



Panel Discussion: Weather Support to Commercial Space

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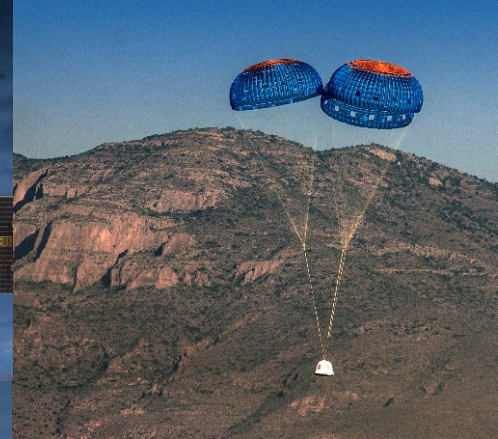
Policy & Innovation Division

FAA Office of Commercial Space Transportation



Federal Aviation
Administration

Empowered through Title 51 U.S.C. – Regulate the safety of commercial space launches and reentries. Encourage, facilitate, and promote commercial space launches and reentries.



Federal Aviation Administration

AST Commercial Space Transportation

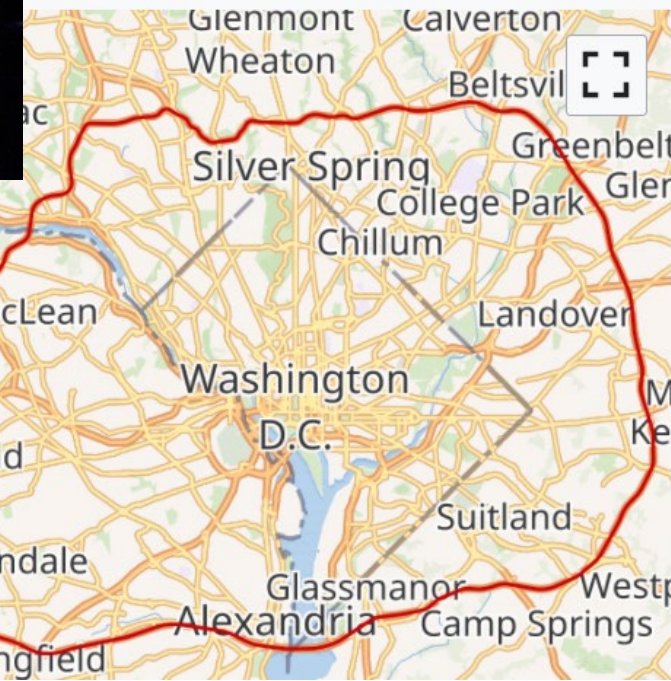
FPAW Panel Discussion – October 6, 2021

- Analogy to the Capital Beltway. Users enter/depart via by using on-ramps and off-ramps.
- For US commercial space activity, The FAA Office of Commercial Space Transportation licenses the “on ramp” (launch) and “off ramp” (reentry) activities.

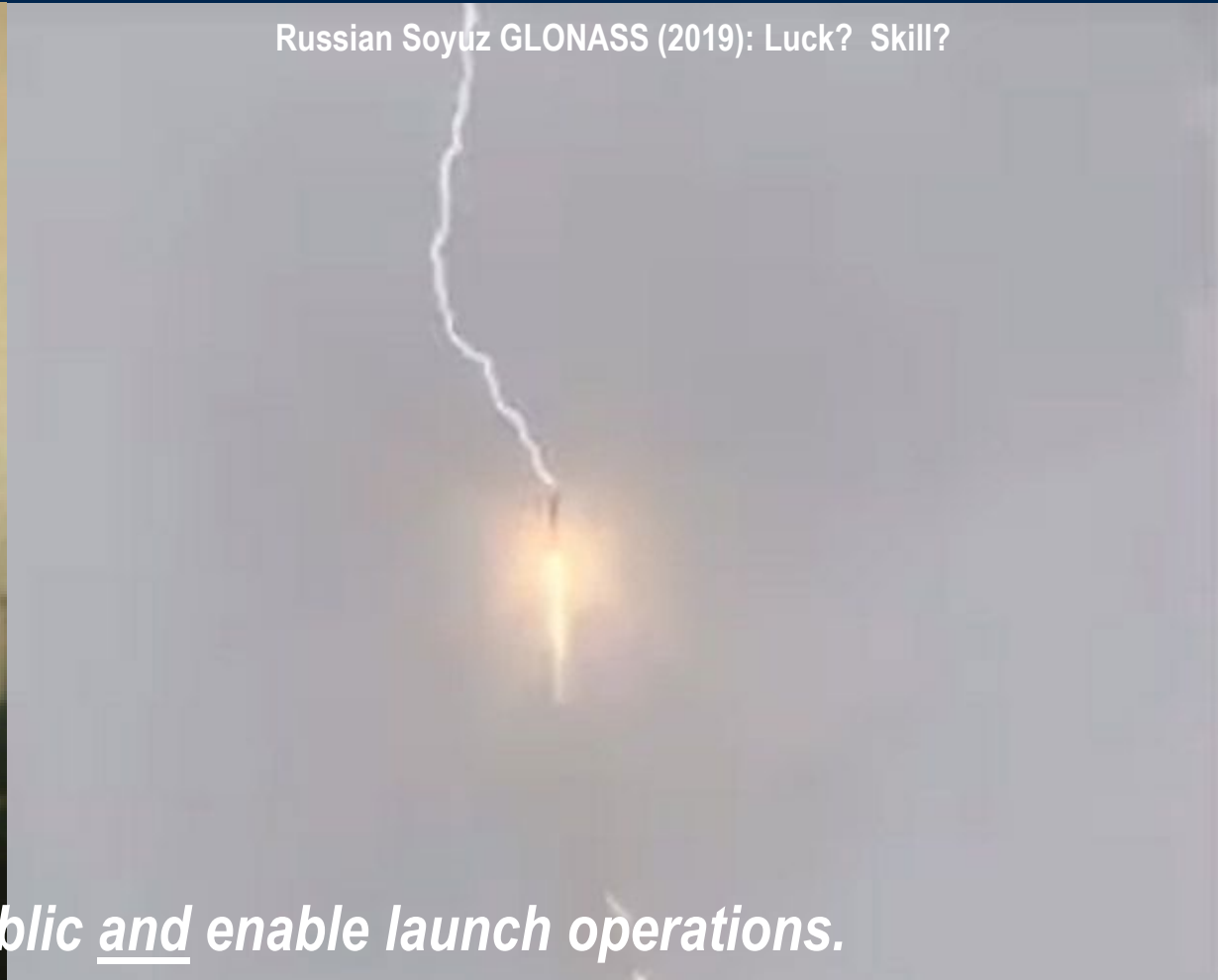


Interstate 495

Capital Beltway



Meteorological Example – Lightning Hazards and Impacts



Perennial Challenge → Protect the public and enable launch operations.

Emerging Trends

Likely challenges and opportunities:

Challenges → More diverse, capable, and frequent operations; weather and airspace constraints.

Opportunities → Increase the fidelity and integration of day-of-operations data (e.g. meteorological and air traffic data).

Challenge & Opportunity → Performance-based licensing regulations which keep pace with technical capabilities. Require active engagement of industry, standards, and knowledgeable practitioners.

*Aerospace safety regulations are **rules made with rocket science**.*

Thoroughness, speed, and flexibility often emerge as triple constraints.