# U.S. Policies and Cooperation on SSA and STM

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#### **Concepts and Definitions**

- Space Situational Awareness: the knowledge and characterization
  of space objects and their operational environment to support safe,
  stable, and sustainable space activities
- Space Domain Awareness: identification, characterization and understanding of any factor, passive or active, associated with the space domain that could affect space operations and thereby impact the security, safety, economy or environment of the U.S.
- Space Traffic Management: the planning, coordination, and onorbit synchronization of activities to enhance the safety, stability, and sustainability of operations in the space environment.



### **U.S. Agencies and Orgs**

- National Space Council
  - White House-level organization that manages and oversees the interagency process for developing and coordinating U.S. national space policy
- Office of Space Commerce (OSC)
  - Part of the Dept. of Commerce, located in Washington, DC
  - Responsible for promotion of U.S. commercial space activities and regulation of commercial remote sensing
- Office of Commercial Space Transportation (AST)
  - Part of the Dept. of Transportation, located in Washington, DC
  - Responsible for promotion and regulation of U.S. commercial space launch and re-entry

### **U.S. Agencies and Orgs**

- 18<sup>th</sup> Space Control Squadron (18 SPCS)
  - Part of the U.S. Space Force (USSF), located at Vandenberg
  - Unit with responsibility to manage the Space Surveillance Network and maintain the military's satellite catalog
- Combined Space Operations Initiative (CSpO)
  - Multilateral agreement to help coordinate SSA policy, architectures, and operational practices
- Combined Space Operations Center (CSpOC)
  - Part of U.S. Space Command (USSPACECOM), located at Schriever
  - Operational center for coordinating space support to combatant and theater commanders
- <u>National Space Defense Center</u> (NSDC)
  - Part of USSPACECOM, located at Schriever, joint military/intelligence
  - Operational center for command and control of national security satellites, threat detection, and protection and defense



#### **U.S. SSA Programs Update**

- S-Band Space Fence reaches operational status
  - Located on Kwajalein Atoll
  - Tracks objects in LEO through GEO
  - Operated by 20<sup>th</sup> Space Control Squadron in Huntsville, AL
  - Currently maintaining separate satellite catalog from that of the 18<sup>th</sup>
     SPCS
- Commercial Sprint Advanced Concepts Training (SACT)
  - Joint NSDC/OSC program created in 2019 to explore the potential of commercial companies to augment traditional SSA and civil STM
  - Most recent version held April 20-24, 2020
- Space Force issues \$280M contract to Bluestraq to continue upgrading and expanding the Unified Data Library
  - Digital platform for combining SSA data from multiple govt and nongovt sources



#### **U.S. SSA Partnerships Update**

- U.S has continued to expand its partnerships with allies and partners on SSA, mostly through the military
  - USTRATCOM has signed <u>119 SSA sharing agreements</u> (including 21 countries)
- <u>Feb. 2020</u>: France and Germany joined the Combined Space Operations initiative
- Nov. 2020: Schriever Wargame includes participants from Australia, Canada, France, Germany, Japan, New Zealand, and the United Kingdom
- Nov. 2020: USSPACECOM Commander says he's looking to add more allies and partners to his staff



#### **U.S. SSA Partnerships Update**

#### France

 Oct. 2019: MOU between French Space Agency and U.S. Dept of Commerce on civil SSA

#### Japan

- Dec. 2020: MOU between NSPS and US Space Force on including SSA payloads on QZSS satellites
- Mar. 2021: Expected to formally include Japan in the CSpOC's Multinational Coordination Cell



## **U.S. SSA/STM Policy Update**

- In Dec 2020, Trump Admin <u>released</u> the 2020 U.S. National Space Policy
  - Mostly updated the prior 2010 National Space Policy released by Obama Admin, added in updates from SPD 1-7
  - Reiterated policy intent to have OSC lead civil SSA/STM activities
  - Reiterated policy intent to have OSC regulate commercial activities that fall outside authorities of FCC, FAA, and NOAA
  - Change in language from STM to Space Traffic Coordination (STC)
- In Dec 2020, Congress <u>passed</u> the FY21 omnibus bill that included funding for civil SSA
  - Authorized & appropriated USD 10 million for OSC to begin a civil SSA pilot program
  - Allowed OSC to merge with the Office of Commercial Remote Sensing and Regulatory Affairs (CRSRA) but kept it under the National Environmental Satellite Data and Information Service (NESDIS)



#### **Biden Admin Space Policy**

- Biden Administration has so far only made a few statements on space policy
  - Voiced support for keeping the <u>Space Force</u> and <u>Artemis Program</u>
  - Nominated Bill Nelson to be the next NASA Administrator
  - Announced intent to keep National Space Council, details of format/role to be determined.
  - Has not made any other nominations or major policy announcements

# Thank you. Questions?

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