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# Our Aerospace



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## Enablers to Ensure a Future Logistics Enterprise

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### **CHANGE THE CULTURE TO ACHIEVE FUTURE LOGISTICS ENTERPRISE (FLE) SUCCESS**

A true logistics enterprise that pervades all levels of the DoD and each of the armed services will maximize operational availability, reduce cycle times and optimize life cycle cost effectiveness. The imperative that will enable a new logistics enterprise is cultural change. Critical analysis of logistics failures shows the root causes to be cultural failures. We must change the rewards and incentives for every activity that impacts logistics. The Defense Acquisition Executive Summary (DAES) must be changed to include Operational Availability as a key baseline target and at the same time this target must have service-wide commitment.

Overcoming cultural inertia is difficult. As a result of the rewards that are presently in place, we under-invest logistics, proliferate configurations, we don't match spares inventories to demonstrated failure rates, and we accept contractor claims such as reliability at face value. Operational Requirements offices pursue goals of higher, faster and further, without considering the effect on logistics. Contract officers take the path of least resistance and underplay logistics incentives. Engineers focus on performance and minimize the effects on reliability. We can see that the wrong incentives have produced poor logistics. In an effort to improve logistics performance, some in the DoD and the Congress have decided that outsourcing and privatization is the answer,

but the best-written contract cannot correct bad logistics behavior or the shortcomings of legacy systems that are old, poorly designed or not well understood.

Our logistics culture in our new enterprise must be one where comptrollers, contracts specialists, lawyers, engineers, logisticians and program managers make policy and decisions based on best logistics outcomes. Furthermore, those who review programs must become more informed about logistics issues and provide a robust logistics check and balance. Additionally, independent Logistics Review Groups must be revitalized in all the services. We need to change to a culture where everyone's efforts add value to the entire enterprise and not just a part. Our culture must become one where all the players in the logistics enterprise are rewarded for the same thing: meeting operational availability targets.

### **THE CURRENT LOGISTICS ENVIRONMENT HINDERS FLE**

#### **Cost, Schedule and Performance**

The most significant inhibitor to a successful logistics enterprise is that Program Managers are rewarded for COST, SCHEDULE and PERFORMANCE only. The natural tension between program cost, schedule, and performance and logistics funding in the absence of operational availability targets as a fourth requirement in the DAES, precludes any opportunity to achieve a true logistics enterprise.

#### **Not Acknowledging the High Cost of Logistics**

The logistics component of weapons system ownership is resource intensive. Policies, manpower, funding and logistics authority must correspond to the realities of the resources necessary for supporting a weapon

system throughout its life. The intensity of life-cycle support costs must be factored into acquisition planning processes at every level. For example, the estimated cost of ownership of an F/A-18 is \$4M per year. That is more than \$80M per airplane for 20 years of ownership in constant year dollars. According to a NAVAIR brief "Relating Business Processes To Warfighting Outcomes" to the CNO on 8 January 2003, the current cost to operate an F/A-18C for one hour is \$9,700 and for the F-14D it is \$20,000 per hour. Recognizing the true costs of the logistics enterprise would raise the level of awareness at all levels and promote the need for better performance/cost/support trade-offs.

#### **Wrong Rewards For the Operating Forces**

In the operating forces, the operational chain and the operators are rewarded for hours flown, hours steamed, sorties generated and other operational measures of success, but not for logistics performance. Each succeeding Carrier Group Commander strives to outdo their predecessor's measures of success. This behavior accelerates the wear-out of systems and the cost of support. We must change the rules and reward faithful type-commander support and in turn reward fleet operating units for good logistics support and well executed maintenance.

#### **HOW TO ACHIEVE FLE SUCCESS**

##### **Establish A Program Baseline A<sub>0</sub>**

First I recommend we establish the requirement for all Program Executive Officers and Program Managers to include a Readiness Target (A<sub>0</sub>) in the Defense Acquisition Executive Summary Baseline. Additionally I recommend that each Chief of Staff of each service commit to meeting program readiness targets.

### **Program Actions Must Enhance Reliability, Maintenance and Cycle Times**

Every echelon of acquisition and logistics from ALT to the operating unit must add value to the logistics product. No action should be taken that reduces reliability, adds to maintenance cycle time or increases maintenance actions. Acquisition and logistics activity should be a joint enterprise.

### **Verify Logistics Performance Through Testing**

Testing specifically for logistics is a particularly important scheme that will assure the performance of enterprise elements. Currently, this is an area of weakness that can easily be improved by making it a robust requirement funded to the necessary levels.

### **Stop Configuration Proliferation**

An important tactic is to minimize configuration changes. Too often, we forward-fit but because of funding constraints we do not retrofit. Unnecessary changes only serve to keep logistics in a continuous state of instability. In general, modification practices require duplication of all the logistics elements. We must avoid logistic dislocations due to insufficient funds for modification kit hardware and installations and the inability to modify the entire inventory.

### **Change The O&S Budget Process**

While we are attempting to advance logistics technology on all fronts, the logistics budget process remains a dinosaur and seriously undermines the logistics enterprise. All programs are the victims of asymmetric funding. Program acquisition funds are for three years and logistics funds are for one year and are in no way tied to any specific program at the appropriation level. The allocation of O&M funds to programs and other logistics budget activities is a tug-of-war between the DoD, the service, the SYSCOMS, and the fleet operators. In this stressed funding environment, operating hour account managers tend to spend into logistics accounts. To make matters worse, O&M is becoming *THE* budget target of opportunity more than ever. It is significant to note that many systems have reached the end of their production and as a result, the procurement dollars used to subsidize sustaining engineering, stops with the end of production. However, the need for this critical funding continues. The present culture just doesn't see logistics with an appropriate sense of priority and the comptrollers are no exception. O&M is still seen as the bill payer to smooth the

rough edges of the budget activity process throughout the fiscal year.

What should we do about this situation? I propose that we totally revise the O&M account: First we should identify logistics funds for all those categories identified for program life-cycle support by logistics elements and reprogram those funds as we do procurement money. Next, we should fund general logistic support elements such as CALS, JEDMICS etc. in what we would call a "Weapons Systems Support Account" as the new priority Operations and Maintenance effort in a new Operations and Support Account. Then I would fund the routine O&M activities such as POL and pencils out of a named lower tier O&M account. If we were to adopt these measures, we would be more efficient in the allocation of program support funds, have greater accuracy of program cost requirements and be better able to depict, articulate and defend resource requirements in a new logistics enterprise.

### **Ensure Fidelity in the IPPD, SE and IPT Processes**

Employing the current tactics of Integrated Planning and Process Development, Systems Engineering, and Integrated Process teams are important steps in engaging the future logistics enterprise, but we have to apply more fidelity in their execution. When we examine teaming from the logistics and program perspective, we see the need for an expanded team whose players include not only logisticians, systems engineers, contracts, lawyers, comptrollers, but also Congressional Members, Staffers, field activities and industry. While we have shown we desire producing a system in the shortest time, with the best performance, the highest quality, and the best cost, initiatives such as spiral development lead to incomplete logistics.

### **Require Technical Education for Logistics Managers**

An important change to be made in our logistics culture is to change the educational requirements of our logisticians. I propose that we establish a two-tier system for logisticians. The first tier would require engineering graduates (ME, EE, IE, etc.) for acquisition logistics and the second tier would require graduates with general BS/BA degrees combined with experience or additional technical course work for sustaining logistics. Weapon systems are more complex, logistics support systems are more complex, and team communications are more complex.

Moreover, decisions at all levels have become more complex and mistakes are more costly than ever. The Congress has recognized this and as a result passed the DAWIA. In this environment, the logistics manager has to be well educated in technical matters as well as business matters. Not only must logisticians have a technical background they should have strong analytical skills and be critical thinkers. Graduate education for senior logistics management positions should be mandatory. During the time I was the Assistant Commander for Logistics and Fleet Support at the Naval Air Systems Command, most of the new logistic interns were graduate engineers. This is a trend that must continue. I recognize that we are a few years away from this posture, but we must go there. We urgently need balanced viewpoints in the value-net working trade-off decisions. Specifically logisticians must be able to understand systems functional analysis: functional allocation, reliability allocation, complexity analysis, cost analysis and so on. In addition they must have some knowledge of modeling and simulation and spreadsheets.

### **Change The Civil Service Classification of Logisticians**

Now this brings me to an interesting point- All civilian logisticians in all the services, regardless of their levels and kinds of education are classified as 346s, an administrative function. We need to correct this serious disconnect by reclassifying logisticians as professionals along with engineers if we are serious about walking the talk.

### **CONCLUSION**

Cultural barriers have continued to undermine logistics practices. No future logistics enterprise can succeed without changing rewards, incentives and instructions.

Because of the technical complexities in our weapons systems and modern culture, logisticians must be able to interact with engineering at all levels so that they may be proactive, credible and influential. This can be achieved by upgrading the technical education of logisticians and adopting the two-tier system I have proposed. Logistics culture will greatly improve by tearing down the barriers to knowledge, confidence and trust. To properly provide for support of increasingly expensive weapons systems, our budgetary processes must be changed so that support funds are a direct part of any program and

bring fiscal balance for the whole and not the part. We must use our weapon systems in peacetime operations so that we don't accelerate wear out. Incorporating these changes will produce a panorama of skill sets that will enable a robust and successful future logistics enterprise that will ensure battle-space dominance.

### **Mobi-Mats - A New Concept in Airfield Surfacing Systems**

*By Thomas Worsdale  
Public Affairs Officer  
NAVAIR Lakehurst NJ*



The Expeditionary Airfield (EAF) Team at NAVAIR Lakehurst directly supports deployed Marines as part of both Operation Enduring Freedom and Operation Iraqi Freedom with a new airfield surfacing system for rotary wing aircraft known to its developers as the Mobi-Mat.

The system, which takes four 14 foot wide by 20 foot long rolls of polyester matting and turns them into a portable landing pad suitable for landing helicopters on adverse terrain, was the result of a four-year long effort to procure, configure and test the effectiveness of a lightweight airfield that was not only easily installed but easily transported.

“Our airfields follow the Marines,” said Mike Jiavaras, EAF team lead. “They have to be portable.” Jiavaras reported lessons learned from the Bosnian conflict revealed AM2 matting to be too heavy for use in theater – particularly when the terrain there is rocky or sandy, both contributors to treacherous brownout conditions.

“We needed to go out and find a lightweight airfield just for rotary wing aircraft. Otherwise, they FOD-out (i.e., draw up foreign objects and debris, FOD) all over the

place.” That, he said, causes loss of aircraft and potentially loss of life.

Once the EAF team had researched the materials to use for the mat, they needed to solicit Congress for special funding in order to purchase them from a European manufacturer. An American company then made modifications to the product, and the team went forward. “We were progressing slowly, but after 9/11, however, we had to accelerate,” said Jiavaras.

Eventually, the mobi-mat was ready to go, except for its packaging. Shipped in a heavy wooden crate, the airfield was not fully usable for the Marines who needed to unpack, repack and transport it over and over again. “The package had to be reusable,” emphasized Jiavaras. “Plus it had to house the rolls of matting and all essential tools and accessories in one very sturdy, user-friendly box.”

He did not have to look very far to find someone to create such a package. Jiavaras turned to the Packing & Crating and Shipment sections of the NAVAIR Lakehurst Supply Division. Ricky Barker, the material management supervisor, created a prototype of a crate suitable for the job.

Fourteen feet long, five feet wide, and four-and-a-half feet high, the crate had a false bottom to store sledgehammers, jack and stakes for the installation and removal of the mat. The rolls of fiberglass matting, as well as slings to help lift them, were all stored above. Fully packed, the box weighed 2,900 pounds.

The prototype quickly turned into the first of 18 packages to be built, painted, stenciled, filled and shipped – all of which had to be completed ASAP for immediate shipment to Kuwait City. That kept a crew of workers hopping. “We practically worked round the clock,” said Barker. “We were working so fast, the paint shop couldn't keep up with us.”

Barker said the initial job took two-and-a-half weeks start to finish – well ahead of deadline. “We've got a great crew here,” he said. “Once they're on a roll, you can't stop 'em.” Which is just as well, since Barker and company have been moving more mission-critical equipment than ever before. “We ship to aircraft carriers, site stand-ups, Marine Corps airwings, naval bases – there isn't a whole lot we don't do.”

The EAF team and the Marine Corps were grateful for the effort extended on their behalf. “As this product was being packaged, we were shipping it directly in-country,” stated Jiavaras. “It was as real-time as it gets. We had a nice operation going comprised of a variety of dedicated people,” he added. “As I told them, they were not just working overtime; they were saving lives.” Over the next year, 100 additional mobi-mat systems will be crated and shipped in support of current U.S. military operations

### **Global Hawk and Evolutionary Acquisition**

*By CDR Rick McQueen and  
Ms. Lucinda Rose  
Global Hawk Systems Program Office*

During the short life of the program, the Global Hawk Unmanned Air Vehicle has dramatically changed the face of how the acquisition world can do business in today's military environment. The Global Hawk has enjoyed unprecedented success in both Operation Enduring Freedom and Operation Iraqi Freedom. This success can be attributed to several evolutionary acquisition initiatives inherent in the program's acquisition strategy: spiral development, collaborative requirements, and seamless verification. These initiatives have enabled the Global Hawk Systems Program Office (SPO) to successfully accelerate capability to the warfighter. As a result, the Global Hawk program is now a model for the transformation process of accelerating innovation and ground breaking acquisition reform.

The Global Hawk program has been used as a model for transforming military operational capabilities and fielding at an accelerated pace. This success is due mainly to the spiral development process, which begins with the final Advanced Concept Technology Demonstrator (ACTD) technical baseline and develops enhancements needed to achieve complete Operational Requirements Document (ORD) compliance through an iterative process, which consists of six spirals. This strategy fields an accelerated Intelligence, Surveillance and Reconnaissance (ISR) capability sufficient to employ in accordance with the Concept of Operations (CONOPS) while the acquisition community further

evolves the system through future spirals as technologies mature to enable fielding a fully ORD compliant system. Each spiral results in multiple, militarily useful capabilities that progress toward a full ORD-compliant system. The cut-in of any particular capability is driven by the implementation philosophy, “when it is ready, it will fly.”

In order for spiral development to work, the program must engage in a collaborative requirements process that involves the user, program office, contractor and test community. For Global Hawk, this process was accomplished through a High Performance Team (HPT), which enabled the program to staff and validate an Operational Requirements Document (ORD) through the Joint Requirements Oversight Council (JROC) in record time (120 days). A unique accomplishment from this process was an incremented ORD that facilitated the spiral development program on a timeline that fits within the budget of the Warfighter. This unique ORD is now the model for documenting requirements with the acquisition community.

A collaborative, incremented ORD requires a new way of thinking. Additionally, it must state the requirements in such a way that an 80% solution can be fielded first. The architecture must also be built so it can be modified and the user must accept that the first few deliveries are not going to meet all the needs; however, the goals will be incrementally accomplished. The test community must also be open to the idea that in testing an incremental ORD, the definition of effective and suitable is going to be widened to fit the strategy. This approach is best accomplished through a process known as seamless verification, which allows for continuous simultaneous developmental and operational testing (DT/OT) of new capabilities with a limited number of Operational Assessments (OA), Initial Operational Test and Evaluation (IOT&E), and Follow-on Test and Evaluation (FOT&E) events; thus reducing time to the warfighter. This approach provides complete and reliable data for estimating the military utility of new Global Hawk systems or items, and forms the basis for making decisions to continue the acquisition process. Decision makers will use the DT/OT results to identify and resolve deficiencies as early as possible, verify the extent to which design risks have been minimized, and verify contract performance, determine system safety, assess military utility

and system reliability and determine system readiness for IOT&E.

Global Hawk is one of the shining stars in the Global War on Terrorism. After a deployment order to support Operating Enduring Freedom, the Global Hawk successfully flew more than 1000 combat flight hours during over 50 combat missions. The system also disseminated over 15,000 images for use by theater commanders. Global Hawk is one of only two programs in recent Air Force history to deploy a developmental weapon system in direct support of the Warfighter. In short, combat hours exceed the total flying hours logged for development. While supporting the war on terrorism, the Global Hawk program not only deployed Advanced Concept Technology Demonstrator (ACTD) aircraft, but also continued to exercise its development and production programs. This effort allowed for rapid response to a second deployment order, and Global Hawk was immediately integrated into Operation Iraqi Freedom (OIF) upon arrival in Theater. During operations, Global Hawk was instrumental in reducing the warfighter's Find, Fix, and Track timeline. The Global Hawk flew only 3% of Air Breathing IMINT missions and 5% of Hi-Altitude Reconnaissance sorties, yet accounted for 55% of the Time Sensitive Targets (TSTs) generated to kill air defense equipment. In addition, the Global Hawk disseminated over 3700 images in OIF which located 13 full SAM batteries, over 50 SAM launchers, over 300 SAM canisters, over 300 tanks (38% of Iraq's known armor), and over 70 SAM Missile Transporters. This also included seamless integration into the Major Theater WAR (MTW) Operations Plan (OPLAN). As a prototype system, the Global Hawk has now flown more hours in support of the Global War on Terrorism than the combined hours flown during the ACTD phase and developmental testing.

Global Hawk has ventured beyond the Air Force to acquire new capabilities. The program has successfully demonstrated the potential to provide high altitude, long endurance Unmanned Aerial Vehicles (UAV) for both strategic and tactical intelligence, surveillance and reconnaissance (ISR). The existing payloads are optimized for overland ISR missions. A USAF-Australian-USN cooperative exercise (TANDEM THRUST) in 2001 has shown that system and payload software changes to Global Hawk provide the basis for a system well suited for maritime and

littoral mission development and demonstration. Currently the Air Force is working jointly with the Navy to build on the TANDEM THRUST experience base to create a long endurance maritime system. The Global Hawk Maritime Demonstration (GHMD) will provide sensors with maritime modes to be utilized by the US Navy for experimentation, CONOPS, and Training, Tactics and Procedures (TTP) development. Flight demonstration and experimentation will primarily concentrate on CONOPS and TTP development along with sensor maritime mode development.

### Lean & Six Sigma at NAVAIR Depot Jacksonville, FL

*By LCDR Don Simmons  
Industrial Planning Officer  
NADEP Jacksonville, FL*

NAVAIR Depot Jacksonville uses a business framework and like any other business we are accountable for the cost and schedule of our products. We are keenly aware that the quality and costs of our products must be such that we are somewhat competitive with private industry, but our mission and our motivation comes from the requirements of our Fleet customer – the Warfighter. Although we are business like, we are not a business because we are driven by Fleet readiness, not profit or shareholder equity. We are Warfighter driven.

The implementation of Lean & Six Sigma at the NAVAIR Depot Jacksonville is a massive undertaking. Although Lean was originally conceived to be used primarily for mass production of new items, the principles can be applied to the repair of aircraft and aircraft components. The bottom line with Lean is the decrease of production time. In private industry this would in turn lead to increased efficiency and increased profit. In order to better control variation we began implementing Six Sigma. By decreasing production time and reducing variation we are able to become more efficient and provide aircraft and aircraft components quicker and at lower expense than previously thought possible.

#### **Lean**

Lean is an operational strategy to achieve continuous improvements in performance through the systematic elimination of all waste

of resources. Lean provides a very dynamic tool set that is applicable to all businesses and disciplines. The primary focus of Lean begins with the identification and elimination of waste. Waste, in this instance, refers to any activity in a process that does not add value to the generation of quality product. Some examples include time associated with waiting for parts or paperwork, searching for parts, and walking around the plant to retrieve tools, parts, or work instructions.

Lean transforms the production process from an inefficient push system to a more efficient and less costly flow and pull system. It is not a new software package with a slick three-letter acronym. It is not easy; it takes both time and effort to change cultures and processes. Lean requires you to view your business from the ultimate customer's perspective, in our case the Warfighter.

### Six Sigma

Six Sigma is a highly disciplined process that focuses on delivering near perfect products and services by driving out variation. By measuring the number of non-conformances in a process, you can systematically determine how to eliminate them for near perfect performance every day.

Reducing variation is accomplished by following the DMAIC (Define, Measure, Analyze, Improve, Control) model. When followed the DMAIC model will lead to improving the right things that are important to the customer and thus important to the business. Like Lean, Six Sigma starts with what is important to the customer – the Warfighter.

### Lean & Six Sigma

Lean & Six Sigma combined provides NAVAIR Depot Jacksonville with an incredible set of tools for improving quality and reducing cycle times. Lean provides us with the process improvement tools needed to reduce waste and decrease cycle time. Six Sigma provides the tools to reduce variation by better controlling our processes.

Together Lean & Six Sigma play a vital role in the continuous process improvement program here at NAVAIR Depot Jacksonville. By implementing both Lean & Six Sigma we are combining the two most important business initiatives today, Lean and Six Sigma, into one cohesive program.

### Implementing Lean Six Sigma

Lean Six Sigma is part of NAVAIR Depot Jacksonville's Continuous Improvement Program. It builds on the foundation established by getting our processes under control and documented, and then certified to the international standards of ISO9000 and AS9100.

In order to implement Lean Six Sigma we first had to change ourselves. To facilitate this we partnered with General Electric Aircraft Engines (GE AE). They have us provided training on how to put the Lean into action and how to use the Six Sigma tools to sustain and focus our efforts. As the Depot develops a core group of Lean & Six Sigma subject matter experts (Six Sigma Green Belts & Black Belts) we will then be able to expand our efforts throughout the Depot. Our goal is to transform the organizational culture into one where every employee is able to identify and remove inefficiency and we are able to continually improve.

To date we have implemented Lean Six Sigma in a total of seven areas; four in the F404 Engine Shop and in three Central Processing Areas. At the Depot we had several central processing areas that were bottlenecks that affected each of the rotating components shops. We took the Lean Six Sigma principles to those traditional batch and queue environments, and set them up on bus schedules designed to produce the right products in the right quantities at the right time.

We have recently completed our third Lean Six Sigma event in the F404 Engine shop. The shop has been completely re-structured into three Lean Cells: High Pressure Turbine (HPT), Low Pressure Turbine (LPT) and High Pressure Compressor (HPC) / Fan. The F404 Engine shop has become the model for NAVAIR Lean Six Sigma implementation.

The areas where we implemented Lean Six Sigma have become islands of success surrounded by the old methods, which over time we will bring along. The challenge is for us is to maintain the incredible results that we have seen after the implementation of Lean Six Sigma.

### Conclusion

NAVAIR Depot Jax is committed to making Lean Six Sigma work. We have begun the process of changing organizational culture to

ensure that the Lean Six Sigma principles of continuous improvement continue well into the future. We know it won't be easy and we will need to make hard decisions and make policy changes to our system to achieve our vision. Education and action are critical at all levels of the organization to ensure consistent application of the Lean Six Sigma principles. However, Lean Six Sigma are the tools that will take us to the next level on our journey to become a world-class organization. The Naval Air Depot Jacksonville is incorporating 63 years of fleet aviation excellence and the most current business initiatives into meeting the requirements and needs of the 21<sup>st</sup> century Warfighter and beyond.

### NAVRIP Discovers Success Stories

*By Betsy Haley  
NAVAIR Public Affairs Office*



During the recent Type-Model-Series evaluation at Naval Air Station Jacksonville, a T-56 engine undergoes disassembly and preparation for cLeaning and re-work

Leaders of the Naval Aviation Readiness Integrated Improvement Program (NAVRIP) recently returned to Naval Air Station (NAS) Oceana, Va to discover many success stories since their first visit one year ago and to review the barrier removal process for the F/A-18 type-model-series (T/M/S).

In particular, by resolving 163 barriers to readiness, the NAS Oceana Aircraft Intermediate Maintenance Detachment (AIMD) was able to average a 50 percent across-the-board increase in meeting aviation supply demand, while reducing flight-line cannibalization and improving shore-based readiness for the F/A-18 and F-14. The barriers identified during NAVRIP's first visit were successfully resolved at the local level except one that was escalated to the NAVRIP planning and programming

organization, Cross Functional Team-3 (CFT-3).

“These numbers are a testament to the support that we received from senior leadership such as the Naval Aviation Readiness Improvement Team (NAVRIIT), Naval Aviation Inventory Control Point (NAVICP), Defense Logistics Agency (DLA) and the close working relationship of the local leadership team,” said CDR Jerry Zumbro, Oceana AIMD OIC.

“NAVRIIP has helped us to get all of the supplies we need, streamlined our processes and made it easier to get the parts we need when we need them,” said AT2 Jeffery Carroll, AIMD technician. “The NAVRIIP process helps us to understand the complete cycle of repairs and parts within the AIMD.”

The NAVRIIT toured the NAS Oceana AIMD, and during the tour actually assisted in resolving a local barrier with a targeted forward-looking infrared looking radar (T-FLIR) shipping plate. CDR Joyce Robinson, from the Naval Inventory Control Point (NAVICP), joined the walk-around tour, and was able to collect data on how the design of the T-FLIR shipping plate causes damage to the system in transit. She also found out how the current design of the plate does not allow for part number visibility. CDR Robinson is assisting the maintenance technicians in gaining approval to change the design of the plates, and the container design engineer and the NAVICP F/A-18 lead technician are currently working the issue. The facilitation to solve this local barrier came to fruition because Fleet members, flag officers and other NAVRIIP team members were able to meet face-to-face to discuss what is causing problems within the detachment, and then agree on quick fixes for resolutions.

“Being on site to see and hold the shipping plate and component was invaluable,” said CDR Robinson. “The Fleet technicians demonstrated removing the optical stabilizer's shipping plate, and drove home the consequence of not being able to read the stabilizer's part number through a view port. The shipping plate is heavy and requires some effort to twist it from the optical stabilizer; multiple removals of the plate induce excessive handling to the fragile component,” Robinson said.

During the same timeframe last year when NAVRIIP was first introduced to Oceana, the

Lean manufacturing process was also introduced to the AIMD. The Lean process is the production of materials to meet maximum daily demand with a balanced flow process by identifying and eliminating non-value added activities.

“A primary reason for becoming Lean is to take unnecessary work off the backs of Sailors and Marines who have always gone the extra mile to sustain our forces,” said Rear Adm. Wally Massenburg, Assistant Commander for Aviation Depots, Naval Air Systems Command (NAVAIR). “This is in addition to the obvious benefit of increased productivity.”

For example, the bomb release unit-32 (BRU) test bench maintenance technicians began using the Lean process in February 2002. Since the process was initiated, production has increased.

“Our backlog was over 250 BRU-32's needing break down, now since we began the Lean process, we have cut it to eight,” said Aviation Ordnance Warrant Officer Gary Mueller, AIMD Oceana. “We are producing 10 a day, compared to five-to-six before we began this process. We have also cut our total-cycle time from eight hours to six hours. Our Fleet customers are telling us that this is the best product to come out of AIMD in years,” Warrant Officer Mueller said.

“With this situation, you have metrics which measure your progress,” said Admiral Massenburg. “The Lean process combines maintenance and supply logistics that better support vertical alignment which drives readiness.”

The Lean process was also introduced to the engine maintenance technicians for F/A-18 and F-14 aircraft in an attempt to reduce the number of bare firewalls. The repair backlog was reduced from 208 engines needing repairs to 30, while also reducing the number of aircraft with engines out for repairs from 68 down to 37. The total turnaround time for F-404 engines went from 78 days to 20 days.

“The Lean process helps us to continue our work flow and eliminate waste with engine kits,” said ADC (AW) David Benton, AIMD Oceana. “We also have improved quality of work, including our working conditions. Our airmen up to our first class petty officers now understand their jobs and what they are supposed to repair every day.”

“Boots on the ground helped us a lot,” said ADC Jerry Robinson, night-check production chief, AIMD Oceana. “It solved a lot of issues. NAVRIIP goes hand-in-hand with the Lean process.”

Chief Benton reiterated that the Lean process helps to determine mistakes in the break down process, and move forward with resolving issues to increase the total time an engine is working while on an aircraft.

“NAVRIIP offers standardization and cycles of learning. When we go to this type of T/M/S construct, it is time for officers to transport best of breed, best of practices onto to others,” said Admiral Massenburg.

Eventually, the Lean process, along with other manufacturing theories that will be introduced by NAVRIIP, will be institutionalized across other AIMDs.

During the recent F/A-18 T/M/S evaluation last month, the local Oceana NAVRIIP leadership team (including the Strike Fighter Wing Commodore, Fighter Wing Commodore, Supply officer, AIMD officer, Strike Fighter Wing Maintenance Officer and the Fighter Wing Maintenance Officer), identified barriers for the following systems: the APG-65/73 radar (including the radar transmitter, radar set, receiver and antenna), T-FLIR and F-404 engine.

“With NAVRIIP you have to use your trouble-shooting skills to determine what barriers are preventing system readiness,” said ATAN Jesus Suarez, AIMD Oceana. “NAVRIIP helped us analyze many systems for the F/A-18.”

Due to NAVRIIP's recent shift in focus from site specific to TMS specific barrier identification, all sites that support the F/A-18 will form a barrier removal team (BRT) and will work together on removing each barrier. NAS Lemoore, Marine Corp Air Station Miramar, Calif., and NAS Oceana will establish BRTs to focus on the top three barriers. After each barrier is resolved, others BRTs will be established.

After evaluating the F-404 engine, barriers include establishing pre-removal screening of engines, common performance metrics and building specifications across all sites, while also tasking a single asset manager for workload balancing.

The APG-65/73 radar system requires a method to identify best practices and then exporting the practices across Naval Aviation.

The T-FLIR system requires improvements to work center manning (FLIR training), availability of supply equipment and Wing benefits.

Recently, the Support Equipment Division (SED) identified a new barrier concerning manpower within the A/S32A-42 tow tractor work center. The local Oceana leadership team was not able to resolve the barrier locally, and it has since been escalated to the resources organization to address skilled manpower shortages and poor reliability issues to better expedite logistical support and reliability.

In June, the NAVRIIP will next address barriers with the SH-60 B, F and H helicopters at NAS North Island, Calif.

For more information on NAVRIIP, link to <http://www.airpac.navy.mil/navriip/>.

### **A New Direction For The Aviation Maintenance Management Team**

*By LCDR Bert Costa and LCDR Kevin Wilson  
COMNAVAIRPAC/COMNAVAIRLANT  
AMMT Team Leaders*

CNAP and CNAL representatives recently met at NAS North Island to map the future of the Aviation Maintenance Management Team (AMMT). Gone are the days where instructional compliance was the primary and often sole focus. While the new mission will continue to emphasize instructional compliance, it now incorporates measures of operational viability and safety. The AMMT's objective: to better evaluate performance levels with respect to a command's ability to meet readiness, safety, and deployability goals.

In order to measure/improve operational viability, the AMMT will utilize the vast pools of empirical data available (Planeside Metrics, TRMS/AMRR, NALCOMIS, 3M, AFAST, SORTS) and rely on other information sources (Type Wings, Resource Managers) to identify degraded processes adversely affecting aviation readiness as necessary. During the pre-inspection phase, maintenance procedures of similar organizations will be studied to

determine best practices. The AMMT will impart these techniques via Type Wings when procedural changes are warranted.

Additionally, Type Wings are expected to liaison with TYCOM, Supply and Resource Managers to institute solutions requiring greater involvement as well as identify and resolve readiness degraders spanning multiple repair levels and to better measure the quality of involvement between supporting and supported activities.

Setting aside the long held notion that NAMP compliance alone equated to safe and effective operations, command personnel will now be expected to demonstrate a practical proficiency in various maintenance and maintenance related actions at all levels of management. Assessing an activity's safety posture and maintenance related readiness will extend beyond the scope of documentation and include AMMT initiated drills. While the number and type of drills will vary by site, dependent upon pre-inspection analysis and on-site observations, specific attention will be paid to those evolutions with the greatest potential for injury. For example, command personnel may be asked to execute the AVGFE rescue plan, simulate tire and wheel assembly, final check aircraft for launch, contain a hazardous material spill, or charge a NICAD battery. Type Wing support will be of particular interest during all inspections.

Finally, while evaluation of program management and policy implementation will continue to be an integral part of all future inspections, the AMMT will concentrate on those programs and program elements with the greatest impact on safety and readiness. A streamlined approach will be applied in gauging instructional compliance, although activities will still be expected to maintain standards as set forth in the 4790 and other relevant directives.

Testing and fine-tuning of the new methodology began May 5 with a combined CNAP and CNAL inspection of HSL-40 and NAS Mayport AIMD. Full implementation and publishing of a revised inspection schedule will be published via separate correspondence.

### **HSL Logistics during OPERATION IRAQI FREEDOM**

*By ENS Scott Hill  
HSL-49 Material Control Officer  
TAD to 5<sup>th</sup> Fleet*

The mindful reader will realize that the points of this article are all supply-support topics. So why should you read this? As AMDOs we should all take an avid interest in our supply-support. Without an efficient, effective logistical support train, aircraft remain on the ground and maintenance personnel are rendered ineffective.

In the months leading up to Operation Iraqi Freedom, the HSL community found itself in a logistical squeeze at the heart of its frontline operations in the 5th Fleet AOR. The in-theater movement of NMCS/PMCS requisitions beleaguered the 19 HSL detachments encompassing 36 aircraft. In some instances, material would arrive from CONUS within 2-4 days only to remain stagnant in the Bahrain warehouse for more than a week.

With the number of assets in the AOR promising to grow, an overload on the logistical pipeline was guaranteed. To maximize throughput, a LAMPS/Combat Logistics Force (CLF) parts-expediter was required for coordination between CTF-53, deployed detachments, home squadron chains of command, and the delivery assets within the AOR.

From late February through mid-April of 2003, there were 120 ships in the 5<sup>th</sup> Fleet AOR. This created constant and emergent logistic requirements never before seen by CTF-53. Deployed assets were spread throughout the Northern Red Sea, Gulf of Oman, Northern Arabian Gulf (NAG) and as far south as the Horn of Africa. The units supported included carrier battlegroups (CVBGs), Amphibious Task Forces (ATFs), Marine Forward Operating Units, and other small operational units. The dispersion of the CVBGs and their escorts (CGs/DDs/DDGs/FFGs/CLFs) extended throughout the Arabian Gulf. These dispersed surface combatants were often distant from their command echelon's supply-support chain (e.g., Beach Detachments specifically designed to manage passenger, mail and cargo (P/M/C) for the

CVBG/ATF). This separation necessitated the management and oversight of the supply-support chain for these ships and their air detachments by CTF-53.

The CTF-53 Aviation Unit (AU) in Bahrain was the main hub for 95 percent of the aviation material shipped to the 5<sup>th</sup> Fleet AOR. In the month of March, the AU handled 1735 aircraft, moved 5,250 tons of cargo, delivered 270 tons of mail, and transported 8,800 passengers within the AOR. For delivery of material to ships, aviation assets assigned to CTF-53 included Bahrain-based H-53s for vertical-on-board-delivery (VOD) and H-3s (the “Desert Ducks”) for P/M/C delivery to surface combatants. Of the 120 ships in theater, the 30 stationed in the NAG (not to include those ships directly supporting the carrier) relied solely on the HC-2 “Desert Ducks” for delivery of P/M/C and all transportation priority I materials.

HC-2 Detachment Two (the “Desert Ducks”) consisted of four H-3s. Normal daily aircraft availability for the logistics flight schedule was 50-75%. Limitations of the H-3 (fuel capacity, cargo space, gross weight) limited each aircraft to logistical runs to 7 or 8 ships per day. For these 30 ships in range, this meant a Desert Duck hit approximately every other day. Another logistical scheduling consideration was the nominal single size for one piece of cargo. The nominal size was 250 pounds and 40 cubic feet. Larger-than-normal pieces significantly reduced the number of ships that one aircraft could hit by reducing the amount of cargo carried, the fuel load carried, and the aircraft’s range. Cargo pieces larger than these limits were normally routed via CLF ship, or special log helo provided by operational commanders.

All Transportation Priority II and III (e.g., stock replenishment) material was routed and delivered via CLF ship or pier delivery. Port visits for LAMPS capable ships were virtually non-existent during this time period so pier delivery was an undependable option. CLF ships conducted replenishment-at-sea (RAS) with LAMPS capable ships approximately every 14 days.

Ships located outside the NAG (i.e., Gulf of Oman, Red Sea and the Horn of Africa) were out of range for the “Desert Ducks.” For these LAMPS ships, 90 percent of their material was flown from Bahrain to Fujairah. Once in Fujairah, material was loaded to a CLF ship for further transfer to units

operating in the Gulf of Oman, the Gulf of Aden, and the Strait of Hormuz. When operational commitments allowed, LAMPS Air Detachments used their organic aircraft to make logistics runs into Fujairah to support their home units. Material for ships operating in the Southern Arabian Gulf was trucked from Fujairah to Jebel Ali and loaded onto a CLF ship for further transfer. Ships operating in the Red Sea were supported from Djibouti and Hurghada, Egypt. Material was flown to these bases via fixed-wing airlift and from there via H-53 to a CLF ship for further transfer.

The CVBG’s beach detachment personnel directly supported LAMPS-capable ships that were operating as an Escort for one of the four Carriers. NMCS/PMCS parts and Transportation Priority I material was flown from Bahrain via COD to the carrier and then transferred to the escort ship via a daily “log helo”.

#### LESSONS LEARNED

A. In an environment as fast-paced as OIF, correct and up-to-date unit locations are mandatory. Material routing was promulgated by CTF-53 Operations and Routing via the Daily Routing Report. This report was based on the latest operational deployment scheme and was sent to all AU and Beach Detachment personnel. If a unit’s position was listed incorrectly on this report, their material missed its point of delivery and was delayed for days. The HSL detachments often knew of their upcoming movements before CTF-53 and notified the parts-expediter. As the HSL parts-expediter, comparison of the routing report with unit-based position confirmations was a critical link in the expedition of the supply-support chain. Daily comparison of unit locations saved many parts a round trip to the AU and allowed the supply-support chain to run effectively and efficiently. This daily comparison of routing was an important task of the parts-expediter.

B. The Aviation Unit was undermanned for the receiving and distribution of the amount of aviation material demanded. A major Naval Reserve augmentation was required just to organize and process the material in-flux at the receiving warehouse. Once this personnel augmentation arrived, the AU was able to manage the receiving supply-support chain.

C. The CVBG/ATF beach detachments were not sufficient to manage the distribution supply-support chain during this period of

time. CTF-53 needed to receive an appropriate amount of additional personnel to track unit locations and verify P/M/C routing. Augmenting CTF-53 with a LAMPS/CLF parts-expediter from each CVBG (and ATF if such forces are in concert) was most appropriate and beneficial. The parts-expediter was also involved with unlocking parts frustrated in Customs or misplaced at the warehouse, where typical beach detachment personnel were unable to break from the continual monitoring of the distribution processes. These parts were often mission-critical and their delay in distribution was directly affecting the detachments’ mission-capable rate.

D. The warehouse was not set up for operations that rely heavily on FEDEX or DHL. These direct-delivery, civilian cargo transportation corporations use an electronic scan method for tracking. The warehouse inventory system uses the GATES Software System to track shipments and each individual shipment must be entered into GATES as it is received. Receiving data are entered manually by keyboard; scanners are not used. This mismatch in inventory tracking systems allowed FEDEX and DHL to outpace the intake capability of the warehouse. Initially, the amount of material being delivered via FEDEX and DHL was more than the AU could organize and process. In order to avoid overloading the warehouse, DHL and FEDEX began delivering all non-CASREP parts directly to the CVBG and ATF beach detachments. With this reduction in parts flow-rate, the AU could manage the remaining direct-deliverables from the air carriers.

E. The in-theater airlift capability was not increased proportionately to meet the higher requirements. The majority of material overloading the warehouse was for the CVBGs and ATFs. These ships used H-53 VODs to deliver most of their material. At the beginning of the force increase, HM-14 was supporting the CVBG/ATF VOD requirement. HM-14 was rapidly recast in their necessary mine-clearance role. HM-15 was moved to Bahrain to offset the unfulfilled VOD missions, but they were not able to relieve HM-14 “face-to-face”. This gap in airlift support left a large void in airlift capability and caused the AU to backlog material. In an effort to alleviate this backlog, a plan called “Desert Turtle” was implemented. The concept called for loading P/M/C onto a LSD/LPD for transport to

the NAG. P/M/C would then be distributed to the individual ships via organic helicopter logistics flights. The flaw in the plan became apparent as tasking for the organic helicopters overwhelmed any opportunities to conduct logistical flights. A work-around was developed using LCACs for delivery.

F. In time of war, stock replenishment material (Transportation Priority II/III material) should take priority over mail and passenger transfer (excepting emergency cases, critical technical assistance, etc...). This would allow more Transportation Priority II/III material to be delivered via airlift, vice waiting for RAS events. The slow nature of the RAS process (compared to directed airlift response time) forced some LAMPS detachment stock replacement orders to upgrade to priority I due to parts necessity.

G. The use of organic helicopters for “as-available” logistical tasking was extremely beneficial. The occasional organic LAMPS logistical flight into the AU allowed the home units to quickly receive high priority parts, transportation priority II and III material and a few critical passengers. Otherwise this P/M/C backlogs until the ship has a RAS or pier delivery.

H. With the introduction of the MH-60S, logistics in the AOR will see an improvement. With a greater aircraft availability rate, the number of sorties increases and more P/M/C is moved per time period. In concert with the introduction of the Sierra, continued use of the “Desert Turtle” concept will greatly enhance the rapid transfer of material to the NAG. The use of H-53 VOD to the Turtle allows for extremely large quantities of P/M/C to reach the NAG (and other remote regions of the AOR). From the Turtle, MH-60S helicopters could then transfer the P/M/C to the H-60-capable ships via shorter haul distances than those currently flown by the “Desert Duck” H-3s flying from Bahrain.

#### **SUMMARY**

The issues that severely impacted the Naval logistics pipeline during OIF were numerous and significant. The most important of these was a sufficient logistics plan accounting for: the overwhelming volume of material that could not be received or processed for distribution; personnel augmentation for the receipt and distribution process; and the dedication of sufficient transport and storage facilities (e.g., warehouse and airlift assets). These issues were largely due to budget

constraints, and that this volume of material had never before been moved in such a short time frame over such a large geographical range. The logistical “lessons learned” from OIF should teach us all the importance supply-support plays in our life as maintainers. The experience certainly opened my eyes to the “big picture challenges” of Naval logistics. We should all take an interest in our supply-support because a breakdown in the supply chain can make or break us as AMDOs.

### **Assault and Special Mission Programs Office (PMA-290)**

*By CDR Mike Paul  
EW/Special Missions Department Head  
PMA-290E*

In response to emerging requirements in support of Operation ENDURING FREEDOM and IRAQI FREEDOM for the EP-3E aircraft, the Program Executive Officer, AIR ASW, Assault and Special Mission Programs (PMA-290) formed a multi-organizational team to meet the challenge. This team quickly responded to Central Command requests to provide mission systems and equipment that would enhance the reconnaissance mission systems of the EP-3E and increase aircraft safety. Four systems were identified for installation in support of Operation ENDURING FREEDOM, two of which were obtained from the National Security Agency (NSA). An additional NSA system in anticipation of Operation IRAQI FREEDOM was also identified as a requirement for installation. The team worked through funding issues, squadron deployment schedules, supportability and technical challenges and an aggressive schedule to deliver Infrared Beacons for aircraft safety, SINGle Channel Ground and Airborne Radio System (SINGGARS) for critical communications, and three classified systems that made the EP-3E mission system a robust electronic warfare suite. The Infrared Beacon was designed to make the aircraft visible during night strike support missions where use of the aircraft anti-collision lights would draw enemy fire. SINGGARS enabled critical communications to joint ground forces during sensitive operations. The three NSA systems ensured Information Dominance of the Battle Space for the Theater and Combatant Commanders.

The team compressed the normal timeline from concept to implementation, yet retained the efforts in logistics and engineering to ensure success. Interim support plans were initiated to ensure supportability with sparing and repair strategies. Operator and maintenance procedures were taken from vendor publications, re-written in a usable format and provided with each installation kit. Rigorous system engineering principles were applied to expedite the flight clearance and Type Commander approval of the systems. Test plans were defined as the technical data package for each system was being developed, reducing schedule and ensuring first time operation of each mission system when the mission aircraft deployed in theater. Installation work schedules were de-conflicted with squadron maintenance, often resulting in the team working nights and extended hours to meet an aggressive schedule. The results of the teams’ efforts were robust mission systems that could be operated and supported by squadron personnel.

The first aircraft was configured by the PMA-290 Operation ENDURING FREEDOM and IRAQI FREEDOM Installation Team and in theater within 90 days of the Central Command requirement being identified. Additionally, this team had two additional aircraft configured, to include one aircraft overseas, in less than six months from notification of the requirements. Despite the challenges of multiple organizations involved in a major configuration change to the aircraft, the EP-3E was the only aircraft to be configured to meet the Central Command deadline for SINGGARS installation. All aircraft were operationally deployed to support our country’s war on terrorism.

Additionally, in November 2002, Central Command requested an electronic attack capability be added to three possible aircraft in anticipation of a gap in coverage from other assets. The Operation ENDURING FREEDOM and IRAQI FREEDOM Installation Team was the only organization that attempted to meet this requirement, working an aggressive schedule to meet the in-theater deadline. Working over the holidays, the Operation ENDURING FREEDOM Installation team designed, fabricated and installed the electronic attack capability in time for the squadron to train and operationally check the system before deployment. This electronic attack prototype was in theater and operational before the war, and proved to be more effective than other electronic attack

assets due to the unique architecture of the EP-3.

### Relevant Information For Leadership (RIFLe)

*CDR David C. Meyers, SC, USN  
NAS North Island Supply Officer*

Imagine an Integrated Maintenance Activity (IMA) – the teaming of an Aviation Intermediate Maintenance Department (AIMD) and an Aviation Support Division (ASD) – in which each and every person shares a single top-level goal. Where Supply and Maintenance personnel both have a clear understanding of mission and purpose and where they are embarked on a common path to a joint vision. Where the leaders at every level, truly own their processes and are encouraged to make changes, to solve problems, and to communicate as one Department across today's vertical and horizontal stovepipes. And where they expect and receive immediate feedback on their results. Sound heady? This is the reality of the Relevant Information For Leadership (RIFLe) philosophy recently instituted at NAS North Island. And what does it lead to? In 5 short months with inductions into AIMD remaining constant and an increased OPTEMPO and at no cost:

- Avg. daily EXREPs have decreased over 83%
- Avg. multiple EXREPS down more than 93%
- Monthly DIFM down more than 34%
- Overaged AWP down 65%
- 1<sup>st</sup> Day Issue Effectiveness up more than 25%
- Local ACWT down 95%
- Numerous personal awards presented within AIMD/ASD

Interested? When our AIMD Officer, CDR Will Ainsworth and I were told that instituting RIFLe could take this Air Station to places it had never been before, we were curious enough to volunteer to be the Navy's prototype test site. The Supply/Maintenance relationship at NAS North Island has always been a source of envy, but we were about to embark on a process of optimizing this IMA in some very profound and effective ways.

Maintainers know that their job begins and ends with supply. An NRFI asset in, material required to fix it after induction, and presenting an RFI asset back is one of their primary contributions to aviation readiness. The better the AIMD/ASD team, the better this process works. While leadership plays a critical role in any success, improvements based on personality are often as transitory as the leader that implemented them. How we, as logisticians, interpret assigned metrics and define success varies from individual to individual. The management style of any given leader can never be duplicated beyond that person, and what gets results at one command may completely fail at another. While metrics are an attempt to standardize processes at every site, they too fall short when they cannot be immediately and easily tied in to aviation readiness.

Metrics are simply there to measure performance. However, with every Air Station Supply Department set up differently, how to apply a standard across the Navy is difficult. So how do we measure effectiveness and how can we apply them to any organization in a way that produces meaningful, sustainable improvements? Enter Relevant Information For Leadership (RIFLe).

To explain RIFLe is to explain Eliyahu Goldratt's Theory of Constraints (TOC). In any organization, there are many processes that come together to achieve the desired result. Some of these processes flow like clockwork while others are stymied by frustrating bottlenecks that hamper increased systemic productivity. Those bottlenecks will impact the entire operation, smooth running or not, creating excesses on one end, and shortages on the other. As a leader – as a manager – our job is to alleviate the impact of that bottleneck on our operations. The science behind TOC and RIFLe is simple, give attention to those few constraints that matter – don't try and manage every variable.

In the aviation readiness world, having an available asset when the O-Level maintainer needs it in support of RFT aircraft or deploying units, is our bottom line. Having our allowance RFI is good. Having holes on the shelf because we have NRFI assets somewhere in the pipeline is bad. That top-level goal – the joint AIMD/ASD metric, if you will – is "Available Asset." That is all I care about in a very generic sense, because all other things flow down from that...training,

retention, expediting, inventory management, MOV process, and so forth. Given a "Relevant" metric, what "Information" does my organization need to provide to the "Leadership" in order to manage? They need to measure those processes that are constraining my ability to achieve my goal. They don't need to measure those processes that are not a hindrance to "Available Asset." If ACWT is not a driver in this equation, it shouldn't occupy my time. If it is, then that is where I want my available resources focused until we have solved the problem. Remove the constraint to achieving the goal – focusing on the problem that is impacting the system as a whole, and then move on to the next one.

This is nothing revolutionary and it is nothing new—especially to our community. Without explaining the actual Theory of Constraints (TOC), you can rest assured that it can be described in simple terms, and because of that, it seems "too easy to be true." TOC formalizes our day-to-day Supply Corps business. There is no great leap of faith required to understand, internalize, and agree with what RIFLe is trying to do. No one has yet proven that profound results have to come from hard processes.

The entire TOC loop – identify, exploit, subordinate, elevate, start again – fits in well with the recently formed Type Model Series (TMS) Team concept in aviation logistics. At the local level, an AIMD or ASD identifies problems, tackles them as a priority, and when it is obviously a larger, systemic issue beyond the ability of the local TRIAD (AIMD, ASD, Wing Maintenance) to fix, it is elevated to the TMS Team and beyond. At the TMS level, this has indeed happened, and in some very focused, specific ways, the results have been impressive. The right level of attention has been brought to bear on a specific degrader to RFT aircraft, and that barrier has been removed. This is the RIFLe philosophy at work.

Most of us will identify with the 5-step approach. It is how good leaders and managers deal with their business, consciously or subconsciously. Given that we have limited resources, how do we get best value from the hand we are dealt? We must understand what our top priority is, subjugate other "priorities" to it, and focus our efforts on those problems which are driving aviation readiness. This is the daily bread-and-butter of our occupation. But it is not as simple as it sounds. There are competing priorities, and

competing management philosophies that we've all grown up with that work against RIFLe.

Management is simply doing things right. Leadership is doing the right things. A subtle play on words, but a significant change in focus. We are managers by fiat, but we are leaders by assumption. Your commission as a Naval Officer meant that you would manage. And it assumed that you either knew how to lead, or would quickly learn. Unfortunately, what is our metric for "leadership?" Is it the same as efficient and effective management? Depending on where you fell out on your Myers-Briggs test, you'll answer that differently. Can leadership – doing the right things – transcend personalities and become institutionalized? With the right tools, I think it can.

RIFLe has the potential to be that tool which provides the continuity from leader to leader, which goes beyond management styles, and which horizontally integrates the stovepiped logistics infrastructure. The leadership philosophy is already what we do. All of us at the operational level look for those improvements that will take less effort, less resources, and return the most effectiveness. But do we currently have a system that directs us to those areas that really need our attention – that clear the "noise" away – and helps focus us on areas impacting our stake in aviation readiness? A system that monitors critical information and warns us of an impending problem – that allows us to be proactive vice reactive? A tool which encourages individuals up and down the chain of command to do what is good for the system as a whole, instead of focusing on their narrow "measure of success?" You do with RIFLe.

RIFLe is probably the easiest application I've had the pleasure to implement. A simple tool, with simple goals, to drive profound change. Jointly with the AIMD Officer, we came up with the top-level metrics. This took some time; we've had some subsequent iterations as we wrestled with RFT numbers, MC/FMC, and various long-term goals that really had more to do with our FITREPs than they did with aviation readiness. Having decided that "Asset Availability" was the bottom line for our joint operation, we gave that goal to the next level – the JO's – and asked them to figure out what they needed to accomplish to achieve that goal. Arriving at that, they turned to their senior Enlisted and asked them...and

so forth down the chain. What we ended up with was a logic tree. If all these events take place, we will have "Available Asset," and our contribution to RFT aircraft on this Air Station will be achieved.

This meant that our IMA identified who owned the process, what they should be measuring, validated the logic flow, and established metric boundaries – a minimum level of performance, a satisfactory goal, and an ultimate goal. Working as a team, AIMD and ASD quickly learned that the success of one was inextricably linked together with the success of the other. Communication – vertical and horizontal – is the key to improvement at this Air Station and anywhere else. RIFLe expedited that learning curve. Throughout this organization, our Sailors and civilians know what is important – we speak as one team, with one voice, towards one goal. The junior Petty Officer responsible for their given metric knows that the AIMDO and SUPPO not only agree that this is important and that we are tracking it, we agree that it is important enough for that Sailor to have ownership and significant leeway to steer that process to continued improvement. My goal has become his or her goal, and if I left tomorrow, that goal is still theirs. RIFLe has formalized our traditional "Intuitive Leadership" and eased turnover inefficiencies.

Sounds simple, doesn't it. Given that you understand the value of the correct metrics, it should be. A metric is only as good as the improvement it drives, and unfortunately, the link between many of our metrics and true process change and improvement, is tenuous at best, and merely anecdotal or subjective in most cases. Metrics should be used to evaluate, assess, and – critical point – reward performance. They should be predictive and not reactive. Last month's metrics tell me what I did, they don't tell me why, and they don't necessarily point me to where I need to change the process. A metric should provide real-time direction and feedback in order to take that corrective action necessary. Metrics align organizational priorities, regardless of the quality of that metric, therefore they must be verifiable—quantitative versus qualitative; empirical versus anecdotal; accurate and truthful versus gathered and manipulated.

Effective metrics have certain traits, and the use of metrics to manage an organization and institute a leadership philosophy such as RIFLe helps define those traits. We have limited resources. Even the finest Supply

Corps Officer lives in a 24-hour day. Given that, we should focus on the critical few metrics that truly impact our primary mission. Those few should be linked to value. If you achieve it, you'll have really done something meaningful to the Navy. They should be gathered frequently. Metrics done on a quarterly or yearly basis aren't metrics, they are command history and have very little value in process improvement. A good metric is a learning tool. It identifies constraints and initiates corrective action. It should provide opportunities for improvement by identifying strategic gaps, major ILS deficiencies, and so on. Give me a metric to shoot for...let me remove my local barriers...and all that is left should be larger systemic problems that will take more seniority than I have to correct. Finally, a good metric should leave you with certain expectations. If you achieve it, you should not only see improvement, but you should be rewarded for it. Simple human behavior.

Bottom line, RIFLe works. Without encumbering our Sailors with another management tool or leadership philosophy that either is not applicable to our unique business – warfighting; or is so onerous it creates inertia and resentment, RIFLe delivers results. It is a change in thinking, it breaks stereotypes, and it forces new relationships – and this in itself is a tough proposition to work through, but once you've broken that mental barrier within the maintenance and supply communities, you are on your way. The power of discovery and empowerment, while managing change and process improvement sharpens the entire organization, and intensifies support to the customer.

Am I a believer? Yes – because the numbers achieved and the results within our four supported – and successfully and completely deployed - Air Wings prove it. RIFLe is no panacea for all the ills that impact our ability to perform, but it goes a long way in refocusing the Aviation Logistics Team, reenergizing our exceptional workforce, and improving our combined product to the warfighter and operator.

## Exporting SEAOPDET

By CDR John "Pontiac" Hine  
CNAP N422RS  
Shore Readiness Officer

Carrier AIMDs are augmented with TAD NAS AIMD technicians when the CVW is embarked. P-3 AIMDs are augmented with squadron technicians when P-3 squadrons are operating in local area. The carrier augment called Sea Operational Detachment (SOD) is assigned to CONUS NAS AIMD. P-3 augment is assigned to P-3 squadrons and sent TAD to AIMD.

Prior to 1986 the carrier IMA augment was imbedded into each CVW squadron similar to current P-3 manning. In 1986 carrier SOD was established and IMA personnel were transferred to the NAS AIMD. Re-assignment accomplished the following:

- Improved the quality of technician assigned to AIMD
- Charged the NAS with invested interest with technician's husbandry function
- Reduced squadron administrative burden
- Eliminated manpower variance between numerous activities
- Training coordinated between two IMA activities vice multiple activities
- Pooled personnel under one activity, which permitted flexible assignment of technicians based on skill level

Because of isolated duty and detailer's motivation to keep the same Sailors within operation area, forwarded deployed P-3 IMAs do not always get the most experienced or seasoned technicians. While deployed, any deficiency in IMA augment affects non-deployed WING/AIMD in the form of aircraft cannibalization and component supply system availability. Each P-3 squadron has 27 "I" level and 19 integrated service billets

Both TYCOMs, CNO Office and TYPEWING "Green Shirts" have initiated an effort to align P-3 IMA augment billets with carriers SOD and establish P-3 SODs. If approved, CNAL/CNAP Instruction 1306.18D Management Procedures/Policy for SOD will be amended to include P-3 IMA support. Billet savings is not an objective of this initiative. The goal is to permit existing P-3 community to capitalize on significant gains

carrier SOD has achieved over many years of proven operation. Proficient, productive and seasoned technicians would have immediate impact on forward deployed P-3 support

## The Center for Naval Aviation Technical Training

By: CDR Jan Wiley  
Functional Integration Directorate  
Center for Naval Aviation Technical Training

The Center for Naval Aviation Technical Training (CNATT) is one of the Learning Centers under Naval Personnel Development Command, Norfolk, VA. Located in the "Cradle of Naval Aviation", the mission of CNATT is to provide human performance solutions that meet the needs of the fleet using the most relevant and efficient delivery methods for continuous personal and professional development of aviation technical personnel. CNATT will be responsible for all technical aviation ratings (ABE, ABF, ABH, AC, AD, AE, AG, AM, AME, AO, AS, AT, AW, AZ, PR), Airman, related aviation maintenance officer training and training for Marine Corps aviation Military Occupational Specialties (MOS) requirements.

Within the Center, the Functional Integration Directorate will partner with Fleet representatives to define individual human performance requirements for given tasks. The Five Vector Model Directorate will coordinate with the Human Performance Center as process owners for the professional and personal growth and development of Sailors and to develop and deliver the appropriate tools and opportunities to meet Fleet requirements.

Sea Warrior is one leg in the triad of supporting organizational processes of "Sea Power 21" - the Chief of Naval Operation's vision for the "way ahead". The program implements the Navy's commitment to the growth and development of its people. It will serve as the foundation of warfighting effectiveness by ensuring the right skills are in the right place at the right time.

Our goal at CNATT is to create Naval Aviation Sea Warriors - a Force in which all Sailors and Marines -active and reserve, afloat and ashore-are optimally assessed, trained, and

assigned so that they can contribute their fullest to mission accomplishment.

To understand more about the "Revolution in Training", see the Task Force EXCEL website at [www.excel.navy.mil](http://www.excel.navy.mil) or join the Navy's enterprise learning portal at [www.nko.navy.mil](http://www.nko.navy.mil) and see how we're building Sea Warriors.

## Selection Boards: The Truth in the Tank

By CDR Art Prunett, AMDO Community Manager  
LCDR Tom Popp, AEDO Community Manager

As Community Managers, we have had the opportunity now to participate in several statutory promotion boards and various NAVAIRSYSCOM command slating panels as Assistant Recorders. This article is intended to provide some insight on the processes for both events, which are very similar. More importantly, this article should re-enforce the need for every officer to take maintain the accuracy of his/her own record - the key to promotion and selection.

Whether it is a promotion board in which an officer is automatically considered for the next paygrade based upon time in service, or a NAVAIR command slating panel in which an officer voluntarily applies for a particular NAVAIRSYSCOM command position, the process in which an officer's record is reviewed is the same. The record is retrieved, reviewed by an assistant recorder, updated if required (or at least a gallant effort is made to update the record), then reviewed and "marked-up" by a voting member, and finally voted upon by all board or panel members.

Your record, consisting of your Officer Summary Record (OSR), Performance Summary Report (PSR) and microfiche contents, is retrieved from the Naval Personnel Command database in Millington, TN. For a promotion board, this is done electronically in Millington where the records are kept. For NAVAIR command slating panels, this is done by the AEDO/AMDO community management team who requests a copy your microfiche and a paper copy of your OSR/PSR. In both cases, your OSR/PSR is verified against your record and updated accordingly. The purpose of this verification is primarily because your OSR/PSR is a transcribed document from the

various elements and documents found in your microfiche record. Commonly, although not frequently, typographical mistakes are made during the transcription. Sometimes the errors are minor—misspelled duty assignments or duty stations. However, other errors are major ones such as incorrect numbers in the individual and summary group average blocks, incorrect numbers in the promotion recommendation summary block, or even an “X” in the wrong individual promotion recommendation category. Table 1 is a list of transcribed errors caught by the assistant recorders during the review of AEDO/AMDO records at the recent FY04 Rear Admiral Lower Half (O-7) and Captain (O-6) Restricted Line Promotion Boards. Other errors commonly found on the OSR/PSRs are gaps in FITREP dates that disrupt the continuity of the FITREPS listed on the PSR, as well as missing personal awards and citations.

**TRANSCRIPTION ERRORS--FITREPS TO PSR**  
Table 1

| PSR BLOCK        | CAPT<br>FY04<br>#<br>ERRORS | RDML<br>FY04<br>#<br>ERRORS |
|------------------|-----------------------------|-----------------------------|
| Station          | 1                           | 2                           |
| Duty             | 0                           | 1                           |
| Dates            | 2                           | 9                           |
| Traits           | 2                           | 7                           |
| Averages (all)   | 2                           | 7                           |
| Promotion<br>Rec | 0                           | 4                           |
| Report Type      | 5                           | 6                           |

Although it is the responsibility of the Assistant Recorders to verify the OSR/PSR prior to the board member’s review, it is not the Assistant Recorders’ responsibility to ensure that all pertinent documentation is maintained in an individual’s record. If documentation is missing, the assistant recorders make every effort to contact the officer concerned in order to try and obtain the missing information in time for that particular board. However, the actual responsibility of maintaining one’s record lies with the individual. It is recommended that, at a minimum, an individual review his/her record at least 4-6 months prior to the board in which their record will appear. This affords the officer an opportunity to identify missing documentation, acquire that documentation and forward it to the appropriate office at the Naval Personnel Command in Millington. Reviewing your record is now easier than ever by going to [www.bol.navy.mil](http://www.bol.navy.mil) and then

providing the requisite information to access your OSR and PSR.

When an Assistant Recorder identifies missing information from an officer’s record and requests that the information be submitted to update the record for a particular board or panel, the information is utilized solely for that purpose. After the board or panel has adjourned, all documentation sent to update the record for the particular promotion board or slating panel is subsequently destroyed and does not become part of one’s permanent record. Consequently, the officer must also submit the same information to the appropriate office code at the Naval Personnel Command to ensure the permanent record is updated as well.

Once a record has been completely reviewed by the Assistant Recorder, it is then randomly distributed to a board member for their review and mark up. In the case of promotion boards, records are distributed to members of the same community (same designator) as the individual who is up for promotion. For, it is those members best understand the career progression of similarly designated officers who are up for promotion. During NAVAIR Command slates, records are randomly distributed to the Navy Flag officers attending the slating panel as voting members. In both cases, records are marked up by the board member to highlight specific areas of outstanding performance and to annotate specific achievements found in block 41 of the individual FITREP. Once the board member completes the mark up, the record is then placed into a holding queue until all of the records have been reviewed and are ready for presentation to the entire voting panel.

During the voting process, each record is briefed by the reviewing member to the other voting members. Subsequently, all members vote on that particular record. The vote itself is actually a “confidence” vote, in which each member assigns a particular numerical to that record. Typically, a member who feels that a candidate is an “absolute must select” would vote 100. If they felt that he/she should probably be selected, then they might vote 75. A vote of 50 indicates that the member is not sure of the record while a vote of 25 indicates that the individual should probably not be selected. A vote of 0 is a no confidence vote by the board member on the individuals record. Once all of the votes are recorded, an average score is tabulated and assigned to the record.

After all of the records have been reviewed and voted upon, a scattergram is generated to show the spread of the average grades from highest to lowest. In the case of a promotion board where several individuals are selected from the board, there is usually a motion made to tentatively select a certain number of records that are clearly superior to the rest of those that were reviewed. There is also a motion to drop from further consideration those records that clearly did not score well enough to be considered for further review. The left over records in the middle of the scattergram are referred to as “the crunch”. These crunch records are then reviewed by different board members and the voting process repeats itself until enough individuals have been selected for promotion based upon the community needs for that particular pay grade. During a NAVAIR Command Slate, if one record is clearly superior to the other, a motion can be made to select that individual for the position. Otherwise, a motion is made to review again only the very best records for that particular position. If passed, those records are then reviewed by a different board member and the process repeats itself until a primary candidate and perhaps, one or two alternates are chosen.

Whether it is a promotion board or a NAVAIR Command Slate, the main point to remember is that the information contained on your OSR/PSR sheets is vital to your success during these boards. And, apart from the OSR summary page, all data on the remaining OSR sheets and PSR sheets is directly, but manually, transcribed from your FITREPS. The responsibility lies with the individual officer to ensure that these important documents are accurately generated and maintained by reviewing one’s own record. Further questions can be directed to your community managers.

**From the Desk of the AEDO Detailer**

*By: CDR Barbara “Timker” Bell  
AEDO Detailer*

**AEDO / Aviation AP Day**

We received excellent feedback on the Naval Air Systems Command (NAVAIR) sponsored Aerospace Engineering Duty Officer/Aviation Acquisition Professional

Day held at Patuxent River on 4 April 2003. VADM Joe Dyer, Commander NAVAIR, kicked off the day with his “view from the top” followed by briefings from all our AED and Aviation Acquisition Flag leadership. Please visit our website at [www.persnet.navy.mil/pers446/p446\\_webpage.htm](http://www.persnet.navy.mil/pers446/p446_webpage.htm) to view copies of all the briefings. Just as the CNO’s vision, **Sea Power 21**, is a must read for all members of the Navy, the briefs from the AED/AP Day are a **must read** for all our Aerospace Acquisition Professionals. So get up to speed on our community, the successes of our acquisition programs and our plans for your future. We plan to make this an annual or biannually scheduled event - don’t miss the next one.

### Detailing 101

The officer assignment process can be easy or difficult based on how well you educate yourself on the process. The process is simple, but involves making tradeoffs among the following three (sometimes mutually exclusive) needs to find the right job for you.

- \* The needs of the Navy
- \* Professional needs of the Officer
- \* Personal needs of the Officer

To begin with, the AEDO community is very well managed and is very open with community information. If you doubt this, go ask your former URL detailer. We publish a listing of all jobs, community members and high priority assignments (i.e. “hot fill” jobs); we educate our members on career progression; and we store all that information on our website. Professional career guidance is free and your detailer, community manager and all our senior AEDO leadership are receptive to giving career guidance, when asked. So, start asking some questions and get some professional career advice. Personal needs are important and only you know what these needs are unless your family has been identified as having special needs through enrollment in the Exceptional Family Member Program and your detailer has been notified.

So what is a savvy AEDO to do? Start planning your next job at least 12-18 months prior to your PRD. Identify your priorities. Is your priority career progression, meeting flight gates, broadening your professional background, staying in a particular geographic area or not? Go to our directory and look for jobs that are within 3 to 6 months of your PRD. Identify which jobs interest you, call the incumbents and find out whether the job

may be a good fit for you. Ask AED leadership for ideas as well. Create or update your resume. Then, call your detailer at least one year out with your job priorities identified to start your discussion. If you are ready to commit to a job 12-18 months prior to your PRD, your detailer most likely will commit to the job for you, too. The detailer is most open and willing to work with your priorities when you call well in advance. Be prepared for your detailer to present other ideas you might not have thought of and please be open to his or her suggestions. Keep working with your detailer towards a goal of receipt of written orders for the right job 6-9 months prior to PRD.

As always, if you would like to discuss your future in the AEDO community directly, please contact me, at 901-874-4108 or via email at [p446b@persnet.navy.mil](mailto:p446b@persnet.navy.mil) You may also contact our new O-6 Detailer and Senior Community Manager, CAPT Terry Merritt, at 301-757-8483 or via e-mail at [terry.merritt@navy.mil](mailto:terry.merritt@navy.mil) or our Community Manager, LCDR Tom Popp, at 301-757-8480 or via e-mail at [PoppTC@navair.navy.mil](mailto:PoppTC@navair.navy.mil) for additional career guidance.

I will be in the detailer job until August when I will return to NAVAIR and the PEO(I) staff. Thanks to everyone for your very candid discussions and for the honor to serve as your detailer. Please welcome CDR Dan Cuff, E-2 NFO, NPS Space Engineering graduate, former NAPRA Operations Officer and current Chief of Staff for CAPT Gahagan at SPAWAR Space Field Activity, as he takes over the headset and reins of one of the best O-5 jobs in our community.

### From the Desk of the AMDO Detailer

*By CDR Ron Burroughs  
AMDO Detailer*

The next Major AIMD selection board will convene in early November. During this board, all Commanders and Commander (selects), who have not previously been selected for a major AIMD, will be screened for assignment to this important professional milestone – equivalent to URL Commander Command. As this milestone represents the 1520 “Gateway to O-6,” it is extremely important that everyone understands the process.

I anticipate that the following nine Major AIMD Officer billets will be slated following this November’s Major AIMD Board:

CV 67 USS JOHN F KENNEDY  
CVN 70 USS CARL VINSON  
CVN 72 USS ABRAHAM LINCOLN  
CVN 73 USS GEORGE WASHINGTON  
CVN 74 USS JOHN C STENNIS  
AIMD OCEANA  
AIMD WHIDBEY ISLAND  
AIMD JACKSONVILLE  
AIMD PT MUGU

All eligible personnel will be notified individually of their eligibility and asked for their preferences should they be selected for one of these crucial billets. The selection board will select nine officers who will be designated as “Primary” selects. From the list of Primary selects, the detailer (NPC—446C), along with both the COMNAVAIRLANT and COMNAVAIRPAC Maintenance Officers (N422) will determine which officer goes to each AIMD billet. During this process, it may be determined that one (or more) of the Primary selects will not be available for immediate detail into one of the available billets. In this case, the officer will be placed into the “Bank”. This means that, although the officer is a “Primary” select, he/she will not be detailed into one of the Major AIMD officer billets until a later date – he/she is still a “Primary” select. In addition to the nine “Primary” selects, the board will also select five alternates who will be designated as “Alternate” selects (prioritized as first alternate, second alternate, etc...). If for some reason, one of the “Primary” selects cannot be detailed into one of the AIMD Officer billets from that slate, an “Alternate” select will be offered that billet. Alternate selects who are not offered an AIMD Officer billet will be re-screened at the next MAJOR AIMD Officer Selection Board – i.e. “Alternate” status is a temporary status which lasts only until the next board.

The MAJOR AIMD Officer board is an Administrative Board and is conducted in similar fashion to Statutory Promotion Boards. The board is composed of 1520 as well as URL Captains. And, as with all selection boards, the key to selection is documented, sustained superior performance. Ensure your record is accurate and up-to-date. If your last FITREP said you were “Ranked 1 of 39, regardless of designator” and recommended you for Flag Officer, but the

FTTREP is missing from your record – then it never happened!

Finally, I would like to say I've enjoyed serving our community as your detailer, it's been a great privilege to do so but it's time to turn this wonderful opportunity over to CDR Marty Sherman who is completing his tour as the AIMD Officer on board USS CONSTELLATION CV-64. Our turnover will be complete at the end of July. I encourage you to contact him at (901) 874-4108 or DSN 882-4108. His email address will be posted on the AMDO website ([http://www.persnet.navy.mil/pers446/AMDO\\_webpage.htm](http://www.persnet.navy.mil/pers446/AMDO_webpage.htm)) shortly after he checks on board.

**CAPT John Scanlan, Head AED/AMD  
Detailer ,Departing**

*By CDR Art Pruett, AMDO Community Manager*

CAPT John Scanlan recently transferred to NADEP Jacksonville to assume the duties as Executive Officer. For the past 12 months, "SCANNER" superbly led the AED/AMD Communities as well as the NAVAIR 7.9 competency. His comprehensive grasp of all matters relating to acquisition policy, manpower and personnel issues affecting Naval Aviation greatly assisted NAVAIR leadership in making critical acquisition and ensured it's continued outstanding support to the fleet. CAPT Scanlan will be sorely missed. We appreciate the incredible support and outstanding esprit de corps that he ALWAYS provided to the detailing and community management teams.

Welcome aboard to CAPT Terry Merritt who has relieved CAPT Scanlan as AIR 7.9 and the AED/AMD CAPT Detailer. CAPT Merritt recently completed her tour at OPNAV N00T and can be reached at her new phone number: 301-757-8483.

**Community Manager's  
Corner**

*CAPT Terry Merritt, USN  
CDR Art Pruett, USN  
LCDR Tom Popp, USN*

**CONGRATs to our new APC members:**

LCDR Karl Andina 1510  
LCDR Ralph Braund 1510  
LCDR Daniel Chisholm 1510  
LCDR Patrick Durbin 1527  
LCDR David Ferreira 1520  
CDR Thomas Flynn 1520  
LCDR Albert Medford 1520  
CDR Robert Murphy 1510  
LCDR Mark Nieto 1520  
CDR Scott Orren 1510  
LCDR Michael Parker 1527  
LCDR Steven Phares 1520  
LCDR Thomas Seidenwand 1520  
LCDR Michael Way 1527  
CDR Blake Weber 1510  
CDR Edward Wolski 1510

**NAVAIR SLATE (21 OCT 02) Results:**

PMA-265 - F/A-18  
CAPT Donald E. Gaddis 1510

PMA-234 – EA-6B  
CAPT Kenneth Smolana 1320

PMA-201 – Conventional Strike Weapons  
CAPT David A. Dunaway 1510

PMA-242 – Defense Suppression  
CAPT Mark Converse 1510

**NAVAIR SLATE (24 APR 03) Results:**

PMA-264 Air ASW Systems  
CAPT John Harrington 1320

PMA-202 Aircrew Systems  
CAPT Thomas Glass 1520

PMA-207 Support/Commercial Derivative  
Aircraft  
CAPT Mark H. Stone 1520

CO, NAVAIR Orlando  
CAPT Stephen Burris 1510

CO, HX-21  
CDR Gordon D. Peters 1510

CO, VX-31  
CDR Timothy J Morey 1510

Note: Slating results for V-22 (PMA-275) and Cruise Missile Command and Control (PMA-281) will be announced upon approval from the Acquisition Workforce Oversight Council and ASN(RDA).

**POC info:**

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Patuxent River, MD 20670-1549

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47122 Liljencrantz Road  
Bldg. 440, Unit 7 Rm 18  
Patuxent River, MD 20670-1549

## Reference Corner

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

(via regular mail)  
NAVY PERSONNEL COMMAND  
PERS-311  
5720 Integrity Drive  
Millington, TN 38055-3110  
DSN 882-3316/COMM(901)874-3316

(via Certified Mail/FEDEX)  
NAVY PERSONNEL COMMAND  
PERS-311  
Bldg 769 – Wood Hall  
5751 Honor Drive  
Millington, TN 38055-3110

\*\*Photograph. The official requirement to submit a photograph is within three months after acceptance of each promotion. At minimum you should be in your current paygrade. Photographs can be submitted on NAVPERS 1070/10 to:

NAVY PERSONNEL COMMAND  
PERS-313C  
5720 Integrity Dr.  
Millington, TN 38055-3130

\*\*Microfiche. Order your microfiche online at [BUPERS Access](#). It will be mailed to your command - (to your command's official address) No fax or signature required! Log on to [BUPERS Access](#), click Programs and then Microfiche Req.

BUPERS Access should be your primary source for obtaining your Microfiche. Only if you cannot access BUPERS Access should you fax or mail in the [Microfiche Order form](#) and mail or fax it to: (Don't forget to sign the form!)

NAVY PERSONNEL COMMAND  
PERS-313C  
5720 Integrity Dr.  
Millington, TN 38055-3130  
DSN 882-3415/3596  
COMM(901)874-3415/3596  
FAX 882-2664 COMM (901) 874-2664

\*\*Performance Summary Record (PSR)  
Officer Summary Record (OSR)  
Officer Data Card (ODC)

Go to the BUPERS Home Page  
[www.persnet.navy.mil/index.html](http://www.persnet.navy.mil/index.html)  
and click on "BUPERS On-Line" link;

log in using your SSN and password, click Performance Summary Record, click View Now!

\*\*Have you updated your contact information on the AEDO /AMDO web site lately? If not, please click on the appropriate website and update your contact info. It will only take a couple of minutes and will greatly assist your Detailer! Thank you for your support!

\*\* Download the latest AEDO or AMDO E-Directory at the respective website. User Name "aed-p446"  
Password "engineering"

\*\*Medals. If missing an award send a copy of signed citation to Navy Department Board of Decorations and Medals (print or type your SSN in upper right corner).

(SECNAV Awards Board & Unit Awards)  
Navy Department  
Board of Decorations and Medals  
Attn: N09B13  
2000 Navy Pentagon  
Washington, DC 20350-2000  
COMM (202) 685-1770 DSN 325

(CNO Awards Board & Personal Awards)  
Chief of Naval Operations  
Board of Decorations and Medals  
Attn: N09B13  
2000 Navy Pentagon  
Washington, DC 20350-2000  
COMM (202) 433-4992 DSN 288

\*\*Letters to the Selection Board:

President, FY0X (Grade) (Competitive Category) Promotion Selection Board  
Department of the Navy  
NAVY PERSONNEL COMMAND  
PERS 80  
5720 Integrity Drive  
Millington, TN 38055-0000  
FAX 882-2746 COMM(901) 874-2746

\*\*Educational Achievements:

NAVY PERSONNEL COMMAND  
PERS 313G  
5720 Integrity Drive  
Millington, TN 38055-3120  
FAX 882-2660 COMM(901) 874-2660

## Web Sites:

**AEDO/AMDO info:**

[http://www.persnet.navy.mil/pers446/p446\\_webpage.htm](http://www.persnet.navy.mil/pers446/p446_webpage.htm)

**AMDO info:**

<http://www.amdo.org>

**DAWIA and APC info:**

<http://dacm.secnav.navy.mil>

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 AED 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 Art Pruett, USN  
NAVAIRSYSCOM HQ (AIR 7.9D)  
47122 Liljencrantz Road  
Bldg. 440, Unit 7 Rm 18  
Patuxent River, MD 20670-1549  
[PruettA@navair.navy.mil](mailto:PruettA@navair.navy.mil)