#### **GSAW 2010 Tutorial F:**

Incorporating Innovation in Today's Ground System Acquisitions

**Length:** Half day

Overview:

# **Tutorial Detailed Objectives**

- Defining and Understanding User Requirements
  - o Over-defined, under-defined and ambiguous requirements
  - Evolving Requirements
  - o The changing user
  - o Example Requirements
- Using COTS Real World Examples
  - o What COTS is and is not
  - o Lessons Learned
  - o A Success Story
  - o Observations
- Acquisition Paradigm Shift
  - o Acquisition Strategies
  - Potential Models
  - New Strategy and Timelines
- Tutorial Exercises
  - Designing potential solutions
  - o Refining the requirement set
  - Thinking out of the box
  - o COTS Management

Class examples and exercises will be drawn primarily from issues that confront designers, builders and users of satellite ground systems.

Instructors: Jim Anderson, Jim Shneer, 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.

# J. V. Anderson:

• B.S. in Information Technology, University of Phoenix

Over 29 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.

### J. A. Shneer:

- B.S. in Mathematics, George Washington University
- Over 40 years of experience in program management and systems engineering. Responsible for requirements definition, source selection, site selection, system and software design, development, test, deployment, operations and retirement for over a dozen major satellite ground systems and public safety computer-assisted communications systems.

### 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 24 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.

### What Participants Should Expect to Learn:

As a ground systems user, more insight into developing and articulating requirements and, as an acquirer, implementer or developer, greater understanding in analyzing and interpreting requirements and in managing expectations within the changing and challenging ground acquisition environment.

#### Who Should Attend:

Personnel responsible for the staffing, management, acquisition, development, and/or maintenance of ground systems. Personnel who deal with user requirements for sustainment and upgrades to existing systems. Attendees would benefit from having taken the "Ground Systems for Satellite Operations Primer and Acquisition Considerations" tutorial presented at GSAW 2006 and 2007, "Ground System Special Topics" presented at GSAW 2008, and "Visualizing User Requirements" at GSAW 2009 but it is not necessary. Material is DOD-centric.