

Reduce Costs with Multimission Sequencing and a Multimission Operations System

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Mission sequencing involves merging science and engineering inputs into an integrated, constraint-checked sequence and producing review and spacecraft command products. This task employs processes, procedures, and tools which have a high degree of commonality across all missions. The JPL Multi-Mission Office (MMO) Mission Planning and Sequencing Team (MPST) has successfully developed these processes, procedures, and tools so that they are readily adaptable to missions of varying complexity. As a result, the MPST can quickly assemble a team that provides mission sequencing to very different missions at a fraction of previous costs. This paper will discuss the MMO MPST approach of adapting core processes, procedures, and tools to multiple missions. The paper will then propose extending this multi-mission philosophy to skeleton timeline development, science sequencing, and spacecraft sequencing. Finally, this paper will present a baseline, multi-mission operations system which can be quickly adapted to very different missions of varying complexity.