IAF SPACE SYSTEMS SYMPOSIUM (D1)

Space Systems Engineering - Methods, Processes and Tools (2) (4B)

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A VALIDATION STUDY OF THE PERFORMANCE PREDICTION METHODOLOGY OF THE EARLY WARNING METRICS

Abstract

Complex projects experience delays and corresponding backlogs of their project control milestones during their acquisition and development lifecycles. In response, a jointly developed methodology between the National Aeronautics and Space Administration (NASA) Goddard Space Flight Center (GSFC) and The Aerospace Corporation monitors the execution performance of GSFC Flight projects and instruments that are under development. Namely, the Early Warning Metrics monitor the GSFC projects' cost and schedule performance and has utility as a stand-alone execution performance monitoring tool that measures performance independently of Earned Value Management (EVM), while providing insight to project performance relative to historical successful projects.

Here is described the purpose and utility of the Early Warning Metrics. Furthermore, the initial prediction method, used in the creation of the metrics, is describe along with its validity and the validity of other comparable prediction methods.