GSAW 2020 Tutorial B:

An Overview of Ground Systems for Satellite Operations

Length: Half day

Overview:

<u>Tutorial Detailed Objectives</u> An Overview of Ground Systems for Satellite Operations and Updating Legacy Ground Systems

Ground Systems Overview

- Increased awareness and understanding of:
 - Major functional areas within Ground Segments
 - o Interrelationship between major functions
 - Modes of operations

Evolving Legacy Ground

- Current Ground Architecture transition to Future Visions
- The Key Concepts needed to transition
- Gain exposure to common Terms and Processes

Instructors: James Anderson and Donald Town, The Aerospace Corporation

Biographies:

J. V. Anderson:

B.S. in Information Technology

Over 45 years' experience in all aspects of ground system acquisition and system engineering with emphasis in modeling and simulation; test planning, test definition and execution; requirements definition and analysis, system deployment, and operations.

D. E. Town:

Ph.D. in Applied Mathematics, Brown University

M.S. in Mathematics, The Ohio State University

B. A. in Mathematics/Physics, DePauw University

Over 35 years at the Aerospace Corporation with engineering experience in satellite ground system acquisition support, Independent Readiness Reviews, ground system engineering studies, and ground system test and integration support. Acquisition activities supported include software development and test and the development of requirements, operational concepts, and ground architectures. Ground system and software support for Aerospace Concept Design Center (CDC) Space Segment, System Architecture and Ground Systems Teams.

Description of Intended Students and Prerequisites:

Personnel responsible for the staffing, management, acquisition, development, and/or maintenance of ground systems. No specific ground system expertise is required. Material is DOD-centric.

What can Attendees Expect to Learn:

Exposure to tutorial material on topics of high current interest in satellite operations ground systems. Increased awareness of ground station functions, COTS, and current/future ground station design

trends.