

2022 State of the Space Industrial Base Sustainability & Prosperity: Winning the Space Race Agenda

As of 30 May 2022
(Times in MST)

Agenda At a Glance

2022 State of the Space Industrial Base - Hotel Albuquerque				
	Tuesday 31 May	Wednesday 1 June	Thursday 2 June	Friday 3 June
7:00		Breakfast - Arrive	Breakfast - Arrive	Breakfast - 8:00-10:00 am
8:00				SESSION 3: WGs 1-3
8:30		Welcome - Opening	Welcome - Opening	
9:00		Keynote Presentations, Panels	Keynote Presentations, Panels	SESSION 3: WGs 4-6
9:30				
10:00		Break	Break	
10:30				
11:00		Keynote Presentations, Panels	Presentations, panels	Welcome
11:30				Working Group Outbriefs
12:00		Lunch - Buffet - Industry Fireside Chat	Lunch - Industry Fireside Chat	
12:30				
1:00		Keynote Presentations, Panels		Closing Remarks
1:30			SESSION 2: WGs 1-3	Adjourn
2:00				
2:30		SESSION 1: WGs 1-3		
3:00	WG Chair Dry Runs	Arrive - Check in		
3:30				Plenary
4:00	4:00-6:00, Registration & Exhibitor Reception - Hotel Albuquerque	SESSION 1: WGs 4-6	SESSION 2: WGs 4-6	Working Groups - Parallel
4:30				Lunch - Breaks
5:00				
		5:00-7:00, Hosted Dinner & Announcement NewSpace New Mexico LaunchPad, 2420 Alamo Ave. SE		

Working Group Conference Topics:

- 1: Hybrid Space Communications, Leaders: Chris Paul, Russ Teehan and Rogan Shimmin
- 2: In-Space Transportation & Logistics, Leaders: Karl Stolleis and Samantha Glassner
- 3: Policy & Finance, Leaders: Pavneet Singh and Katherine Koleski
- 4: Next Generation Power and Propulsion, Leaders: Barry Kirkendall, James Winter, and Ryan Weed
- 5: Remote Sensing & Traffic Management, Leaders: Dave Barnaby and GP Sandoo
- 6: Workforce, Education and STEM, Leaders: Scott Erwin and Casey Anglada DeRaad

Speaker List (presentation order):

Casey Anglada DeRaad
 Gen John Olson, U.S. Space Force
 Gen Steve (Bucky) Butow, Defense Innovation Unit,
 Col Eric Felt, Air Force Research Laboratory
 Administrator Bill Nelson, NASA
 Namarata Goswami
 Chris Paul, Air Force Research Laboratory
 Russ Teehan, Amazon
 Steve Nixon, SmallSat Alliance
 Rogan Shimmin, Defense Innovation Unit
 Andy Williams, Air Force Research Laboratory
 Karl Stolleis, Air Force Research Laboratory
 Jason Aspiotis, Axiom Space
 Juli Lawless, Redwire
 John Wagner, Sierra Space
 Barry Kirkendall, Defense Innovation Unit
 James Winter, Air Force Research Laboratory
 Paolo Venneri UNSC-Tech
 Ryan Weed, Defense Innovation Unit
 Associate Administrator Dr. Bhavya Lal, NASA
 Robbie Schingler, Planet
 Steve Wood, Maxar

Peter Wegner, BlackSky
 Brian Flewelling, ExoAnalytics
 Shiloh Dockstader, Planet
 Christos Christodoulou, University of New Mexico
 Tom Caudill, Blue Halo
 Maraia Tanner, Star Harbor
 Pav Singh, Defense Innovation Unit
 Meagan Crawford, Space Fund
 Bruce Cahan, Urban Logic
 Katherine Koleski, Defense Innovation Unit
 Nicholas Eftimiades, Atlantic Council
 Brian Weeden, Secure World Foundation
 Mark Jelonek, Aerospace Corp
 Lisa Rich, Hemisphere Ventures, Xplore
 Robbie Robertson, Air Force Research Laboratory
 Jared Rieckewald, Northrop Grumman,
 Cameo Lance, Rhea Space Activity
 Jim Kerval, OffWorld
 Mike Brown, Defense Innovation Unit
 Rick Tomlinson, Space Fund
 Severin Blenkush, Space Advisory Group

AGENDA – Times in MST

31 May 2022 – Tuesday

2:00 – 4:00 Leadership and Working Group Leaders Dry Run
3:00 – 6:00 Check in
4:00 – 6:00 Reception

1 June 2022 – Wednesday

7:00 – 8:00 Breakfast and Check In

8:00 – 10:00 Plenary: Opening Presentations and Panels

8:00 am Welcome and Conference Opening: Casey Anglada DeRaad, NewSpace New Mexico

8:10 am Opening Leadership Panel: State of the Space Industrial Base - Highlight achievements policy impacts and other developments. Introduction to SSIB Survey. Gen John Olson, U.S. Space Force; Gen Steve (Bucky) Butow, Defense Innovation Unit, Col Eric Felt, Air Force Research Laboratory (Gen Olson – Virtual)

8:55 am Keynote Presentation - NASA Administrator Bill Nelson (Virtual)

9:05 am China's Space Program: An Update – Namarata Goswami, PhD

9:35 am Panel on Working Group Conference Topic: 1: Hybrid Space Communications – Rogan Shimman, DIU; Chris Paul, AFRL; Russ Teehan, Amazon; Steve Nixon, SmallSat Alliance.

10:00 – 10:20 Break

10:20 – 12:00 Plenary: Keynote Presentations and Panels:

10:20 am Panel on Working Group Conference Topics: 2: In-Space Transportation & Logistics – Karl Stolleis, and Andy Williams, AFRL; Juli Lawless, Redwire, John Wagner, Sierra Space, and Jason Aspiotis, Axiom Space

10:45 am Panel on Working Group Conference Topics: 4: Next Generation Power and Propulsion - Barry Kirkendall, DIU; James Winter, AFRL; Paolo Venneri UNSC-Tech; and Ryan Weed, DIU

11:10 am Keynote Presentation – NASA – Going Nuclear - Prospects for Power and Propulsion in Space. Dr. Bhavya Lal, Associate Administrator for Technology, Policy, and Strategy and NASA Chief Technologist (Acting) (Virtual)

11:45 am Keynote Presentation: Sustainability & Prosperity – Robbie Schingler, Planet

12:05 – 1:00 pm - Lunch – Industry Panel: The Ukraine conflict highlights the significance of the Information Domain and how commercial space capabilities have been used to counter propaganda and reveal the truth – Gen (Bucky) Butow, moderator; Steve Wood Maxar, Peter Wegner, BlackSky

1:00 – 2:15 pm Plenary: Presentations and Panels:

1:00 pm Panel on Working Group Conference Topics: 5: Remote Sensing & Traffic Management - GP Sandoo, DIU moderating; Brian Flewelling, ExoAnalytics; Shiloh Dockstader, Planet

1:25 pm Panel on Working Group Conference Topics: 6: Workforce, Education and STEM: Casey Anglada DeRaad, NewSpace New Mexico moderating; Christo Christodoulou, UNM; Tom Caudill, Blue Halo, Maraia Tanner, Star Harbor

1:50 Panel on Working Group Conference Topics: 3: Policy & Finance – Pav Singh, DIU moderating; Bruce Cahan, Urban Logic; Meagan Crawford, Space Fund; Katherine Koleski, DIU

2:15 Commercial Launch Working Group Out Brief – Space Florida

Kick off – Working Groups

2:25 – 3:40 pm – Concurrent Working Group Breakouts - Topics 1-3, Session 1

1: Hybrid Space Communications

2: In-Space Transportation & Logistics

3: Policy & Finance

3:40 – 4:55 pm Concurrent Working Group Breakouts - Topics 4-6, Session 1

4: Next Generation Power and Propulsion

5: Remote Sensing & Traffic Management

6: Workforce, Education and STEM

5:30-7:00, Hosted Reception-Dinner NewSpace New Mexico U&I LaunchPad – 2420 Alamo Ave. SE, Suite 104, Albuquerque, NM 87106

2 June 2022 – Thursday

7:00 – 8:00 Breakfast and Check In

8:00 – 10:05 Plenary: Opening Presentations and Panels

11:00 am Welcome: NewSpace New Mexico: Casey Anglada DeRaad

8:10 am Keynote Presentation: Atlantic Council - Strategy for Space Security; National Security Implications of Small Satellites; Space Traffic Management - Nicholas Eftimiades, Atlantic Council (Virtual)

8:40 am Keynote Presentation - International space accomplishments and potential collaborations for US space activities Katherine Koleski, DIU and Dr. Brian Weeden, Director of Program Planning, Secure World Foundation (Brian Weeden – Virtual)

8:55 am Keynote Presentation: Building a Diverse STEM Talent Pipeline – Mark Jelonek, Aerospace Corp.

9:20 am Keynote Presentation: Space Needs Financial Engineering Now More Than Ever – Dr. Bruce Cahan, Urban Logic

9:40 am Panel: Venture Capital Investment & Successes from Industry – Lisa Rich, Hemisphere Ventures; Meagan Crawford, Space Fund; and Jason Aspiotis, Axiom Space

10:05 – 10:30 Break

10:30 – 12:00 Plenary: Presentations and Panels

10:30 am Industry Panel: On-orbit Servicing, Assembly, and Manufacturing (OSAM); In-Space Servicing, Assembly, and Manufacturing (ISAM) – Moderated by Robbie Robertson, AFRL; Jared Rieckewald, Northrop Grumman, Cameo Lance, Rhea Space Activity, Jim Keravala, OffWorld

11:00 am Keynote: Fast Follower Strategy –Mike Brown (Virtual)

11:15 am Special Presentation: Rich Tumlinson's Space Revolution – Rick Tumlinson, Space Fund

12:00 – 1:00 Lunch with a Fireside Chat – Space as a Service, Lisa Rich, Xplore and Peter Garretson, American Foreign Policy Council

1:00 – 3:00 pm – Concurrent Working Group Breakouts - Topics 1-3, Session 2

1: Hybrid Space Communications

2: In-Space Transportation & Logistics

3: Policy & Finance

3:00 – 5:00 pm Concurrent Working Group Breakouts - Topics 4-6, Session 2

4: Next Generation Power and Propulsion

5: Remote Sensing & Traffic Management

6: Workforce, Education and STEM

3 June 2022 Friday

8:00 – 10:00 am Breakfast Available

8:00 – 9:30 am – Concurrent Working Group Breakouts - Topics 1-3, Session 3

1: Hybrid Space Communications

2: In-Space Transportation & Logistics

3: Policy & Finance

9:30 – 11:00 am Concurrent Working Group Breakouts – Topics 4-6, Session 3

4: Next Generation Power and Propulsion

5: Remote Sensing & Traffic Management

6: Workforce, Education and STEM

11:00 – 1:00 Plenary: Presentations, Working Group Out Briefs, Closing

11:00 am Welcome: NewSpace New Mexico: Casey Anglada DeRaad

11:05 am Welcome: Space Force Association – NM Chapter: Severin Blenkush

11:15 am Working Group Out Briefs & Discussion

12:45 am Closing Remarks

1:00 Adjourn

Working Group Conference topics - Detail

1: Hybrid Space Communications: This working group will explore the progress made in securing funding for the future Space Internet and how to accelerate achieving the vision for transforming space systems into a 'space superhighway' that strengthens US leadership in commercial, civil and national security space. The discussion will include how to enable the space industrial base in delivering critical solutions across building hybrid space architecture, multi-path communications, SATCOM, Space Domain Awareness, weather observation sources and ground terminals. Hybrid space communications are foundational to enabling secure, authenticated, interoperable communication between satellites and much broader economic activity. Addressing where automation and autonomy are desirable and essential for transforming communications in space will also be covered.

2: In-Space Transportation & Logistics: This working group will explore how the U.S. and its allies should advance development on modular, serviceable, and reusable systems and sustainable in-space logistics infrastructure (both physical and digital) to support operations by leveraging commercial, civil, and national security space systems. This will include a discussion on implementing the Active Debris Removal Strategy (pending release) and In-Space Servicing, Assembly, and Manufacturing (ISAM) National Strategy.

3: Policy & Finance: This working group will discuss recent developments and actionable steps needed to modernize near- and mid-term licensing, trade, economic and financial policies and strategies to ensure the long-term competitiveness of the commercial space sector. This encompasses policies and strategies on how to engage allies and regional partners and address foreign ownership, control and influence (FOCI) while protecting our national security and supporting the U.S. space industrial base.

4: Next Generation Power and Propulsion: In the last year, the U.S. Government has laid out a National Strategy for Nuclear Power and Propulsion. Both the human missions themselves and the logistics missions that support them will require large quantities of propellant and highly efficient propulsion systems to achieve affordable routine missions. Systems such as high-power electric propulsion, nuclear thermal and nuclear electric propulsion, and Lunar-sourced propellant must all be developed to sustain the spaceflight ecosystem. This group will discuss progress made over the last year and challenges to be addressed to expand energy supplies more rapidly, including regulatory and licensing obstacles and a lack of testing facilities and nuclear disposal sites. Nuclear and solar power and propulsion, power beaming and alternative propellants will be among the innovative technologies explored and discussed

5: Remote Sensing & Traffic Management: This working group will review the current remote sensing and traffic management landscape and propose implementable recommendations needed to resolve undetermined aspects of operation in cislunar space, including spectrum allocation, space situational awareness, and earth observation (EO, IR, Hyperspectral, SAR, RF, others) with real time tracking from, to, and in space. This will include modernizing and overcoming barriers to commercial acquisition regulations to leverage the nation's growing commercial remote sensing industry to enhance our space domain awareness (SDA) architecture and continue expansion of LEO constellations.

6: Workforce, Education and STEM: A healthy space infrastructure supported by a STEM workforce must be put in place to capture a dominant share of the \$1.4 trillion in economic growth expected over the next decade. Success will require a highly educated workforce across all Science, Technology, Engineering and Mathematics (STEM) disciplines not only in design but skilled labor. However, workforce issues threaten the economic viability of space as well as the ability to maintain a strong national security space posture. This group will discuss progress in building the space workforce of the future and how to address talent gaps, such as preparing the workforce, increasing diversity, securing financial investments and retaining talent.