



2021 GLOBAL SATELLITE SERVICING FORUM

Building the Infrastructure for a Thriving Space Ecosystem

September 29-30 (Virtual) | 9 a.m. - 1 p.m. EST

Titanium Sponsors:



DAY 1 - September 29, 2021 [Wednesday]

<p>09:00 EDT</p>	<p>Opening & Welcome Master Moderator: Dr. Harley Thronson, Senior Scientist (Retired), NASA</p> <p>Mr. Chris Blackerby, COO, Astroscale Dr. Brian Weeden, Executive Director, CONFERS</p> <p>Day 1 Sponsor Remarks: Mr. Nobu Okada, Founder and CEO, Astroscale</p>
<p>09:15</p>	<p>Highlight Panel: Recent Servicing Missions & Activities <i>A review of recent successes in on-orbit servicing and rendezvous and proximity operations activities for CONFERS member companies.</i></p> <p>Moderator: Dr. Harley Thronson</p> <ul style="list-style-type: none"> • Mr. Joe Anderson, Vice President, Business Development and Operations, SpaceLogistics • Dr. Trevor Bennett, Co-Founder, Starfish Space • Dr. Yuske Taguchi, Director, Business Development, GITAI Japan, Inc. • Ms. Harriet Brettle, Head of Business Analysis, Astroscale
<p>10:15</p>	<p>Break</p>
<p>10:30</p>	<p>Sponsor Spotlight Talk</p> <ul style="list-style-type: none"> • Mr. Jeremy Schiel, Co-Founder and CDO, OrbitFab
<p>10:40</p>	<p>Keynote Address 1</p> <ul style="list-style-type: none"> • Col. (USAF, Ret) Pam Melroy, NASA Deputy Administrator
<p>11:00</p>	<p>Highlight Remarks: Japan's Draft Requirements for a License to Operate a Spacecraft Performing On-Orbit Servicing</p> <ul style="list-style-type: none"> • Mr. Atsu Fujishige, Director for Space Security, National Space Policy Secretariat, Cabinet Office, Japan

11:15	<p>Lightning Talks: Perspectives From Across the Satellite Servicing Ecosystem <i>A forum of invited talks sharing perspectives from the prospective satellite servicing client, developer, and partner community on national servicing initiatives and on integrating servicing capabilities into commercial operations.</i></p> <p style="text-align: center;"><i>A series of 10 minute talks, followed by a group discussion.</i></p> <ul style="list-style-type: none"> • Mr. Daniel Noelke, European Commission, DG Defense Industry and Space Unit Innovation, Start-ups and Economics • Mr. Florian Rems, Research Associate in German Space Operation Center (GSOC) OOS-Group, Project Lead, RICADOS++ (10-minute talk only) • Mr. Florian Sellmaier, German Space Operation Center (GSOC) Business Development (Q&A only) • Mr. Maurizio Vanotti, VP, Space Infrastructure & Partnerships, OneWeb • Mr. Karl Stolleis, Lead for Space Robotics and Logistics, Air Force Research Lab Space Vehicles Directorate • Dr. William Carter, Program Manager, Defense Sciences Office, DARPA • Ms. Debi Tomek, Senior Advisor, On-orbit Servicing, Assembly and Manufacturing (OSAM), NASA (presenting short remarks live)
12:45	<p>Update on CONFERS Standards Work</p> <ul style="list-style-type: none"> • Dr. Brian Weeden
13:00	<p>Conclude / Day 1 Wrap-Up Remarks</p>

DAY 2 - September 30, 2021 [Thursday]

09:00 EDT	<p>Opening & Welcome</p> <ul style="list-style-type: none"> • Dr. Brian Weeden, Executive Director, CONFERS <p>Day 2 Sponsor Remarks: Mr. Joe Anderson, Vice President, Business Development and Operations, SpaceLogistics</p>
09:05	<p>Keynote Address 2</p> <ul style="list-style-type: none"> • Dr. Rolf Densing, Director of Operations & Head of ESOC, European Space Agency
09:35	<p>Highlight Panel: Making the Case: the Servicing Market <i>This panel will focus on the steps, challenges, and actions which must be addressed in order for the satellite servicing sector to become a vibrant part of the space economy. Each panelist will be asked to respond to a central question in a 5 minute TED style talk addressing the case for servicing from their standpoint. A moderated discussion will follow to identify common challenges – and the solutions.</i></p> <p>Moderator: Dr. Brian Weeden</p> <ul style="list-style-type: none"> • Ms. Carie Mullins, Analytic Lead, BryceTech's Consulting Practice • Capt Dalton Hayes, USAF, Government Lead, Catalyst Accelerator, Air Force Research Laboratory • Dr. Gordon Roesler, President, Robots in Space LLC • Mr. Rick Tumlinson, Founding Partner, SpaceFund

<p>10:35</p>	<p>Highlight Remarks: CAESAR – True Service Robotics Technology for In-Orbit Assembly, Maintenance, and Repair</p> <p><i>The aim of the CAESAR development is to bring the technology of the most up-to-date terrestrial service robot systems for manufacturing and human-robot cooperation into space. The basis is DLR’s world-famous light-weight robot technology which was successfully transferred to KUKA, one of the world’s leading suppliers of robotics. The seven degrees of freedom force/torque controlled robotic arm is currently implemented as an Engineering Arm designed for a variety of on-orbit services in LEO/GEO.</i></p> <ul style="list-style-type: none"> • Dr. Gerhard Grunwald, Coordinator of On-Orbit Servicing, DLR Institute of Robots and Mechatronics
<p>10:45</p>	<p>Break</p>
<p>11:00</p>	<p style="text-align: center;">Concurrent Breakout Sessions</p> <p>1. Implementing Policies for Success of On-Orbit Services: <i>Emerging space activities such as on-orbit servicing face not only technical or business hurdles, but those in the policy and regulatory realm where there is little precedent for authorization. This situation ends up much like a “build the airplane while flying it” approach. Lack of policy for on-orbit servicing stalls advances in solutions to enable a growing space economy. This panel of both industry and government will offer points of view on what policy action is needed to see the emerging on-orbit services industry thrive.</i></p> <p>Moderator: Mr. Tony Lin, Partner, DLA Piper</p> <ul style="list-style-type: none"> • Mr. Joe Anderson, Vice President, Business Development and Operations, SpaceLogistics • Dr. William Crowe, Co-Founder and CEO, HEO Robotics • Ms. Aya Iwamoto, Lead-Japan Space Policy, Astroscale Japan • Mr. Andrew Ratcliffe, Chief Engineer, UK Space Agency • Ms. Ezinne Uzo-Okoro, Assistant Director for Space Policy, White House Office of Science and Technology Policy <p>2. Interfaces as an Enable: State of Play: <i>This panel will provide an update on various efforts and programs underway to develop and field standard interfaces to enable commercial servicing activities. Panelists will discuss both the current state of technologies and the next steps necessary to facilitate widespread adoption.</i></p> <p>Moderator: Mr. Jon Goff, Vice President of On-Orbit Servicing, Voyager Space Holdings</p> <ul style="list-style-type: none"> • Dr. Robert Hoyt, President and Co-Founder, Tethers Unlimited, Inc, • Mr. Joerg Kreisel, Chairman and Co-Founder, iBOSS GmbH • Mr. Pierre Letier, Team Leader Robotics, Mechanisms and Structures Space Applications Services • Mr. Patrick Loner, CEO, Altius Space Machines, Inc. • Mr. Talbot Jaeger, CTO, NovaWurks <p>3. Servicing in the National Security Space Context: <i>This panel aims to examine the potential role of servicing capabilities in national security space architecture and strategy, with a particular focus on the cislunar context. How do national security architectures align or correspond to civil space activities, logistics, and infrastructure in the cislunar region?</i></p> <p>Moderator: Mr. Jared Rieckewald, Director of Business Development, SpaceLogistics</p>

	<ul style="list-style-type: none"> • Mr. Rob Hauge, Strategy Director Space Mobility and Logistics, SpaceLogistics • Mr. Adam Harris, Vice President of Business Development, OrbitFab
12:05	Sponsor Spotlight Talk: On-Orbit Servicing and Mission Augmentation <ul style="list-style-type: none"> • Ms. Pam Calderwood, Program Manager, Lockheed Martin
12:15	Fireside Chat: Servicing Over the Horizon How will servicing capabilities enable the space infrastructure of the future? <i>In this session several invited guests will outline their vision for the future of several specific areas of space infrastructure, including exploration, space science, and space sustainability. A panel of satellite servicing ecosystem companies will then be challenged to outline the ways in which servicing capabilities can contribute achieving the future visions. The audience will be asked to vote for which area of space infrastructure servicing capabilities offers the most compelling vision.</i> Moderator: Harley Thronson <ul style="list-style-type: none"> • Mrs. Vanessa Clark, Co-Founder and CEO, Atomos Space • Ms. Jaime Landers, Advanced Programs Director of Business Development, Lockheed Martin • Dr. Clare Martin, Executive Vice President, Astroscale U.S. • Dr. Melissa Sampson, Senior Manager, Advanced Systems, Ball Aerospace
13:00	Conclude