
Reconfigurable Satellite Planning Tool

Topic: N091-089

***ABSTRACT #:** Reconfigurable, satellite, decision support, planning tool, courses of action, MUOS.*

The Satellite Planner for Execution and Reconfiguration (SPEAR) is decision support software that allows satellite operators and operational commanders to respond to threats or component failures quickly, effectively and in consideration complex physical and operational constraints. With SPEAR, user-built automated workflows that leverage open optimization libraries are used to produce alternative courses of action (COA) allowing users to determine how available space assets can best be utilized. The technology has demonstrated avoidance maneuver and payload reconfiguration planning for MUOS and is ready for operations center integration and trials. Focused on developing innovative solutions in autonomous guidance, navigation and control for a broad range of aerospace and defense applications, this company seeks resources for targeted development in operational environments such as NAVSOC, GSSC and JSpOC. [**Princeton Satellite Systems, Inc.**]