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14. ABSTRACT

Tracking schedules for flight test is difficult in a traditional network based scheduling paradigm. Traditional network based scheduling relies on being able to lay out a plan and follow it during project execution without many changes. This paradigm begins to struggle when the plan changes often. Flight test is a very dynamic endeavor. Scope changes frequently based on what is learned in test. Data is also collected at different times than planned due to the realities of test execution. As a result schedules are quickly out of date from both a time and resource usage standpoint. The software industry has moved away from network scheduling techniques toward Agile techniques and processes to manage projects. The reason for this paradigm shift is due to the volatile nature of software projects. User needs and scope changes often as users refine what they truly need. Schedules become obsolete quickly. Agile methods have been invented to minimize upfront planning and embrace scope changes as necessary during the project lifecycle. Flight test and software development projects share similar characteristics. They both are very volatile and require constant changes. This presentation will outline a conceptual framework that describes how Agile techniques, concepts, and processes can be used to monitor and execute flight test. In addition, this presentation will show how Agile techniques provide a throughput metric that can provide the basis for understanding the capacity of an organization.

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