auto wrecks before and that was bad enough, but this was my first exposure to an aviation Class A mishap.

Again I found myself the passive observer instead of the active participant in the events that rapidly followed. I tried to recall everything I was just taught in school about these kinds of circumstances while watching and learning from those around me. “What is his family situation?” “What would I have done if I was the SO at the time?” “How will this effect the troops who knew him and worked for him” “What arrangements still need to be made?” “How is this going to affect the rest of our detachment?” “Will a replacement jet be required immediately?” All these questions briskly flew through my mind on top of my personal concerns for our pilot’s family.

News crews and lots of other people continuously called our squadron for more information which was politely but firmly referred to the PAO office. I was exposed to many other facets of the accident response that I had previously never thought of.

So what is this Ensign’s perspective of what a ground officer’s job involves? Not only does it involve the day-to-day maintenance planning, but also it requires dealing with the tangibility of the inherently dangerous profession in which we choose to work. Frankly though, I thought I was prepared quite well with my prior service background and recent schooling, the reality of what I saw was quite different than anything school can teach. Quick, professional, and accurate responses are absolutely crucial in dealing with a crisis such as this. What I witnessed in my squadron was nothing short of just that. I hope to incorporate the knowledge I’ve gleaned from this experience into my permanent memory, along with what I’ve learned from school, to make myself an even better ground maintenance officer. Though this is definitely not the way I would have preferred to start the rest of my Naval career, nor is it the newspaper article I wanted to clip for my scrapbook, I can already perceive and appreciate the lessons I have learned from it.

The retirement process is fairly straightforward. Once the decision has been made to retire, all that is left is the inevitable paperwork. But this is not as difficult as it might first appear; in fact, it is a ‘turn key’ process. The requirements and procedures are outlined in MILPERSMAN 1810-020 (previously referred to as MILPERSMAN 3860280). If you do not have a copy of this revised article, it can be easily downloaded from the BUPERS homepage at www.bupers.navy.mil. Once in the BUPERS CD on the Homepage, click on “Military Personnel Manual” and then scroll down to “MILPERSMAN 1810-020”. The retirement process consists of the following five elements:

I. Officer writes the retirement request 9-12 months prior to his requested date in accordance with the format outlined in MILPERSMAN 1810-020. This request letter consists of the following:

From: Retiring Officer
To: Secretary of the Navy
Via: (1) Commanding Officer of the retiring officer (or immediate superior in command)
(2) Chief of Naval Personnel, PERS-27

Subj: SUBMISSION OF APPLICATION FOR VOLUNTARY RETIREMENT FROM ACTIVE DUTY

(The written retirement request must contain the following wording)

1. “Having completed [fill-in] years of active service, I request transfer to the Retired List to be effective on the first day of [month and year].” [If appropriate, add one of the following statements: (1) “I request [fill-in] month(s) time in grade waiver,” or (2) “I request to retire in the next lower grade of [fill-in grade].”]

2. “I intend to request [fill-in] days permissive TDY and [fill-in] days separation leave.”

3. “I have read and thoroughly examined DOD 5500.7R specifically Chapters 8 and 9, concerning pre-and post-retirement standards of conduct and employment activities. I further understand that I may direct any questions to my area ethics counselor or the Office of the Judge Advocate General (Code 13).”

4. [Optional – any desired amplifying information.]

II. The above retirement request must have a “CO Endorsement”.

III. Once the retirement request has the CO’s endorsement, submit the request to your command’s Admin Office or your cognizant Personnel Support Detachment. PSD’s maintain a retirement checklist that will be provided at this time.

IV. The Admin Office or PSD then submits the request to the BUREAU (PERS 27) for action. Upon final approval, separation orders are written.

V. Retiring officers should check with their local Family Service Center to enroll in Transition Assistance Program (TAP).
Although not mandatory, TAP is highly recommended. At certain facilities, such as Pax River, the Careers and Transition (CARIT) brief is included as part of the TAP class. The CARIT brief is the only mandatory brief that an officer must have, as this is what fulfills the requirement for your Page 13 entry, which is required by PSD as part of the checkout process.

AMDO ASSOCIATION Web Site Launched

The non-profit AMDO association, whose members include active, retired, reserve and former AMDOs throughout the world, has established a web site containing an abundance of relevant information for the AMDO community. At the new web site you will read:

- breaking community news
- e-mail addresses for hundreds of AMDOs
- civilian job market listings and info about the civilian job market
- community history files
- links to web sites of interest to AMDOs
- Association membership information

The URL is: http://ourworld.compuserve.com/homepages/mreagan/amdo.htm

This site can be reached from the Greenshirt Site with a 'point and click'.

http://greenshirt.nalda.navy.mil

Check out these sites and all AMDOs, past and present are encouraged to have their e-mail addresses added to the community’s most comprehensive listing.

COMMUNITY MANAGER’s Corner

LCDR Curt M. Shanahan
LCDR Larry A. Pugh

The former AMDO and AEDO community managers, CDR Mike ‘Guido’ Disano and LCDR Clay “Happy Idiot” Snaza (self-proclaimed call sign) departed in early May. CDR Disano went on to be the AIMD Officer at NAS North Island and LCDR Snaza is off to Point Mugu as a Tomcat Project Officer.

We are the newest member’s of your community management team, LCDR Curt M. Shanahan, AMDO and LCDR Larry A. Pugh, AEDO.

We encourage you to call or write our offices with all of your community concerns, questions and individual issues. Remember we are not detailers and have not had any surgery splitting the ends of our tongues.

We can provide information on a myriad of topics, including promotion boards, promotion zones, career advice, separation/retirement from active duty, fitrep writing, PSR’s, DAWIA, etc.

If you have read this far... drop us an e-mail with your updated e-mail and snail mail addresses and your work phone number:

LCDR Curt M. Shanahan, AMDO
(301)757-8481
DSN 757-8481
E-mail: shanahancm%am6%paxmb1@mr.nawcad.navy.mil
NAVAIRSYSCOM HQ (AIR 8.0P) 46990 Hinkle Cir, Unit 8, bldg 419 PAX River, MD 20670-1627

LCDR Larry A. Pugh, AEDO
(301)757-8480
DSN 757-8480
E-mail: pughla@navair.navy.mil
NAVAIRSYSCOM HQ (AIR 8.0P) 46990 Hinkle Cir, Unit 8, bldg 419 PAX River, MD 20670-1627

**Photograph. The official requirement to submit a photograph is now within three months after acceptance of each promotion vice the old requirement of submission within one year. At a minimum you should be in your current paygrade. Photographs can be submitted on NAVPERS 1070/10 and sent to:

Bureau of Naval Personnel (PERS-313C)
5720 Integrity Dr.
Millington, TN 38055-3130

**Fitness reports. If you are missing a fitness report from your microfiche send a copy to:

Bureau of Naval Personnel (PERS-322)
5720 Integrity Dr.
Millington, TN 38055-3130
For questions call (901)874-3317, DSN 882-3317

**Microfiche. You cannot order your microfiche by phone or by E-mail because your signature is required.
Send written requests to:

Bureau of Naval Personnel (PERS-313D)
5720 Integrity Dr.
Millington, TN 38055-3130
For questions call DSN 882-3415/6/7, (901)874-3415/6/7 FAX 882-2664, (901) 874-2664.

**Performance Summary Record (PSR). You may order your PSR by writing or faxing:

Bureau of Naval Personnel (PERS-313D)
5720 Integrity Dr.
Millington, TN 38055-3130
For questions call DSN 882-3415/6/7, (901)874-3415/6/7 FAX 882-2664, (901) 874-2664.

**Officer Data Card (ODC). You may request an Officer Data Card by writing or faxing:

Bureau of Naval Personnel (PERS-312G)
2 Navy Annex
Washington, D.C. 20370-1030
For questions call (901) 874-3403, 882-3403

**Medals. If an award is missing from your PSR, send a copy of the signed citation to the Board of Decorations and Medals (printing or type your SSN in the upper right hand corner).

Navy Department Board of Decorations & Medals
2000 Navy Pentagon
Washington, DC 20370-1030
For questions call (901) 874-3403, 882-3403

Letters to the Board:
Regular Mail
President, FY0X (Grade) (Competitive Category) Promotion Selection Board
Department of the Navy
Note: If an award is missing from the microfiche, again ensure your SSN is in the upper right hand corner and send the citation to PERS-313C1 (use address above with proper code). Faxed citations are not acceptable for inclusion on the microfiche. Remember that only personal awards (NAMs, NCNs, etc.) are part of your official record.

AMDO PROMOTIONS

Congratulations to:

CAPT (s)  Michael D. Hardee
CAPT (s)  David E. Hough
CAPT (s)  Steven L. Hanson
CAPT (s)  R. Larry Howard
CAPT (s)  James R. Boone

CDR (s)  Theresa M. Braymer
CDR (s)  Tarry M. Burt
CDR (s)  Kenneth R. Campitelli
CDR (s)  Patrick Dispenzieri
CDR (s)  Richard J. Dorn
CDR (s)  Catherine Eberhart
CDR (s)  Jerry L. Godding
CDR (s)  Michael T. Haberthur
CDR (s)  Jon C. Harding
CDR (s)  Timothy Holland
CDR (s)  Jen Sue King
CDR (s)  Timothy Matthews
CDR (s)  Robin A. Moore
CDR (s)  Robert G Ramsey, Jr

AEDO PROMOTIONS

Congratulations to:

CAPT (s)  John N. Kohut
CAPT (s)  James W. Rainwater
CAPT (s)  Carl E. Reaber
CAPT (s)  Michael L. Noble
CAPT (s)  James F. Small
CAPT (s)  Christopher L. Evans
CAPT (s)  Kenneth G. Heffeman

CAPT (s)  Richard A. Mohler
CAPT (s)  Robert E. Novak
CAPT (s)  James R. Seaman

CDR (s)  Colleen L. Ellis
CDR (s)  Raymond L. Coutley
CDR (s)  Richard W. Walter
CDR (s)  Donald C. Mueller
CDR (s)  Mark M. Rhoades
CDR (s)  Matthew R. Kercher
CDR (s)  Rick M. McQueen
CDR (s)  Paul S. Morgan
CDR (s)  Christopher W. Rice
CDR (s)  Charles S. Anderson
CDR (s)  Thomas D. Stuart
CDR (s)  Randal D. Black
CDR (s)  Francis C. Lukenbill
CDR (s)  Barbara A. Bell
CDR (s)  Randolph L. Mahr
CDR (s)  Mark C. Nye
CDR (s)  Vivan L. Ragusa
CDR (s)  Patric K. Roesch
CDR (s)  James R. Brown
CDR (s)  Gregory A. Silvernagel
CDR (s)  Clay J. Szaa
CDR (s)  Dean R. Sawyer
CDR (s)  Andrew S. Dean
CDR (s)  John B. Herrington
CDR (s)  Eric J. Tibbets
CDR (s)  Clifford A. Brunger
CDR (s)  Leonard J. Hamilton
CDR (s)  Steven R. Wright
CDR (s)  Robert L. Curbeam
CDR (s)  Maude E. Young
CDR (s)  Dave P. Markert

Community Manager's Quarterly Quotes:

That guy is a loose cannon that self-loads

When you deliver bad news, keep one foot in the stirrup

Effective Fitness Reporting

By CDR M. D. Disano

A fitness report must accomplish at least two things to be effective. First, it must provide clear feedback to an officer on his/her strengths and weaknesses. And second, it must provide promotion boards the necessary data to select the best candidates for the greater responsibilities of higher paygrade billets. This article focuses primarily on the latter. This article also assumes that you have seen your new Performance Summary Report (PSR). If you have not, and you are at all interested in being promoted someday, you should order your PSR immediately (see Community Manager's Corner).

A quick review just in case you haven’t caught a recent road show. In the “Tank”, your record gets flashed onto the screen as one of three community representatives briefs your job performance and career path based on the fitness reports in your fiche. I like to equate this process to artwork. Each of your FITREPs is a brush stroke in the picture entitled “your story”. You get promoted based on how “your story” looks compared to your competition and the percent to be promoted.

All promotion boards revolve around the term “confidence vote”. Each board member is voting on his confidence (0%, 25%, 50%, 75%, or 100%) in your ability to assume the duties and responsibilities of the next paygrade. Why is this “confidence vote” an important concept to understand when discussing effective fitness reporting? It’s simple. The most effective fitness report is the one that gives the reader (and briefer) complete confidence that he has received the message your reporting senior was trying to send. This is true whether the reporting senior is sending a message of a “superstar” or “dirt bag”. Fitness reports that have conflicting statements, grades, or other hidden meanings ultimately reduce the reader’s confidence in the reader’s interpretation of the message your reporting senior was trying to send. Additionally, poorly written fitness reports reduce the reader’s confidence in your reporting seniors’ ability to evaluate you effectively. Ultimately, poorly written fitness reports reduce the board’s confidence in “your story”.

After observing 20 selection boards, I have concluded there are at least five data points on a fitness report and PSR that must be in agreement for board members to have confidence in the message being sent on your performance:

1. Billets held and job groupings.
2. Your average for the reporting period (on FITREP and PSR).
3. Summary group average (on PSR only).
for your paygrade regardless of designator (on PSR only).

5. Comments on Performance - block 41 (on FITREP only).

The effectiveness of your FITREP is diminished if the data in any one of these categories conflicts or is not commensurate with what is expected for the next higher paygrade. Let me try to illustrate this with a few real life examples.

**Case 1 (LT)** - "My CO said that I’m 1 of 1, so none of his other FITREPs will affect me". **Wrong!** Each of the officers under that reporting senior, regardless of designator, comprises the summary group average. Every Lieutenant fitrep ever written by that CO, regardless of designator, comprises the CO’s cumulative average. These facts are missing from the FITREP when he signed.

Case 2 (LCDR) - Now that the CO can put comparative comments in Block 41, he boldly proclaims "LCDR Slow is the Best MMCO I have ever seen and would easily rank 1 of 37 LCDR’s if compared with other designators onboard". Without knowing the CO’s cumulative average, this officer walks out of the CO’s office feeling good. If he is below the CO’s average, this will conflict with the ranking and block 41 and reduce a promotion board member’s confidence.

So what can be done to eliminate doubt and enhance the boards confidence in your story?

**Know your CO’s average.** Every CO should track his average. If he doesn’t, he cannot be an effective evaluator of his people. How you compare to his average should be an item of discussion during every mid-term counseling session. If you’re a ship’s company LT, I don’t recommend confronting the Captain when you’re in his office for the debrief. He might be hesitant to rewrite all 65 LT FITREPs to accommodate your complaints.

**Show continuous improvement.** Every board member will know that being 2 of 2 is not bad if you checked in 6 months ago. However, if you continue to hold that distinction throughout your tour, that’s another story. Your FITREPs should paint a story of an officer performing in progressively more responsible billets and moving up in the pecking order, both against 1520’s and against the CO’s average for your paygrade. Your CO needs to understand what our community considers "progressively more responsible billets". If he doesn’t, ask for help from your senior AMDO shipmates, i.e., the AIMD officer, CAGMO, the detailer or even the Career Manager.

**Use block 41 effectively to enhance the readers confidence in what the numbers say.** I hope that we never get to the point when you get promoted base on numbers and statistics. Block 41 is your reporting seniors chance to make sure that doesn’t happen. However, as depicted in case 1 and 2 above, his average for your paygrade will be the RED FLAG if he goes overboard with your praise.

In our traditionally 1 of 1 community, breakouts that compare you against other officers outside of your designator have been important tiebreakers. Encourage your reporting senior to continue this tradition, e.g., "Although 1 of 1, he would continue to be EP if rated against all my LT’s", "4 of 15 LT’s, regardless of designator".

If you are the 2 in the "2 of 2", ask for comments in block 41 that help explain why, e.g., "Ranked 2 against very senior competition", "would easily be an EP if ranked with all my LT’s", "ranked 2 against the Virgil Lemmon winner", "I have the two best 1520’s in the Navy... Betty is 2".

Finally, I hope that my comments have contributed to a better understanding of how your FITREPs fit into the promotion process. As restricted line officers, our primary mission is to support the warfighter. However, we need their assistance to provide a professional atmosphere for our officers to work in and the objective and educated feedback on the quality of our performance. I have to leave it up to you to share these ideas with your reporting senior. Your detailer and community manager are available to answer any questions.

***********************

**The AED/AMD Newsletter, Our Aerospace, is published by the Career Management Office of the Aerospace Engineering Duty (Aerospace Engineering and Aerospace Maintenance) communities.** The purpose of this newsletter is to provide information of general interest to officers of both the AMD and AMD communities and to serve as a forum for the publication of technical papers and articles. Contributions and comments are solicited and should be sent to:

LCDR Curt M. Shanahan, USN
NAVAIRSYSCOM HQ (AIR 8.0)
46990 Hinkle Circle, Unit 8, Bldg 419
Patuxent River, MD 20670-1627

Next Issue: February 1999