



JSWAG Conferences

The next full-attendance JSWAG is scheduled for March 22-24, 2011 in Virginia Beach, Va.

The JSWAG working meeting is scheduled to take place in Aug. 15-18, 2011.

For updates on these meetings, keep watching the JSWAG Web site for updates, registration opportunities, and the Lu Roberts award voting. Visit www.navair.navy.mil/jswag.

Other Conferences

- DoD Maintenance Symposium & Exhibition -- Tampa, Fla.
Nov. 15-18, 2010
- Reliability & Maintainability Symposium -- Orlando, Fla.
Jan. 24-27, 2011
- Dixie Crow Symposium -- Warner Robins, Ga.
March 20-24, 2011
- MRO -- Miami, Fla.
April 12-14, 2011
- AUSA Sustainment Symposium -- Richmond, Va.
May 10-12, 2011

Newsletter Contacts

JSWAG Coordinator
jswag@navy.mil

Jim Jenkins -- Editor
james.l.jenkins@navy.mil

JSWAG Creates Military Handbook Highlighting EWIS Best Practices

The NAVAIR Wiring Systems Team (AIR 4.4.5.3 & 6.7.1.3) working with the Joint Services Wiring Action Group (JSWAG) created a military handbook designed specifically for use by aircraft electrical maintenance professionals, as a wiring systems inspection tool that offers clear and concise instructions. It is a quick and easy-to-use guide showing specific acceptable and unacceptable examples of wiring systems installations.

This new effort "Guidelines for Inspection of Electrical Wiring Interconnect Systems Handbook," MIL-HDBK-522 was created through a JSWAG action chit proposed by fleet aircraft maintainers looking for easier, more efficient ways to perform their work. They simply wanted a "one-stop-shop" to look for, and find some of the most common inspection criteria and practices for wiring and fiber optic systems.

"We decided to venture into creating a document that shows the acceptable and unacceptable criteria on our own," said Timothy Faux, Logistics Manager with the NAVAIR Wiring Systems Team. "We then took a fleet survey of Navy and Air Force personnel to see what would be the most useful format. The simpler, illustrated handbook format won out over the NA 01-1A-505-1 technical manual format."

The JSWAG Executive Steering Group conducted research to validate the need for an electrical wiring interconnect systems (EWIS) best practices guide, and found a commercial standard and a NASA standard, but neither met the special needs for DoD applications. The JSWAG Team created a unique wiring awareness guide to address clear examples on typical military aircraft installations. According to their findings, a lack of specific guidance led to marginal and poor installation practices. Some of the pivotal conditions which needed attention were connector corrosion, wire installation clearance and wire chaffing, which eventually cause arcing

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Handbook

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failures. Other areas included terminal lugs, circuit breakers and chafe protection devices. Altogether the handbook addressed 33 components and focus areas with pictures and drawings and their applicable references.

Mainly, the wiring team focused on how similar documents in the fleet show their solutions to problematic issues. Faux said that most military documents do a very good job to show what is acceptable and how to perform the job correctly but very few, if any, show from an inspection standpoint, what is not acceptable. This new handbook is specifically geared to the inspectors so that they can determine how well a particular job has been

performed. Now the inspectors have an easy to follow guide to help them determine the level of quality.

“So, if you’ve never seen bad criteria you may not recognize it, Faux said. “The point of this manual is to show you the good and bad side-by-side so, as an inspector; you can go out and see what is acceptable comparably to what is bad in the technical manual.”

The new MIL-HDBK-522 on “Guidelines for Inspection of Electrical Wiring Interconnect Systems Handbook” is available on the Web at the following site: <https://assist.daps.dla.mil/quicksearch>. 

NAVAIR Wiring Team Produces Training Video

The NAVAIR Wiring Systems Team (AIR 4.4.5.3 & 6.7.1.3), working with the JSWAG, Special Skills Training Branch (AIR 6.7.5.2) and Center for Naval Aviation and Technical Training (CNATT), has created a short training video that will provide all maintenance ratings a quick refresher on how to work with and/or around aircraft Electrical Wiring Interconnects Systems (EWIS).

The video encompasses information on how wiring is employed in military aircraft. It addresses the importance of EWIS being treated as a distinct and vital system, best maintenance practices, and the importance of safety while working with and/or around wire on aircraft.

After taking more than a year to create, the video is ready for dissemination to maintenance shops around the Fleet. To order, go to www.defenseimagery.mil and use the PIN #806881. A similar video created to explain the importance of working with and/or around fiber optic interconnects systems is also



Sailors perform a wiring inspection on the backbone of an F-14 Tomcat at sea.

in the final stages of completion and is expected to be distributed by the end of calendar year 2010.

In addition, the JSWAG has spearheaded an effort to create short training videos that intend to explain in greater detail various tasks, such as crimping, connector assembly, splice installation, cable repair, etc.,

expected to be mastered by wiring-related maintenance ratings. Each video will be approximately 5 to 10 minutes in duration at the most and are currently being filmed and edited.

For more information on these training videos and other wire-related information, visit www.navair.navy.mil/jswag. 