Modeling and Analysis of the UH-60 Recapitalization Process at the Corpus Christi Army Depot

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Abstract: The current drawdown of the DOD budget has affected all aspects of the Armed forces, but budget constraints are one of the biggest factors affecting the budget today. This is evident in the operations and sustainment within the field of Army Aviation. Recently, the OH-58D Kiowa Warrior was decommissioned, Combat Aviation Brigades were closed, and reliance on current Army Aviation infrastructure increased. The Corpus Christi Aviation Depot (CCAD) is the only source for the Army for full refurbishment of rotary wing aircraft. It is now their job to keep the Army Aviation fleet modern, effective, and cost efficient. Accordingly, our job is to give CCAD a discrete-event simulation model of their UH-60 Recapitalization process in order to look at possible alternatives to improve the process. The overall goal of the project is to reduce the time it takes to recapitalize one UH-60 from 520 days to around 365 days. The main issues within the process involve parts availability along the project line, number of financial resources (due to a lower budget), the time it takes to evaluate an incoming UH-60, and delays caused by low standards of work and extra clean up. These main issues drove the research for the project in hopes of finding similar successful systems that could be utilized as alternatives to mitigate some of the issues within the process.