

GSAW 2006 Tutorial B:

Information Assurance Engineering (IAE) for Space Systems

Length: Half day

Overview:

Several space programs have experienced difficulty with the complexities of Information Assurance (IA) acquisition and engineering. Much of the problem is attributed to the difficulty in mapping the myriad of information assurance policies to tasking and deliverables. With many players involved in space system acquisition, tasks and deliverables may be assigned to individuals from a wide range of organizations, including:

- Civilian/military program office staff
- SETA support to the program office
- FFRDC support
- Operations personnel
- Certification/Accreditation Authorities
- System contractors
- NSA

To date, the assignment of IA tasks on space programs has varied greatly, causing confusion, duplication of effort, missed tasking, and diminished productivity among program participants. The lack of a true IA engineering approach further complicates the acquisition of space systems.

The proposed tutorial will focus on defining contractor responsibilities and prescribe their role in executing a successful development of IA in space systems. In our approach, the program office manages the acquisition, the certifier performs an IA assessment, and the contractor performs the engineering. The goal of the tutorial is to present guidance for an IA engineering approach that strongly integrates with the overall space systems engineering approach.

Instructors: Timothy Lelesi and Charles Lavine, The Aerospace Corporation

Biographies:

Timothy Lelesi: Mr. Lelesi has worked in the information assurance industry for over 10 years performing vulnerability assessments and information assurance engineering. Currently, Mr. Lelesi is a Manager for information assurance at the Aerospace Corporation.

Charles Lavine: Mr. Lavine has worked in the information assurance industry for over 15 years-all at the Aerospace Corporation. He has participated in the NSA's product evaluation programs as well as performing information assurance engineering support for several space systems. Mr. Lavine is the Director of Aerospace's Information Assurance Technology Department.

Description of Intended Students and Prerequisites:

The ideal student is someone who needs to specify, design, or evaluate a DoD network or information system with an emphasis toward space systems. This tutorial will also be applicable to the Intelligence Community. Attendees should receive the following benefits from participation in this tutorial:

- Understand industry approach to developing IA in National Space Systems
- Enhance your understanding an IA architecture
- Learn to translate architecture into requirements
- Gain an enhanced awareness of industry IA development deliverables
- Learn necessary skills to assess industry progress in the area of IA during system development