

# Space Law Game



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# Space Today

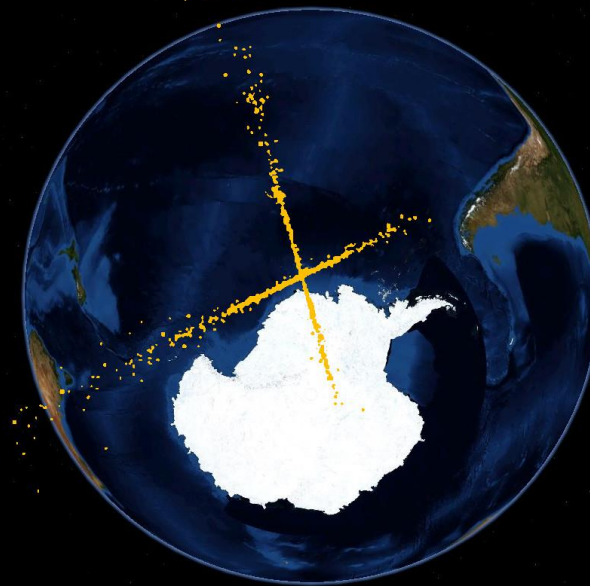
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- Space industry growing – rapidly
- Number of operators & satellites growing – rapidly
- Space actors not limited to traditional big military (US/Russia/China) or commercial companies (IntelSat, JSAT, ...)
- Many more satellites & operators with wide range of space experience
  - Mega-constellations
  - Low cost / short life satellites
- Growing dependence on space / growing risk to space capabilities
- VERY FEW ESTABLISHED NORMS & BEHAVIORS
- Kind of the wild west up there!



# The Law Games

- The Law Games will use wargame methodology to 'simulate' a collision event
- *"What would happen if a satellite were to collide with another satellite...?"*
- One in Low Earth Orbit (LEO)
- One in Geosynchronous Earth Orbit (GEO)





# Objectives of the Law Games



The objectives of the Space Law Games\* include:

1. SSA/STM System Development through:
  - a. Exploring how the event could have been avoided to drive SSA system requirement developments.
  - b. Identification of the roles and responsibilities in avoiding such outcomes.
  - c. Develop Standard operating procedures for the implementation of civil space traffic management.
2. Building on the above, when legal litigation proceeds:
  - a. Develop the evidential requirements needed to properly assign fault.
  - b. Understand the issues (both theoretical and practical) of entering that evidence into legal proceedings?
3. Understand the responsibilities to all parties for the continued existence of risk arising from the collision event?

*\*Using a 'wargame' approach by creating 'mock collision events' in LEO and 1x GEO)*



# Panel Objective



- To discuss the scenario that leads to a debris generating event in low earth orbit.
- Consider the consequences of the event
- Discuss the roles and responsibilities needed to avoid such an event
- Discuss the procedures required to initiate fault based litigation
- Explore the rudimentary evidence requirements
- Discuss the responsibilities to all parties to the continued existence of risk arising from the collision event



# The Low Earth Orbit Event



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# Low Earth Orbit Scenario



- A 'mega' constellation operator has launched 30 satellites into an orbit (500km) in preparation to collectively raise the satellites to their optimum operating altitude (1000km).
- Contact with one of the satellites (mid-pack) is lost during transit and an active debris removal (ADR) mission is dispatched to move the stricken satellite out of the way of following satellites.
- During close proximity operations at 800 km the ADR object crashes into the uncooperative satellite generating a large number of additional debris objects from both satellites.