

Contributors

Peter L. Hays is a Senior Space Policy Analyst with Falcon Research supporting the Principal Department of Defense Space Advisor. He helps lead development and implementation of space policy and strategy initiatives. Dr. Hays holds a Ph.D. from the Fletcher School and was an honor graduate of the USAF Academy. He currently teaches at George Washington University, served internships at the White House Office of Science and Technology Policy and National Space Council, and previously taught at the USAF Academy, School of Advanced Airpower Studies, and National Defense University. Publications include: *Toward a Theory of Spacepower, Space and Security, Spacepower for a New Millennium, Countering the Proliferation and Use of WMD*, and *American Defense Policy*.

Jean-Daniel Testé (Air Force Brigadier General) has been serving as Commander of the French Joint Space Command since July 1, 2014. Upon completion of the joint staff college or the higher command and staff course and others, and he attended the *Ecole nationale supérieure d'électronique, électrotechnique, informatique et hydraulique* in Toulouse (ENSEEIH), where he qualified as an engineer in computer science. He mainly joined the development team of HELIOS military observation satellite in Paris, was responsible for the satellite mission, was head of the space and intelligence department at the air force staff, and, took command of the French Guyana Air Forces and “Capitaine François MASSE” Air Force Base in Cayenne, was Deputy head - “Homeland” - Air Operations and Air Defense Command, was deputy director - Analysis and Production - at the Military Intelligence Directorate. He is officer of the Legion of Honor and commander of the National Order of Merit. He is married and has three children. He has a passion for rugby and regularly practices running.

Xavier Pasco (Doct. In Pol.Sc- Univ. of Paris-Sorbonne) is a Senior Research Fellow at the Fondation pour la Recherche Stratégique (FRS – Foundation for Strategic Research, an independent think-tank based in Paris) where he has been in charge of the programme “Space, High technology and security”.

Previous to 1997, he was researcher at CREST (*Center for Research and Evaluation of the relationships between Strategies and Technology*) associated to Ecole Polytechnique, France.

Xavier Pasco has conducted a number of projects studying the use of space for the security, notably in support of the French ministry of defense but also in relation with the European Union R&D Framework Programme. He has also supported several analytical works of the subcommittee on Security and Defence of the European Parliament on these issues and has been contributed to EDA and ESA on-going work on governance and data policy issues for future programmes. In particular, he has been in charge of the ESA-commissioned study related to governance and data policy models suitable for a European Space Situational Awareness System. Xavier Pasco is also associate Research Fellow at the *Space Policy Institute* in the George Washington University (Washington D.C., U.S.A.). He has also been giving lectures in the French Military School in Paris as well as at the Institute of Political Studies in Paris. He is the European Editor of the international academic review *Space Policy*. He has also been named Expert at the European Economic and Social Committee in Brussels in 2007. In 2012, Xavier Pasco has been elected full member of the *International Academy of Astronautics*.

Teruhisa TSUJINO

Specially Appointed Fellow, Center for Research and Development Strategy (CRDS), Japan Science and Technology Agency (JST). Graduated from Tohoku University, Faculty of Technology (Electrical Engineering). After Japanese National Railways (JNR), entered to National Space Development Agency (NASDA). Since 2011, in parallel, Japan Aerospace eXploration Agency (JAXA), JST, and MEXT National Institute of Science and TEchnology Policy (NISTEP). Member of The Japan Society for Aeronautics and Space Sciences (JSASS). Engaged in various research works such as trend of world space activities, Comparison study of world space technologies, science and technology policy, Lunar exploration (KAGUYA and Lunar surface activities), and space debris observing facilities (Radar and Optical).

Yasuaki HASHIMOTO

Director, Policy Studies Department, The National Institute for Defense Studies

(NIDS). Graduated from Kanazawa University (1983), received LL.M. from Keio University (1987) and PhD candidate of Leiden University (The Netherlands) (1996). Member of Committee on National Space Policy (2013-2014). Member of the Board of Directors, International Institute of Space Law (IISL) (2013-). His study fields include space law, cyber law and national/international security, etc.

Brian Weeden is the Technical Advisor for Secure World Foundation and has 16 years of professional experience in space operations and policy. 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, stability, and sustainability topics. Mr. Weeden is a member and former Chair of the World Economic Forum's Global Agenda Council on Space. Prior to joining SWF, Mr. Weeden served nine 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. Mr. Weeden holds a Bachelor's Degree in Electrical Engineering from Clarkson University and a Master's Degree in Space Studies from the University of North Dakota. He is currently a Doctoral Candidate in Public Policy and Public Administration at George Washington University in the field of Science and Technology Policy.

Setsuko AOKI

Professor of International Law, Keio University Law School. Previous career includes Assistant, Faculty of Law, Rikkyo University (1991-1992), Assistant Professor (1994-1995) and Associate Professor (1995-1999) of School of Social Science, National Defense Academy, and Professor (1999-2016) of Faculty of Policy Management, Keio University. Bachelor of Law (B.C.L.) from Keio University (1983) and Doctor of Civil Law (D.C.L.) from Institute of Air and Space Law, Faculty of Law, McGill University (Canada) (1993). Member of

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John B. Sheldon is the Chairman and President of ThorGroup GmbH; founder and owner of the Torridon Group LLC, a space and cyberspace consulting company; and non-resident Senior Fellow at the Atlantic Council in Washington, DC. Prior to his current positions, John was Professor of Space and Cyberspace Strategic Studies at the U.S. Air Force's School of Advanced Air and Space Studies (SAASS), at Maxwell AFB, Alabama. For over six years John taught the National Security Space course, and founded, directed, and taught the Intelligence, Information, and Cyberspace course. John was also Executive Director of the George C. Marshall Institute in Washington, DC. John has consulted for the U.S. National Security Council, the Office of the Secretary of Defense, the U.S. Department of State, and for allied governments around the world. A former British diplomat, John holds Bachelor and Master's degrees from the University of Hull, UK, and a Ph.D. in politics and international relations from the University of Reading, UK. He currently resides in Washington, DC, with his American wife Melissa.

Shinichi NAKASUKA

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Prof. Nakasuka graduated from University of Tokyo in 1983 and got Ph.D. in 1988. He joined IBM Research during 1988-1990, and then worked for Department of Aeronautics and Astronautics, University of Tokyo as a lecturer in 1990, as an Associate Professor in 1993, and became a Professor in 2004. He developed and launched seven micro/nano/pico-satellites successfully. He is a member of JSASS, SICE, and IAA, and the Chairperson of IFAC Aerospace Technical Committee and UNISEC-GLOBAL. He has been a member of Space Policy Committee of Cabinet Office since 2012.

NIDS International Symposium on Security Affairs

“Space Security: Trends and Challenges”

November 30, 2015

Hotel Chinzanso Tokyo

OPENING REMARKS: Yoshiyuki Suzuki, President, the National Institute for Defense Studies (NIDS)

INTRODUCTION: Yoshiaki Sakaguchi, Executive Director for Research and International Affairs, NIDS

SESSION I “Trends in Space Security”

Chair: Yasuaki Hashimoto, Director, Policy Studies Department,
NIDS

Speakers:

Peter Hayes, Professor, George Washington University, USA

Jean-Daniel Teste, Commandant, Joint Space Command,
France

Xavier Pasco, Senior Research Fellow at the Foundation for
Strategic Research (FRS), France

Teruhisa Tsujino, Specially Appointed Fellow, Center for
Research and Development Strategy (CRDS), Japan Science
and Technology Agency (JST).

Yasuaki Hashimoto, Director, Policy Studies Department,
NIDS, Former Member of Committee on National Space
Policy

SESSION II “Space Threats and Responses”

Chair:

Yasushi Horikawa, Technical counselor of Japan Aerospace Exploration
Agency (JAXA), Former Chair of the United Nations Committee on Peaceful
Use of Outer Space (UNCOPUOS)

Speakers:

Brian Weeden, Technical Advisor, Secure World Foundation,
USA

Xavier Pasco, Senior Research Fellow at the Foundation for
Strategic Research (FRS), France

Setsuko Aoki, Professor of International Law, Faculty of
Policy Management, Keio University, Member of Committee

on National Space Policy

SESSION III “International Cooperation in Space Security”

Chair:

Hiroshi Yamakawa, Professor, Kyoto University, Member of Committee on National Space Policy

Speakers:

John Sheldon, Senior Researcher, Atlantic Council, USA

Shinichi Nakasuka, Professor, Tokyo University, Member of Committee on National Space Policy

CLOSING REMARKS: Hirofumi Ohnishi, Vice President, NIDS

(Position title as of November 30, 2015)