

## **GSAW 2021 Tutorial B:**

### Ground Systems Overview

#### **Overview:**

Increased awareness and understanding of:

- Satellites ground systems in a system engineering context as they relate to:
  - Other ground systems
  - Space missions
- Obtain an appreciation for how ground segment capabilities are determined
- Understand the totality of functions which satellite ground segments must perform
- Provide a context for how ground segment architectures are changing

**Instructors:** Jim Anderson and Donald Town, The Aerospace Corporation

#### **Biographies:**

The instructor duo are senior members of the Aerospace Corporation technical staff. The average years of industry experience for the duo is over 40 years.

#### **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.