Militarized Competition in Outer Space and the EU draft International Code of Conduct

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Jana Robinson

Space Security Program Director

Prague Security Studies Institute (PSSI)

Prague Security Studies Institute

Presentation Overview

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1. Shifting Space Security Paradigm
2. Russia and China Call for Space Arms Control
3. An International Space Code of Conduct for Outer Space Activities as Contributor to Space Stability
4. Conclusion

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JR1 Jana Robinson; 09/07/2015

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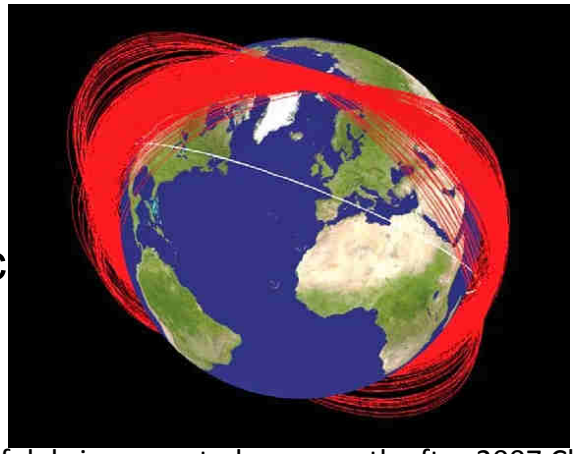
1. Shifting Space Security Paradigm

- Elevated threat to the space domain and the post-Cold War space paradigm due to changing security environment
- Greater dependence on space by ever-growing number of actors
- Increasing congestion (spac debris, RF spectrum demand)
- Heightened concern over counterspace activities of Russia and China

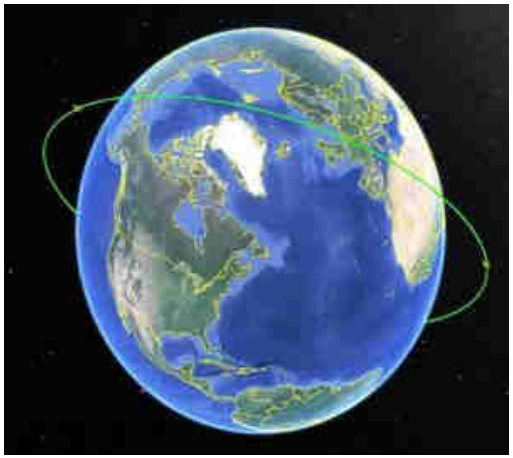
Summary of Known or Suspected Chinese ASAT Tests in Space

Date	ASAT System	Target	Altitude Reached	Result
July 7, 2005	SC-19[3]	None known	Unknown (likely LEO)	Likely rocket test
February 6, 2006	SC-19[3]	Unknown satellite[6]	Unknown (likely LEO)	Likely flyby of orbital target[3]
January 11, 2007	SC-19[4]	FY-1C satellite[4]	865 km[4]	Destruction of orbital target, 3,000+ pieces of orbital debris[5]
January 11, 2010	SC-19[6]	CSS-X-11 ballistic missile[6]	250 km[7]	Destruction of target, no orbital debris[7]
January 27, 2013	Possibly SC-19	Unknown ballistic missile[8]	Unknown	Destruction of target, no orbital debris[8]
May 13, 2013	Possibly DN-2	None known	10,000[11] to 30,000 km[12]	Likely rocket test[14]
July 23, 2014	SC-19[10]	None known	Unknown (likely LEO)[10]	Non-destructive test[9]

Source: Secure World Foundation



Orbits of debris generated one month after 2007 Chinese ASAT test. The white orbit represents the International Space Station (Source: NASA Orbital Debris Program Office)



Russian space object 2014-28E – suspected ASAT weapon (Source: N2YO)

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2. Russia and China Call for Space Arms Control

- PAROS initiatives
- Chinese-Russian draft “Treaty on Prevention of Placement of Weapons in Outer Space and of the Threat or Use of Force Against Outer Space Objects” (PPWT)
- Russia’s “no first placement of weapons in outer space” initiative

➢ PAROS, PPWT and “no first placement” initiatives fail to address space reality

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3. An International Space Code of Conduct for Outer Space Activities as Contributor to Space Stability

- International space venues should advance a governance regime that protects peaceful and reliable access to, and use of, space, particularly with regard to man-made threats such as deliberate counterspace measures by one or more space-faring nations
- Absent active diplomacy that enhances transparency and promotes confidence, incidents and even conflict involving space domain inevitable
- International Space Code of Conduct can serve as a rules-based beacon that guides a future space traffic management regime

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4. Conclusion

- Security-related developments will require more holistic understanding of space security
  - Increasing number of terrestrial conflicts and terrorist activities that could implicate space domain
  - More actors in space increase potential for space “incident” that could lead to conflict and/or political instability
  - Rise of China as a capable space power and its implications for sustainable space security, particularly given maritime disputes in the South and East China Seas
  - Russia’s desire to reassert its great power status in space
- An International Code of Conduct for Outer Space Activities is Europe’s best response to date to contested space domain