Army Corrosion Prevention and Control Program: What is the Why?

Courtesy AMCOM Corrosion Program Office

The prevailing opinion across the Department of Defense and the Army is having an effective Corrosion Prevention and Control program is vital to successful unit operations and their support for ground and air operations and the commanders on the battlefield. The Department of Defense (DoD) recognizes that Corrosion Prevention and Control (CPC) planning is critical to acquisition program success (see the Defense Acquisition Guidebook (DAG, Section 4.3.18.5). The need for CPC planning is paramount:

1. **It Is In Law—** CPC planning is mandated in 10 U.S.C. 2228 and is a required part of 10 U.S.C. 2366(b) certification.

2. **It Is In Policy**— CPC Planning is required in DOD Directive (DODD) 5000.01, DoD Instruction (DODI) 5000.02, DODI 5000.57, and other policies.

3. **It Is Costly Not To—** Maintenance costs for fixing DoD equipment damaged by corrosion run $23 **billion** a year. That equates to 25 percent of every maintenance dollar spent (Defense, 2014, p. 2).

Each branch of the military has its corrosion program designed explicitly for its equipment requirements. For the Army, AR 750-59 *Corrosion Prevention and Control for Army Material (Mar 14)* Para 2-9 states that unit commanders **will**:

a. Appoint corrosion monitor(s) on unit orders, as an additional duty.

b. Ensure corrosion monitors receive training in corrosion prevention, mitigation, and safety from an accredited corrosion course or program (Army H. D., 2014, p. 4).

However, according to the Secretary of the Army's memorandum titled, "Prioritizing Efforts—Readiness and Lethality (Update 12) which was based on the memorandum from the

Secretary of Defense dated 21 July 2017 titled, "Administrative and Personnel Policies to Enhance Readiness and Lethality," it eliminates the Headquarters Department of the Army requirements for "Commanders to publish appointment orders for corrosion monitor(s) as an additional duty" (AR 750-59) (Army D. o., Prioritizing Efforts-Readiness and Lethality (Update 12), 2018). Although commanders have been relieved of the responsibility of appointing a corrosion monitor(s) on unit orders, this will not eliminate the commander's obligation of passing the Forces Command (FORSCOM) Aviation Resources Management Survey (ARMS) when it comes to Corrosion Prevention and Control. To obtain a current copy of all FY20 FORSCOM ARMS Checklists, they are located at **https://www.jtdi.mil/group/forscom/home**. You must have access to Joint Technical Data Integration (JTDI) to download ARMS Techniques Guides and ARMS Work Guides.

The United States Army Aviation and Missile Command's (AMCOM) Corrosion Program Office (CPO) runs the Army's accredited corrosion course. According to Para 8-5b in TM 1-1500-328-23, *Aeronautical Equipment Maintenance Management Policies and Procedures* (Jun 14), "Training for the Unit CPC Monitors, is available through the AMCOM Corrosion Program Office's Center of Excellence (CoE). [It is not through the Army Training Requirements and Resources System (ATRRS)]. The CoE offers a three-day class at Redstone Arsenal in Huntsville, Alabama, for that personnel appointed as Corrosion Monitor." For more information, visit the AMCOM CPO web page at **https://amcomcorrosion.army.mil.** You can call them at DSN 897-0209, (256) 313-0209, or by email **usarmy.redstone.rdecom-amrdec.mbx.amcom-corrosion@mail.mil.**

While browsing the CPO site, be on the lookout for corrosion assistance and care of supplies in storage (COSIS) information tabs that lead to corrosion references and sign up information for the corrosion monitor course. Having a program is essential because organizations are held accountable for COSIS when it comes to Class IX components, whether in the supply support activity (SSA), tech supply, or unit supply. Again, the FORSCOM ARMS will assess how well organizations care for their Class IX supplies.

Below in Appendix A, are a few examples of what happens when organizations either neglect their equipment or are not adequately trained to combat corrosion. When it comes to Corrosion Prevention and Control, everyone with a valid DA Form 348 (Equipment Operator's Qualification Record) should have the ability to identify corrosion and how to treat corrosion according to the technical manual properly. As stated earlier, corrosion costs the Department of Defense about $23 billion in lost equipment and 25 percent of the maintenance cost. This cost could be reduced with leadership involvement and command emphasis placed on properly maintaining equipment both ground and air.

Preventive maintenance like Corrosion Prevention and Control supports the ground force commander's goals by providing safe, fully mission capable (FMC), reliable, and lethal weapon systems to the battlefield. Where the rubber hits the road, these weapon systems need to be on-time, FMC, and available for the Soldiers to accomplish their wartime missions.

References

Army, D. o. (2014). *Technical Manual 1-1500-328-23 Aeronautical Equipment Maintenance Mangagement Procedures.* Washington, DC: Department of the Army.

Army, D. o. (2018, April 12). *Prioritizing Efforts-Readiness and Lethality (Update 12).* Retrieved from Army Publishing Directorate: https://armypubs.army.mil/ProductMaps/PubForm/ArmyDir.aspx

Army, H. D. (2014). *Army Regulation 750-59 Corrosion Prevention and Control for Army Materiel.* Washington, DC: Department of the Army.

Defense, T. D. (2014, February 04). *Corrosion Prevention and Control Planning Guidebook for Military Systems and Equipment.* Retrieved from https://apps.dtic.mil/dtic/tr/fulltext/u2/a606227.pdf

Appendix A

Heavy Expanded Mobility Tactical Truck (M977 HEMTT) with surface and penetrating corrosion on step and cabin frame. The vehicle was located on an undisclosed flight line ready to pump fuel into aircraft.
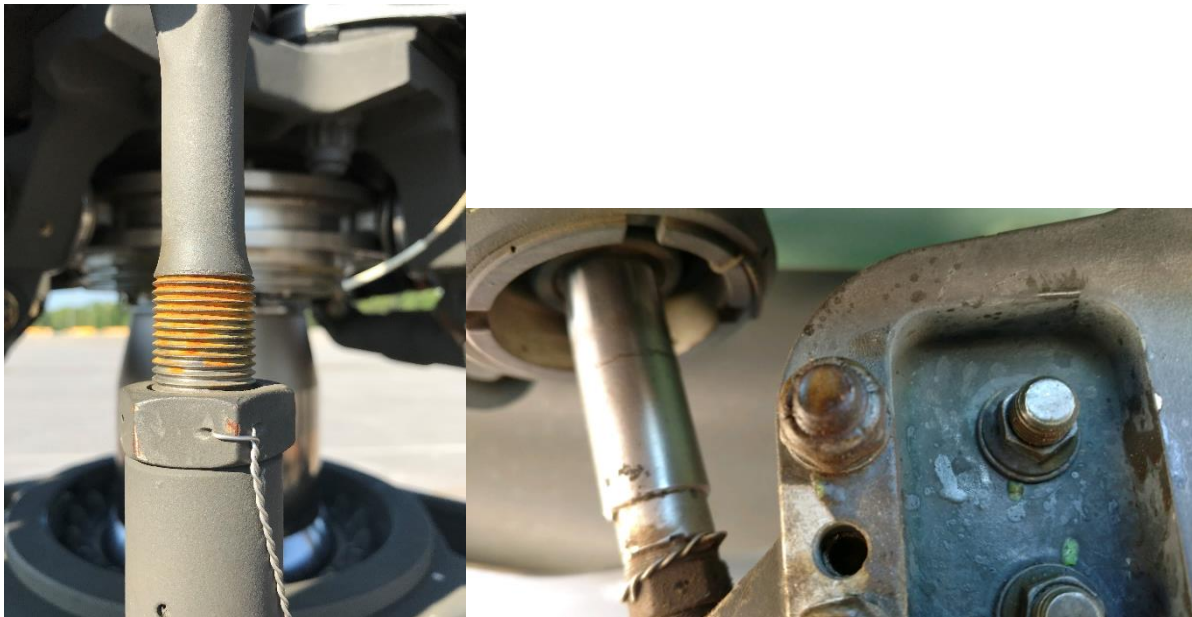
Preventable surface corrosion located on fully mission capable (FMC) aircraft. These aircraft were on the flight line ready to conduct daily operations. (Both pictures are of AH-64D/E common components)