



ANM
TECH DAY



The Space Economy, New Mexico, and Spaceport America

April 29, 2026

Albuquerque, NM

Scott McLaughlin

Executive Director

New Mexico Spaceport Authority

scott.mclaughlin@spaceportamerica.com



May 9th, 5k, 10k, and 15k



1968
APOLLO 8



2026
ARTEMIS II



Theoretical_mass
@theoretical_mass

AFTER 58 YEARS...
HUMANITY RETURNS TO LUNAR ORBIT



APOLLO 8 CREW



ARTEMIS II CREW

Two Crewed Moon Flybys, 58 Years Apart



Apollo 8, “Earthrise”
Bill Anders, Dec. 24, 1968



Artemis 2, “Earthset”
Christina Koch, April 6, 2026

And behold

The blue planet steeped in its dream
Of reality, its calculated vision shaking with
The only love.

Life Magazine 1968, U.S. Poet Laureate, James Dickey

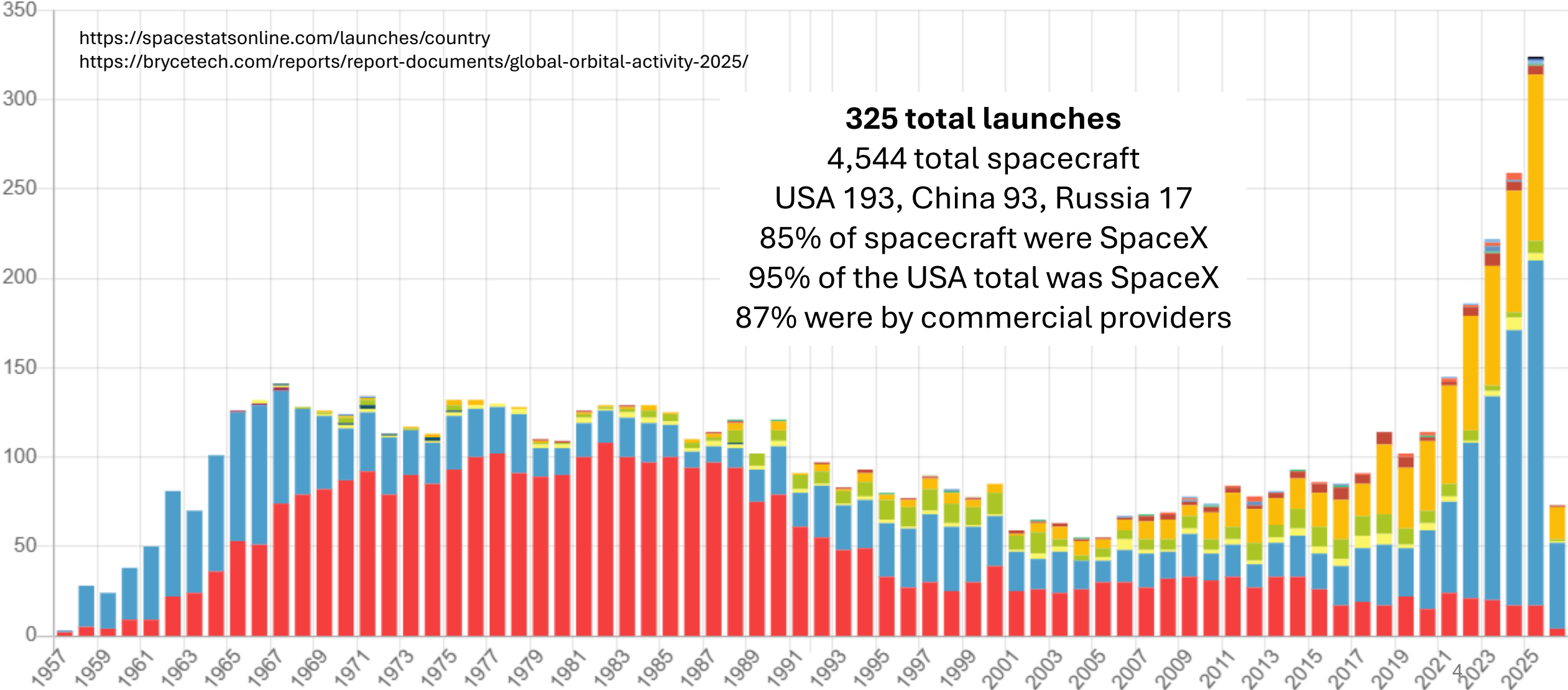


2025 Orbital Launches by Year and Country



<https://spacestatsonline.com/launches/country>
<https://brycetechnology.com/reports/report-documents/global-orbital-activity-2025/>

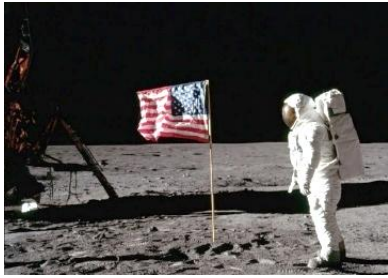
325 total launches
4,544 total spacecraft
USA 193, China 93, Russia 17
85% of spacecraft were SpaceX
95% of the USA total was SpaceX
87% were by commercial providers



Space Ages...

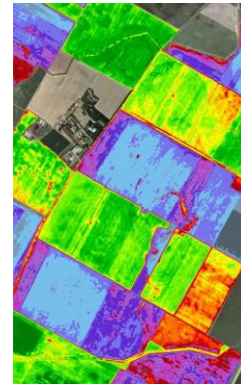
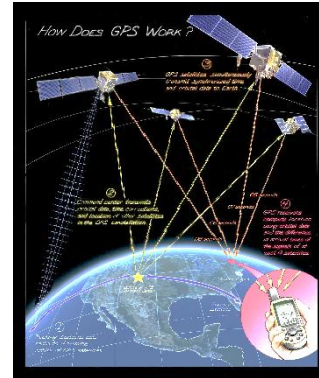
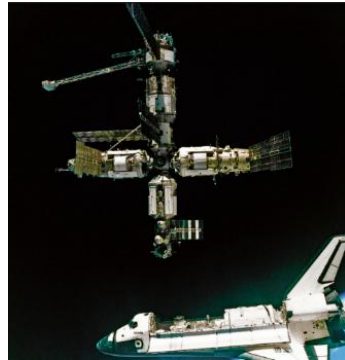
Space 1.0

Space Race
Government
Nothing reused



Space 2.0

Cooperation
Regular Flights
Government
Some reuse

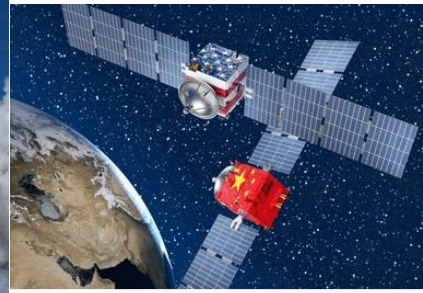


Space reliance:
(communication,
**GPS unrestricted in
2000, remote
sensing, etc.)**

Space 3.0

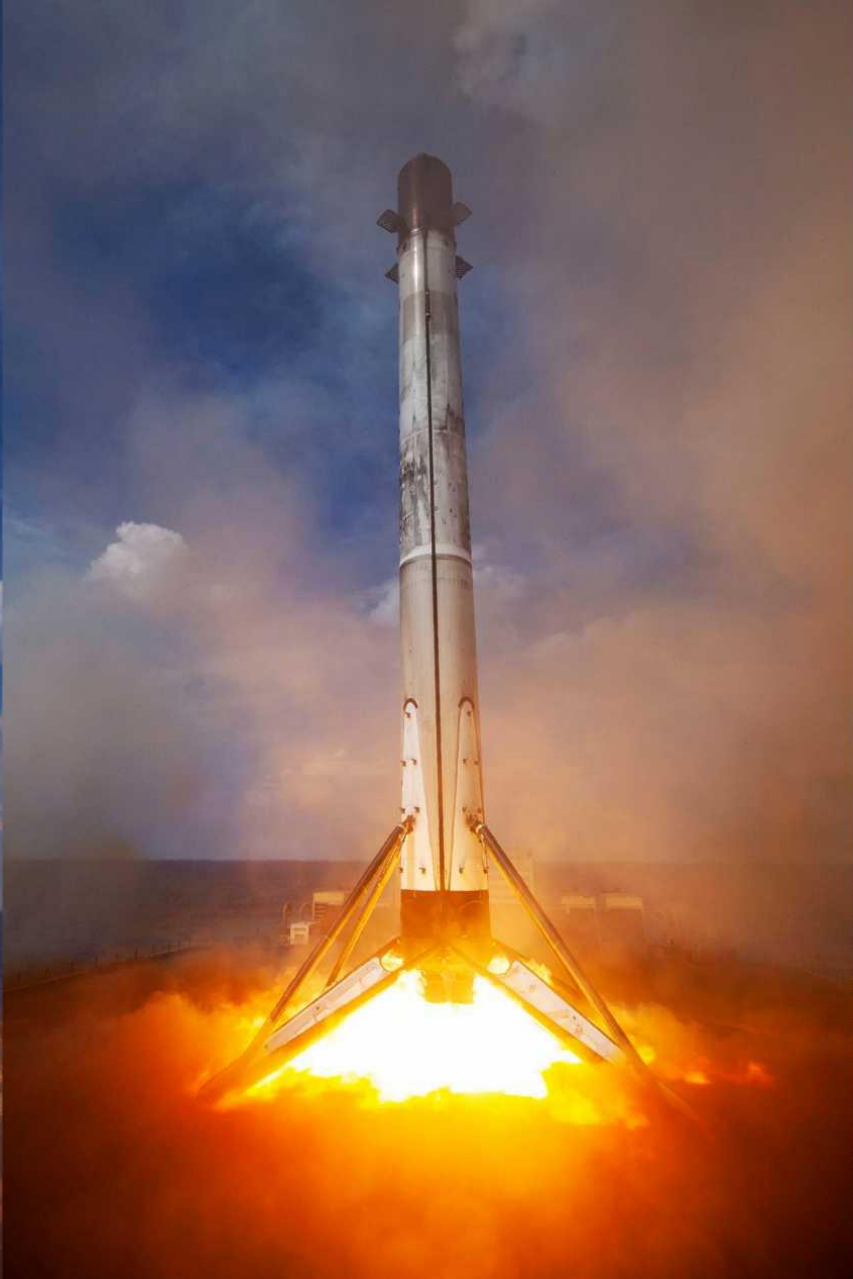
Private Capital and
Companies

Regular Flights
Significant reusability
Low cost to space
War-fighting domain



At present:

- Orbital launches are increasing by **25% a year**
- In just a few years, there will be **daily launches** to orbit from sites in the U.S.
- **Lower costs** are creating new markets and applications, such as manufacturing in space (which requires reentry)
- There is significant **private capital** spurring development
- A “race” to the Moon, including new space stations and even asteroid mining
- Orbital space tourism as a business model



SpaceX Falcon 9, Landing on Drone Ship

**SpaceX Falcon 9
Launch from
California
(Vandenberg SFB)
as seen
From
Albuquerque**

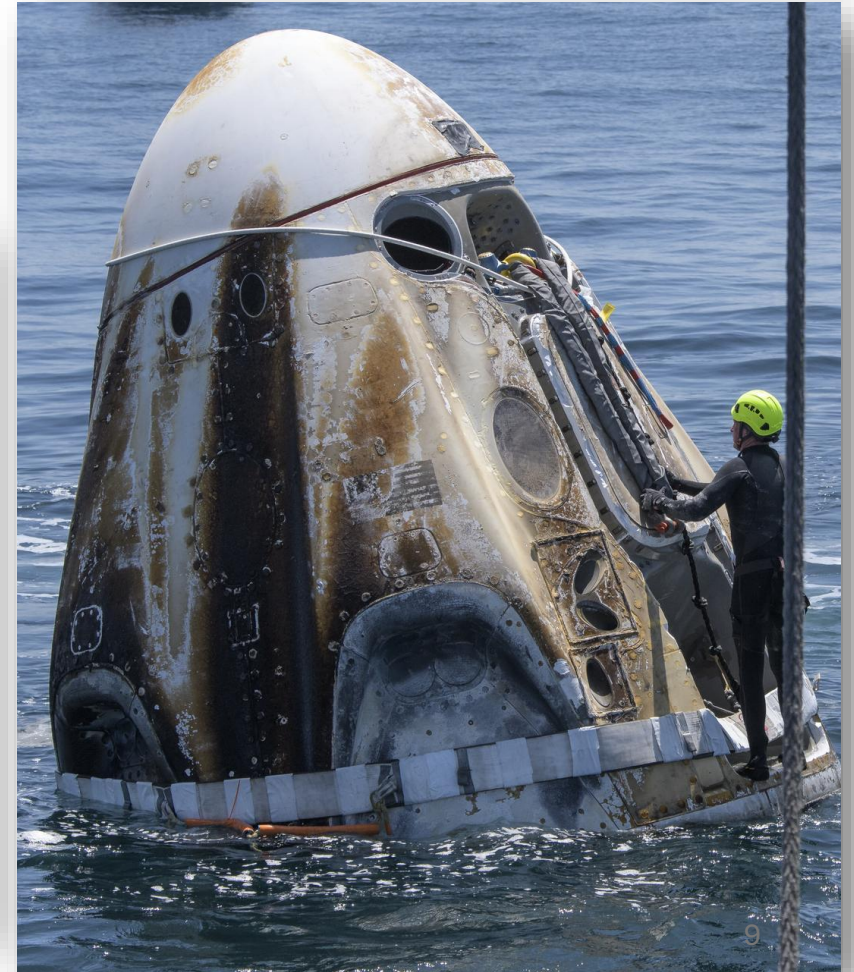


*Anne
Vandegrift*

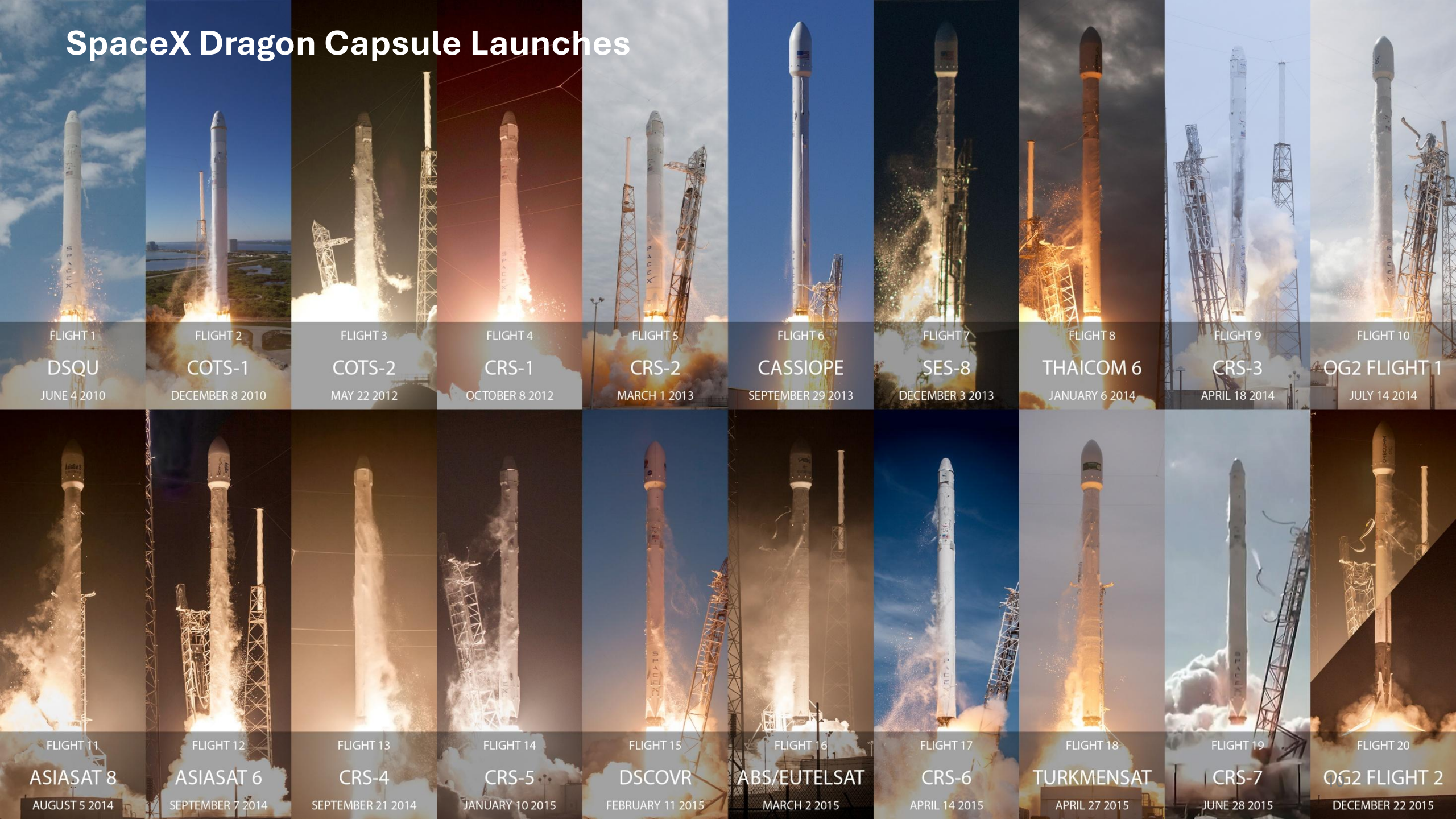
Space jellyfish!



**First Commercial Crew to ISS
SpaceX Dragon, May 30, 2020
(Since last Space Shuttle in 2011)**



SpaceX Dragon Capsule Launches



FLIGHT 1

DSQU

JUNE 4 2010

FLIGHT 2

COTS-1

DECEMBER 8 2010

FLIGHT 3

COTS-2

MAY 22 2012

FLIGHT 4

CRS-1

OCTOBER 8 2012

FLIGHT 5

CRS-2

MARCH 1 2013

FLIGHT 6

CASSIOPE

SEPTEMBER 29 2013

FLIGHT 7

SES-8

DECEMBER 3 2013

FLIGHT 8

THAICOM 6

JANUARY 6 2014

FLIGHT 9

CRS-3

APRIL 18 2014

FLIGHT 10

OG2 FLIGHT 1

JULY 14 2014

FLIGHT 11

ASIASAT 8

AUGUST 5 2014

FLIGHT 12

ASIASAT 6

SEPTEMBER 7 2014

FLIGHT 13

CRS-4

SEPTEMBER 21 2014

FLIGHT 14

CRS-5

JANUARY 10 2015

FLIGHT 15

DSCOVER

FEBRUARY 11 2015

FLIGHT 16

ABS/EUTELSAT

MARCH 2 2015

FLIGHT 17

CRS-6

APRIL 14 2015

FLIGHT 18

TURKMENSAT

APRIL 27 2015

FLIGHT 19

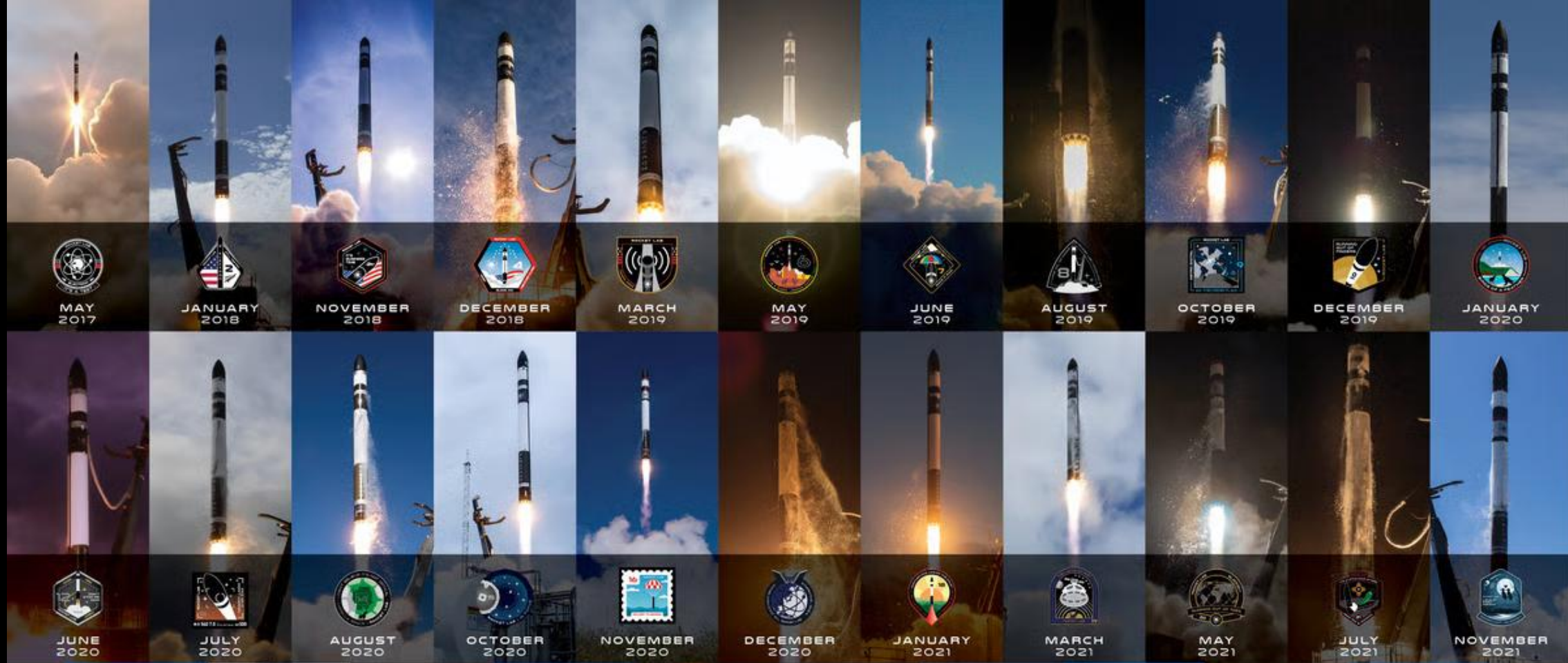
CRS-7

JUNE 28 2015

FLIGHT 20

OG2 FLIGHT 2

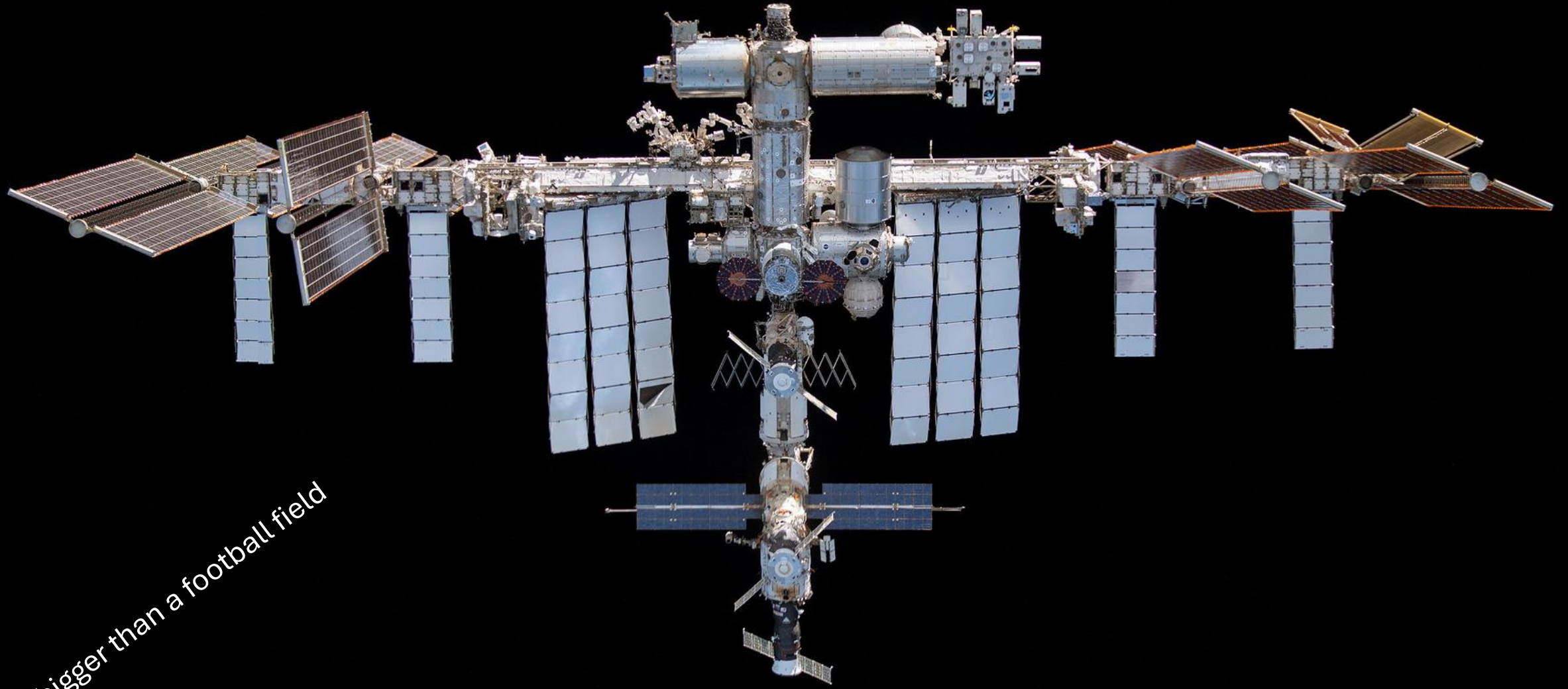
DECEMBER 22 2015



Rocket Lab

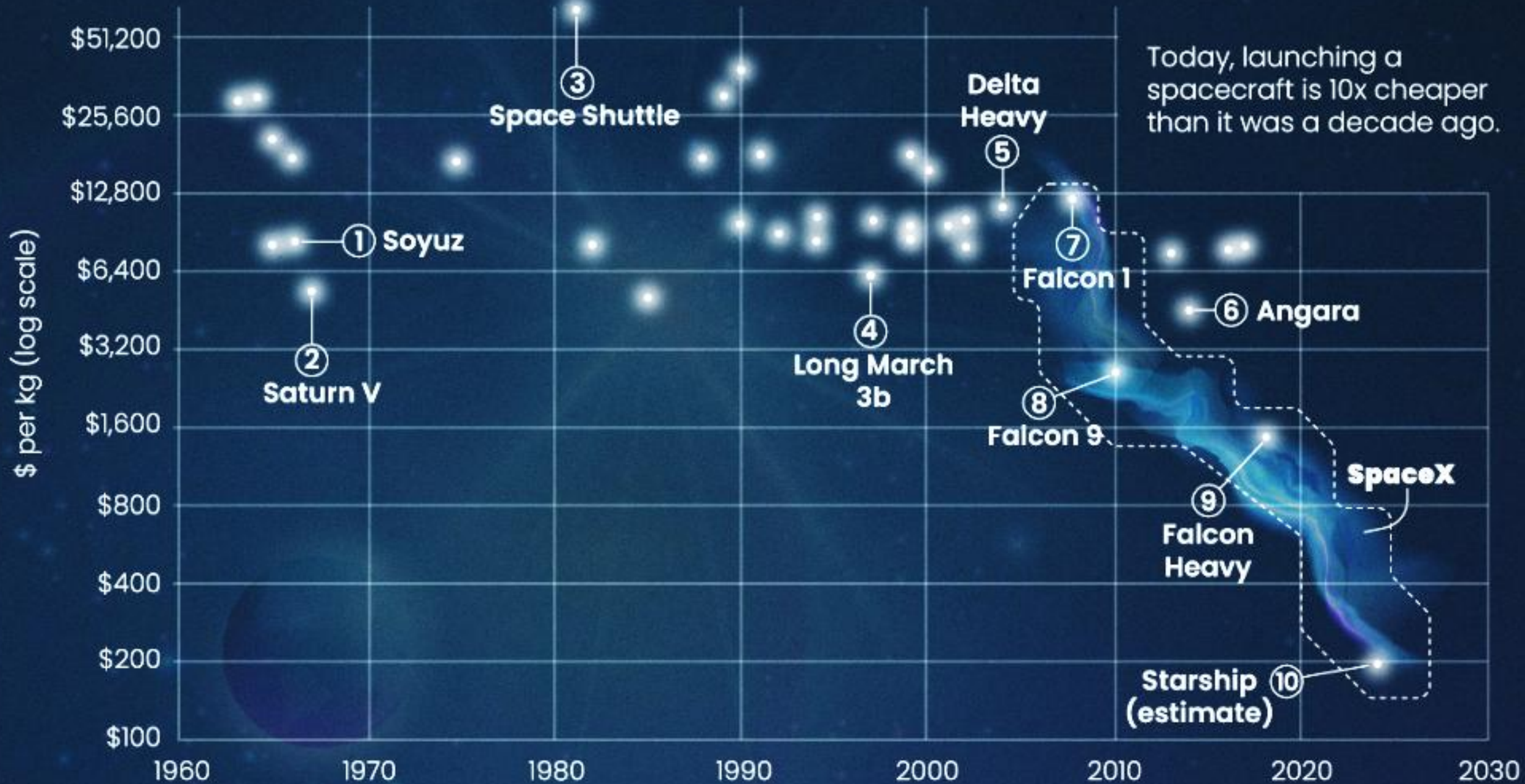
Blue Origin New Glenn





This is bigger than a football field

**A continuous human presence aboard the ISS since November 2000.
But it is nearing the end of its life and is planned for deorbit in 2030.
*There are 4 commercial space stations under development in the U.S.***



184'



NASA
STS



ESA
Ariane 5



SPACEX
Falcon 9



SPACEX
Falcon Heavy



BLUE ORIGIN
New Glenn



363'



NASA
Saturn V

394'



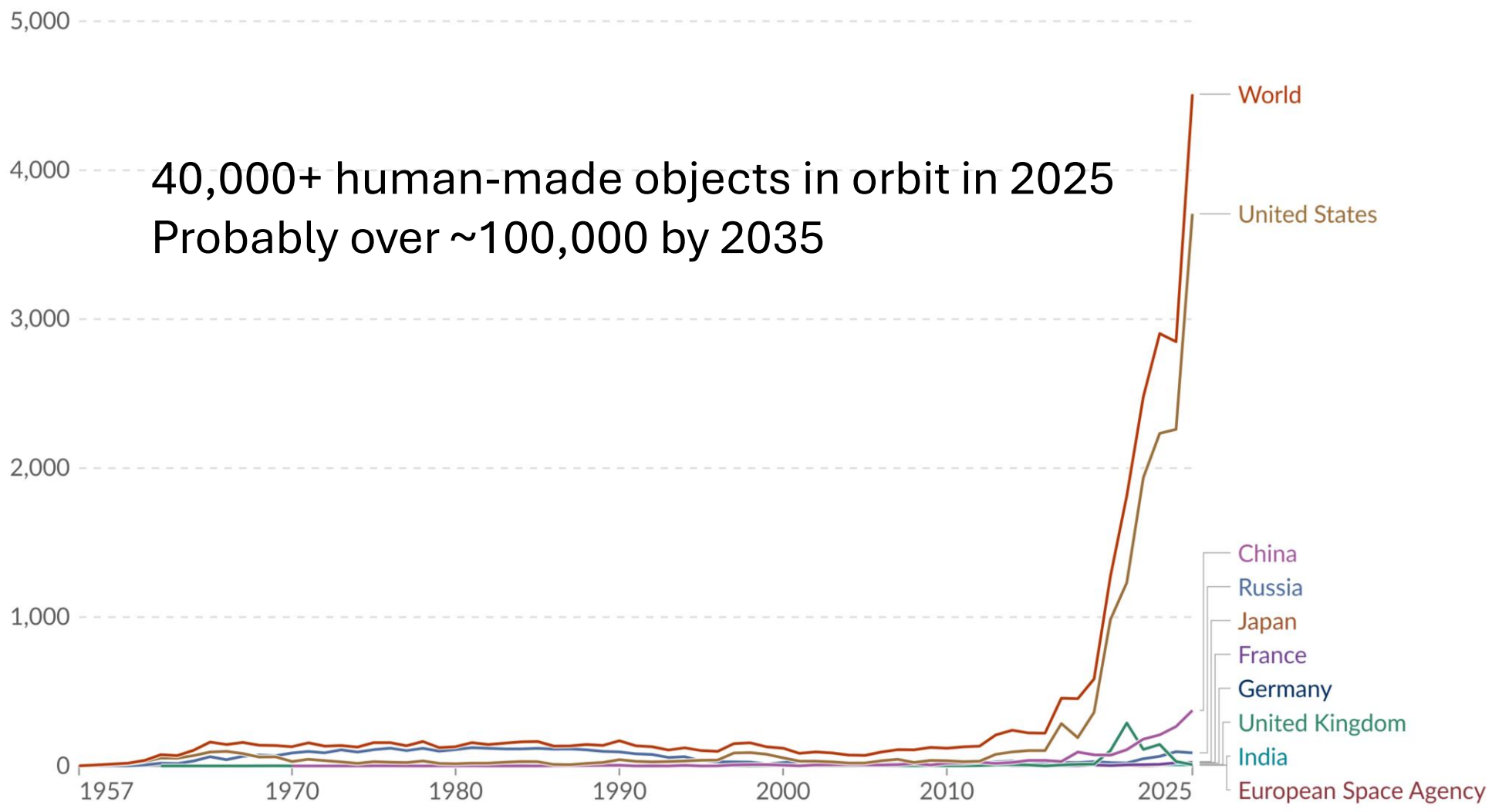
SPACEX
ITS



<https://www.technology.org/2024/06/03/new-glenn-vs-starship-bigger-faster-farther/>

Annual number of objects launched into space

This includes satellites, probes, landers, crewed spacecrafts, and space station flight elements launched into Earth orbit or beyond.



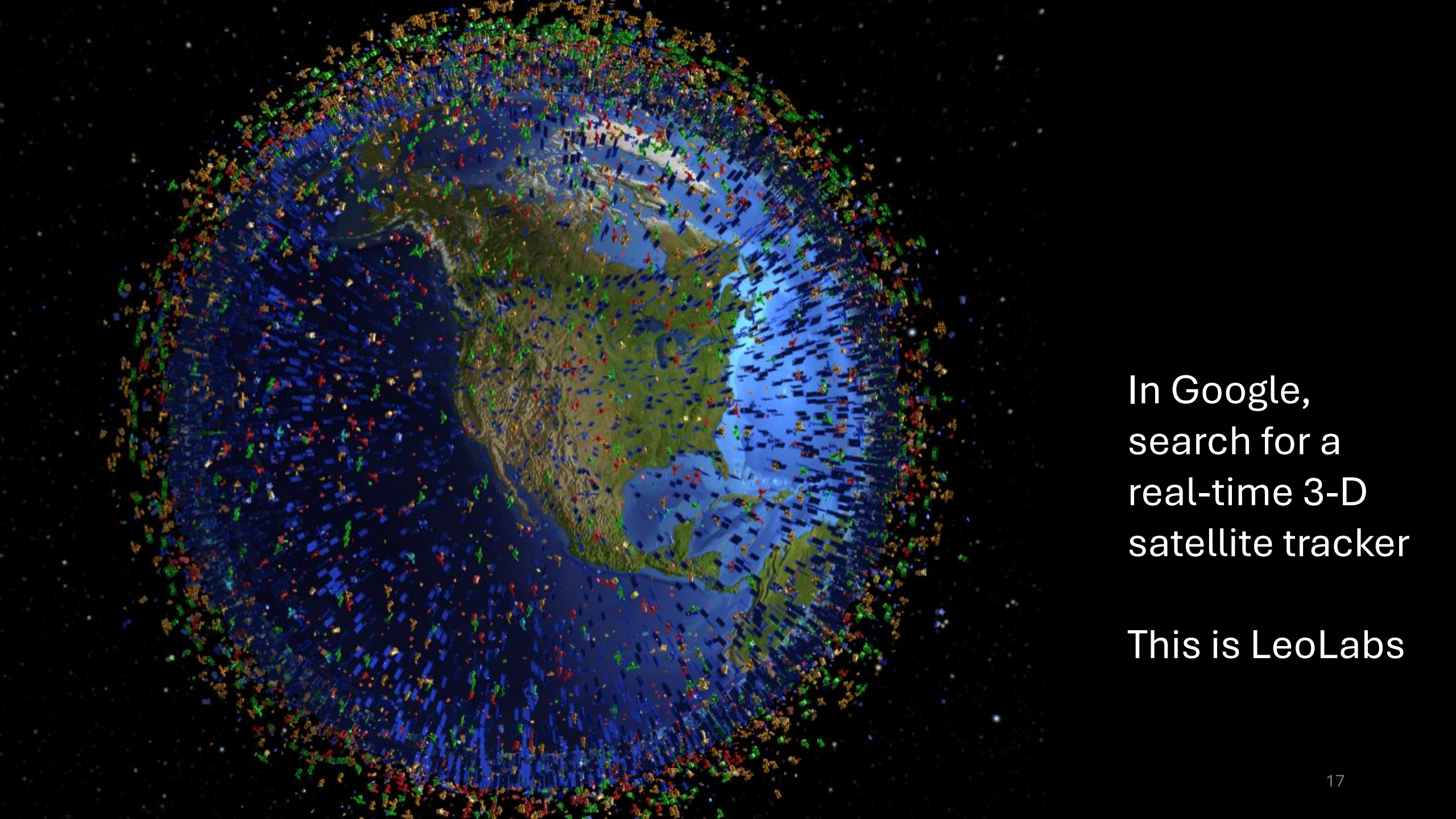
MEGA-CONSTELLATIONS

- **SpaceX Starlink** has as many as 42,000 satellites (10,000, as of April 2026), they orbit at 300+ miles, and weigh 500 – 2,000 lbs., depending on vintage
- **Amazon Kuiper** planned for 3,236 satellites, 241 in orbit right now
- **China Guowang** will have 13,000 satellites, **China Qianfan** will have 14,000
- Several others
- Also: Starcloud AI and Suncatcher solar power

Data source: United Nations Office for Outer Space Affairs (2026)

OurWorldinData.org/space-exploration-satellites | CC BY

Note: Where they differ, launch attributions are based on the commissioning country, not the country conducting the operations.

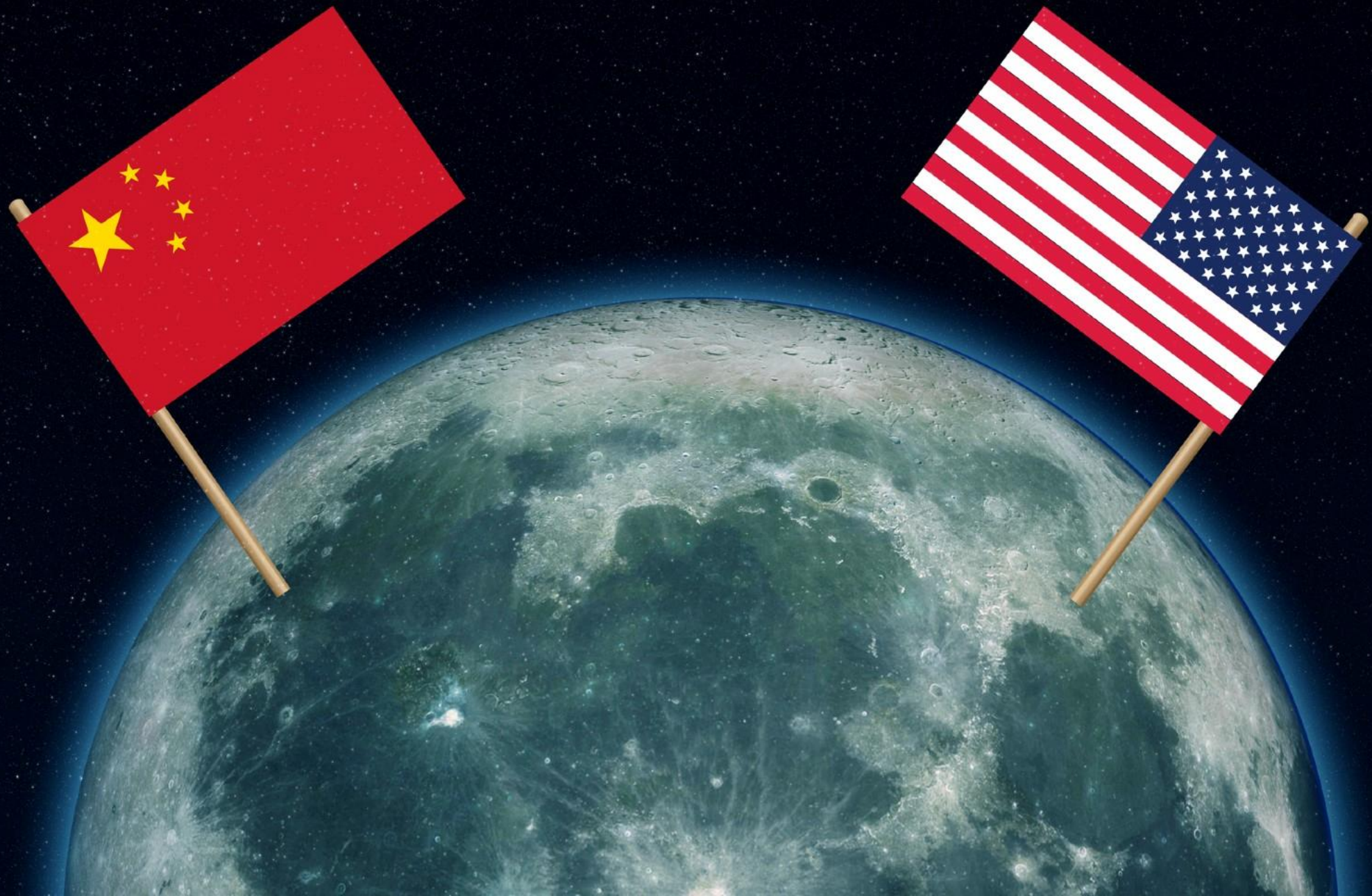


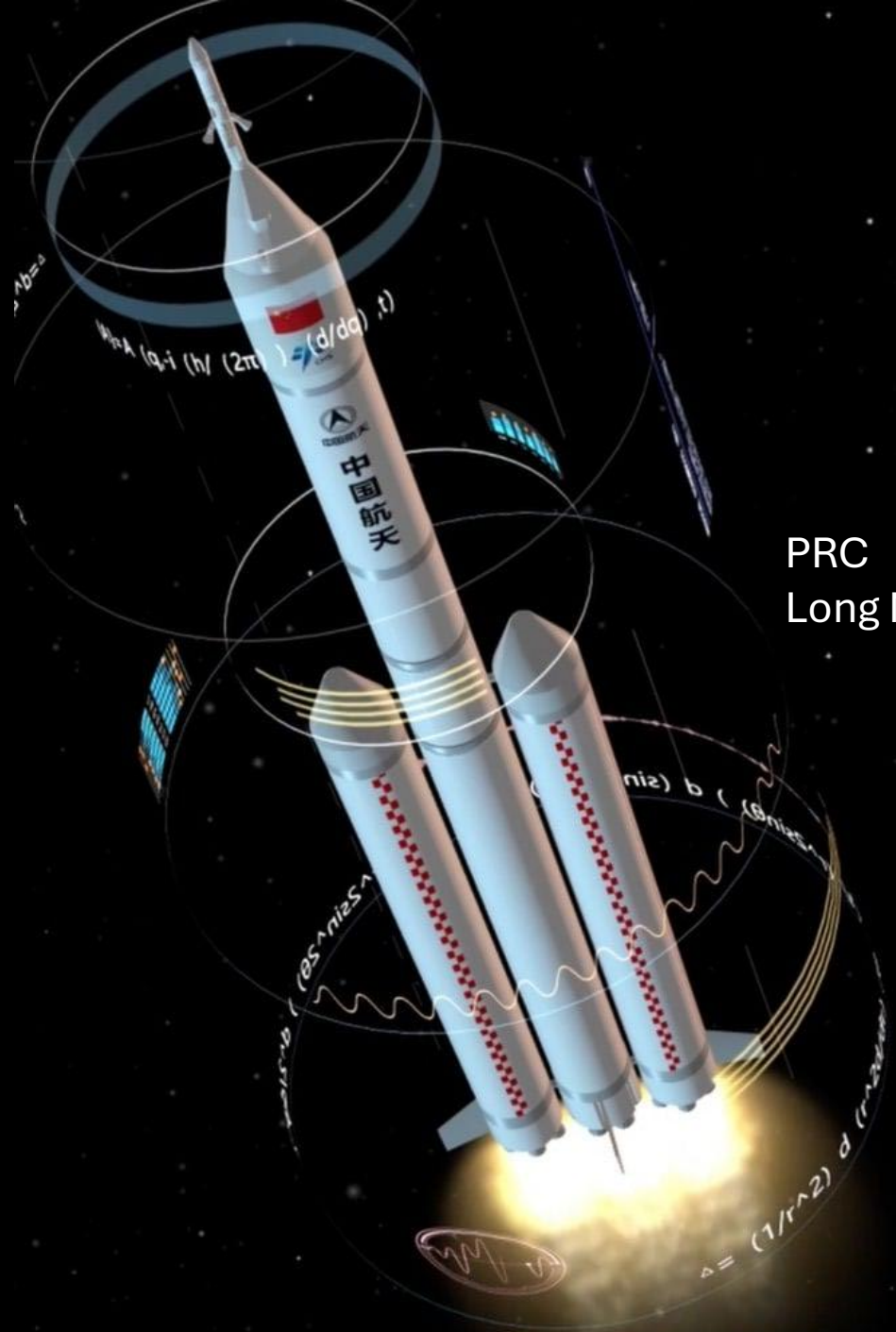
In Google,
search for a
real-time 3-D
satellite tracker

This is LeoLabs



<https://www.space.com/space-exploration/satellites/this-is-really-intolerable-astronomers-protest-giant-orbiting-mirror-project-and-spacexs-million-ai-satellites>

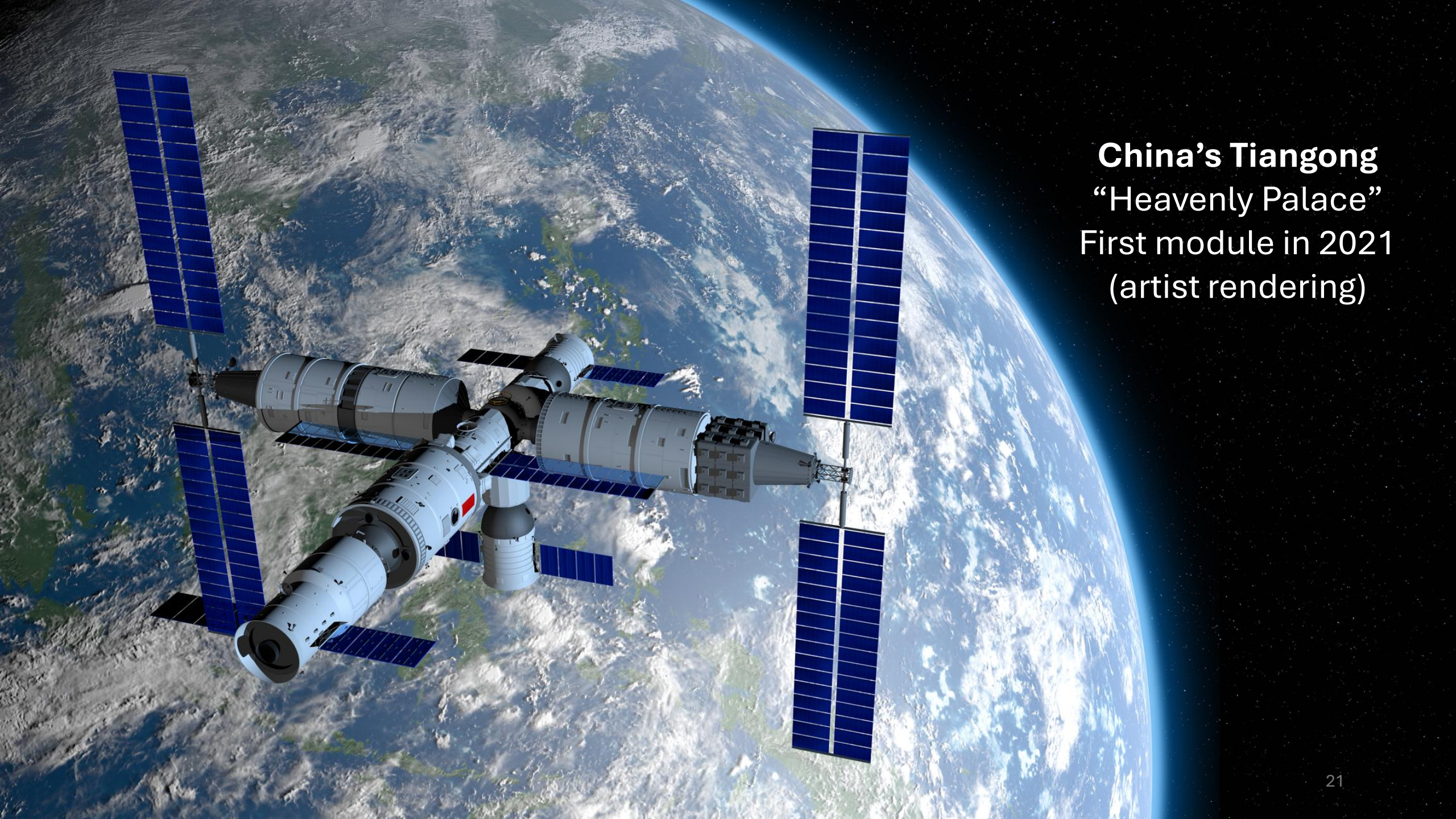




PRC
Long March 10



USA
SLS



**China's Tiangong
"Heavenly Palace"
First module in 2021
(artist rendering)**

Space as a War-fighting Domain

Russian satellites shadowing our own, warns German defence minister

Boris Pistorius stressed the need to develop offensive capabilities in space as a deterrent to hostile actions.

Thursday 25 September 2025 15:52, UK

Five Chinese Satellites Engage in 'Dogfighting' Drills in Space: US Officials



JOE SABALLA MARCH 19, 2025

1 MINUTE READ



"Space Matryoshka": Russian Spacecraft Deploys Possible Anti-Satellite Weapon Near USA 326

Jul 01, 2025 14:18 Updated Jul 03, 2025 11:28 3 min read

Space Force wants six kinds of space weapons—including anti-satellite lasers

Controlling space means "employing kinetic and non-kinetic means to affect adversary capabilities."

STEPHEN CLARK - MAR 13, 2025 5:00 AM 123

Russia and China Demonstrate Advanced Orbital Maneuvering, Prompting Further Calls for Anti-Satellite Weapons

US Space Command has previously requested further development of orbital warfare capabilities.

By Jon Martindale October 22, 2025

'Mind-boggling': Space Force chief fires off dire warning about Chinese capability to knock out US satellites

Space Force Gen Chance Saltzman warns US-China commission that China's rapid advances in space warfare – including satellite tracking and quantum tech – could soon eclipse US dominance

By Morgan Phillips · Fox News

China is practicing 'dogfighting' with satellites as it ramps up space capabilities: US Space Force

McCarthy, CNN
ad · Published 4:56 AM EDT, Fri March 21, 2025

Space Force Focused on the Ground for Anti-Satellite Weapons

April 3, 2025 | By Shaun Waterman

Why French and American Satellites Are Practicing Dogfighting in Space

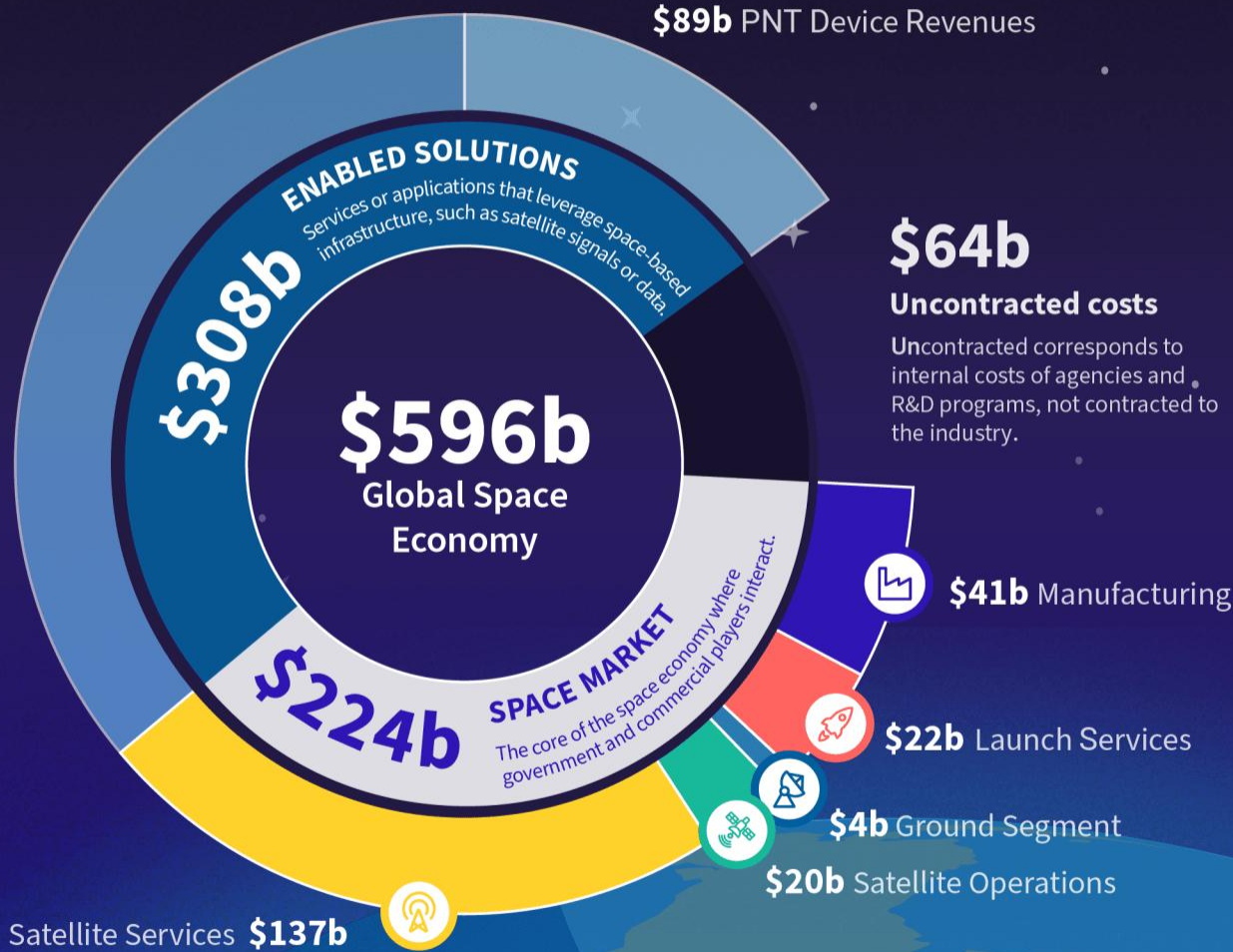
October 3, 2025 | By: Brandon J. Weichert

In 2022: PRC SJ-21



2024 Space Economy Valuation

in USD



Space Market by Application



Space Market by Region

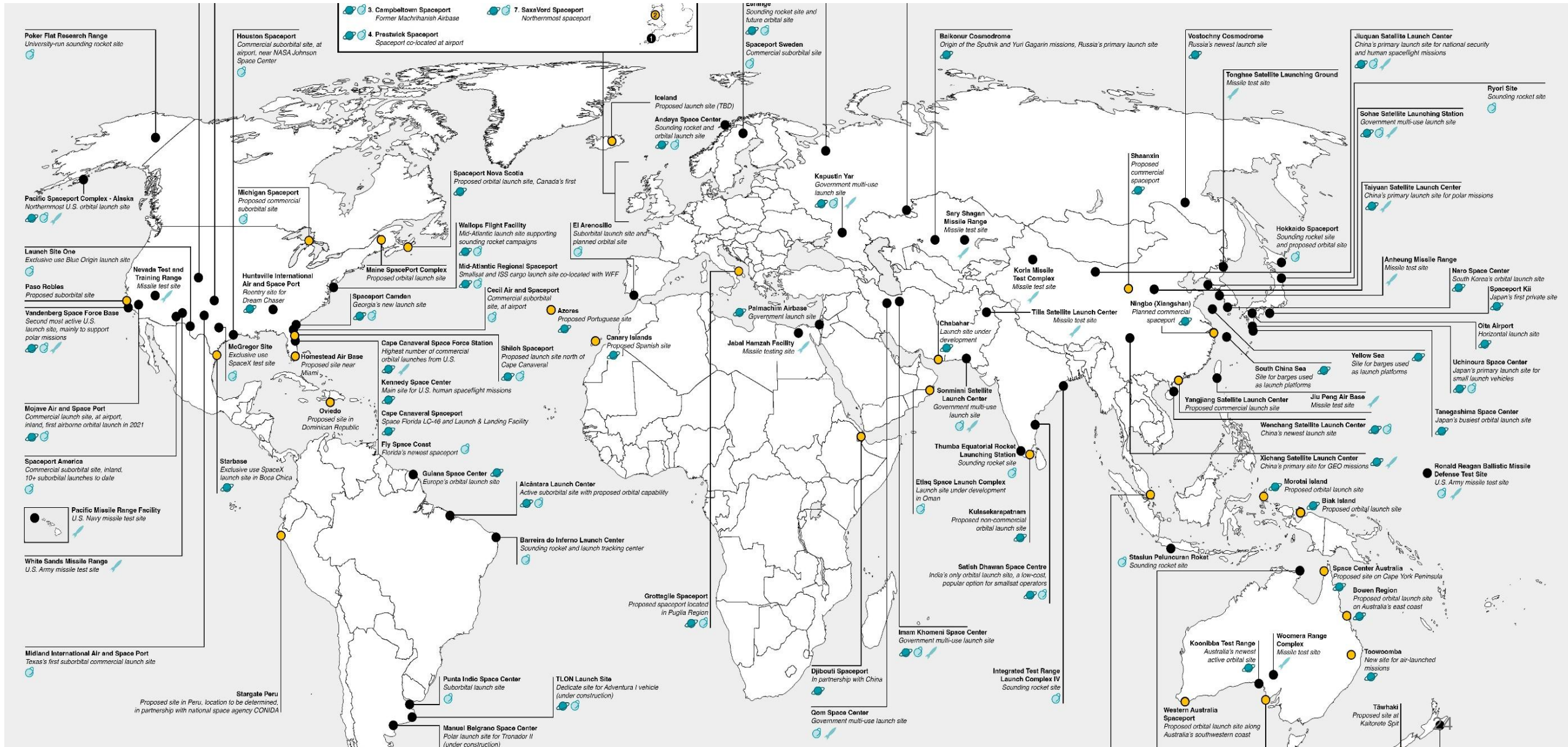


\$626B for 2025

Regional segmentation is excluding ground segment market value

Source: Novaspaces, Space Economy Report, 2024

Spaceports around the World



U.S. Federal and Licensed Spaceports



MAP LEGEND

- States with Current Spaceports
- ✈ FAA-Licensed Horizontal Launch Site
- 🚀 FAA-Licensed Vertical Launch Site
- 📍 FAA-Licensed Horizontal and Vertical Launch Site
- 🔥 FAA-Licensed Reentry Site
- ★ U.S. Federal Site
- ◆ Exclusive Use Site
- * Locations licensed by the FAA or currently hosting FAA-licensed activity.

Source: FAA/AST March 2025

14 Licensed Commercial Spaceports
 Each has its own governance model and is owned by various entities, such as city, county, state governments, or is private. Some are located on federal ranges, while others are near them.

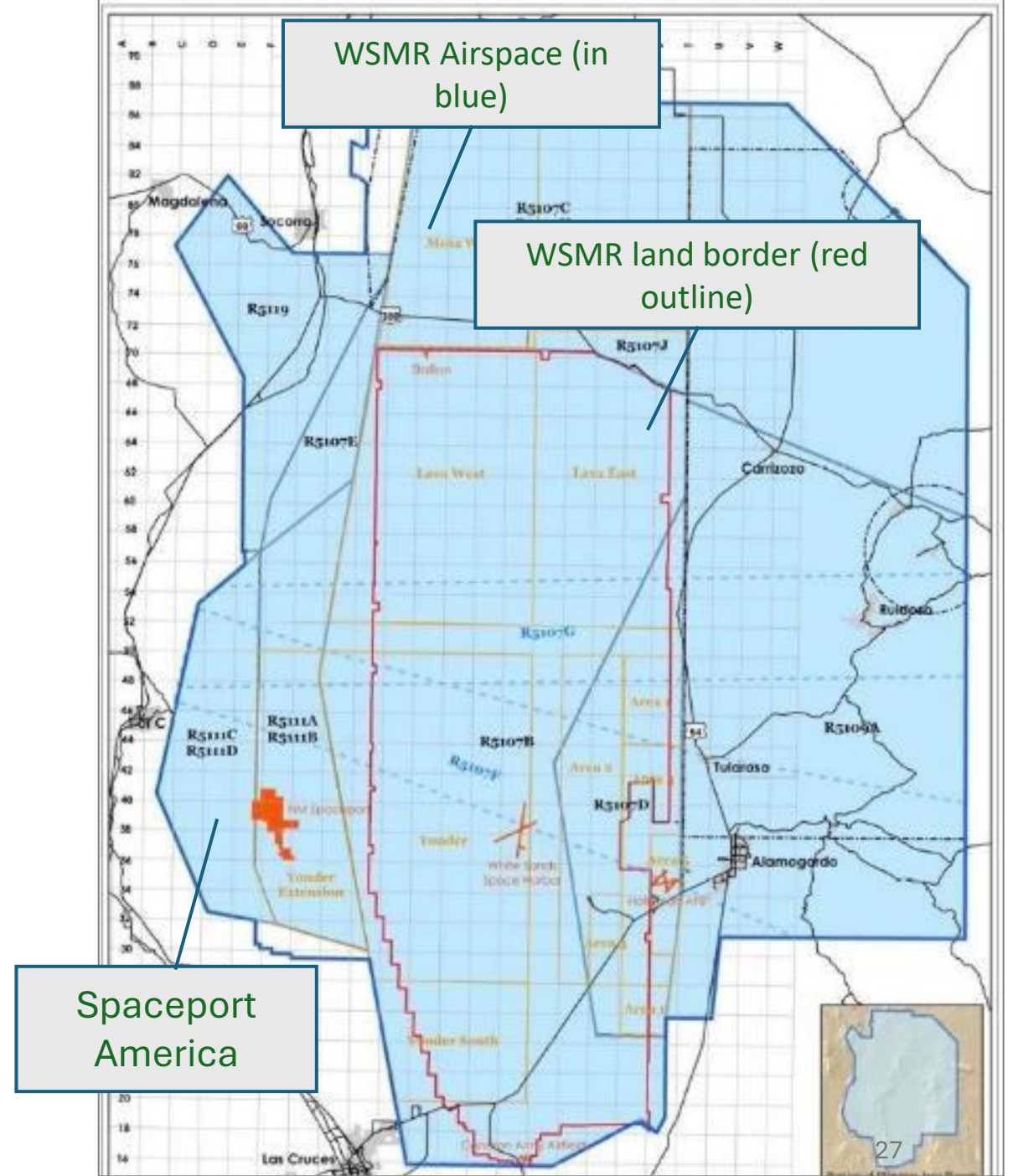
SPACEPORT AMERICA

- 18,000 acres in Sierra County, New Mexico
 - Adjacent to White Sands Missile Range (WSMR)
 - Easy road access to I-25 and I-10
 - No rerouting of air traffic
 - About \$240M spent to develop the site
- We are a 'small city' with our own water system, fiber, electric, roads, security, EMS, and fire dept.



Spaceport America

- First purpose-built commercial spaceport
- 4,600 ft MSL is beneficial for launch
- No salt air corrosion, good launch weather
- Remote location with very low population density and very little private land
- Access to restricted airspace surface to unlimited
- Available assets from nearby White Sands Missile Range include Radar, Telemetry, Optics, and Meteorological Services



Horizontal Launch Area



Terminal and Hangar Facility
also known as,
Gateway to Space building



Spaceport America Area Descriptions

Horizontal Launch Area (HLA)

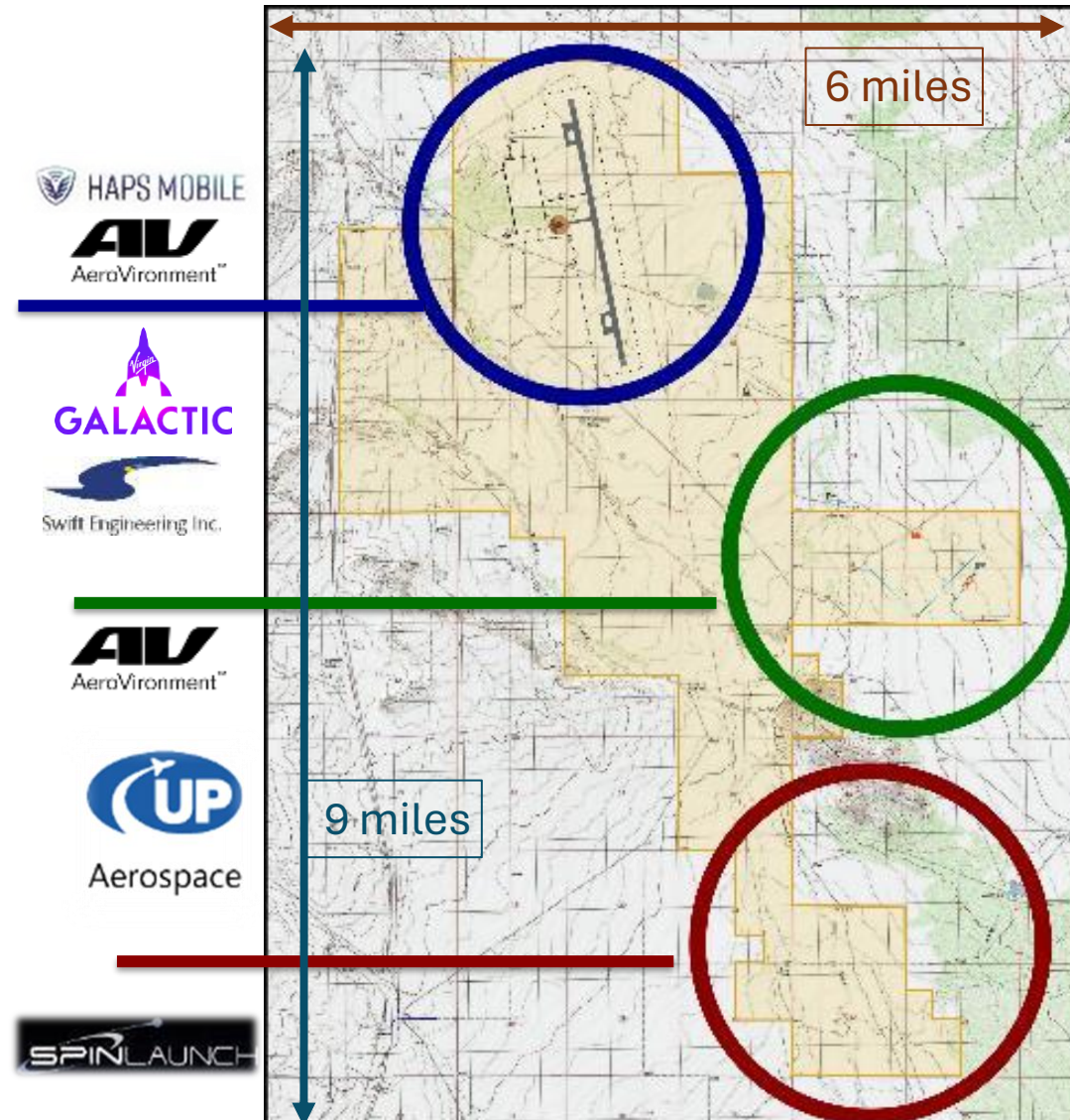
- 12,000-ft long, 200-ft wide runway
- Horizontal and air launch operations
- Space tourism
- Conventional aircraft operations
- Unmanned aircraft operations
- High-altitude balloon operations

Vertical Launch Area (VLA)

- Suborbital launch vehicles & R&D
- Solid, liquid, and hybrid propellant support
- Rocket motor manufacturing and testing
- Commercial and academic customer support
- Launch from SA, land on WSMR
- Small UAVs

Advanced Technology Area (ATA)

- Emerging technology R&D
- Isolated environment



A growing **Space Valley**, 'Los Alamos to El Paso and Beyond'

SANDIA NATIONAL LABORATORIES

The nation's premier science and engineering lab:

- Nuclear weapons and defense systems
- Energy and climate
- Global security

- Bioscience
- Computing and information science
- Electromagnetics, nanotechnology, materials science



PHYSICAL SCIENCES LABORATORIES

Provides expertise in sub-orbital platforms, information modeling for predictive decision-making, specialized intelligence community support, advanced NASA scientific experimentation, homeland security



Los Alamos National Laboratories

Delivers science and technology to protect the nation and promote world stability. Boasts a rich network of local research and business partnership programs.

- Energy
- Biotechnology
- High-energy physics
- Advanced computing



UTEP AEROSPACE CENTER

- UTEP Aerospace Center
- Leader in STEM workforce development
 - Aerospace manufacturing
 - Work in space applications,

robotic lander, hypersonic technologies, Space Domain Awareness and energy technologies



White Sands Missile Range

The DoD's largest open-air test range. Provides Army, Navy, Air Force and private sector customers with services for:

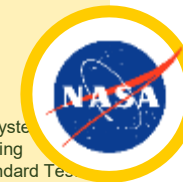
- Experimentation
- Research
- Development
- Testing
- Assessment
- Training



NASA - White Sands Test Facility

WSTF is a component of the Johnson Space Center in Houston. WSTF's role is to conduct hazardous testing, focused around six core capabilities:

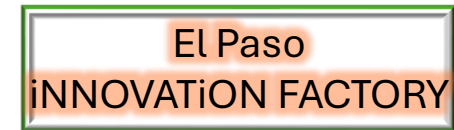
- Rocket Propulsion Testing
- Oxygen System Testing
- Hypervelocity Impact Testing
- Composite Pressure Systems
- Aerospace Fluids Testing
- Flight Acceptance Standard Test



Spaceport America

The world's first purpose-built commercial spaceport. Shares access to White Sands Missile Range restricted airspace. Home to four on-site tenants

- Virgin Galactic
- UP Aerospace
- HAPSMobile/ AeroVironment
- SpinLaunch



The Air Force Research Laboratory

Housed at Kirtland Air Force Base, leading the way in laser, optical and space supremacy technologies.

- Directed energy
- Space vehicles
- Technology Engagement Office connects private sector and academia with resources



Major Educational Institutions



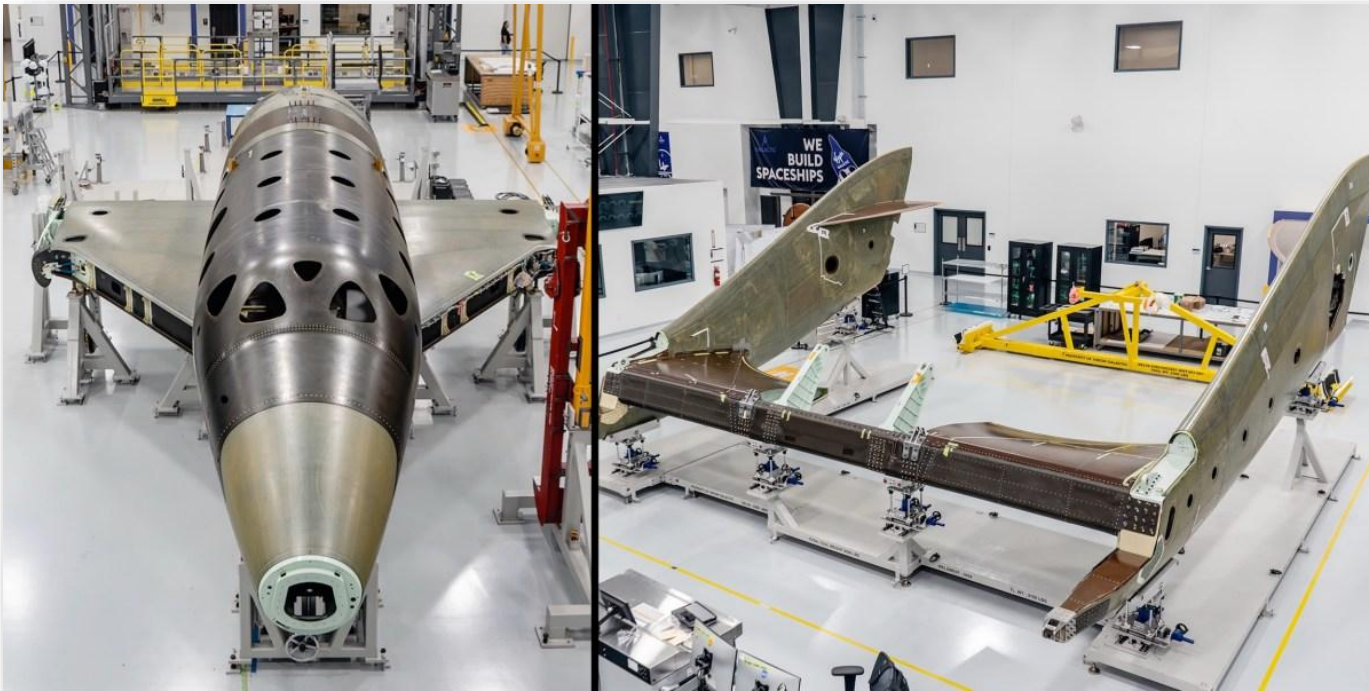
El Paso Space Innovation Hub (with SCIF)

Spaceport America has many Customers and Events



Virgin Galactic Status

- Eleven spaceflights (32 private astronauts) occurred in New Mexico
 - New Delta spaceship(s) will undergo tests and then operations by late 2026
 - Check out their social media and investor site
- Example: Two spaceships, 100 flights per year, about 600 private astronauts, about 12,000 visitors to the region, with about 60,000 room nights



@virgingalactic

Spaceport America Economic Impact, 2019 - 2024

- NMSU Center for Border and Economic Development (<https://cbed.nmsu.edu/>)
- Impacts include tenant employment (direct, indirect, induced), privately funded construction, out-of-state visitor spending, and spaceport customer revenues.
- NMSA's mission is to create jobs, generate revenue, economic impact, and to build the regional aerospace cluster

Impact	2019	2020	2021	2022	2023	2024
Direct Jobs	242	487	221	549	431	313
Total Jobs	396	896	609	811	985	790
Economic Output	\$72,265,317	\$196,511,257	\$168,920,735	\$138,080,756	\$266,020,386	\$239,784,359
Value-Added Production	\$31,756,350	\$91,988,529	\$74,519,634	\$60,435,345	\$122,419,195	\$110,769,271
Labor Income	\$22,273,071	\$59,209,861	\$52,648,224	\$45,845,649	\$81,428,508	\$73,118,968
Total Taxes:	\$7,335,456	\$19,058,128	\$16,535,240	\$12,907,325	\$27,192,833	\$24,405,576
Federal	\$4,818,874	\$13,223,950	\$11,044,930	\$9,161,760	\$18,425,948	\$16,646,473
New Mexico	\$2,239,220	\$5,834,178	\$5,490,310	\$3,745,475	\$8,766,885	\$7,759,103

Opportunity and Competition

SPACE NEWS
BUSINESS | POLITICS | PERSPECTIVE

News Military Launch Commercial Opinion Sponsored More Advertise

The next space race starts at our spaceports

Bryce Kennedy and Geeg Autry May 1, 2023

SPACE NEWS
BUSINESS | POLITICS | PERSPECTIVE

News Military Launch Commercial Opinion Sponsored More Advertise

Space Force looks at options for relieving Cape Canaveral launch congestion

Jeff Foust May 19, 2023

Houston Spaceport Reaches for the Stars with Transformative Expansion Project

Published Feb 23, 2024 by Hailea Schultz

With three new cutting-edge anchor tenant facilities and its second phase of development underway, the Houston Spaceport has undergone a full transformation since the city first vowed to reshape Clearing Airport into an aerospace hub in 2015.

In 2018, the Houston City Council approved nearly \$20 million in funding for infrastructure development at the Spaceport, marking the beginning of a

abc 15 ARIZONA

3... 2...1...liftoff! Yuma looks to build Arizona's first 'spaceport'

The project would put a launchpad in the Yuma County desert for small rockets to launch satellites

By: Adam Klepp

Posted 5:55 AM, Mar 28, 2025 and last updated 10:40 AM, Mar 28, 2025

SPACE NEWS

The Space Economy to Reach \$944 Billion by 2033: Novaspace Unveils Key Insight

by Novaspace May 5, 2025

KSBY CALIFORNIA'S CENTRAL COAST

By: Izzy Romero
Posted 7:25 PM, Jun 16, 2025

Paso Robles Spaceport development makes strides

Midland Reporter-Telegram

Midland wins \$5M grant for commercial vertical rocket launch site

By **Luke Dias**, Staff Writer
July 25, 2025

Sierra Vista ARIZONA

BlackStar Orbital signs letter of intent with City

Post Date: 03/20/2025 2:16 PM

BlackStar Orbital President and CEO Chris Jannette and Sierra Vista City Manager Chuck Potucek recently signed a letter of intent for the

DeseretNews

Utah ready to take one giant step toward a rocket launching pad

State came up short 50 years ago, but the business of space is a whole new game

Published: July 20, 2025, 9:00 p.m. MDT

THE WALL STREET JOURNAL

There's a Traffic Jam Forming at U.S. Rocket Launchpads

The nation's busiest spaceports are fielding record demand, spurring new efforts to develop launch sites in landlocked states and even at sea

By **Roshan Fernandez** and **Micah Maidenberg**

Jan. 5, 2025 5:30 am ET

HILL COUNTRY NEWS

Cedar Park and Williamson County launch spaceport development corporation

Posted 8/21/25

And more...

WEST TEXAS SET FOR AEROSPACE EXPANSION WITH \$21M BOOST FROM TEXAS SPACE COMMISSION

By Bianca Chavez

Published on January 30, 2025

Space Florida's toolkit lures new businesses, fuels aerospace industry growth



By J.C. Carnahan - Staff Writer, Orlando Business Journal
Jan 29, 2025 Updated Jan 29, 2025 7:59pm EST

Liberty Hill Independent August 22, 2025 WilCo partners with Cedar Park to create Central Texas Spaceport Development Corporation

What is a spaceport? New bill rekindles Utah's old efforts to explore final frontier

By Carter Williams, KSL.com | Posted - Jan. 26, 2025 at 2:54 p.m.

Alaska spaceport deal draws rocket-launch industry interest

By Tim Ellis

Published July 10, 2025 at 12:55 PM AKDT

US Space Force is launching more missions than ever. Lawmakers worry America's spaceports can't keep up

News By Brett Tingley published May 17, 2024

THE CAPITOLIST About 2

Florida expands aerospace infrastructure with new spaceport territories in Miami-Dade and Bay counties

by Caden DeLisa | Jul 3, 2024

KVIA

Texas Space Commission awards \$19 million to Borderplex Alliance for aerospace development

EL PASO, Texas (KVIA) -- El Paso County just announced that the Texas Space Commission is awarding \$800,000 for the development of the West...

Canada's NordSpace begins construction on orbital spaceport. When will it open for launches?

News By Josh Dinner last updated August 18, 2025

Texas Space Commission Offers \$150M in Its First-Ever Grants

The newly created Texas Space Commission is looking for applicants for grants from the Space Exploration and Aeronautics Research Fund, marking one of the first tangible actions of the agency.

SPACE FLORIDA



EXPLORATION PARK, Fla.—January 22, 2025—Space Florida announces its annual call for projects to further develop Florida's spaceport system. The

Williamson County greenlights spaceport liftoff

By Nalani Nuylan on Wednesday, March 12, 2025

Las Vegas Spaceport seeks FAA permit for 'horizontal launch facility'

by: Greg Haas
Posted: Oct 1, 2024 / 12:21 PM PDT
Updated: Oct 1, 2024 / 12:21 PM PDT



U.S. Rep. Dale Strong's bill would aid Huntsville airport's spaceport effort

Published: Dec. 18, 2024, 3:13 p.m.



Defence, Science & Technology News

Europe Aims to Compete in Global Space Race with New Spaceports

By News Desk | Last updated: September 1, 2025 | 4 Min Read

Strategy – Next five years

- Continue to work with **Virgin Galactic** to maximize the economic impact of space tourism flights and their space operations
- Focus on **regional growth**, including working with economic development organizations throughout Space Valley
- Continue with **infrastructure improvements** to be site-ready for new customers
- Acquire FAA **orbital reentry license** and work toward **orbital launch capability**, including point-to-point tests and operations
- Watch new technologies, find new tenants, and develop other revenue streams from a **diversity of customers**



ChatGPT→



**SPACEPORT
AMERICA®**

Thank you! Questions?

Scott McLaughlin

Executive Director

New Mexico Spaceport Authority

URL: www.spaceportamerica.com

Email: scott.mclaughlin@spaceportamerica.com



**Open House
Sep. 26, 2026**

