CONFERS Overview

Brian Weeden
Executive Director
CONFERS Objectives

• Independent, self-sustaining industry forum to advocate and promote on-orbit satellite maintenance, servicing, and rendezvous operations

• Collaborate to research, develop, and publish voluntary, consensus technical and safety standards

• Engage with governments on policy and oversight of satellite servicing activities

• Open to participation by private sector stakeholders in the international satellite servicing community

• Initially supported by DARPA, CONFERS intends to transition to full private-sector funding over a period of several years

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## Current Members

<table>
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<tr>
<th>Aerospace Corporation</th>
<th>Airbus</th>
<th>Analytical Graphics, Inc</th>
<th>Altius Space Machines</th>
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<tr>
<td>Astroscale</td>
<td>Atomos Nuclear and Space Corporation</td>
<td>AXA XL</td>
<td>Ball Aerospace</td>
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<td>Olis Robotics</td>
<td>Chandah Space Technologies</td>
<td>Cislunar Space Development Corporation</td>
<td>Effective Space</td>
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<td>Hoffer Flow Controls</td>
<td>Honeybee Robotics</td>
<td>iBoss</td>
<td>Maxar Technologies Holding, Inc.</td>
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<td>MDA</td>
<td>NovaWurks</td>
<td>OrbitFab</td>
<td>SES</td>
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<td>Tethers Unlimited</td>
<td>ThalesAlenia Space</td>
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CONFERS Secretariat

- **ATI (Brian Delamater / Stacey Lindbergh)**
  - consortium start-up and formation activities
  - consortium operations and general management functions

- **Secure World Foundation (Brian Weeden / Ian Christensen)**
  - overall technical lead
  - coordinate all research and standards development activities

- **University of Southern California Space Engineering Research Center (Dave Barnhart)**
  - execute a comprehensive study of past and present RPO actions
  - catalog the past programs both nationally and internationally

- **Space Infrastructure Foundation (Fred Slane)**
  - identify the proper standard strategy for publication by qualified Standards Development Organization (SDOs);
  - identify an SDO to work on a core standard on RPO;
  - coordinate intersessional meetings with national and international stakeholders

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CONFERS: A Holistic Approach To Standards

- **Interfaces and Designs**
  - Engineering and design to increase the safety, viability, and interoperability of satellite servicing

- **Operational Practices**
  - Behavior of satellite servicing and RPO activities

- **Data Exchange and Sharing**
  - Information sharing between servicing companies, clients, and governments

- **Transparency**
  - Mechanisms to reduce misperceptions and clarify intent about the dual-use activities

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Technical Approach: Standards Development Plan

Nov 2017 – Apr 2018
- Research/Ontology
  - Study historical RPO missions
  - Develop ontology that recommends and incorporates multiple approaches
  - Simulate/present results

May/Jul/Sep 2018
- Intersessional Workshops
  - May 21: Los Angeles, CA
  - July 25-26: Washington, DC
  - Sept 28-29: Bremen, Germany
  - Email/telecon in-between as needed

Nov 2018
- Consortium General Assembly Approval
  - Nov 7: General Assembly (members only)
  - Nov 8: Open Forum (public)
  - Both Washington, DC area

Nov 2018 -
- Transition to SDO
  - Insert draft CONFERS standard into appropriate SDO process

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Anticipated 2019 Activities

• Begin formal engagement with standards organizations
  • ISO, CCSDS

• Focus on satellite servicing and interfaces
  • Research on existing standards/practices by USC

• Workshops (invite only)
  • April: Colorado Springs, CO
  • May: Washington, DC
  • July: United Kingdom
  • Sept: TDB
  • Nov: 2019 GSSF (open)
Engagement

• Information on membership application process is available on the CONFERS website at: www.satelliteconfers.org

• Contact Information:
  • Technical/Standards questions: Dr. Brian Weeden (bweeden@swfound.org)
  • Membership/Administrative: Ms. Stacey Lindbergh (stacey.lindbergh@ati.org)