

Status Report on the Formation of the new Exploration Subcommittee: The Avionics, Software and Cybersecurity Committee

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NASA Headquarters
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Terms of Reference

- ◆ **The Avionics, Software, and Cybersecurity Subcommittee (ASCS) will focus its attention on the software and avionics systems being developed by NASA with a particular focus on the Constellation program.**
- ◆ **The ASCS will review and assess NASA's approach, progress, vulnerabilities, and risk mitigation plans for its software and avionics systems.**
- ◆ **An important element of the ASCS's efforts will be to assess the vulnerabilities of NASA's spaceflight systems and of the processes for their development and operation from a cybersecurity perspective.**

Initial Activities

Created 27 February, 2009

◆ Membership:

- Prof. Alexander H. Levis (chair), George Mason University
- Dr. Matthew R. Barry, Kestrel Technology LLC
- Prof. Matt Bishop, UC - Davis
- Ms. Penny Chase, MITRE
- Dr. Gregory Frazier, BAE Systems
- Prof. Janos Sztipanovits, Vanderbilt University
- Mr. Kurt C. Wallnau, Software Engineering Institute, Carnegie Mellon
- Invited – in process: Mr. Jay Turner, JHU/APL
- Mr. Richard McGinnis (Executive Secretary), NASA

Initial Meeting

- ◆ **The first meeting of the subcommittee was held on**
 - ◆ **March 24-26, 2009**
 - ◆ **at the Johnson Space Center.**

- ◆ **The objectives of the meeting were:**
 - ◆ **Establish working subcommittee.**
 - ◆ **Gain understanding of NASA's Exploration Plans:**
 - ◆ **Exploration Systems Mission Directorate**
 - ◆ **Constellation Program (CxP)**
 - ◆ **Software & Avionics Integration Office (SAVIO)
Organization and Plans**
 - ◆ **Set goals for first phase of subcommittee's work.**
 - ◆ **Develop ASCS Plan for the first year.**

Subcommittee Start

- ◆ **Note: This subcommittee has an aggressive start.**
- ◆ **Experts are highly respected in the community.**
- ◆ **As they get started, we invite other NAC committees to work with this team and consider this new team to be an asset for the entire NAC.**
- ◆ **We especially consider them to work closely with the Space Operations Committee as well as special ideas and tasking from other NAC committees.**