



Collaboration yield improvements in anti-submarine warfare

By the Commander Patrol and Reconnaissance Group Community

For the better part of a century, the men and women of the Maritime Patrol and Reconnaissance Force (MPRF) have contributed to core competencies of maritime surveillance and advancements in air anti-submarine warfare (ASW). In light of the de-

mand for excellence in the maritime arena, Commander, Patrol and Reconnaissance Group directed the establishment of a Degradation Analysis Team (DAT) to identify synergies between fleet operators and mission system engineers at Naval Air Sys-

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To read how a cost analysis team didn't just reduce expenditures but also improved the KC-130 community's readiness, click [here](#) or go to Page 2.

Welcome aboard!

Rear Adm. (sel.) C.J. Jaynes, currently program manager for Naval Air Traffic Management Systems Program Office, Naval Air Systems Command

(NAVAIR), was named as NAVAIR assistant commander for Logistics. Jaynes will relieve Rear Adm. Timothy Matthews who was recently



Rear Adm. (sel.) C.J. Jaynes

named as director, Fleet Readiness Division, N43, Office of the Chief of Naval Operations. Jaynes is a plankowner in Naval Aviation's continuous process improvement efforts and was instrumental in introducing the methodologies to Naval Air Station Lemoore's maintenance activities more than 10 years ago.

100 years of putting the 'A' in MAGTF



Click here to learn about related Marine Aviation Centennial at: <http://www.marines.mil/unit/aviation/centennial/Pages/default.aspx> or go to Page 8.

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An aerial shot over Iraq of a KC-130 “Hercules” assigned to Marine Aerial Refueler-Transport Squadron Two Thirty Four (VMGR-234) fires flares used to counter attack surface to air missiles. (U.S. Marine Corps photo by Lance Cpl. Andrew Williams/Marines.mil)

Cost Analysis Team: Effective communication yields cost savings and heightened awareness for the KC-130 community

By the KC-130 TMS Team

Since the implementation of its Cost Analysis Team (CAT), the KC-130 community has gained numerous tangible and intangible benefits.

No official forum existed for cost analysis across the community prior to the implementation of the CAT. Common practice was an individual

unit focus and the duplication of efforts towards the same end state, with no definitive resolution within the community. In the past, each Marine aviation logistics squadron (MALS) would forward its supply/maintenance issues through their respective Marine aircraft wings (MAWs), or directly send them to Support /Commercial Deriva-

tive Aircraft Program Office (PMA-207) or the C-130 Fleet Support Team (FST) without sharing any of their issues or lessons learned with the other MALS. This prevented information flow through all MALS which ultimately could have saved time and prevented cost spikes.

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Lt. Jae Kim, assigned to Patrol Squadron (VP) 4, reviews aerial images of northeast Japan aboard a P-3 aircraft during an aerial survey of the region. The squadron provides communication and real-time capabilities, which allowed the Navy to determine where to provide vital humanitarian and relief support to tsunami stricken areas of Japan in this photo dated March 22. (Photo by Mass Communication Specialist 2nd Class Devon Dow/Navy.mil)

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tems Command (NAVAIR) with the goal of developing solutions specific to improvements in the on-station reliability of the P-3C's Single Advanced Signal Processor (SASP) that provides post processing of acoustic data.

With more than 250 years of combined operational maintenance and engineering process improvement experience, experts from the Maritime Patrol and Reconnaissance Aircraft Program Office (PMA-290), Naval Air Technical and Engineering Service Command (NATEC), the Patrol Squadron Fleet Replacement Squadron (VP-30), industry partners, and deckplate warriors from Patrol and Reconnaissance Wing 11 began to collaborate monthly. The team combed through mountains of data, searching for commonalities in the mission set discrepancies.

The end result of their root-cause analysis was a list of barriers to operational effectiveness that included areas of improvement in system troubleshooting for the fleet operators and maintainers, software modifications, and publication refinement. PMA-290 put together a team of experts, who traveled to the various wings in order to better understand the scope of the problem. A mixture of former acous-

tic operators and software engineers observed current pre- and post-flight practices, listened to the challenges faced by the Sailors on the hangar deck, and then provided hands-on maintenance training.

Armed with this detailed information, the NAVAIR engineers identified and went to work on resolving one of the leading SASP reliability issues: the Multi-protocol Prodius Digital Channel (MPDC) cards. A solution was developed and expeditiously tested with great success during a fleet training exercise. Committed to continuous process and functionality improvement, the DAT continued to encourage fleet trouble report submissions and began to systematically attack other reliability degraders previously masked by the MPDC issues.

The emphasis on ASW mission system reliability and aircrew proficiency paid huge dividends. and the rapid implementation of the MPDC upgrade helped to significantly reduce the number of failures.

Cultural improvements derived from the SASP DAT involved policy and procedural changes designed to instill habits of best maintenance practices and the clear and consistent communication of maintenance discrepancies up, down, and across the chain of command. The material condition of SASP mission systems, targeted during 28-day ASW Systems Health and Welfare Conditional Inspections, have benefited from an increased focus of effort. Maintenance publications and crew station manuals have been reviewed and updated to include a comprehensive system troubleshooting guide.

Additionally, NAVAIR's technical specialists, strategically positioned at each of our VP fleet concentration areas, have formed an integral relationship with our aircrews and maintainers. Through daily interaction, they provide consistent real-time support and training, and are the conduit for the critical feedback between fleet operators and the mission system engineers. Regarding the positive impact that these "tech reps" have on our force, Capt. Aaron Rondeau, P-3 department head at PMA-290, said that he was

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Cpl. Erin C. Pesti, a KC-130J crew chief with Marine Aerial Refueler Transport Squadron 152, prepares to initiate her preflight checks on a KC-130J Hercules in this photo dated April 3. (Photo by Cpl. Rashaun X. James, 2nd Marine Aircraft Wing (Fwd)/Marines.mil)

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Now, the CAT is fully functional and producing definitive results. It is organized into four tiers: Tier 1 members include organizational- and intermediate-level representatives from the flying squadrons and the MALS. The Tier 1 CAT uses Aviation Financial Analysis System Tool (AFAST) to identify trends and explain cost variances across the type/model/series (TMS).

Tier 2 includes the MAW Aviation Logistic Department (ALD) and representatives from Operations and the Comptroller.

Tier 3 consists of Marine Forces, ALD, Operations, and the Comptroller.

Lastly, Tier 4 is rounded out with Headquarters Marine Corps and Commander Naval Air Forces (CNAF). Naval Air Systems Command (NAVAIR), Naval Inventory Control Point (NAVICP), and Defense Logistics Agency (DLA) are engaged when unusual cost circumstances or conditions warrant.

With the use of AFAST data, trends and abnormal costs are analyzed to pinpoint possible issues. These issues are further discussed at the appropriate level for necessary clarification and/ or a solution. Monitoring and follow-up ensue in order to produce long-term assessments.

The CAT process has significantly improved communication between the fleet and resource providers. The KC-130J TMS Team enjoys a very responsive and productive relationship with all of its resource providers such as PMA-207, the C-130 FST, NAVICP, DLA and all supporting MALS. The value of this relationship in response to community readiness, financial savings, and performance barriers cannot be overstated.

As an example of the effectiveness of the continuous monthly communication forums within the KC-130J community, the CAT identified excessive Aviation Consolidated Allowance List (AVDLR) cost expenditures associated with the ALR-56M Radar Warn-

ing Receiver system. (RWR detects incoming radar signals, identify and characterize these signals to a specific threat and alert the aircrew) Through coordination with PMA-207 and the FST, an interim test procedure was developed and implemented fleet-wide to reduce excessive component failures arising from a faulty power supply. Additionally, a preliminary Engineering Change Proposal is in work to correct the power supply deficiency. This effort alone has produced a decrease of more than \$2 million in KC-130J AVDLR costs over a five-month period.

Also, the CAT identified excessive beyond the capability of maintenance (BCM) costs related to poor bench test procedures for the panel mounted oxygen regulators and cargo winches. Coordination with PMA, FST, and the vendor allowed for improved test and check procedures and specific maintenance training at the intermediate level. These actions reduced the BCM rates and achieved a cost avoidance of \$400,000 in Fiscal Year (FY) 10.

Cost avoidance and reliability initiatives with systems such as the ALR-56M, the panel mounted oxygen regulator, and the procurement of propeller blade covers for protection during transport contributed to an execution index improvement from 0.96 in FY 09 to 1.38 in FY10. Initiatives such as these further led to an improvement in overall budget management and a cost per hour (CPH) decrease.

Through the cohesive efforts and participation of all pertinent tier teams, combined with the astute leadership and the ambition of flight line manpower, the KC-130J community experienced a ready-for-tasking gap reduction of 39 percent. Bottom line, more aircraft were available to the commander to globally source training (Weapons Tactics Instruction, Mojave Viper) and real world contingencies to

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For your SA

New capability delivered to the fleet

Engineers at Naval Air Systems Command, Lakehurst, N.J., work on the EMALS trough at the System Functional Display site (left photo). Naval Air Systems Command's Aircraft Launch and Recovery Equipment program (PMA-251) delivered the first set of Electromagnetic Aircraft Launch System (EMALS) components to the future Gerald R. Ford (CVN 78) aircraft carrier May 9. EMALS is a complete carrier-based launch system designed for Gerald R. Ford (CVN 78)



and future Ford-class carriers. The system will provide the capability for launching all current and future carrier aircraft platforms – lightweight unmanned to heavy strike fighters. (Below) An F/A-18E Super Hornet prepares to launch during a test of the Electromagnetic Aircraft Launch System (EMALS) at Naval Air Systems Command, Lakehurst, N.J., in this photo dated Dec. 18. (U.S. Navy photo/NAVAIR and Navy.mil)

For more information, go to <http://www.navair.navy.mil/index.cfm?fuseaction=home.NAVAIRNewsStory&id=4585>.



NAVICP's new name

Naval Inventory Control Point will take on a new name on July 1 – Naval Supply Systems Command (NAVSUP) Weapons Systems Support. The change will provide customers with a clearer understanding of

the capabilities of all NAVSUP's organizations. To read more, click here or go to *NAVSUP Echelon III and IV Command Names to Change* at http://www.navy.mil/search/display.asp?story_id=59414.

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support the warfighter on the ground. The KC-130J aircraft continues to answer that call with support to Operation Enduring Freedom-Afghanistan, humanitarian relief in Pakistan and support to Marine Expeditionary Units in the Mediterranean Sea and the Horn of Africa with the transport of cargo and personnel, aerial refueling, aerial delivery, as-

sault support and battlefield illumination. ■

Photo on Page 1: Marines and Sailors disembark from a KC-130 Hercules during a humanitarian assistance mission in response to the earthquake and tsunami that struck Japan March 11. (U.S. Marine Corps photo by Master Sgt. Leo Salinas/ Navy.mil)

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impressed with the training the aircrews were receiving. "This is an additional level of mentorship that some of these young chiefs and Sailors have never received, especially when combined with trouble-shooting a difficult system."

In spite of flight line gaps experienced by the fleet over the past year, MPRF combat aircrews have demonstrated numerous successes at home and have exceeded expectations of theater and combatant commanders abroad during multiple high-visibility, real-world ASW prosecutions. The efforts and results of the P-3C SASP Degradation Analysis Team speak for themselves. Their bottom to top approach to solving real issues involved more than simply addressing hardware or software problems. They applied their vast experience to identify and analyze potential root causes to barriers impeding operational excellence on-station. Then they set about addressing the tough issues associated with training, culture, and the habits of the aircrew and maintenance professionals.

Beginning with a clear end state, the DAT along with its fleet partners, continues to identify and attack systemic issues. The lessons learned as a result of the SASP DAT are being applied across the fleet and will enable the Maritime Patrol and Reconnaissance Force to continue to be the Navy's premier submarine hunter as it transitions from the P-3C *Orion* to the P-8A *Poseidon*. ■



Aviation Machinist's Mate Airman Matthew Miller removes a spinner from a P-3C Orion assigned to the Fighting Tigers of Patrol Squadron (VP) 8 as part of an aircraft prop balance and vibration analysis in this photo dated March 25. (Photo by Mass Communication Specialist 2nd Class Pedro A. Rodriguez/Navy.mil)

Links of interest

- F-35C test aircraft exceed test and evaluation goals**
The F-35C is undergoing test and evaluation to evaluate flutter, loads and mission systems at Naval Air Station Patuxent River prior to eventual delivery to the fleet
<http://www.navair.navy.mil/index.cfm?fuseaction=home.NAVAIRNewsStory&id=4581>
The F-35C test program is making rapid progress toward initial carrier suitability testing this year at Joint Base Lakehurst-McGuire-Dix in New Jersey.
http://www.navy.mil/search/display.asp?story_id=60439
To see the *All Hands* video on the testing, go to:
<http://www.navy.mil/swf/mmu/mmplyr.asp?id=15792>
All Hands Radio News also focused on the event:
<http://www.navy.mil/navydata/radioPlay.asp?id=4413>
- JSF Depot Activation Team tours FRCSE, reviews repair capabilities**
A 14-member team traveled the country to review the capabilities at three U.S. Air Force and three U.S. Navy maintenance depots to evaluate each facility's processes and products and to provide guidance and support during the implementation phase.
<http://www.navair.navy.mil/index.cfm?fuseaction=home.NAVAIRNewsStory&id=4587>
- Custom tool to save weeks in F-35B test and evaluation**
The tool will be used when performing maintenance on a critical part of the F-35B three-bearing swivel module used for short take-off and vertical landing operations.
<http://www.navair.navy.mil/index.cfm?fuseaction=home.NAVAIRNewsStory&id=4576>
- JSOW C-1 completes 2nd captive carry test**
Captive carry tests are simulated launches where the weapon stays on the aircraft.
<http://www.navair.navy.mil/index.cfm?fuseaction=home.NAVAIRNewsStory&id=4577>
- NAE Air Plan[#]**
Future Readiness Cross Functional Team
Talking points on the Future Readiness Cross-functional Team, their successes and current initiatives.
https://www.portal.navy.mil/comnavairfor/Naval_Aviation_Enterprise/Air%20Plans/17%20-%20May11%20Air%20Plan.pdf
- Rhumb Lines[#]**
NAE: Partnering for Smarter, Faster, Combat-ready Naval Aviation
This edition focuses on the Naval Aviation Enterprise initiatives to achieve cost-effective readiness.
https://www.portal.navy.mil/comnavairfor/Naval_Aviation_Enterprise/AirSpeed%20Newsletters/Newsletter%20repository/Rhumb%20Lines/NAE_Partnering_for_Smarter_Faster_Combat_ready_Naval_Aviation.pdf
- USS George H.W. Bush departs for maiden deployment**
The last Nimitz-class aircraft carrier "sets sails."
http://www.navy.mil/search/display.asp?story_id=60273

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8. **DoN CPI Gram – May[#]**

In this issue: A reminder about the DoD/DoN Performance Symposium; A detailed explanation on Mr. Fanning's memo; and how to become involved with the DoN CPI Communications Working Group.

https://www.portal.navy.mil/comnavairfor/Naval_Aviation_Enterprise/AirSpeed%20Newsletters/Newsletter%20repository/CPI%20News/DON_CPI_Gram-May_Final.pdf

Memo from Mr. Eric Fanning, Deputy Undersecretary of the Navy for Business Operations and Transformation Office of the Under Secretary of the Navy[#]

A communiqué on the future use of the Continuous Process Improvement Management System to capture and document accomplishments.

https://www.portal.navy.mil/comnavairfor/Naval_Aviation_Enterprise/AirSpeed%20Newsletters/Newsletter%20repository/General%20documents/CPI_FANNING_05172011.pdf

9. **NAVSEA's Who's on Watch[#]**

Read how Naval Station Warfare Center Port Hueneme Division White Sands gained efficiencies with facility re-use Plan and the efforts of Naval Undersea Warfare Center Newport Code 25 Engineers to Increase efficiency and avoid cost of weapon firings events during at-sea test and evaluation.

[https://www.portal.navy.mil/comnavairfor/Naval_Aviation_Enterprise/AirSpeed%20Newsletters/Newsletter%20repository/WOW%20Newsletter%20\(NAVSEA\)/MAY2011WOW.PDF](https://www.portal.navy.mil/comnavairfor/Naval_Aviation_Enterprise/AirSpeed%20Newsletters/Newsletter%20repository/WOW%20Newsletter%20(NAVSEA)/MAY2011WOW.PDF)

10. **Navy names next aircraft carrier *USS John F. Kennedy***

Designated CVN 79, the aircraft carrier honors the 35th President of the United States and pays tribute to his service in the Navy, in the government and to the nation.

http://www.navy.mil/search/display.asp?story_id=60686

Marine Aviation Centennial Links

1. **Theme: "100 years of putting the 'A' in MAGTF"**

The yearlong celebration will be held through to May 2012

<http://www.marines.mil/unit/hqmc/Pages/MarineCorpsHonorsAviationCentennialWithYear-longCelebration.aspx>

2. **Aviation reinvented Naval operations post WWII**

A brief history on how air power ensured victory in the Pacific.

<http://www.marines.mil/unit/mcascherrypoint/Pages/AviationReinventedNavalOperationsPostWWII.aspx>

3. **History: Naval, Marine Aviation jump forward into age of jets**

A history of how technology gave Marines the tactical advantage in the skies.

<http://www.marines.mil/unit/mcascherrypoint/Pages/HistoryNaval,MarineAviationJumpForwardIntoAgeOfJets.aspx>

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Content in this publication has been cleared for release.