Cyber Security Technical Panel

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Introduction to Cyber Security Panel

- Vision of the panel is to serve as a hub of AESS cyber security activities, to highlight and promote awareness of activities, technical understanding, and developments in this increasingly important field.

- The panel promotes and supports cyber security technical interests, technical articles and conference activities, and educational activities in those aspects of cyber security most relevant to complex systems for space, air, ocean, or ground environments.

- These technical areas include
    - Cyber security for transportation
    - Cyber security for aircraft and avionics
    - GPS threats
    - Information security for complex systems, and
    - Identification and modeling of cyber-related vulnerabilities.

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Cyber Security Panel

Near-Term Goals and Objectives

- Hold 2+ meetings/year
- Increase AESS reputation and visibility in cyber
- Relate DLs to Cyber
- Relate to AESS Conferences, Meetings, Activities

Cyber & Panel Roles

1. Conferences – DASC, ICCST, and…
2. What are best AESS-related fora to share developments?

Greater IEEE and Cyber:
- IEEE Cybersecurity Initiative
- Ruling from IEEE-HQ: No affinity groups. Non-council, so Cyber "chapter" can be effected by joint chapters in AES/C/CE/COM.

Recent Activities

- Focus for 2015: clarify mission; reinvigorate panel
- Members include BoG Bill Walsh, Erik Blasch, and Mike Davis
- AESS Conferences
- Panel meetings planned for DASC and ICCST in 2015

AESS Conferences and Cyber Security

- Cyber Security is not central theme or name-related to an AESS financially co-sponsored conference, but often related topics are prominent.
- Selected AESS conferences to co-locate with panel meetings
  - DASC (Digital Avionics Systems Conference) has related sessions and panel chair is involved with organization → Meeting planned for DASC in Prague
  - ICCST (Int'l Carnahan Conf. on Security Technology) is technical co-sponsored and requested to be site of a panel, virtual if need be, as meeting is in Taipei in 2015.

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IEEE Cybersecurity Initiative

- Pre-Council IEEE body *(has interest and activities from multiple societies, but "initiative" means no owners within TAB org)*
  - cybersecurity.ieee.org/
    - Links to various non-IEEE cyber security reports, publications and conferences. Web calls for participation in related standards
  - Cybersecurity Group in San Diego IEEE (pulls in huge crowd, joint AESS meetings, multiple sections)
  - Major presence at Women in Engineering International Leadership Conference, including headline focus of conference hackathon.
- Which IEEE orgs are currently involved?
  - Computer Society (overwhelmingly the most significant society involvement)
    - numerous conferences, at least one journal, society technical committee
  - Communications Society
    - Technical co-sponsor on cyber security related computer society activities
    - IEEE Conference on Communications and Network Security (CNS)
  - AESS, Consumer Electronics Society, Reliability Society
  - IEEE Women in Engineering activity partnership/sponsorship
  - Other IEEE societies have related interests (including special issues) but little evidence of involvement this initiative (Signal Processing, Vehicular Technology