



UNITED STATES
SPACE COMMAND

MG Mike Morrissey

Mission Integration for All-Domain Dominance

United States Space Command

Never a Day Without Space



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Mission Integration for All-Domain Dominance



Competitive and Contested Space Domain

RUSSIA

- Terrestrial EW (Lasers and Jammers)
- Nudol ground-based ASAT/On-Orbit ASATs
- 15 November ASAT test
- 193 satellites, 2026 projection of 231, 2031: 270 +/-50
- \$3.42B spent in 2022
- Joint MOU with China for lunar research base by 2031
- Stood up Space Command in 2015
- 25 launches in 2021, 22 in '22, 11 in '23

CHINA

CHINA

- Terrestrial EW (Lasers and Jammers)
- Ground based ASATs
- SJ-17, SJ-21, SJ-23
- 527 satellites, 2026 projection of 645, 2031: 781 +/-200
- \$11.94B spent in 2022
- Joint MOU with Russia for lunar research base by 2031
- Stood up Space Command in 2015
- Space station launched in 2021
- 52 launches in 2021, 64 in '22, 21 in '23

RUSSIA

UNITED STATES

- 16 Space faring nations
- Blue Origin, Inspiration first crewed launches
- SpaceX: First reuse and reflight of capsule, first all-private crew
- 3801 functional Starlink satellites
- Cooperation with Dept of Commerce on Space Traffic Mgmt
- NASA milestones: James Webb Telescope, Perseverance, Artemis
- 22 Academic Engagement Enterprise Members
- 50 launches in 2021, 76 launches in '22, 44 in '23
- Allies and Partners: 168 Total SSA Sharing Agreements
 - 35 Nations/International Governmental Organizations
 - 133 Commercial Companies

CHINA MOVING FAST

China is steadily becoming a world-class space leader and will probably achieve world-class status in most space technology areas by 2030.

- Integrating space services into weapons and C2 systems to erode the U.S. military's information advantage.
- Fielding ground-based counterspace capabilities including electronic warfare systems, directed energy weapons, and ASAT missiles to disrupt, damage, and destroy target U.S. and Allied satellites.

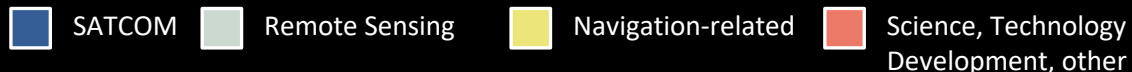
Space Launch, SSA, Satellite Control Centers, Command and Control, and Data Reception Stations



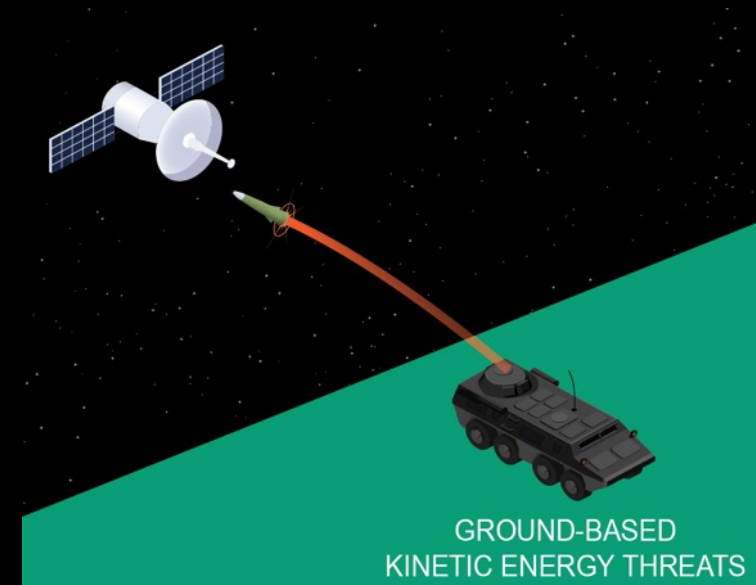
China's Commercial Space Sector

China's commercial space sector on pace to become a major global competitor by 2030.

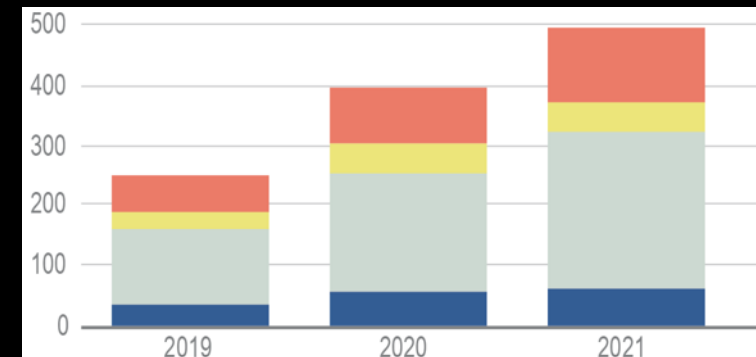
- Policies encouraging private investment in space activities influencing firms to enter the commercial market.
- State-owned enterprises and subsidiaries, including research and development spinoffs, established companies, and startups, will remain primary players in the Chinese commercial space sector.



China's Direct Ascent ASAT



- Fielded ground-based counterspace capabilities including electronic warfare, directed energy, and ASAT missiles to disrupt, damage, and destroy target satellites.
- Conducted orbital technology demonstrations, which while not counterspace weapons tests, prove ability to operate space-based counterspace weapons.



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RUSSIA WEAKENED BY SANCTIONS

Russia will remain a key space competitor as it fields new antisatellite weapons to disrupt and degrade U.S. and allied space capabilities.

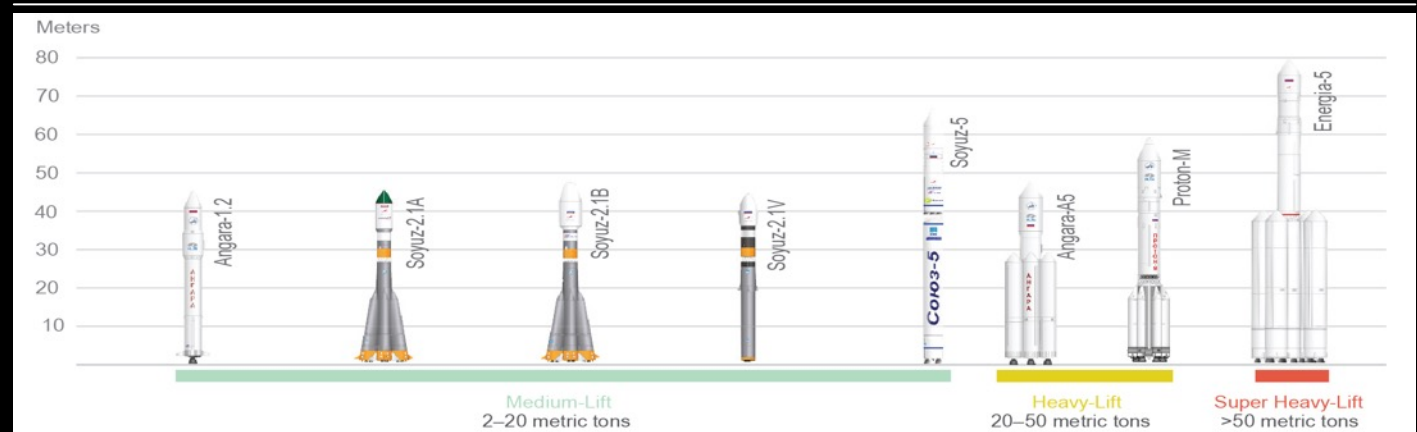
- May have difficulty achieving long-term space goals due to international sanctions and export controls, myriad of domestic space-sector problems, and increasingly strained competition for program resources within Russia.

GLONASS K



- Probably will prioritize integrating space services—communications; positioning, navigation, and timing; geolocation; and intelligence, surveillance, and reconnaissance—deemed critical to national security.

Space Launch Vehicles



Counter-Space



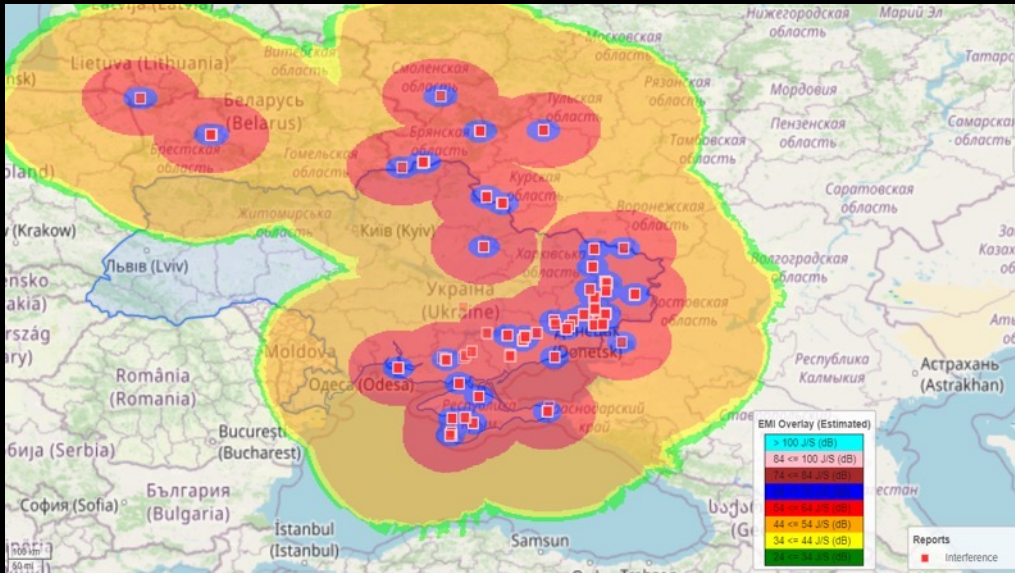
- Continues to train military space elements, field new antisatellite weapons to disrupt and degrade U.S. and allied space capabilities.
- Developing, testing, and fielding nondestructive and destructive counterspace weapons—including jamming and cyber-space capabilities, directed energy weapons, on-orbit capabilities, and ground-based ASAT capabilities.

Space Launch, SSA, Satellite Control Center, and Command and Control Sites



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RUSSIA'S WAR ON UKRAINE



Ukrainian Military Successfully Intercepts Russian Hypersonic Missile with US-Made Patriot Defense System



40-Mile Russian Armored Column Outside Kyiv



Expanding the Missile Defeat Enterprise

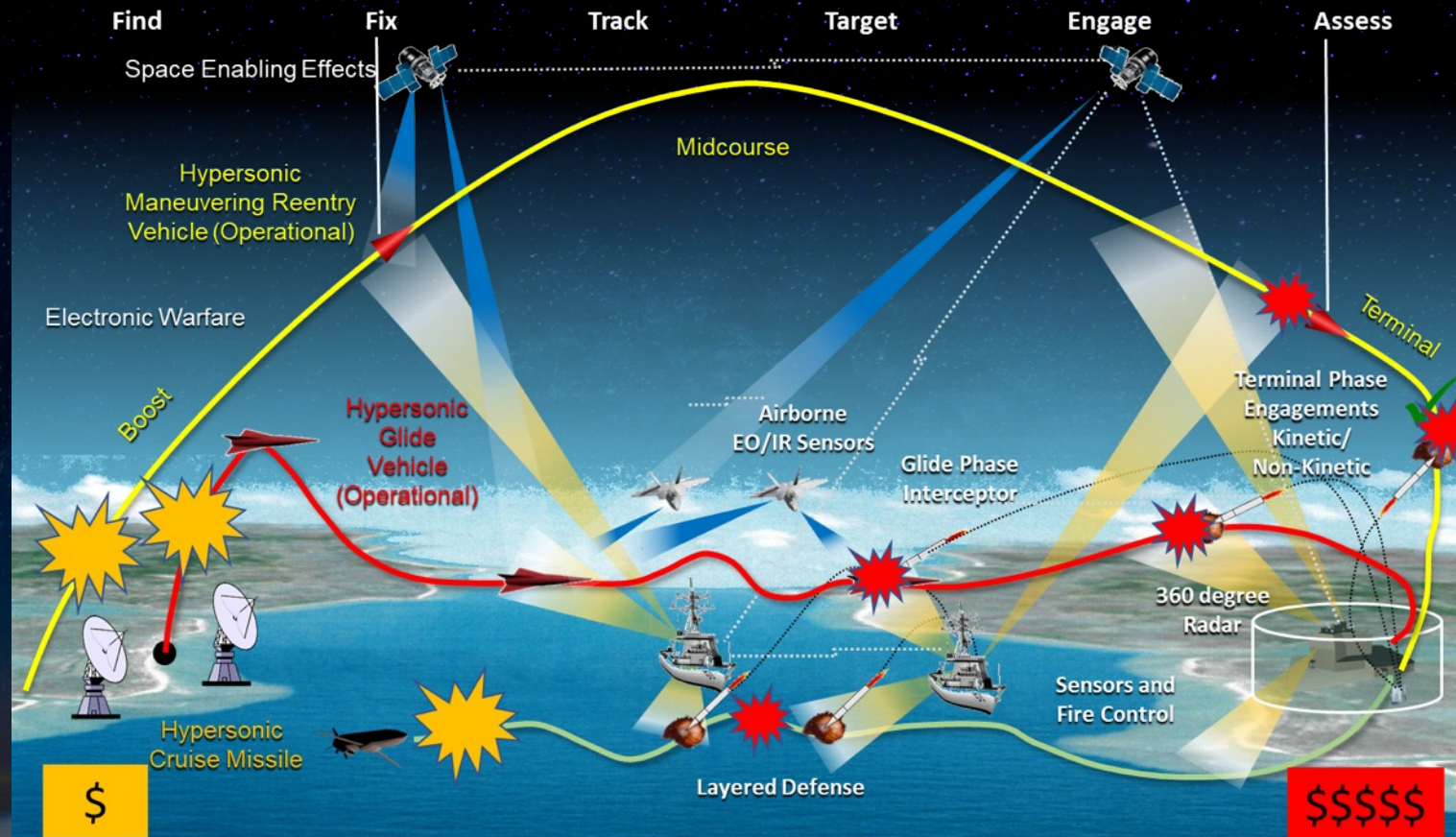


DENY: Prevent from acquiring missile tech, dual use tech and critical enabling technologies

DELAY: Slow tech acquisition and production process, incentivize de-escalatory posture, demonstrate strength and deterrence

DISRUPT: Inhibit decision space and ability to pinpoint friendly forces, communicate and coordinate offensive missile plans & operations

DEGRADE: Inhibit effectiveness of offensive ops short of physical destruction adversary missile/ launch systems, reducing effectiveness prior to launch



Immediate detection and attribution

Precision localized warning

Dynamic basing

Multi-phenomenology camouflage, concealment & deception

Deception

Missile Defeat encompasses whole of government activities to counter the development, acquisition, proliferation, potential and actual use of adversary missiles of all types, and to limit the damage from such use

All-Domain Dominance



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NEVER A DAY WITHOUT SPACE