

The Impact of Corrosion on Mission Readiness and Capability

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Abstract: “Corrosion, the deterioration of a material or its properties due to a reaction of that material with its chemical environment, has been with us forever” (Corrosion, 2014). People have always dealt with corrosion and its destructive effects, and extensive research has been conducted in the area of combating it. One sector corrosion is impacting greatly is the United States Military. Whether we are a nation at war or peace, corrosion is a major issue. Specifically, The United States Army has noticed the amount of problems, as a result of corrosion, with the UH-60 Blackhawk helicopter. Through our research, we were able to identify additional causes of corrosion on the UH-60. By applying regression analysis, we were able to determine which variables played the most significant role in leading to corrosion. We then introduced different organizational policies or updates that were enacted by the Department of Defense. These policies either mitigated or amplified corrosion on the UH-60. Through this study, we were able to suggest ways to limit corrosion in order to improve UH-60 availability.

Keywords: Corrosion, Availability, Maintenance Policy