



*Presented to:*

**AAAA 13<sup>th</sup> Luther G. Jones Army  
Aviation Depot Forum**

**CCAD Readiness Panel**

*AED Engineering Support  
for  
CCAD Readiness*



**DISTRIBUTION A. Approved for public release: distribution unlimited.**

***TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.***

*Presented by:*

**David Schlesinger**

**Engineer, Avion Solutions**

**U.S. Army Aviation and Missile Research,  
Development, and Engineering Center**

**4 October 2017**



# Maintenance Engineering Division (AEM)



**We are AED's logistics experts, focused on providing outstanding airworthiness engineering to all types of maintenance and spares activity.**



**TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.**



U.S. ARMY  
**AMRDEC**

# AED SUPPORT TO CCAD READINESS



- **AED supports:**

- Overhaul/RECAP of airframe and components
- Crash damage repair
- New repair development



# TAILBOOM DAMAGE T/N 07-07035 (AH-64D)



# CRASH DAMAGE T/N 10-09008 (AH-64E)





U.S. ARMY  
**RDCECOM**

## BLACK HAWK AIRCRAFT SUPPORT



- **US Army has been executing RECAP since 2003, converting to a theory of constraints approach in FY17; AED supports with engineering expertise**
- **32 UH-60A to UH-60L RECAPS accomplished in FY17**
- **Currently the H-60 line is in the process of preparing and converting to the H-60V line. This conversion will be the Army's first attempt at designing and performing upgrade, work will be in conjunction with the overhaul of that aircraft**
- **2 On Condition Maintenance (OCM)/ crash damaged, including H-60M.**

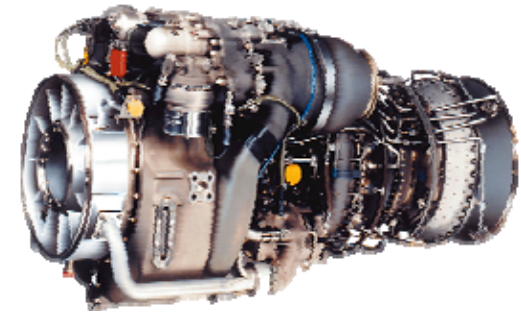


**TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.**

- **AED supports Cross-service workload at CCAD**
  - 3 Pave Hawks completed depot maintenance in FY17
  - USMC AH-1W and USN/USAF UH-1N, component support



- **399 T700 engines have been inducted for overhaul at the Depot**
- **AED processed 217 MECs for the T700 Engine**
- **By working with GE, the DMWR was developed for Multi-tier maintenance:**
  - **Minor Repair**
  - **Major Repair**
  - **Recapitalization**
- **A repair procedure was implemented to prevent the intermittent oil leak present with the B-Sump that was present over the last 2 decades.**





- **CH47 Cargo Team had developed repair and overhaul for 50 swivel housings to fulfill immediate gap in supply in 2014 (all models)**
- **CARGO PM tasked AEM to capture and/or develop all technical data and graphics for inspection, repair, overhaul, testing to create CH-47F DMWR 1-1650-301 IAW MIL-STD-40051-2C**
- **CH47F Aft Landing Gear Swivel Housing Assembly, P/N 414L2332-5, DMWR 1-1650-301, entire manual created in IADS**



- **A significant number of EPUSHA Pump assets were failing on aircraft, and new assets had to be acquired**
- **CARGO PM tasked AEM to capture and/or develop all technical data and graphics for inspection, repair, overhaul, testing to create a CH-47F DMWR IAW MIL-STD-40051-1C**
- **CH47F EPUSHA Pump, P/N 3032171-001, Drafted DMWR in review; waiting on validation and verification**



- **3 main goals of SAFR parts process:**
  - Reduce O&S costs for Army aircraft
  - Increase fleet readiness
  - Improve safety
- **Return to Service Success: ~95% of Repairables**
- **Reparable Parts to CCAD in FY17: 425 ea. @ \$8.9M in Cost Avoidance**



**TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.**

