

**SMA Space Panel Discussion:**

**Outer Space; Earthly Escalation? Chinese Perspectives on Space Operations and Escalation**

 **Booklet**

**Tuesday, 30 October 2018**

**1400-1530 ET**

**Dial (866) 712-4038; Passcode 37250264#**

Strategic Multi-Layer Assessment (SMA) provides planning support to Commands with complex operational imperatives requiring multi-agency, multi-disciplinary solutions that are NOT within core Service/Agency competency. Solutions and participants are sought across USG and beyond. SMA is accepted and synchronized by Joint Staff/J-39 DDGO and executed by ASD (EC&P).

# Agenda

**Panel Description:** Conflict has come to space despite past US efforts at prevention. Growing Chinese capabilities and ambitions make it critical to understand their strategic perspectives across the range of confrontations – including the Gray Zone conflict that has already extended into space, causing profound strategic and escalatory challenges. We have entered a new era where strategy in space no longer operates as it did during the Cold War or the quarter century after it. This white paper addresses critical issues now facing United States policy makers: How can they put themselves in the shoes of Chinese planners to manage strategy and escalation in the current strategic environment in space?

During this panel discussion, each speaker will discuss their contributions to this white paper.

The white paper in which this panel discussion is based upon can be downloaded from <https://nsiteam.com/outer-space-earthly-escalation-chinese-perspectives-on-space-operations-and-escalation/>

**Panel Moderator and Speaker:** Dr. Nicholas Wright (Intelligent Biology)

**Speakers (In Order):**

* Mr. Bruce MacDonald (Johns Hopkins University School of Advanced International Studies)
* Mr. Dean Cheng (Heritage Foundation)
* Lt Col Peter Garretson (US Air Force)
* Dr. Namrata Goswami (Independent Analyst)
* Dr. Brian Weeden (Secure World Foundation)

# Speaker Biographies

### Mr. Dean Cheng (Heritage Foundation)

Dean Cheng is currently the Senior Research Fellow for Chinese Political and Military Affairs at the Heritage Foundation. He is fluent in Chinese and uses Chinese language materials regularly in his work. Prior to joining the Heritage Foundation, he worked with the China Studies Division (previously, Project Asia) at the Center for Naval Analysis, a Federally Funded Research and Development Center, where he specialized in Chinese military issues, with a focus on Chinese military doctrine and Chinese space capabilities. Before that, he worked for Science Applications International Corporation (SAIC), and an analyst with the US Congress’ Office of Technology Assessment in the International Security and Space Division.

He is the author of the volume Cyber Dragon: Inside China’s Information Warfare and Cyber Operations (Praeger Publishing, 2016).

He has testified before Congress, and spoken at the National Space Symposium, the US National Defense University, the STRATCOM Deterrence Symposium, Harvard, and MIT. He has appeared frequently in print and broadcast media to discuss Chinese space and military activities.

### Lt Col Peter Garretson (US Air Force)

Lt Col Peter Garretson is an Instructor of Joint Warfare at Air University’s Air Command and Staff College (ACSC), and lead for the Air University Space Horizons Initiative, which seeks to “Re-imagine Spacepower in the Age of Asteroid Mining.” Lt Col Garretson has participated in numerous OSD and USAF wargames focused on Future Warfare and the role of space in future conflict. He is the former Chief of USAF Future Technology and has served at the Defense Advanced Projects Agency (DARPA) as a Service Chief Fellow, and a Los Alamos National Laboratory as an Academy Research Associate. He has been a strategy and policy advisor to the Chief of Staff of the Air Force on Space and Great Power conflict in Asia. He was the first serving military officer to be detailed as a visiting fellow to Asia’s #1 think tank, the Ministry of Defense Funded Institute for Defense Studies and Analysis (IDSA) in New Delhi, India, where he worked with India’s President Dr. APJ Kalam on long-term US-India collaboration in Space. Lt Col Garretson has over 50 publications including on the topics of space governance, space policy, space based solar power, asteroid mining, planetary defense, strategic culture, and US military strategy and security cooperation in Asia.

### Dr. Namrata Goswami (Independent)

Dr. Namrata Goswami is an author, strategic analyst and consultant on counter-insurgency, counterterrorism, alternate futures, and great power politics. After earning her Ph.D. in international relations, she served for nearly a decade at India’s Ministry of Defense (MOD) sponsored think tank, the Institute for Defence Studies and Analyses (IDSA), New Delhi, working on ethnic conflicts in India’s Northeast and China-India border conflict. She is the author of three books, “India’s National Security and Counter-Insurgency,” “Asia 2030,” and “Asia 2030 The Unfolding Future.” Her research and expertise generated opportunities for collaborations abroad, and she accepted visiting fellowships at the Peace Research Institute, Oslo, Norway; the La Trobe University, Melbourne, Australia; and the University of Heidelberg, Germany. In 2012, she was selected to serve as a Jennings-Randolph Senior Fellow at the United States Institute of Peace (USIP), Washington D.C. where she studied India-China border issues, and was awarded a Fulbright-Nehru Senior Fellowship that same year. Shortly after establishing her own strategy and policy consultancy, she won the prestigious MINERVA grant awarded by the Office of the US Secretary of Defense (OSD)to study great power competition in the gray zone of outer space. Shewas also awarded a contract with Joint Special Operations University (JSOU), to work on a project on “ISIS in South and Southeast Asia.” With expertise in international relations, ethnic conflicts, counter insurgency, wargaming, scenario building, and conflict resolution, she has been asked to consult for audiences as diverse as Wikistrat, USPACOM, USSOCOM, the Indian Military and the Indian Government, academia, and policy think tanks. She was the first representative from South Asia chosen to participate in the George C. Marshall European Center for Security Studies NATO Partnership for Peace Consortium (PfPC) ‘Emerging Security Challenges Working Group.’ She also received the Executive Leadership Certificate sponsored by the Harvard Kennedy School of Government, National Defense University (NDU), and the Asia Pacific Center for Security Studies (APCSS). Currently, she is working on two book projects, one on the topic of ‘Ethnic Narratives,’ to be published by Oxford University Press, and the other on the topic of ‘Great Power Ambitions” to be published by Lexington Press, an imprint of Rowman and Littlefield.

### Mr. Bruce W. MacDonald (Johns Hopkins University School of Advanced International Studies)

Bruce W. MacDonald is an Adjunct Professor at the Johns Hopkins University School of Advanced International Studies, where he teaches the SAIS course on Nuclear Nonproliferation, and consults on nuclear, military space, and cyber security policy issues. He is the author of the 2016 book Crisis Stability in Space: China and Other Challenges, with contributions from ADM Dennis Blair and others. He is an adjunct senior fellow for National Security Technology at the Federation of American Scientists and co-led the FAS studies on China and Missile Defense (published in 2015 as Dragon Shield) and on Multi-Polar Missile Defense Dynamics (published in 2017). He was Senior Director to the Congressional Commission on the Strategic Posture of the United States, supporting the commission led by former Secretaries of Defense William Perry and James Schlesinger. He prepared numerous papers and briefings on nuclear/space/Russia/China strategic posture issues, led Commission expert Tiger Teams, and helped draft the Commission’s well-received 2009 final report. He has participated in many Track 1.5 and Track 2 dialogues with Chinese, Russian, South Korean, and other counterparts.

MacDonald worked on BMD and larger strategic nuclear issues in the Clinton White House as Senior Director for Science and Technology on the National Security Council staff and in the Office of Science and Technology Policy. He was a professional staff member for the House Armed Services Committee responsible for oversight of Air Force, BMD, military space, and strategic forces acquisition budgets and staffed a senior member of the Senate Defense Appropriations Subcommittee. At the State Department, MacDonald analyzed strategic forces, ballistic missile defense (BMD), and arms control, and served on the US START delegation in Geneva. He was the State Department’s principal strategic BMD expert in the crucial 1977-1983 years when numerous BMD initiatives were developed. He performed advanced BMD studies for the Army’s Ballistic Missile Defense Agency and assessed Navy theater missile defense programs in its support of an OSD/JCS BMD review. He performed numerous studies for DOD’s SALT Task Force and supported senior interagency groups at the State Department through his leadership of the START Policy Interagency Working Group. MacDonald, a member of the Council on Foreign Relations and the American Institute of Aeronautics and Astronautics, is an honors graduate of Princeton University, with a BSE and MSE in aerospace engineering, and an MPA in Economics and Public Policy from Princeton’s Woodrow Wilson School of Public and International Affairs.

### Dr. Brian Weeden (Secure World Foundation [SWF])

Dr. Brian Weeden is the Director of Program Planning for Secure World Foundation (SWF) and has nearly 20 years of professional experience in space operations and policy. Dr. Weeden directs strategic planning for future-year projects to meet the Foundation's goals and objectives, and conducts research on space debris, global space situational awareness, space traffic management, protection of space assets, and space governance. Dr. Weeden also organizes national and international workshops to increase awareness of and facilitate dialogue on space security, stability, and sustainability topics. He is a member and former Chair of the World Economic Forum's Council on the Future of Space Technologies, and is also a member of the Advisory Committee on Commercial Remote Sensing (ACCRES) to the National Oceanic and Atmospheric Administration (NOAA). Prior to joining SWF, Dr. 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 US Strategic Command's Joint Space Operations Center (JSpOC), Dr. Weeden directed the orbital analyst training program and developed tactics, techniques and procedures for improving space situational awareness. Dr. Weeden holds a Bachelor’s Degree in Electrical Engineering from Clarkson University, a Master’s Degree in Space Studies from the University of North Dakota, and a Ph.D. in Public Policy and Public Administration from George Washington University in the field of Science and Technology Policy.

### Dr. Nicholas D. Wright (Intelligent Biology)

Dr. Nicholas Wright is an affiliated scholar at Georgetown University, a Consultant at Intelligent Biology, an honorary research associate at University College London and Cybersecurity Fellow at New America. His work combines neuroscientific, behavioural and technological insights to understand decision-making in politics and international confrontations, in ways practically applicable to policy. He was an Associate in the Nuclear Policy Program, Carnegie Endowment for International Peace, Washington DC and a Senior Research Fellow in International Relations at the University of Birmingham, UK. He has conducted work for the UK Government and US Department of Defense. Before this, he examined decision-making using functional brain imaging at University College London (UCL) and in the Department of Government at the London School of Economics. He worked clinically as a neurologist in Oxford and at the National Hospital for Neurology. He has published academically (some twenty publications, e.g. Proceedings of the Royal Society), in general publications such as the Atlantic and Foreign Affairs, with the Pentagon Joint Staff (see [www.nicholasdwright.com/publications](http://www.nicholasdwright.com/publications)), and has appeared on the BBC and CNN.

Dr. Wright received a medical degree from UCL, a BSc in Health Policy from Imperial College London, has Membership of the Royal College of Physicians (UK), and has an MSc in Neuroscience and a PhD in Neuroscience both from UCL.