



## **Satellite Servicing and Debris Removal: An Assessment of Prospects and Challenges**

Monday, November 4, 2013

### **Biographies**

In Alphabetical Order

**David Barnhart** joined DARPA in December 2010 and specializes in developing innovative approaches and architectures for small satellites, satellite robotics and inspiration-based engineering technology. Prior to DARPA, Mr. Barnhart was the Director and Co-Founder of the Space Engineering Research Center at the University of Southern California (USC), jointly developed by the Information Sciences Institute (ISI) and Department of Astronautical Engineering. He was responsible for developing innovative solutions in aerospace and small satellite systems technologies, new satellite design-synthesis tools to cut design time down to days from months and incorporate integration as a design tool, and hybrid robotics concepts for satellites with the ability to be demonstrated in multi-dimensional low cost ground testbeds. Prior to USC, Mr. Barnhart helped initiate two-commercial space companies, serving as vice president and chief financial officer for MSS in Los Angeles, California; he was also the youngest of a three-person international executive management board for a German startup in Bremen, Vanguard Space, where he also served as chief engineer. Mr. Barnhart holds a Bachelor of Science degree in Aerospace Engineering from Boston University and a Masters of Engineering from Virginia Polytechnic Institute.

**Michael K. Simpson** is the Executive Director of Secure World Foundation, after joining SWF as the Senior Program Officer in September 2011 following seven and a half years as President of the International Space University (ISU). Dr. Simpson holds a post as Professor of Space Policy and International Law at ISU. He is a corresponding member of the International Academy of Astronautics. After 23 years of service, Dr. Simpson retired from the Naval Reserve in 1993 with the rank of Commander. Dr. Simpson received his Bachelor's Degree magna cum laude from Fordham University in 1970 where he was elected to Phi Beta Kappa. He has also been elected to academic honor societies in the fields of political science and business management. He completed his Ph.D. at Tufts University, The Fletcher School of Law and Diplomacy, holds a Master of Business Administration from Syracuse University, and has two Master of Arts degrees from The Fletcher School. He has also completed two

prestigious one year courses in Europe: the French advanced defense institute (Institut des Hautes Études de Défense Nationale) and the General Course of the London School of Economics. He is the author of numerous scholarly papers, presentations, articles and book contributions and his practical experience includes service as a Political Military Action Officer, observer representative to the UN Committee on the Peaceful Uses of Outer Space, and member of the Association of Space Explorers International Panel on Asteroid Threat Mitigation. He currently serves on the Commercial Spaceflight Safety Committee of the IAF.

**Brian Weeden** is the Technical Advisor for Secure World Foundation and has 14 years of professional experience in the national and international space security arena. Prior to joining SWF, Mr. Weeden served 9 years on active duty as an officer in the United States Air Force working in space and intercontinental ballistic missile (ICBM) operations. As part of U.S. Strategic Command's Joint Space Operations Center (JSpOC), Mr. Weeden directed the orbital analyst training program and developed tactics, techniques and procedures for improving space situational awareness. In his current role, Mr. Weeden conducts research on space debris, global space situational awareness, space traffic management, protection of space assets, and space governance. He also organizes national and international workshops to increase awareness of and facilitate dialogue on space security and sustainability topics. Mr. Weeden's research and analysis have been featured in *The New York Times*, *National Public Radio*, *The BBC*, *Fox News*, *China Radio International*, *The Economist*, academic journals, presentations to the United Nations, and testimony before the U.S. Congress. He is also Co-Chair of the World Economic Forum's Global Agenda Council on Space Security. Mr. Weeden holds a Bachelor of Science (B.S.) degree in Electrical Engineering from Clarkson University, a Master's of Science (M.S) degree in Space Studies from the University of North Dakota, and is also a graduate of the International Space University Space Studies Program (2007, Beijing). He is currently a Ph.D. student in Science and Technology Public Policy at George Washington University.