Mission Assurance Breakout

The Mission Assurance Breakout Session covers a number of diversified issues associated with mission assurance. We commence with a web-based distributed situation awareness management system. We then describe security requirements management and their rigorous decomposition and recomposition. We continue with a perspective on NASA’s future space communication and its dynamic access approach. We then return to situation awareness via novel middleware that provides the framework for validation and verification. We conclude with a Q&A session for the panel combined with a discussion of the participants.

Joe Betser, Charlie Lavine
In, Fox, Marcus, Hadjitheodosiou
Our Vision of Distributed Operations

- Physical Control Center
- Off-Site Contractors
- Other Military Locations
- Troops in the Field
- Researchers
SYSTEM DECOMPOSITION TREE

System

Space segment

Ground

User
Future Mission Network Evolution

- NASA network supports large numbers of single or constellation spacecraft with IP-addressable instruments.
- Mission Operation gradually evolves to a dynamic concept and uses a NASA & commercial assets for communication support; direct-to-ground as well as GEO relay solutions are employed.
- Commercial technology and standard communication protocols are employed (where possible).