

# Evolving National Security Space Policies and Multilateral Discussions

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Secure World Foundation (SWF) is a ***private operating foundation*** that promotes cooperative solutions for space sustainability

**Our vision:** The secure, sustainable, and peaceful uses of outer space that contribute to global stability on Earth

**Our mission:** Secure World Foundation works with governments, industry, international organizations, and civil society to develop and promote ideas and actions to achieve the secure, sustainable, and peaceful uses of outer space benefiting Earth and all its peoples





# United States

- Has had established policy and doctrine about counterspace capabilities for decades
- Presidential administrations since the 1960s have directed/authorized R&D, and in some cases, greenlit testing/operational deployment of counterspace systems
- US recently undertook major reorg of its military space capabilities as part of its renewed focus on space as a warfighting domain
  - Done at the same time as discussing resiliency of military space systems and reorg of national security space structures
  - Led to the reestablished of US Space Command (USSPACECOM) in August 2019 and the creation of the US Space Force (USSF) in December 2019
- December 2020: National Space Policy (released under Trump administration)
- December 2021: United States Space Priorities Framework (released under Biden administration)



# Russia

- Russia recently undertook major reorg of its military space capabilities into a new organization that combines space, air defense, and missile defense capabilities
  - The combination of Air Force and Aerospace Defense Forces led to the creation of its Aerospace Forces in 2015
- Russian space activities are run by Roscosmos. Created in 1992 as the Federal Space Agency, it was dissolved in 2015 and its responsibilities transferred to the Roscosmos state corporation, which was also merged with the United Rocket and Space Corporation
  - In its current form, Roscosmos is responsible for Russian civil space activities as well as supervising companies manufacturing civil and military space, missile, and rocket hardware
- Russia’s space strategy is defined by the Ministry of Defense
- The pillar of Russian outer space governance is [Law N 5663-1, Law of the Russian Federation on Space Activities](#), which undergoes modification via presidential amendments. The Executive Office of the President also issues decrees and provisions on space policy and activity.



# China

- China has an integrated civilian and military outer space program
  - Civilian outer space authority is the [China National Space Administration \(CNSA\)](#), which is under the management of the Ministry of Industry and Information Technology. China's space activities and projects are guided by white papers functioning as Five Year Plan's, the latest being [China's Space Program: A 2021 Perspective](#)
  - Reporting to the State Council, the State Administration of Science, Technology and Industry for National Defense regulates policy for military aerospace and technological industry development
- In 2015, Chinese President Xi Jinping initiated a sweeping reorganization of the PLA
  - Led to the creation of the Strategic Support Force (SSF) as the fifth military service by merging existing space, cyber, and electronic warfare units under a new unified command that reports directly to the Central Military Commission. The intent is to shift the PLA's most strategic, informatized missions from a discipline-centric to domain-centric force structure and enable full-spectrum war-fighting
  - Space has been designated a military domain



# India

- Limited national space policy documents
  - Up until this spring, its Constitution from 1950, Satellite Communications Policy from 2000, and revised Remote Sensing Data Policy from 2011 were the only national laws that specifically deal with space
  - ISRO released its National Space Policy in April 2023; no military aspects to it
  
- Long had focused on space for national development; shifted after China's 2007 ASAT test
  - June 2010, India established an Integrated Space Cell, located in the Integrated Defense Headquarters, which is comprised of all three branches of India's armed forces
  - In September 2018, Prime Minister Narendra Modi announced that India would be creating a Defence Space Agency that would coordinate the space assets of the three branches of the Indian armed forces and work on space protection policies for Indian space assets; it became operational late in 2019
  - Defence Space Research Organisation was created in June 2019







# State of Multilateral Security Discussions (1)

- No forward movement on space security and stability discussions at the UN for decades
  - Disagreement on nature of the threat and how to respond
  - Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force Against Outer Space Objects (PPWT) / No First Placement (NFP) versus nothing
  - EU Draft Code of Conduct
  - 2013 Group of Governmental Experts (GGE) on TCBMs
  - 2019 GGE on prevention of an arms race in outer space (PAROS)
  
- UNGA 75/36: Dec. 2020
  - National submissions to the UNSG on nature of the threat to space, responsible/irresponsible behavior, and possible paths forward
  - See some commonalities emerge: act with due regard, avoid harmful interference, no non-consensual close approaches, no deliberate creation of long-lived debris
  
- UNGA 76/231: Dec. 2021
  - Created an Open-Ended Working Group to meet four times over 2022 and 2023
  - Goal: come up with recommendations on possible norms, rules, and principles of responsible behaviors relating to threats by States to space systems





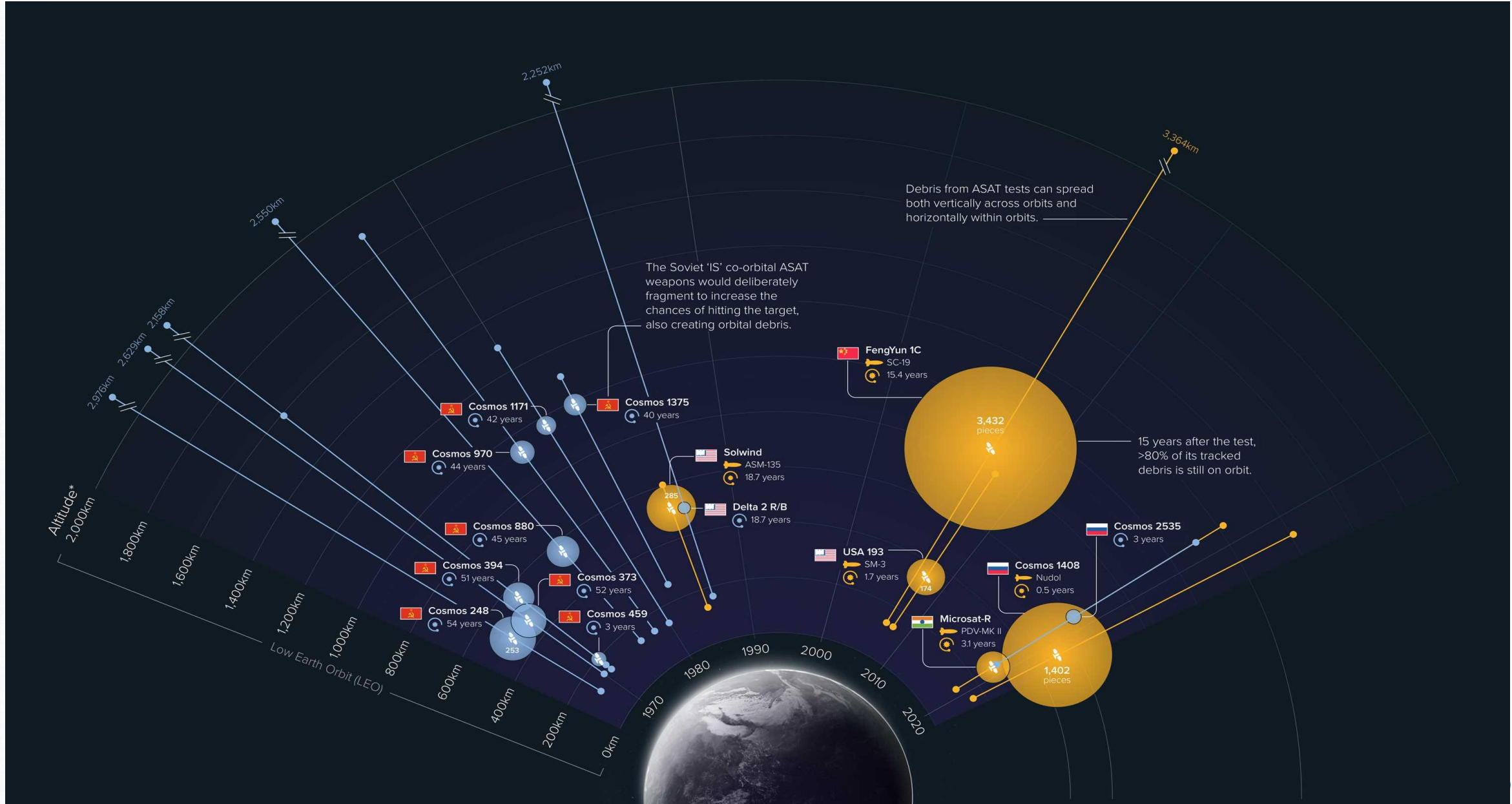
# Case Study: ASAT Test Moratorium

- Dangerous nature of space debris to satellites, humans in orbit
  - ~8900 active satellites; ~48,000 pieces of debris we can track, ~900,000 pieces big enough to cause damage but too small to track
  - ASAT tests leave debris in orbit
  - At present, no way to deliberately get rid of debris (remediation)
  
- International support growing for an ASAT test moratorium
  - Increasingly see the deliberate creation of debris/holding destructive ASAT tests as irresponsible behavior
  - In April 2022, the United States announced it was making a commitment not to conduct destructive direct-ascent anti-satellite missile tests
    - 37 countries now have made this commitment (see SWF tracking sheet for statements: <https://swfound.org/multilateral-space-security-initiatives/>)
  - SWF has a tracking sheet that tracks the votes on and sponsors of UNGA Resolution 77/41 in December 2022 which called for same commitment with a vote of 155-9-9
  - Underlines focus on behavior, not necessarily technologies
  - Aided by dwindling military utility of DA-ASAT tests



**TABLE 5-1 – ORBITAL DEBRIS CREATED BY ASAT TESTS IN SPACE**

DATE	COUNTRY	ASAT SYSTEM	TARGET	INTERCEPT ALTITUDE	TRACKED DEBRIS	DEBRIS STILL ON ORBIT	TOTAL DEBRIS LIFESPAN
Oct. 20, 1968	Russia	IS	Cosmos 248		252	79	50+ years
Oct. 23, 1970	Russia	IS	Cosmos 373		147	35	50+ years
Feb. 25, 1971	Russia	IS	Cosmos 394		118	45	50+ years
Dec. 3, 1971	Russia	IS	Cosmos 459		29	0	3.3 years
Dec. 17, 1976	Russia	IS	Cosmos 880		127	57	45+ years
May 19, 1978	Russia	IS-M	Cosmos 970		73	64	40+ years
Apr. 18, 1980	Russia	IS-M	Cosmos 1171		48	6	40+ years
Jun. 18, 1982	Russia	IS-M	Cosmos 1375		64	60	35+ years
Sept. 13, 1985	U.S.	ASM-135	Solwind	530 km	287	0	18+ years
Sept. 5, 1986	U.S.	Delta 180 PAS	Delta 2 R/B		17	0	< 1 year
Dec. 26, 1994	Russia	Naryad-V?	Unknown		27	24	25+ years
Jan. 11, 2007	China	SC-19	FengYun 1C	880 km	3536	2786	15+ years
Feb. 20, 2008	U.S.	SM-3	USA 193	220 km	175	0	1+ year
Mar. 27, 2019	India	PDV-MK II	Microsat-R	300 km	130	1	3+ years
Aug.-Dec. 2019	Russia	Cosmos 2535	Cosmos 2536		30	16	3+ years
Nov. 15, 2021	Russia	Nudol	Cosmos 1408	470 km	1790	300	Unknown
<b>Total</b>					<b>6850</b>	<b>3472</b>	





Questions?

Thanks.

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