

6th PSSI Space Security Conference
**The Global Space Competition:
Security, Markets and Sanctions**
Prague, 19–21 June 2022



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BACKGROUND

Since 2011, PSSI has held a series of high-level International Space Security Conferences designed to advance allied decision-making in this critical security portfolio. Five such major conferences have been convened to date, hosting leading space security experts and senior officials from Europe, the United States, and Japan. Three have been held in Prague (in 2011, 2016, and 2019), one in Tokyo (in 2013), and one in Washington, D.C. (in 2017).

The most recent conference, entitled "*Evolution of the Counterspace Threat and Strengthening of International Space Partnerships*", was held in Prague on June 9 - 11, 2019, and focused on the prominent role played by the state-controlled space companies of authoritarian space powers (notably China and Russia) and how they are deployed to recruit smaller countries aspiring to build space capabilities. This generally entails the offer of vertically integrated packages of equipment (e.g. satellites), services (e.g. launch facilities), ground stations, operators, training, and subsidized financing -- ultimately leading to sole-source contracts and unhealthy levels of dependency.

To compound the problems associated with approach to space sector partnerships described above, the large Chinese and Russian space companies are often operating under official sanctions of the U.S. and/or EU for various forms of national security and human rights abuses. Chinese space companies are presently grappling with a number of U.S. sanctions regimes, including the Treasury Department's new capital markets sanctions list (instituted on June 3, 2021, by Executive Order 14032), the Pentagon's Chinese Military Companies List, and the Commerce Department's Entity List (Japan has a similar METI's End User List).

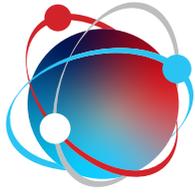
The imposition of sanctions on space companies raises a number of new, vexing questions with regard to the risk calculus associated with space-related cooperation or partnering arrangements. These have not, to date, been included in the multilateral deliberations on space behavioral norms and governance.

To drill down further on this and other interesting topics, the upcoming conference (the sixth of this series) is entitled, "The Global Space Competition: Security, Markets and Sanctions", and is scheduled to be convened in Prague on June 19 - 21, 2022.

CONFERENCE GOAL

The central goal of the conference is to illuminate the connectivity among seemingly benign global space commerce, proper space governance, and deterrence/security-related considerations. It will seek to:

- evaluate the latest developments regarding space deterrence and readiness to manage ever-more sophisticated counterspace scenarios, including those emanating from the economic and financial domain;
- consider requirements for allied space domain awareness systems and policies to share information;
- identify attributes of 21st century global space leadership;
- elevate the importance and urgency of government-industry collaboration in strengthening innovation and market competitiveness of allied space companies;
- discuss the role of commercial companies in strengthening the democratic space alliance;
- assess the risks and threats of an uneven playing field presently favoring Chinese and Russian state-led companies in competition with their allied corporate counterparts in global space markets;
- gauge the level of political interest of allied governments in pushing back against the non-market business practices of state-controlled space companies which are inconsistent with international trade rules and/or have been subject to allied-sanctioned corporate national security and human rights abuses; and
- propose policy options to integrate sanctions-related considerations into existing deterrence/space security strategies and behavioral norms.



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CONFERENCE PROGRAM

SUNDAY, 19 JUNE 2022

Venue: Terasa U Zlaté studně (Golden Well Terrace), U Zlaté studně 166/4, Prague 1

18:00–20:00 **OPENING RECEPTION** (by special invitation only)
Introductory Remarks: Roger W. Robinson Jr., Chairman and Co-Founder, PSSI
Opening Remarks: Jiří Schneider, former First Deputy Minister of Foreign Affairs of the Czech Republic
Keynote Remarks: Lt. Gen. B Chance Saltzman, Deputy Chief of Space Operations for Operations, Cyber, and Nuclear, US Space Force

MONDAY, 20 JUNE 2022

*Venue: Czernin Palace, The Seat of the Ministry of Foreign Affairs of the Czech Republic,
Loretánské nám. 5, Prague 1*

7:45–8:15 **COFFEE AND REGISTRATION**

8:15–8:35 **OPENING SESSION**
Welcome Remarks:
Roger W. Robinson Jr., Chairman and Co-Founder, PSSI
Opening Remarks:
Tomáš Kopečný, Deputy Minister of Defence for Industrial Cooperation, Czech Republic

8:35–9:35 **PANEL 1: ARCHITECTURE AND POLICIES FOR PARTNER SPACE DOMAIN AWARENESS**
Moderator: Regina Peldszus, Space Policy Officer, European External Action Service (EEAS)
Panelists:
Pascal Faucher, Chairman, EU SST Consortium
Kevin O'Connell, former Director of the Office of Space Commerce, US Department of Commerce, and Founder and CEO of Space Economy Rising LLC.
Paul Graziani, Chief Executive Officer, COMSPOC Corp.

9:35–9:50 **COFFEE BREAK**

- 9:50–11:05 **PANEL 2: SPACE THREAT PROFILE UPDATE**
Moderator: Scott Pace, former Executive Secretary of the US National Space Council and Director of Space Policy Institute, George Washington University
Panelists:
Rodrigo da Costa, Executive Director, EU Agency for the Space Programme (EUSPA)
John F. Huth, Defense Intelligence Officer for Space and Counterspace, Defense Intelligence Agency (DIA)
Pascal Legai, Senior Advisor to ESA Director General for Security Affairs, European Space Agency (ESA)
Jill Stuart, Visiting Fellow, Department of Government, The London School of Economics and Political Science
- 11:10–12:10 **SPECIAL SESSION: ALLIED SPACE COMMANDS COOPERATION**
Moderator: John P. Stopher, former Principal Assistant to the Secretary of the US Air Force for Space and Senior Fellow, PSSI
Panelists:
Lt. Gen. John E. Shaw, Deputy Commander, U.S. Space Command
Maj. Gen. Michel Friedling, Commander, French Space Command
Maj. Gen. Michael Traut, Commander, German Space Command
Air Cdre. Mark Flewin, Head of Operations, Plans, and Training, UK Space Command
- 12:10–12:15 **GROUP PHOTO**
- 12:15–13:10 **BUFFET LUNCHEON**
- 13:15–13:35 **SPECIAL GUEST:**
Yasuyuki Kasai, Director-General, National Space Policy Secretariat, Japan Prime Minister's Cabinet Office
Introduced by: Jana Robinson, Managing Director, PSSI
- 13:35–14:50 **PANEL 3: ALLIED OPTIONS FOR STRENGTHENED CROSS-DOMAIN DETERRENCE**
Moderator: Xavier Pasco, Director, La Fondation pour la recherche stratégique (FRS)
Panelists:
Peter Hays, Senior Policy Advisor, Falcon Research and Adjunct Professor, George Washington University's Space Policy Institute
Col. Ladislav Stahl, Space Advisor and Coordinator for Joint Intelligence, Defence and Security (JIDS), NATO HQ
Peter Marquez, Head of Space Policy, Amazon Web Services and former Director for Space Policy at the US National Security Council
Namrata Goswami, Strategic Analyst on Indo-Pacific
- 14:50–15:20 **COFFEE BREAK**



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15:20–16:35

PANEL 4: REQUIREMENTS FOR MAINTAINING GLOBAL SPACE LEADERSHIP

Moderator: Jana Robinson, Managing Director, PSSI

Panelists:

Carine Claeys, Special Envoy for Space and Head of Space Task Force, European External Action Service (EEAS)

Richard Buenneke, Senior Advisor, Space Policy, US State Department

Kai-Uwe Schrogl, Special Advisor for Political Affairs, European Space Agency (ESA)

Simon Jones, Deputy Head (Strategic Threats), Security Policy Department, Foreign Commonwealth and Development Office, UK

19:15

GALA DINNER (by special invitation only)

Venue: Mlýnec Restaurant, Novotného lávka 9, Prague 1 - Old Town Prague

Keynote Speaker:

Lt. Gen. John E. Shaw, Deputy Commander, U.S. Space Command

Introduced by:

Roger W. Robinson Jr., Chairman and Co-Founder, PSSI

TUESDAY, 21 JUNE 2021

Venue: Czernin Palace, the seat of the Ministry of Foreign Affairs of the Czech Republic
Loretánské nám. 5, Prague 1

8:00–8:30 **COFFEE AND REGISTRATION**

8:30–8:50 **OPENING SESSION**

Remarks: Jan Lipavský, Minister of Foreign Affairs of the Czech Republic

Introduced by: Roger W. Robinson Jr., Chairman and Co-Founder, PSSI

8:50–10:05 **PANEL 5: INDUSTRY PERSPECTIVE ON EXPANDING ALLIED PARTNERSHIPS**

Moderator: Jean-Jacques Tortora, Director, European Space Policy Institute (ESPI)

Panelists:

Václav Kobera, Director of ITS and Space Activities, Research, Development and Innovations, Czech Ministry of Transport

Kevin O'Connell, former Director of the Office of Space Commerce, US Department of Commerce, and Founder and CEO of Space Economy Rising LLC.

Hiroshi Koyama, Fellow, Electronic Systems Group, Mitsubishi Electric Corporation

Jaroslav Jaworski, General Manager, Redwire Space Europe

10:05–10:35 **COFFEE BREAK**

10:35–11:50 **PANEL 6: BOLSTERING ALLIED SPACE ENTERPRISE ARCHITECTURE**

Moderator: John P. Stopher, former Principal Assistant to the Secretary of the US Air Force for Space and Senior Fellow, PSSI

Panelists:

Brig. Gen. Didier Polomé, Assistant Chief of Staff for Strategic Plans and Policy/Defence Planning, NATO HQ Supreme Allied Command Transformation (NATO ACT)

Stephen C. Pluntze, Executive Director of the Space Systems Command International Affairs Office, US Space Force

Travis Langster, Principal Director of Space Policy, US Department of Defense

Thomas Single, Deputy Vice President International Region, Space Force Association

11:50–12:00 **CLOSING REMARKS**

Roger W. Robinson Jr., Chairman and Co-Founder, PSSI

12:00–13:45 **CLOSING LUNCHEON**

Venue: Czernin Palace Gardens, the Ministry of Foreign Affairs of the Czech Republic



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SPEAKERS' BIOGRAPHIES

Richard H. Buenneke

Richard H. Buenneke is a senior advisor for national security space policy in the Office of Emerging Security Challenges of the Bureau of Arms Control, Verification and Compliance at the United States Department of State in Washington, D.C. Mr. Buenneke advises senior State Department officials on the planning and implementation of diplomatic and public diplomacy activities relating to U.S. national and homeland security space policy. In this role, he leads State's development of "whole of government" strategies for international cooperation on spaceflight safety and space critical infrastructure security and resilience. Before joining the State Department, Mr. Buenneke was a senior policy analyst at The Aerospace Corporation, where he served as lead analyst for the U.S. Department of Defense's efforts relating to mission assurance and resiliency of commercial space capabilities. Mr. Buenneke has also led research tasks in support of U.S. government assessments of policies and architectures for national security and commercial space systems as an analyst with Booz Allen Hamilton and the RAND Corporation. He holds Bachelor's degrees in economics and systems engineering from the Wharton and Engineering schools of the University of Pennsylvania. Mr. Buenneke also holds Master's degrees in national security studies and policy analysis from the George Washington University's Elliott School of International Affairs and the Pardee RAND Graduate School.

Carine Claeys

Carine Claeys has been the EU Special Envoy for Space in the European External Action Service (EEAS) since 2019. She has been Head of the EEAS Space Task Force (now SecDefPol.5 Space) since its inception in 2015. In this capacity, she ensures that the High Representative of the European Union for Foreign Affairs and Security Policy (HR) can exercise his operational responsibilities regarding the Union's response to threats to or through the systems and services deployed under the EU Space Programme and regarding the functioning of the

EU Satellite Centre (SatCen); she advises the EEAS Secretary-General on all space matters of EU interests, in particular those having an international, as well as a security and defence, dimension; she chairs the Board of the SatCen, as the representative of the HR.

Before the EEAS was established, Carine Claeys served in the General Secretariat of the Council of the European Union. From 2005 to 2011, she was head of the "Security of Space Tools" cell (Galileo, GMES – then Copernicus) in the EU Joint Situation Centre. Before that, she was responsible for maritime transport and for intermodal transport and networks in the Directorate-General for Transport (2000-2005). She worked in several other sectors of this administration since 1992, including energy, human rights, United Nations, drugs, terrorism, agriculture, and enlargement.

Carine Claeys holds a PhD in political science, a Master's degree in business engineering, a Master's degree in international relations, and a Master's degree in development cooperation.

Rodrigo da Costa

On 16 October 2020, Rodrigo da Costa took up his duties as Executive Director of the European Union Agency for the Space Programme (EUSPA), formerly the European GNSS Agency (GSA). Prior to this, he was the Galileo Services Programme Manager from March 2017.

Before joining the GSA, Rodrigo da Costa held several senior project management, business development, and institutional key account management positions in the space industry, in the areas of human space flight, exploration, launchers and R&D.

Rodrigo da Costa holds a degree in Aerospace Engineering from the "Instituto Superior Tecnico" in Lisbon, a Master's degree in Aerospace Engineering from the University of Delft, and an MBA from the EuroMBA consortium of Business Schools.

Pascal Faucher

Dr. Pascal Faucher graduated (1997) from the *École Nationale Supérieure de l'Aéronautique et de l'Espace* (SUPAERO). He also holds a Master's Degree (1998) and a Ph.D. in Physical Oceanography (2001) by the University Paul Sabatier, funded by the Ministry of Defense, and an Executive Master of Business Administration (2007) by ESCP Europe. After a post-doctoral position in the EU project Marine Environment and Security for the European Area, his experience includes 19 years of various positions at CNES headquarters as international relations advisor and programme manager. For the last 10 years, as a programme manager in defense and security, he is responsible for the following themes: space security, space situational awareness, space surveillance and tracking, space traffic management, space debris, space weather, and near-Earth objects. He is the chairman of the European Union Space Surveillance and Tracking (EU SST) since July 2017. He is a French delegate to the Programme Board SSA of the European Space Agency (ESA), the EU Space Programme Committee in SSA configuration, the Administrative Board of the European Union Agency for the Space Programme (EUSPA), the Steering Group of the Inter-Agency Space Debris Coordination Committee (IADC), the Steering Committee of the Space Mission Planning Advisory Group (SMPAG), the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), appointed in 2021 as the national point of contact to the new Working Group on the Long Term Sustainability of Outer Space Activities (LTS 2.0). Since October 2021, he is the chair of the Space Security Committee of the International Astronautical Federation (IAF). In France, he chairs the National Coordination Group on Space Weather (GCME). He is a member of the French Steering Group on Unidentified Aerospace Phenomena (GEIPAN).

Mark Flewin

Air Commodore Mark Flewin was commissioned into the Royal Air Force in 1998. After pilot training, he was posted to the Jaguar and became a Qualified Weapons Instructor, completing several frontline tours including operational deployments to enforce the no-fly zone in Iraq. He joined the nascent Typhoon Force in 2005, taking on instructional and standardization roles to support capability growth, alongside operational deployments to the Combined Air and Space Operations Centre in Qatar and to command 903 Expeditionary Air Wing in support of Op SHADER.

In 2012, he took command of 1 (Fighter) Squadron at RAF Leuchars, leading its formal re-establishment as a frontline, combat-ready Typhoon squadron. Two joint roles followed: Chief of Staff within the Air Staff at the Ministry of Defence and Chief of Staff, Joint Effects at the UK Permanent Joint Headquarters, where he was appointed CBE in 2018 for his operational contribution.

He assumed command of RAF Coningsby in 2018, supporting a multitude of operational commitments in the UK and overseas, as well as the key commemorative role of the Battle of Britain Memorial Flight. A short tour as Typhoon Force Commander followed with oversight of RAF Leeming, the Hawk T1 fleet and the Royal Air Force Aerobatic Team, in addition to the Typhoon Force at RAF Coningsby and Lossiemouth. Upon completion of the Higher Command and Staff Course in 2021, he was appointed to the newly formed UK Space Command, with responsibility for UK space operations, planning and training.

Michel Friedling

Major General (FRA-AF) Michel Friedling graduated from the French Air Force Academy (year 1986) as a fighter pilot and obtained a degree in aeronautics engineering. He exercised different levels of command and responsibilities in operational units, flying Mirage F1 and Mirage 2000, mainly in Cambrai AFB, to include several deployments in Africa, Balkans and Middle East.

Graduated from the War College in 2001, he took command of a Fighter Squadron in Mont-de-Marsan Air Force Base. From 2001 to 2004, his unit prepared the entry into service of the Rafale and managed the operational testing of all new weapon systems and armaments delivered to the French Air Force.

He then served five years in the Plans Department of the French Air Force HQ in charge of capability development and multinational cooperation on capabilities. In 2009, he took command of Saint-Dizier Air Base, equipped with the Rafale. Graduated from the *Centre des Hautes Etudes Militaires (CHEM)* and the *Institut des Hautes Etudes de la Défense Nationale (IHEDN)*, Paris, Michel Friedling served in the Joint Military Staff, where his areas of responsibilities included successively nuclear deterrence and military strategy. In 2014, he became head of the Plans Department of the French Air Force. From August 2016 to February 2017, he was the French Senior National Representative to USAFCENT Cdr - Al Udeid, Qatar – for Operation Inherent Resolve and commanded the French Air Component allocated to the international coalition



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against ISIS. Promoted to Air Force Brigadier General in 2017, he became the Deputy Chief of Staff responsible for developing the Military Strategy at the French joint Staff HQ in Paris. In 2018, he was appointed as the Commander of the French Space Command. He was promoted Major General in 2019.

Namrata Goswami

Dr. Namrata Goswami is an independent scholar on space policy and Great Power Politics. Recently, she has been invited to teach at the Thunderbird School of Global Management, Arizona State University for their Executive Masters in Global Management, Space course. She is a consultant for Space Fund Intelligence and a guest lecturer at the seminar on "India Today: Economics, Politics, Innovation & Sustainability", Emory University. She was subject matter expert in international affairs with Futures Laboratory, Alabama. She worked as Research Fellow at MP-Institute for Defence Studies and Analyses, New Delhi; a visiting Fellow at Peace Research Institute, Oslo, Norway; La Trobe University, Melbourne, Australia; University of Heidelberg, Germany; Jennings-Randolph Senior Fellow, United States Institute of Peace; and was a Fulbright Senior Fellowship Awardee. She was awarded the Minerva grant by Office of the U.S. Secretary of Defense to study great power competition in outer space. In 2019, Dr. Goswami testified before the U.S.-China Economic and Security Review Commission on China's space program. Her co-authored book, *Scramble for the Skies: The Great Power Competition to Control the Resources of Outer Space* was published in 2020 by Lexington Press; Rowman and Littlefield. Her book on The Naga Ethnic Movement for a Separate Homeland was published in 2020 by Oxford University Press. She has published widely including in The Diplomat, the Economic Times, The Washington Post, Ad Astra, Asia Policy, Live Encounters Magazine, Cairo Review. She was invited in 2019 to share about her life and her work at a Tedx event held at the Rosa Parks Museum, Montgomery, Alabama. She is currently working on two academic book projects, one on *China's Grand Strategy and Notions of Territoriality* (Routledge, 2023) and the other on *Spacepower Theory and Practice: Case Studies of U.S. China, India, Russia and Japan* (2023).

Paul Graziani

Paul Graziani is COMSPOC Corporation's Chairman and Chief Executive Officer. COMSPOC aims to detect, track, characterize and protect everything in space. The company delivers commercial SSA and STM services for the safety of spaceflight and Space Domain awareness services for national security out of Exton, Pennsylvania.

For the 33 years before COMSPOC's inception, Paul championed the use of commercial software in the national security and space industries as a co-founder and CEO of Analytical Graphics Inc (AGI).

Paul is chairman of the board for OneSky Systems Inc, and he sits on the board of directors of Passur Aerospace, Ursa Space Systems, the Civil Air Patrol Foundation, and serves as vice-chairperson of the Federation of Galaxy Explorers (FOGE). He is also an associate fellow of the American Institute of Aeronautics and Astronautics (AIAA).

Paul earned a Bachelor of Science degree in biology from LaSalle College, but quickly pivoted his career to software, launching into satellite mission planning systems with General Electric's Space Division in 1980. Paul is a serial early adopter of all technology, an avid woodworker, and a sports car enthusiast.

Peter Hays

Dr. Peter L. Hays is Adjunct Professor of Space Policy and International Affairs at George Washington University's (GWU) Space Policy Institute, Senior Policy Advisor with Falcon Research, and Space Chair at Marine Corps University. He has been directly involved in helping to develop and implement major national security space policy and strategy initiatives since 2004 and serves as a senior advisor on acquisition, governance, cadre, and strategic messaging issues. Dr. Hays was presented the National Intelligence Professional Award by the Director of National Intelligence in 2014 and was chosen as the SAIC National Security Solutions Employee of the Year in 2008. He served as a Staff Augmentee at the White House Office of Science and Technology Policy in 1988 and at the National Space Council in 1990. Dr. Hays is a member of the Center for Strategic and International Studies Missile Defense Project Advisory Board and

is a member of the editorial board for *Aether, Space and Defense*, and *Astropolitics*; he served on the Space Security Index Governance Group and was a term member of the World Economic Forum's Global Agenda Council on Space Security from 2010-2014. He holds a Ph.D. from the Fletcher School and was an Honor Graduate of the USAF Academy. Dr. Hays served as an Air Force officer from 1979-2004; flew C-141 cargo planes, and taught international relations, defense policy, and space policy courses at the USAF Academy, School of Advanced Airpower Studies, and National Defense University. He now teaches the Air and Spacepower Seminars for the Marine Corps School of Advanced Warfighting and the Space and National Security and Science, Technology, and National Security Policy graduate seminars at GWU. Major publications include *Handbook of Space Security, Space and Security*, and *Toward a Theory of Spacepower*.

John Huth

Dr. John Huth is the Defense Intelligence Officer for Space and Counterspace. He serves as the senior intelligence advisor to the Director and Deputy Director of DIA on the full range of intelligence matter related to space and counterspace topics to include analysis, collection, counterintelligence, international engagement, intelligence policy, and outreach.

Dr. Huth earned his Doctorate in Computational Science from George Mason University, his Master of Science in Physics from the University of Massachusetts, and a Bachelor of Science in Astronomy from Penn State. He served as an Army Intelligence Officer, technology industry leader, and program manager for over 25 years before joining the Defense Intelligence Agency (DIA).

Dr. Huth is a lead contributor to several firsts in space and intelligence that have had long-lasting impacts. He has experience across the full spectrum of intelligence activities from analysis, to collection, to enterprise management. Dr. Huth has led multiple cross-discipline organizations.

Simon Jones

Mr. Jones serves as the Deputy Head of the FCDO's Security Policy Department, leading the Strategic Threats team, covering modern deterrence policy, including nuclear deterrence and space security. His previous security policy roles in the FCDO have included European defence, NATO, Russia, Council of Europe, OSCE, and counter-terrorism. He has also worked

in the UK representation to the EU, leading on audio-visual policy, and in the European Commission, covering education and training policy.

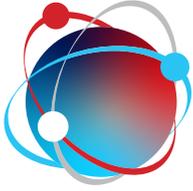
Jaroslav Jaworski

Jaroslav Jaworski is the General Manager of Redwire Space Europe. Before, Jaroslav Jaworski led the daily operations of Luxembourg-based Made In Space Europe. With a special focus on space robotics, Jaroslav has heavy backgrounds in both business and engineering. After starting his space adventure at Students Space Association during his time at Warsaw University of Technology, Jaroslav spent several years lobbying Poland to join the European Space Agency through promoting the benefits of such partnership. Since then, he has developed several technologies for satellite servicing and lunar exploration, working as a systems engineer, project manager, and leading a space robotics department.

Jaroslav teaches at International Space University, and holds degrees in aerospace engineering and accounting and finances. He is a co-founder of Luxembourg Space Federation, which is a non-profit organisation supporting space-focused education in Luxembourg. Jaroslav's ambition and career are dedicated to making space more accessible for humans. He hopes that his work makes living and working in space common for people. Jaroslav believes that space industrialisation, a concept introduced by Harry Stone and Gerard K. O'Neill, is the key to solving space's biggest challenges.

Yasuyuki Kasai

Mr. Kasai is the Director-General at the National Space Policy Secretariat of the Cabinet Office of Japan. Before, he served as the Deputy Director-General at the Economic and Industrial Policy Bureau of the Japanese Ministry of Economy, Trade and Industry. In 2018, Mr. Kasai started working as the Director of the General Coordination Division in the Japan Patent Office. Between 2015 and 2018, he was the Director for Industry and Employment at the Cabinet Office's Economic and Fiscal Management Bureau. Earlier in his career, he served as the Director at the Industry Revitalization Division of the Economic and Industrial Policy Bureau of the Ministry of Economy, Trade and Industry and also as the Counsellor at the Fourth Department at the Cabinet Legislation Bureau. In 2009, he was appointed Special Assistant to Director-General at the Economic and Industrial Policy Bureau at the Ministry of Economy, Trade and Industry. Mr.



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Kasai joined the Ministry of International Trade and Industry in Japan in 1990. Mr. Kasai holds a Master's degree in Business Administration from the University of California, Berkeley, and a Bachelor's degree in Law from the University of Tokyo.

Václav Kobera

Since 2011, Mr. Václav Kobera, J.D., has served as the Director of Intelligent Transport Systems at the Space Activities and Research, Development, and Innovation of the Ministry of Transport of the Czech Republic. He is also the Chairman of the Administrative Board of the EU Agency for Space Programme (EUSPA). In addition, since 2017, Mr. Kobera has served as the Head of Delegation of the Czech Republic to the European Space Agency (ESA). Between 2013-2018, he was a Member of the Administrative Board of the European GNSS Agency (GSA) representing the Czech Republic and the Chairman of the ESA Programme Board on Satellite Navigation (PB-NAV) between 2017-2020.

Tomáš Kopečný

Tomáš Kopečný, Deputy Minister of Defence, currently heads the Industrial Cooperation Division. Mr. Kopečný, as an expert on international industrial cooperation and defence market, is dedicated to the strengthening of Czech defence industry, strategic partnerships in defence research and development, and continuous build-up of Czech defence industrial and technological base within the European defence framework. He holds an advanced MA degree (PhDr.) in Security Studies from the Faculty of Social Sciences at Charles University in Prague. He also attended the McGill University in Canada and did a professional internship at NATO within the team of the Special Advisor to NATO Secretary General and the Public Diplomacy Division. His prior working experience covers various positions within the Czech Ministry of Defence ranging from the Advisor to the First Deputy Minister on Africa to Head of the Industrial Cooperation Division.

Hiroshi Koyama

Dr. Hiroshi Koyama is currently Fellow & Chief Engineer of the Electronic Systems Group of Mitsubishi Electric Corporation (MELCO). In March 1987, he received his

Ph.D. from the University of Tokyo and in April of 1987, he joined MELCO. He started his career as Chief Engineer for the rendezvous and docking system of Engineering Satellite-VII (ETS-VII) & H-II Transfer Vehicle (HTV) in Kamakura Works. Since then, he has experienced satellite system development and project management of various satellites including Communication Satellites, Earth Observation Satellites and Navigation Satellites. In April of 2008, he was appointed General Manager of Office for Space Utilization and Strategy Planning at MELCO Headquarters. He was responsible for promoting the utilization of space systems in various fields such as high-precision navigation fields and Earth Observation fields. In April of 2015, he was appointed Executive Fellow of Electronic Systems Group and responsible for business development for MELCO space activities and promoting utilization of space. Dr. Koyama is currently a member of International Academy of Astronautics (IAA) and a member of International Federation of Automatic Control (IFAC) Technical Committee on Aerospace.

Travis B. Langster

Travis B. Langster was sworn in as Principal Director of Space and Missile Defense Policy in the Office of Under Secretary of Defense, Space Policy on April 18, 2022. In this role, his responsibilities include the review and development of space policies aligned with Department of Defense priorities and strategic guidance. These responsibilities span across international and commercial engagement, strategy & plans, integration and missile defense.

Mr. Langster's prior experience and engagements span across many sectors within the National Security Space community. Mr. Langster's contributions within this community includes work and support to the National Reconnaissance Office (NRO) HQ and mission ground stations, the National Military Command Center (NMCC), the National Air and Space Center (NASIC), the National Security Agency (NSA) and other organizations. Mr. Langster has also participated in many international engagements on behalf of U.S. Government trade missions and direct engagements. Previous to his role in the Department of Defense, Mr. Langster served as the Vice President and General Manager at COMSPOC Corp, a global leader in space

situational awareness, space domain awareness, and space traffic coordination and management. In this role, he managed the transition and start-up of the company from its former parent company. Mr. Langster was responsible for establishing and managing the organizational design and business operations. Prior to his leadership of COMSPOC, Mr. Langster was a Business Unit Vice President at Analytical Graphics, Inc. (AGI). Mr. Langster began his aerospace career as a satellite engineer focused on spacecraft integration & test, satellite subsystems, launch and early orbit operations for Air Force satellite systems.

Pascal Legai

Major General (Ret) Pascal Legai, was an intelligence officer in the French Air Force. He acquired experience mainly in the fields of geography, imagery, international relations, space and security issues. He has extensive international experience in geospatial and intelligence domains. He had been appointed as a geographer in the French Air Force staff in Paris for 5 years (1994-1999). He was also the Head of the French Imagery Intelligence Centre (2004-2006), Human Resources adviser of the French Air Force (2006-2008) and the Commanding Officer of the French Air Force Base in Grenoble (2008-2010) before joining the EU Satellite Centre in July 2010 as Deputy Director. Pascal Legai has been elected by the Member States as the EU Satellite Centre Director on the 1st January 2015, an imagery analysis centre, based near Madrid, Spain, providing Geospatial Intelligence (GEOINT) and Imagery Intelligence (IMINT) products and services to support the EU external action. He left this position on the 30th of April 2019. On 1st of May 2019, he has been appointed to the European Space Agency (ESA), first as a Senior Security Adviser to the ESA/Earth Observation Director, in Frascati (Rome), and today as a Senior Security Coordinator to ESA DG in Paris. He has a PhD in International Relations, a law degree, several Master degrees in Imagery Processing, Computer Sciences, in History, in British Civilization, in Mathematics. He is an aerospace engineer and has also an Engineer Diploma in the field of the geographic sciences.

Jan Lipavský

Mr. Lipavský has served as the Minister of Foreign Affairs of the Czech Republic since December 2021. He served in the Chamber of Deputies for four years as Vice-Chairman of the Committee on Foreign Affairs,

Defence and Security. In addition, he was a member of the Standing Committee on Hybrid Threats, the Subcommittee on Defence, Cyber and Security Policy and Strategic Concepts of the Czech Republic and the Subcommittee on Migration and Asylum Policy. He focused mainly on issues of energy and international security and hybrid threats. Before entering politics, he pursued a private sector career in banking IT, having worked for McKinsey & Company, Euro RSCG, ZOOT, Total Solutions and Moro Systems. He graduated in International Territorial Studies at the Institute of International Studies, Faculty of Social Sciences, Charles University, and spent a year at the University of Kent in the United Kingdom.

Peter Marquez

Peter Marquez is the Head of Space Policy at Amazon Web Services where he oversees global space policy activities for Amazon Web Services. Peter served at the White House for the three previous Administrations. Peter was the Director for Space Policy for Presidents Bush and Obama and a Senior Advisor to the National Space Council. Peter was responsible for the development, implementation, and coordination of the U.S. national space policies. Peter has also worked with foreign governments to establish their own space agencies, assist in the writing of their national space policies, and create interagency processes to execute national space programs. Peter also worked in the commercial space sector as Managing Partner of Andart Global, U.S., the Vice President of Global Engagement for Planetary Resources, and the Vice President for Strategy at Orbital Sciences Corporation. Before his time at the White House, Peter served for a decade in the Pentagon on a variety of space and classified programs for the Air Force and Office of the Secretary of Defense. He served in requirements, acquisition, operations, and policy roles and served as the Director of Special Programs for the Under Secretary of Defense for Policy.

Scott Pace

Dr. Pace rejoined the faculty of the Elliott School of International Affairs in 2021 after serving as Deputy Assistant to the President and Executive Secretary of the National Space Council from 2017-2020. He previously served as the Associate Administrator for Program Analysis and Evaluation at NASA from 2005-2008 and Deputy Chief of Staff for the NASA Administrator from 2002-2003. Prior to NASA, he was



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the Assistant Director for Space and Aeronautics in the White House Office of Science and Technology Policy. From 1993-2000, he worked for the RAND Corporation's Science and Technology Policy Institute, and from 1990-1993, he served as the Deputy Director and Acting Director of the Office of Space Commerce, in the Office of the Deputy Secretary of the Department of Commerce. He received a Bachelor of Science degree in Physics from Harvey Mudd College in 1980; Masters degrees in Aeronautics & Astronautics and Technology & Policy from the Massachusetts Institute of Technology in 1982; and a Doctorate in Policy Analysis from the RAND Graduate School in 1989.

Xavier Pasco

Since October 2016, Dr. Xavier Pasco (Doct. In Pol. Sc.- Univ. of Paris-Sorbonne) has been Director of the Fondation pour la Recherche Stratégique (FRS) in Paris. Before that, Dr. Pasco has been in charge of space, high technology and security-related studies at FRS and CREST (*Center for Research and Evaluation of the Relationships between Strategies and Technology*) associated to Ecole Polytechnique. Xavier Pasco has been in charge of numerous studies and working groups about National and European space policies in the field of civilian and military activities. He is a specialist of the United States space policy and programmes, with a focus on the transatlantic relationships dealing with military space and interoperability issues. Since 2004, Xavier Pasco has engaged in specific research projects managed by the European Commission in the field of space and security research. He has been in charge of End-User engagement programmes in several, PASR, FP6 and FP7 projects related to high-tech security related to space technology and critical infrastructures. 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 (2008-2009) and has been the coordinator of the EDA Study on Earth observation Ground Segment System of Systems for Security and Defence (2011-2012). 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 further ESA on-going work on governance and data

policy issues for future programmes. He is today the lead coordinator of SPACEWAYS, a European Commission-sponsored project dedicated to studying Space Traffic Management with a team of key European industry actors, research centres and institutes. For over 12 years, he has been in charge of many studies for the French ministry of Armed Forces.

Regina Peldszus

Dr. Regina Peldszus is a Space Policy Officer with the European External Action Service (EEAS), Security and Defence Policy Directorate, with a focus on Space Security, Space Situational Awareness and threat response.

Until the end of 2021, she was a Seconded Expert to the Federal Ministry of Economic Affairs in Berlin (Division for Space Agency, Technologies & Security) covering interagency, European and international cooperation for Space Security and Space Situational Awareness. Prior to this she served as Head of Delegation and Co-Chair of EU Space Surveillance & Tracking (EU SST) and handled horizon-scanning studies at the intersection of space operations and infrastructure while with the German Space Agency at DLR (Department of Space Situational Awareness). Previously, she worked for the European Space Agency (ESA), as Internal Research Fellow with the European Space Operations Centre (Special Projects Division) analysing the resilience of mission control teams during critical phases such as LEOP including transfer of practice from other complex domains, and earlier as consultant for human systems integration for future systems at ESA's Astronaut Training Centre (Special Skills Unit). Her background is in design research (MA, University of the Arts London; research council-funded PhD, Kingston University London) with an emphasis on crewed exploration mission scenarios, including foresight approaches, simulator fidelity and extreme environment analogues in high-latitudes.

Regina is a senior member of the AIAA, a member of the IAF Space Security Committee, the IAA Space Traffic Management Committee where she served as secretary in 2021, and the IFIP Working Group on Human Error, Resilience, Reliability, Safety & System Development.

Stephen C. Pluntze

Dr. Steve Pluntze is the Executive Director of the Space Systems Command International Affairs (IA) Office. This office forms part of the Force Design and Architecture Integration functions, which build the overall Space Enterprise Architecture and determine how allied partners are integrated within military space mission areas, such as navigation or weather, and aligned with various cross mission endeavors such as cross mission data and cross mission ground. The office uses international, inter-agency, commercial and academic sources to discover those with the means to either add directly to the capability of the US Space Enterprise Architecture or to help improve the space capabilities of our friends and allies around the world. The IA office leverages the work of US military installations and combat commands.

Dr. Pluntze retired from active Air Force duty as a Colonel in 2011. After retirement, Dr. Pluntze worked as Senior Scientist, Parsons Corp, El Segundo, CA. He served as program manager for the Parsons contract in SMC/EN, the SMC Engineering Directorate, and was assigned to roles in business development and proposal management. He moved from Parsons to Tecolote early in 2016 and then to government service in May, 2016. At Tecolote, he worked for the Director of MILSATCOM in planning the strategic direction of the MILSATCOM Directorate.

Didier Polomé

Brigadier General Didier Polomé started his fighter pilot career in 1988 at the Belgian Royal Military Academy followed by ENJJPT in Sheppard AFB. He joined the 350th Fighter Squadron in Florennes in 1997, and subsequently participated in NATO operations above former Yugoslavia. In 2004, Brigadier General Didier Polomé was appointed as an A3 staff officer in NATO HQ AC Ramstein. In 2007, Brigadier General Didier Polomé assumed command of the 350th Fighter Squadron and led the first Belgian F-16 detachment to Kandahar in support of ISAF in 2008. Upon completion of his command tour in 2009, he was selected for the U.S. Air War College in Maxwell AFB. Brigadier General Didier Polomé was assigned in 2010 as Chief, Crisis Response Planning in the Belgian Joint Staff. Three years later, he attended the U.S. National War College in Washington D.C. During the following two years, Brigadier General Didier Polomé fulfilled the duties of Commander of the Air Ops Division (A3) in the Belgian Air Force staff. In June 2016, Brigadier General Didier Polomé became

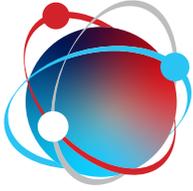
the commander of the 2nd Tactical Wing at Florennes Air Base. Finally, after a three-year mandate as base commander, he was appointed to become Assistant Chief Of Staff Strategic Plans and Policy and Defense Planning (ACOS SPP/DP) at the NATO Supreme Allied Command Transformation (SACT) HQ in Norfolk, USA.

Kevin M. O'Connell

Mr. O'Connell, founder and CEO of Space Economy Rising LLC, brings almost four decades of experience in the U.S. government, in research organizations, and as an entrepreneur and business leader to this position. Mr. O'Connell has researched and written extensively on the policy, security, and global market issues related to the commercialization of remote sensing. Aside from numerous articles and op-eds, he was co-author of Commercial Observation Satellites: at the Leading Edge of Global Transparency (2000). He served as the Executive Secretary and Staff Director of the NIMA Commission (1999-2000). He was a member, and later Chair, of NOAA's federal advisory committee on remote sensing from 2002-2016. Previously, Mr. O'Connell served as the CEO of Innovative Analytics and Training, a Washington, D.C. professional services firm focused on analysis and decision support for U.S. government and commercial clients. During this time, he also served as a senior consultant to the Office of the Director of National Intelligence and as an independent advisor to the Director, National Geospatial Intelligence Agency. Mr. O'Connell's background also includes extensive experience in national security and intelligence matters, including assignments in the Department of Defense, Department of State, National Security Council, and the Office of the Vice President. He spent a decade conducting and managing research in these areas at the RAND Corporation, including as the first director of RAND's Intelligence Policy Center. Finally, Mr. O'Connell has taught and lectured extensively at universities and research organizations, including MIT, Thunderbird School of Global Management and Georgetown University's School of Foreign Service.

Roger W. Robinson Jr.

Roger W. Robinson Jr. was formerly Senior Director of International Economic Affairs at the Reagan National Security Council, where he was the principal architect of the secret economic and financial strategy for the take-down of the Soviet Union. He later served as Chairman of the Congressional U.S.-China Economic and Security Review Commission for the bulk of 2001-2006.



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Prior to his government service, Mr. Robinson was a Vice President in the International Department of the Chase Manhattan Bank with responsibility for Chase's loan portfolios in the USSR, Central/Eastern Europe and Yugoslavia. He also served as a personal staff assistant to then-Chase Chairman David Rockefeller for some three years. Mr. Robinson is currently Chairman and Co-Founder of the Prague Security Studies Institute in the Czech Republic. He served for seven years on the Board of Visitors of the Sanford School of Public Policy at his alma mater Duke University and has an MA in International Affairs from the Elliott School of George Washington University. Mr. Robinson has regularly testified before Senate and House hearings and appeared in print and broadcast media outlets for over four decades on economic and financial statecraft with respect to China and Russia.

Jana Robinson

Dr. Jana Robinson has been Managing Director of the Prague Security Studies Institute (PSSI) since April 2020. She also serves as PSSI's Space Security Program Director, a post she assumed in 2015. She previously held the position of a Space Policy Officer at the European External Action Service (EEAS) in Brussels as well as a Space Security Advisor to the Czech Foreign Ministry. From 2009 to 2013, Ms. Robinson worked at the European Space Policy Institute (ESPI), seconded from the European Space Agency (ESA), leading the Institute's Space Security Research Programme. Ms. Robinson is an elected member of the International Institute of Space Law (IISL) and the International Academy of Astronautics (IAA). She is also a member of the Advisory Board of the George C. Marshall Missile Defense Project of the Center for Strategic and International Studies (CSIS) in Washington, D.C. Ms. Robinson holds a PhD in the field of space security from the Charles University's Faculty of Social Sciences, Institute of Political Studies and received two MA degrees, from George Washington University's Elliott School of International Affairs and Palacky University in Olomouc, respectively. She received scholarships to attend the International Space University's (ISU) 2009 Space Studies Program (SSP09), the 2008 Summer Training Course at the National

Taiwan Normal University in Taipei, and a one-year course of study at Shanghai University 1999-2000.

Bradley Chance Saltzman

Lt. Gen. B. Chance Saltzman is the Deputy Chief of Space Operations for Operations, Cyber, and Nuclear, United States Space Force, the Pentagon, Arlington, Va. As the Chief Operations Officer, Lt. Gen. Saltzman has overall responsibility for Operations, Intelligence, Sustainment, Cyber, and Nuclear Operations of the United States Space Force.

Lt. Gen. Saltzman is a graduate of Boston University and was commissioned in 1991. He has operational experience with missile and space systems, as a Minuteman III launch officer, and as a satellite operator for the National Reconnaissance Office. He also served as the first Chief of Combat Plans for the Joint Space Operations Center, and later, as Chief of Combat Operations.

Lt. Gen. Saltzman has commanded at the squadron, group, and wing levels including the 614th Space Operations Squadron and 1st Space Control Squadron at Vandenberg Air Force Base, California; the 460th Operations Group at Buckley AFB, Colorado; and the Aerospace Data Facility Colorado, Aurora, Colorado. Before serving in his current assignment, Lt. Gen. Saltzman was the Deputy Commander, U.S. Air Forces Central Command; Deputy, Combined Force Air Component Commander, U.S. Central Command, Southwest Asia.

Jiří Schneider

Jiří Schneider is a former diplomat and consultant in international and security affairs. He currently serves as a Lay Moderator of Czech Protestant Church (ECCB). Following democratic changes in 1989 he was a member of the Czechoslovak Federal Parliament (1990-1992). After the split of Czechoslovakia, he joined the Foreign Ministry as the head of policy planning. He also served as the Czech Ambassador to Israel (1995-1998) and most prominently as the First Deputy Foreign Minister of the Czech Republic (2010-2014). Mr. Schneider took direct part in development of think-tanks as a Program Director at the Prague Security Studies Institute (2005-2010) and Executive Director of Aspen Institute Central

Europe (2016-2020). Jiří graduated from Geodesy and Cartography at The Czech Technical University and obtained a Diploma in Religious Studies from University of Cambridge.

Kai-Uwe Schrogl

Prof. Dr. Kai-Uwe Schrogl is Special Advisor for Political Affairs at the European Space Agency ESA (Headquarters in Paris). From 2019, he was seconded to the German Federal Ministry for Economic Affairs and Energy in Berlin to support the German Presidency of the Council of the European Union in the second half of 2020 and the Presidency Trio until the end of 2021. Up to 2019, he was the Chief Strategy Officer of ESA (Headquarters in Paris, France). From 2007 to 2011 he was the Director of the European Space Policy Institute (ESPI) in Vienna, Austria, the leading European think tank for space policy. Prior to this, he was the Head of the Corporate Development and External Relations Department in the German Aerospace Center (DLR) in Cologne, Germany. Previously he also worked with the German Federal Ministry for Post and Telecommunications and the German Space Agency (DARA) in Bonn, Germany.

He has been a delegate to numerous international bodies and forums and has served from 2014 to 2016 as chair of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space, the highest body for space law-making, comprising 73 Member States. He also was chair of various European and global committees (ESA International Relations Committee; European Coordination Committee for the International Space Station Intergovernmental Agreement; two plenary working groups of the UNCOPUOS Legal Subcommittee, the one on the launching State and the other on the registration practice, both leading to UN General Assembly Resolutions). He presented, respectively testified, at hearings of the European Parliament and the U.S. House of Representatives. Kai-Uwe Schrogl is the President of the International Institute of Space Law, Member of the International Academy of Astronautics and Corresponding Member of the French Air and Space Academy, the International Law Association, as well as Member in academic space law and policy related institutions in China, India, Japan, the Netherlands, and the UK. He is also the Co-Chair of the Global Future Council on Space of the World Economic Forum.

John E. Shaw

Lt. Gen. John E. Shaw is the Deputy Commander, U.S. Space Command. U.S. Space Command is the Unified

Combatant Command responsible for conducting operations in, from, and to space to deter conflict and, if necessary, defeat aggression, deliver space combat power for the Joint/Combined force, and defend U.S. vital interests with allies and partners.

Lt. Gen. Shaw entered the Air Force in 1990 as a distinguished graduate of the U.S. Air Force Academy with a degree in aeronautical engineering and a minor in Russian language. He has served in a variety of air and space operations and staff positions, including operations tours in the 50th Space Wing, the National Reconnaissance Office, the 32nd Air Operations Group and the Space Warfare Center. His operational commands have included the 4th Space Operations Squadron, the 50th Operations Group and the 21st Space Wing. He also served at U.S. Strategic Command as Director of the Commander's Action Group and as Deputy Director for Operations, and in the Pentagon as an Air Force intern, as Deputy Chief of Space Strategy and Integration, a speechwriter and as a senior space policy advisor.

Prior to his current position, Lt. Gen. Shaw was dual hatted as the Commander, Combined Forces Space Component Command, U.S. Space Command, and Deputy Commander, Space Operations Command, U.S. Space Force, Vandenberg SFB, California. He also served as the Deputy Commander of Air Force Space Command, United States Air Force.

Thomas Single

Tom is the Director of Space and Cyber Initiatives for Avantus Federal and volunteers as the Deputy Vice President of the International Region for the Space Force Association (SFA). At Avantus, he leads corporate-level space and cyber growth strategy and capture activities for Defense, Intelligence and Civilian portfolios. In this role he provides subject matter expertise on U.S. and Allied government Space and Cyber operations and technology matters. He is also helping to lead international activities for the SFA and facilitating dialogue between Allied partners on space issues.

Tom served in the Air Force for 24 years as a Space Operations Officer with experience in Space, Cyber and ICBM operations. This included a NATO posting as the Space Strategist at the Joint Air Power Competence Center in Germany. He has three combat deployments, including as the Chief of Space Operations for Coalition forces in Afghanistan. He retired in 2018. Prior to assuming his current position, Tom was a Project Leader for the MITRE Corporation.



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Ladislav Stahl

Colonel Ladislav Stahl is a graduate of the Military Academy in Brno, Charles University in Prague, CEVRO Institute, and European School of Business & Management. He is the SPACE Advisor and Coordinator to the Joint Intelligence and Security Division at NATO Headquarters in Brussels. Before, he was a director of the Czech National Satellite Centre (SATCEN ČR) and head of the Space Technologies expert section on the Board for Research, Development, and Innovations at the Ministry of Defence of the Czech Republic. As an intelligence officer and Special Forces member, he took part in several military operations in Balkan and Afghanistan. He also worked for the EU, namely in the Operations Division of the European Union Satellite Centre for three years.

John P. Stopher

Dr. John Stopher is a Senior Fellow supporting PSSI's Space Security Program. He previously served as the Principal Assistant to the Secretary of the Air Force for Space and was responsible to the Secretary of the Air Force for establishing a Space Force as well as governance, planning, policy, strategy, development and execution across the defense space portfolio and integration with the National Security Space Enterprise. He was also the lead for international space relations and interdepartmental and interagency matters.

Prior to joining the Air Force in 2017, Dr. Stopher was the President of 377 Omega, a national security space and intelligence community technology, policy, and programs-focused consulting company. From 1998 until 2007, John served on the U.S. House of Representatives, Permanent Select Committee on Intelligence as Budget Director, Staff Director for the Subcommittee on Technical and Tactical Intelligence, and Program Monitor for the National Reconnaissance Office and the National Geospatial-Intelligence Agency. John also worked at SeiCorp, TASC, and Eastman Kodak as an engineer on national space programs.

He earned his PhD in electrical engineering from the University at Buffalo. His research was sponsored by the Strategic Defense Initiative in the area of

advanced pulsed power for space systems and taught courses in electromagnetic theory, probability and statistics, electric circuits, and physical electronics laboratory.

Jill Stuart

Dr. Jill Stuart is an academic based at the London School of Economics and Political Science. She is an expert in the politics, ethics and law of outer space exploration and exploitation. The UK Home Office has endorsed Dr. Stuart as an Exceptional Talent Migrant/World Leader in her Field. In 2015 she was awarded the prestigious Margaret Mead Award Lecture by the British Science Association in recognition of her cutting-edge research. She is a frequent presence in the global media (print, radio, television, documentary) and regularly gives lectures and public appearances around the world. She is trained in both domestic and international mediation and has done consultancy work for the International Criminal Court and the International Court of Justice. She has contributed to space-related conferences and projects with the United Nations and NATO. From 2013-2017 Dr. Stuart was Editor in Chief of the Elsevier journal Space Policy where she remains on the Editorial Board. She is also on the Board of Advisors of METI International, an organisation focused on searching for and messaging extraterrestrial intelligence. She has a sub-specialism in women, peace and security and gender-based violence and is a Trustee of the domestic abuse charity Luton All Women's Centre.

Jean-Jacques Tortora

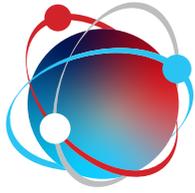
Since June 1, 2016, Jean-Jacques Tortora serves as the Director of the European Space Policy Institute. From 2007 to mid-2016 he was the Secretary-General of ASD-Eurospace, which is the trade association of the European Space Industry. From 2004 to mid-2007, he was head of the French Space Agency (CNES) office in North America and the Attaché for Space and Aeronautics at the Embassy of France in Washington, D.C. Previously he was Deputy Director for Strategy and Programs, responsible for the Industrial Strategy of CNES, the French Space Agency. Prior to that position, he was France's representative in the ESA Industrial Policy Committee and Joint Communication Board.

From 1998 to 2000, Mr. Tortora was an adviser to the French Ministry of Research for Industrial Policy Funds management, aiming at industry competitiveness support and new space applications and services development and promotion. From 1996 to 1998, he was appointed by Arianespace in Evry, France, to lead a risk mitigation and cost reduction plan covering the end of the operational life of the Ariane 4 launcher. From 1990 to 1996, Mr. Tortora was based in Kourou, French Guiana, as Head of Arianespace Operations Quality Department. There, he led the Quality Management of the Ariane 4 launchers' final integration and of the launch pad operations and maintenance. He supervised the industrialization and the implementation of the associated control plans. Mr. Tortora started his career in 1984 at the French military procurement agency, DGA, as a naval weapons integration and test engineer, an expert in signal processing, and warships acoustic discretion.

Michael Traut

Major General Traut has been serving as the Director of the National Air Operations and Commander at the Bundeswehr Space Command since September 2021. Between 2020-2021, he was a Royal College of Defence Studies member in London, GB. He also served as the Commandant at the Air Force Officer School in Fürstenfeldbruck from 2016-2020. Maj. Gen. Traut also worked as the Armed Forces Training Division Chief at the Headquarters German Joint Support Service in Bonn. Between 2007-2013, he served as the Branch Chief both in Cologne and Bonn. Before, Maj. Gen. Traut worked as the Commander at the Tactical Air Command and Control Centre in Aurich and the Operational Wing MAZAR-E-SHARIF in Afghanistan. Between 2000-2002, he served as the Assistant Section Chief of the Armament Policy Affairs of the German Air Force Office, Air Force Armament Section in Cologne. Between 1990-1997, he worked as the Intercept Control Instructor and Intercept Controller in Erndtebrück. From 1986 to 1988, he served as the system administrator and programmer at Cologne's Air Force Materiel Office.

Maj. Gen. Traut joined the Bundeswehr as a conscript in 1983. He studied computer science at the Bundeswehr University Munich.



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6th PSSI Space Security Conference
**The Global Space Competition:
Security, Markets and Sanctions**
Prague, 19–21 June 2022

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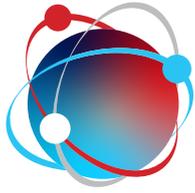
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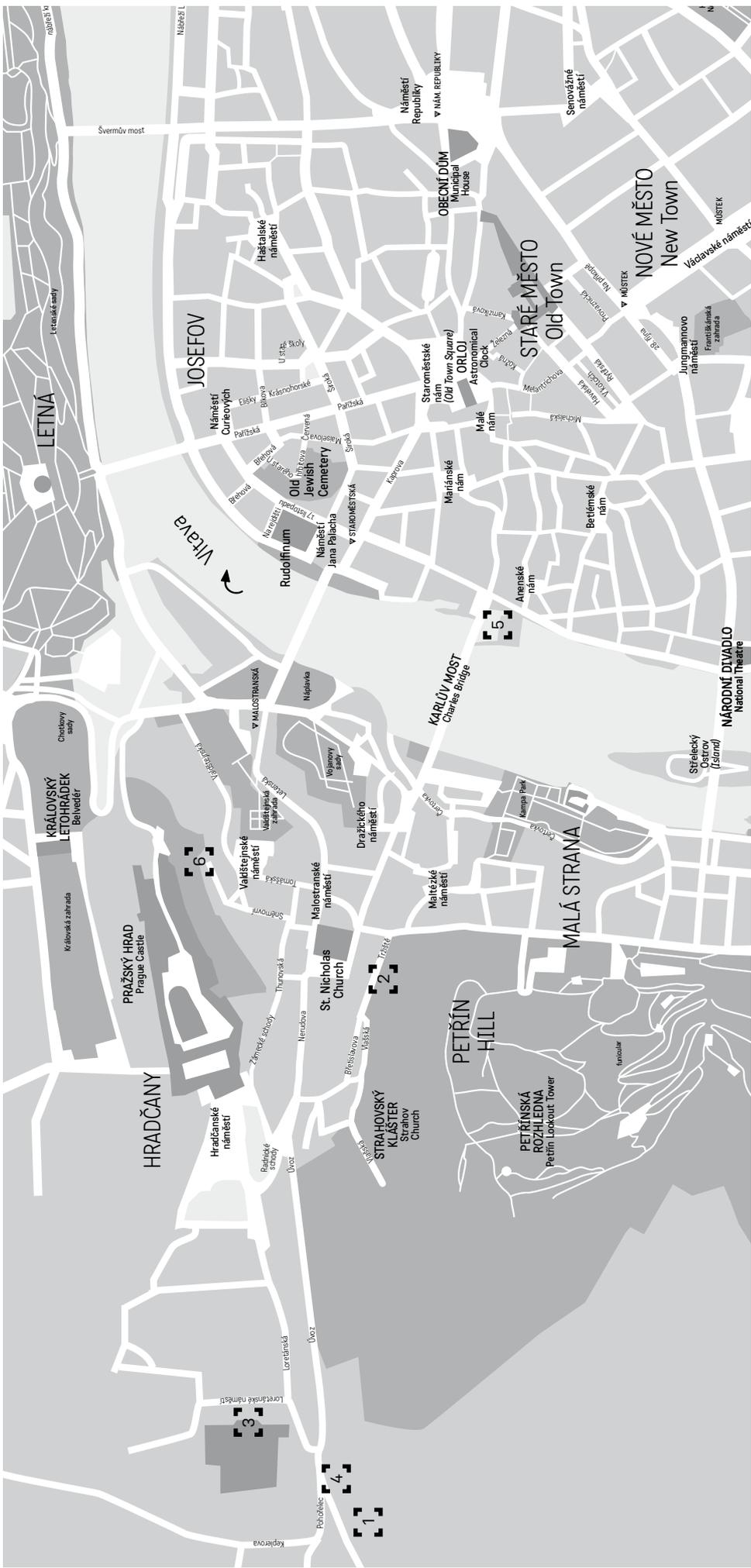
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6/ Golden Well Terrace (Opening Reception)
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