

## **GSAW 2015 Tutorial C:**

Introduction to Ground Systems

**Length:** Half day

### **Overview:**

Tutorial Detailed Objectives

Introduction to Ground Systems

### **Ground Systems Overview**

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

Ground Systems Transmit and Receive Functions

- Become familiar with the basic functions for transmit and receive
- Gain exposure to common transmit and receive elements and subsystems

Managing and Using Commercial Off the Shelf Products

- Case studies on past challenges when using COTS components
- Case study on how you can successfully use COTS in development

Current and Future Trends

- Become familiar with where ground systems are going

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

### **Biographies:**

The instructor team includes senior members of the Aerospace Corporation technical staff. The average years of industry experience for the team is 30.

#### **James Anderson:**

B.S. in Information Technology, University of Phoenix

Over 35 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.

#### **Donald Town:**

Ph.D. in Applied Mathematics, Brown University

M.S. in Mathematics, Ohio State University

B. A. in Mathematics/Physics, DePauw University

Over 30 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 transmit and receive functions, COTS lesson learned, and current/future trends.