

SPACE FLORIDA

Be where new ideas take off™

SPACE FLORIDA



WHO WE ARE

It all began with a rocket launch in 1950. And the brightest minds, biggest ideas, and most innovative ventures have been coming here ever since. While it may have started on the Space Coast, now all of Florida is pushing the envelope and breaking boundaries to claim many firsts in aerospace.

Space Florida is the state's aerospace finance and development authority. In 2006 a unique state statute was enacted that would open the door to more creative financing options and infrastructure access – making aerospace ventures much easier to launch.

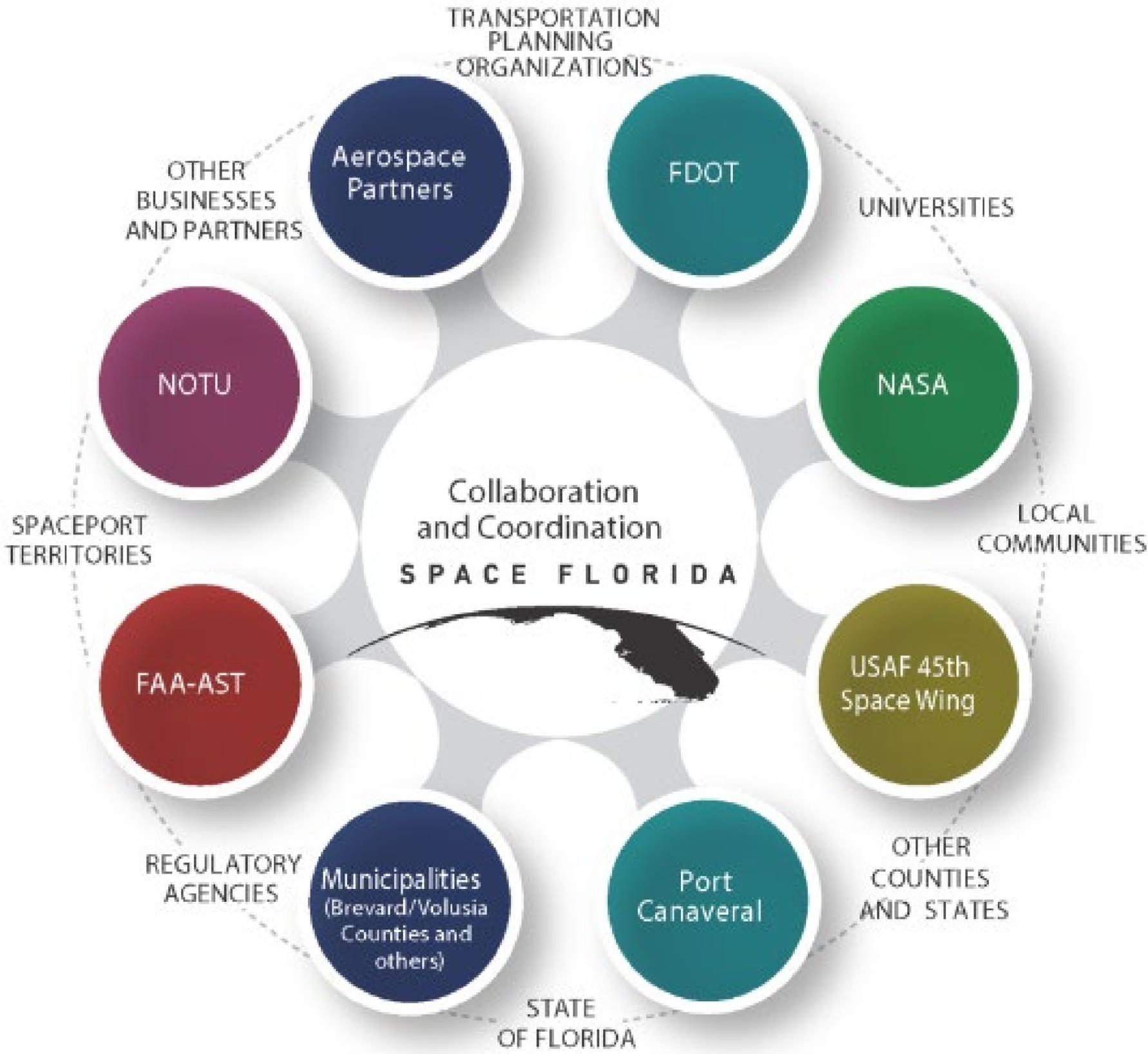




2022 milestones

- Closed out 2022 with approximately \$5.5 billion of statewide capital investment in its 150-project strong pipeline
- Space Florida expanded its role in commercial spaceport operations by supporting two commercial launches at SLC-46, the only active multi-user launch pad on the Cape
- Enabled 3,500 total flight operations at Space Florida's Launch and Landing Facility (LLF) – including the arrivals of SpaceX's Crews 4 and 5, the successful return of the U.S. Space Force's X-37B unmanned spaceplane, and delivery of the heatshield for Artemis III

Partnerships – “WE”

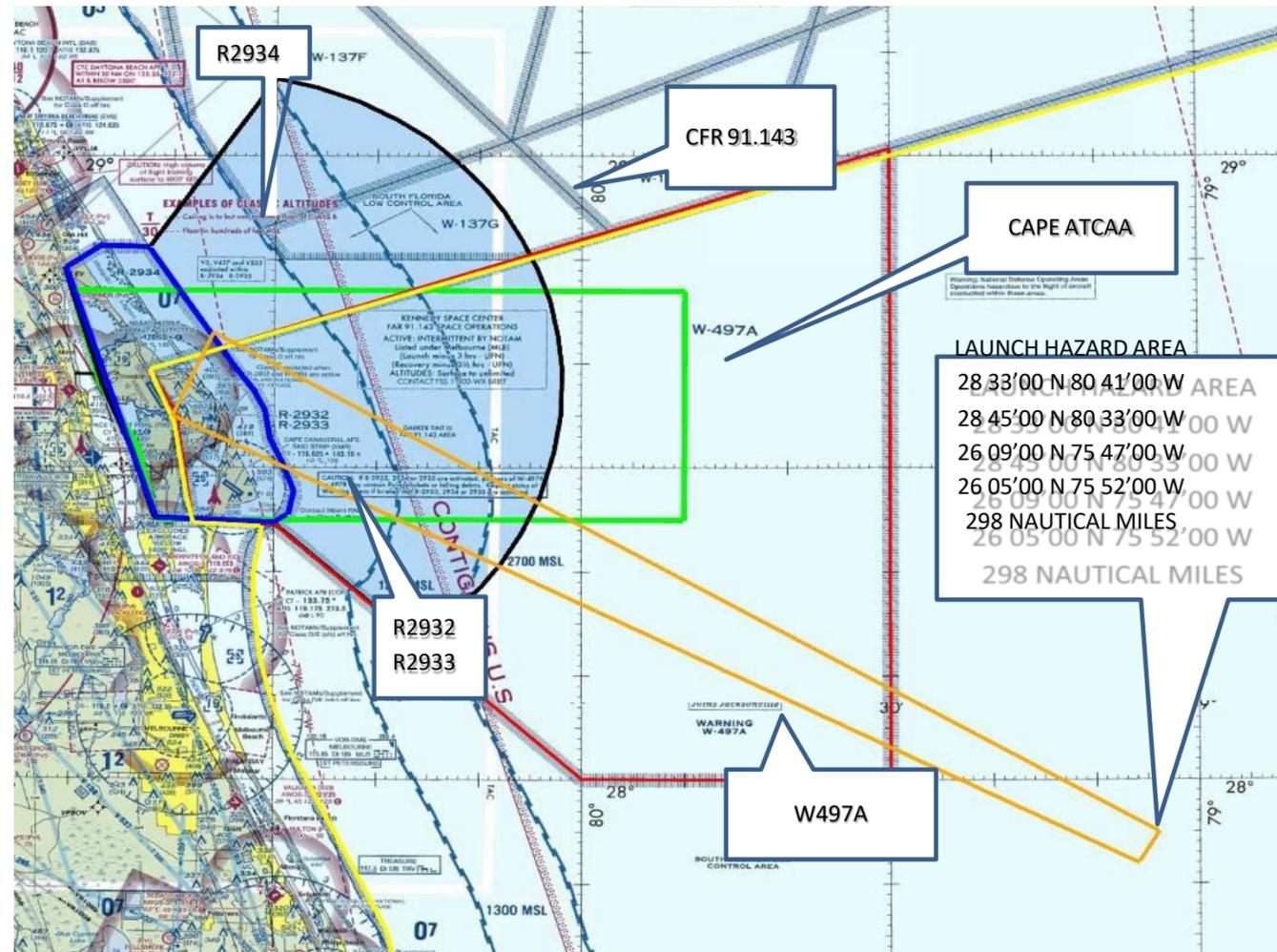




EASTERN RANGE AIRSPACE

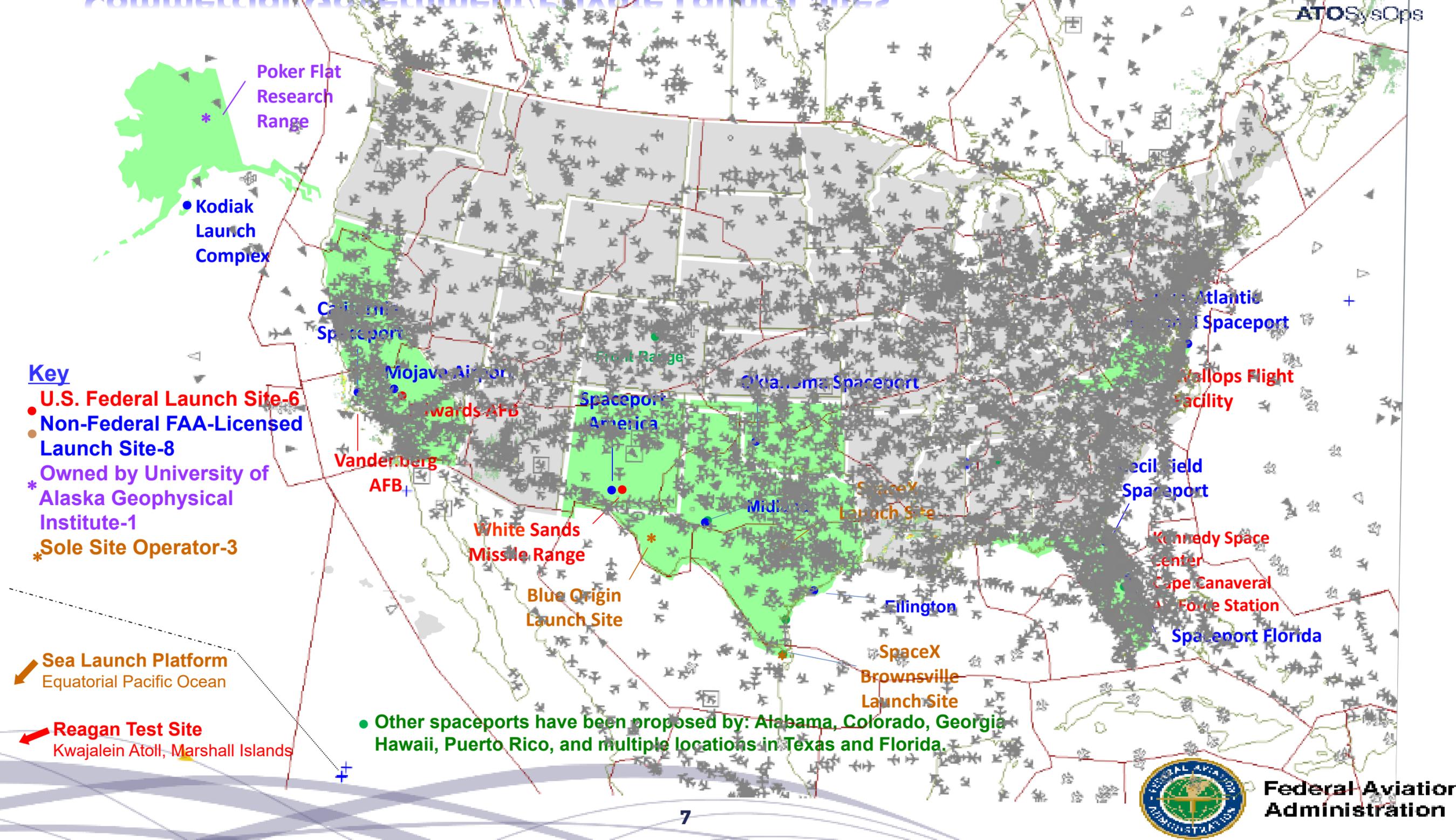
FALCON 9 STARLINK 4-8
20 Feb 22 1601Z – 1707Z

For detailed information on Space Launch Hazardous Airspace location and activation times, check your local **NOTAMs or locate under KZMA.** Airspace activation normally begins 2 hours prior to launch. Contact Orlando Approach on 132.65 or 281.425 for Eastern Range Special Use activated airspace status.

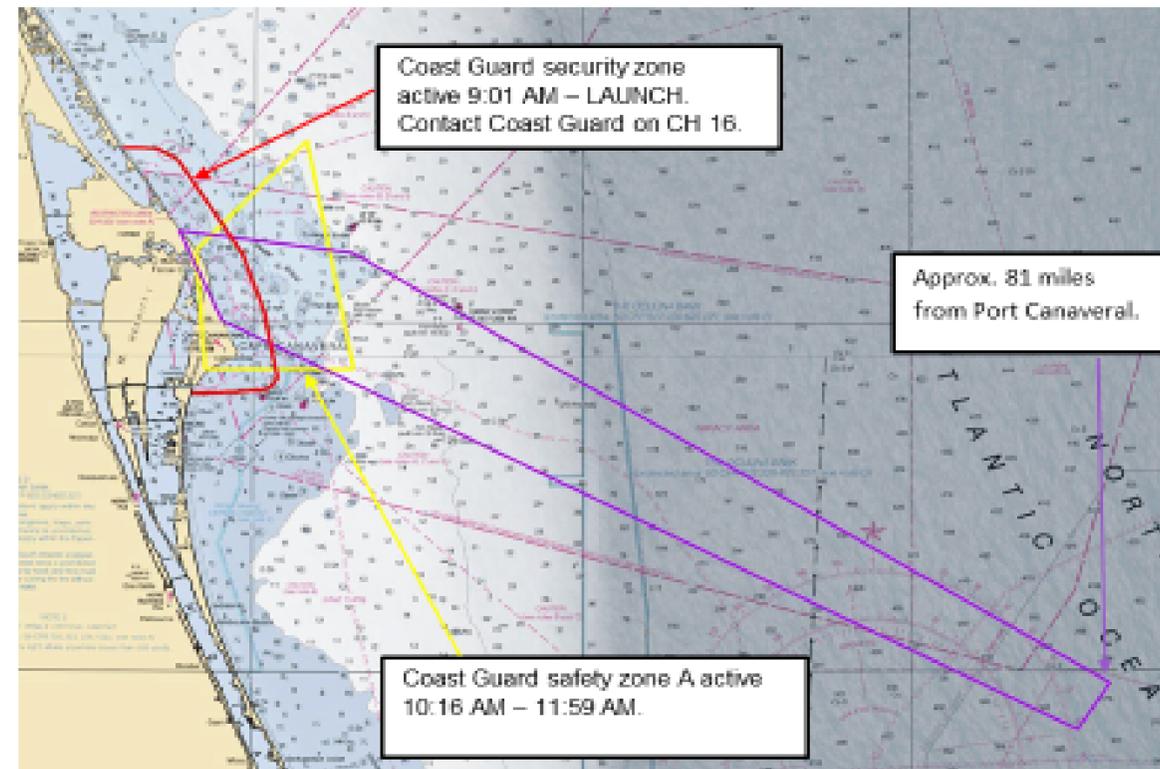


* U.S. Spaceports

Commercial/Government/Private Launch Sites



Space Launch Delta 45 Hazard Area



SPACEX STARLINK 4-8

20 FEB 22

LAUNCH HAZARD AREA COORDINATES

(PURPLE BOX ON MAP)

28° 37'52 N	80° 36'50 W
28° 36'00 N	80° 21'00 W
27° 59'00 N	79° 12'00 W
27° 55'00 N	79° 15'00 W
28° 30'10 N	80° 32'53 W

Please remain clear of the

Launch Hazard Area from:

9:00 AM – 12:15 PM

If launch is delayed the next attempt will be **21 FEB 22.**

Backup Launch Hazard Area Times:

7:00 AM – 11:45 AM

Launch Information Recorded Line:

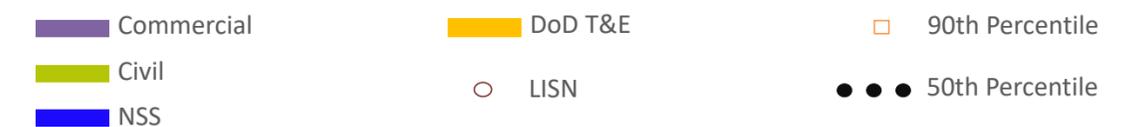
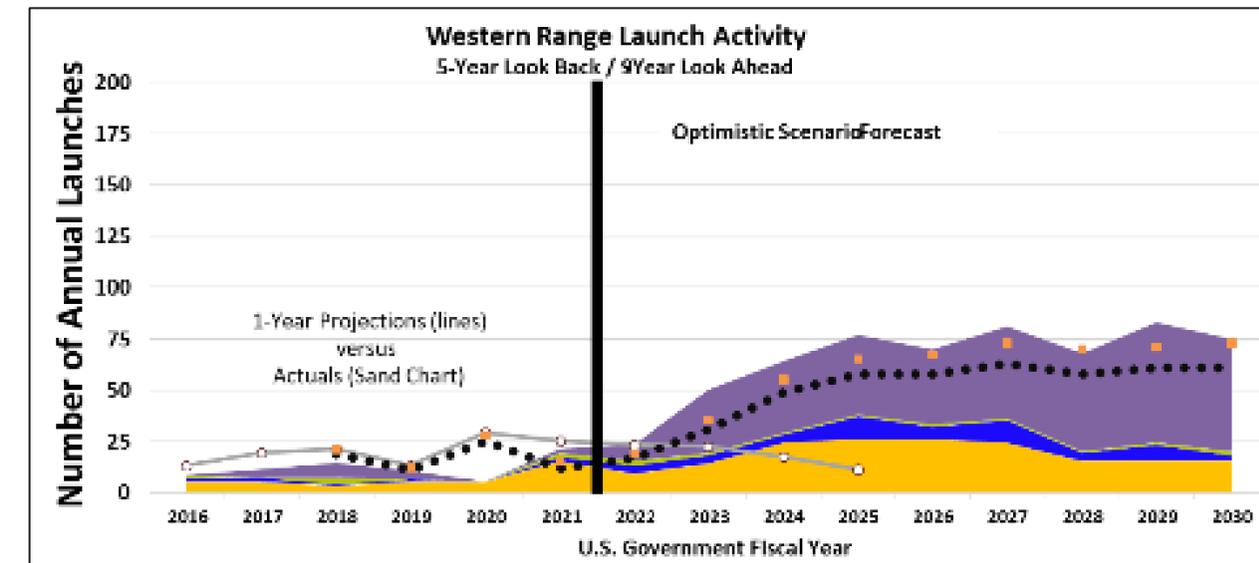
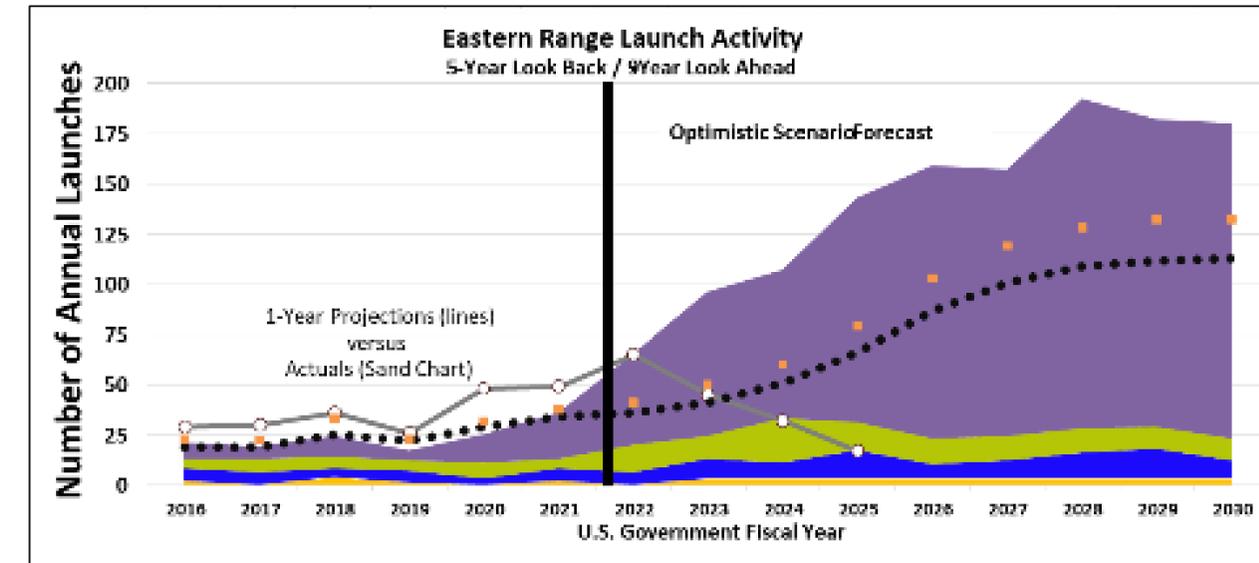
1-800-470-7232

Detailed Launch Area Information can be obtained using Coast Guard channel 16 or FM81A and Notice to Mariners @ <http://www.navcen.uscg.gov/?pageName=InmDistrict®ion=7>

Space Access: A Dynamic Landscape



- Revolution in spacelift underway (launch, range, acq)
 - Significant growth of Commercial Space Launch providers / launch rates / launch support activities
 - Commercial launch ~90% of launch manifests
 - 300% increase in launch rates projected by 2040
 - Expansion of space missions
 - On-orbit service and maintenance, moon base, tourism, etc.
 - Poised to support T&E and range activities alongside increased space launch requirements
- Automated Flight Safety System (AFSS): “the game changer”
 - Enables fundamental transformation of services and capacity
 - Enhances ability to support simultaneous ops & launch/test deconfliction
- Complementary changes in range acquisition
 - Tech/infrastructure/processes are outdated, difficult to OM&S





Trend - On Orbit Servicing

Commercially Provided Orbit Repositioning

- Move asset at will
- Decommission at end of life

Upgrade/Repair/Modularity

- Enable high performance processing
- Upgrade electronics sensors
- Upgrade with new capabilities
- Evolve capabilities along with mission and threats
- The "Immortal Spacecraft"

Autonomous RPV Docking

- Inspection and characterization
- Multi-agent collaboration
- Explore disaggregation beyond LEO

Joint Civil/DoD XGEO Operations

- Enable and protect commercial shipping lanes
- Support civil exploration of deep space
- Comm/PNT processing nodes
- Maneuver dominated regime everage multimode propulsion

Commercially Provided Launch

Commercially Enabled Maneuver Without Regret

- Unlock spacecraft from fuel constraints that currently exist
- Maneuver and reposition assets with impunity
- Protect and defend US government civil and commercial interests
- Enable truly persistent assets and platforms throughout XGEO

Civil Focused On Orbit Assembly and Manufacturing

- Assembly and construction of large structures
- Basis for space based logistics chain
- Enable space commodity exchange
- Tailor structures for environment to launch

Dynamic Response & Complexity

- Position orbital assets at time and place dictated by dynamic scenarios
- Create uncertainty through complexity

Rocket Cargo

- Provide support for terrestrial CCMDs
- Provide global hypersonic logistic support

Commercially Provided Mid-flight Refueling

- Use fuel required for the mission
- Decrease transit time/Increase revisit rate
- Fly novel flight paths for mission requirements
- Single fuel type multimode propulsion
- Decrease launch mass with corresponding cost reduction

Novel Orbits

- Learn how novel low energy orbits can be exploited
- Map the dynamic Earth Moon Lagrange Points

VLEO - MEO

GEO - 2x GEO

3x GEO - L1/L2

THE GROUND NODE FOR GLOBAL AEROSPACE

FLORIDA

- Payloads, people, assets outbound & inbound
- Spaceport System includes in-space elements
- Interplanetary cargo & crew accommodations
- Deepen competitive tax & regulatory systems
- Space-supporting maritime operations



**FLORIDA IS THE GLOBAL, MULTIMODAL
PORT OF ENTRY TO SPACE**

Thank you!

Dale Ketcham, Vice President of Government and
Community Relations

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