



THE INTERNATIONAL SPACE STATION

A CITY IN THE STARS

25 Years of Discovery, Teamwork,
and Life Above Earth.

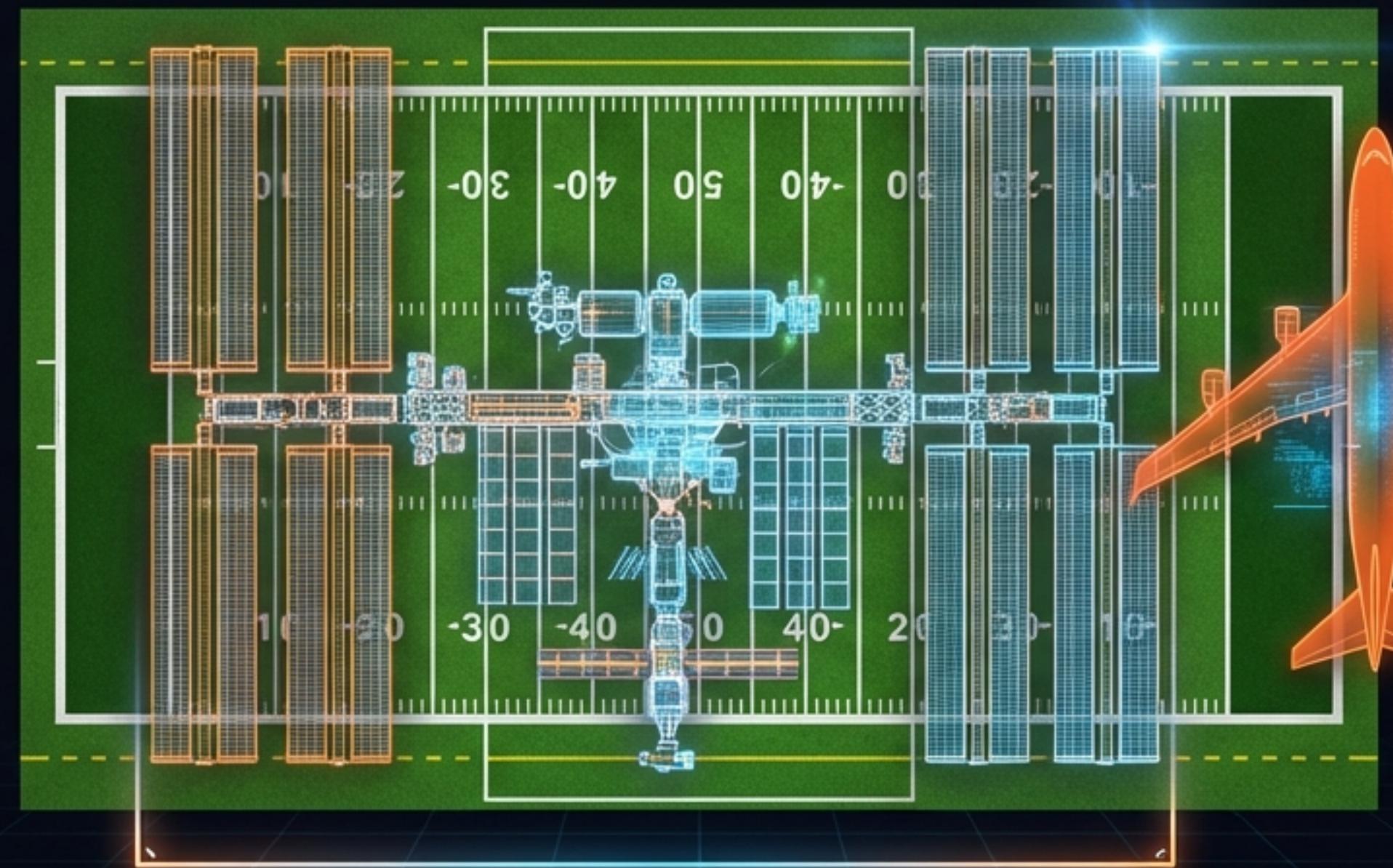
Welcome to humanity's home in orbit. It is a laboratory, a classroom, and a spaceship all in one. Since November 2000, humans have lived here every single day—never leaving the sky empty.

T+ 25
YEARS

MISSION DURATION

VITAL STATISTICS

THE NUMBERS BEHIND THE MACHINE



WIDTH: 356 FEET (109 METERS) = 1 FOOTBALL FIELD

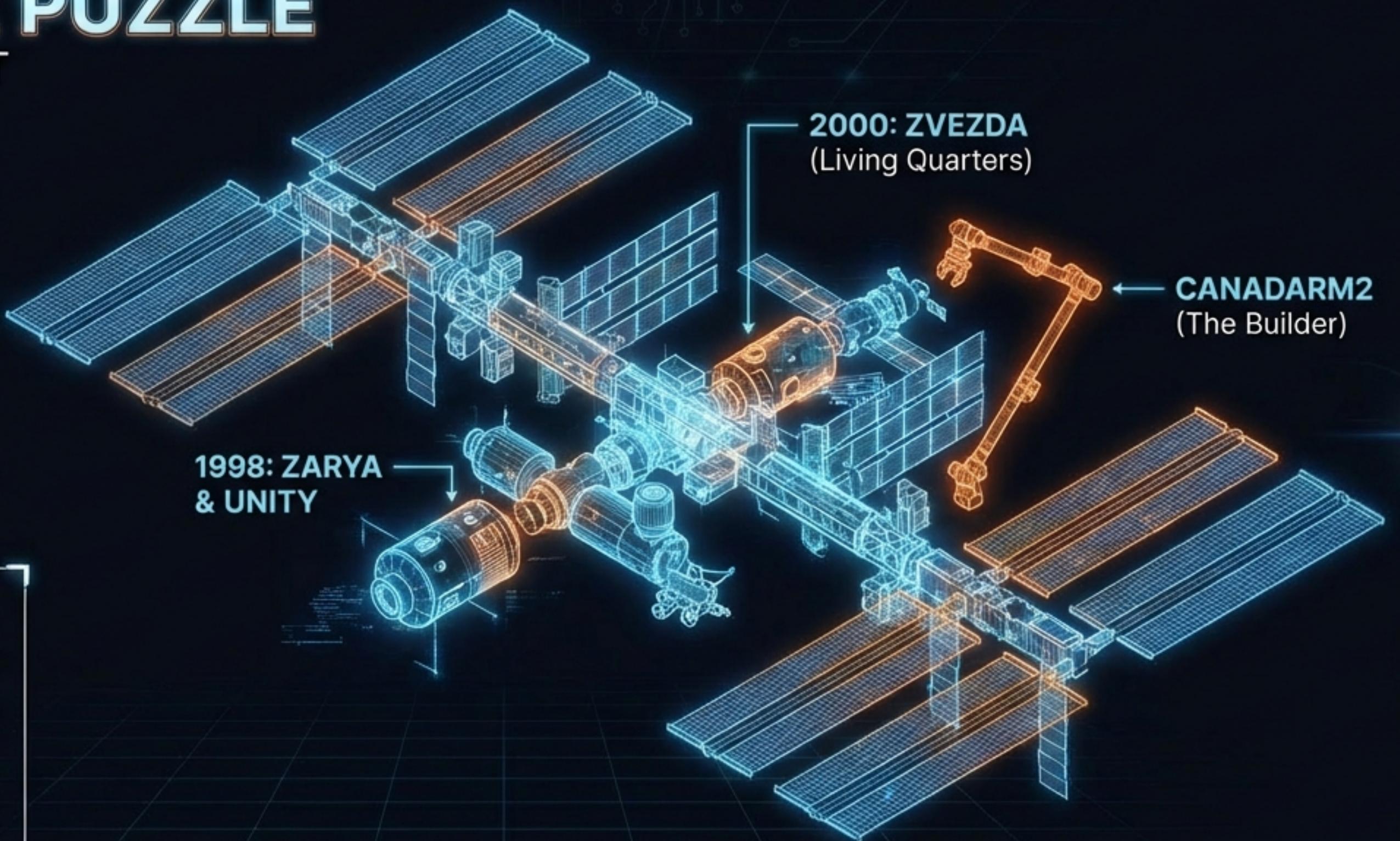


A GLOBAL PUZZLE

BUILDING IN ORBIT

-  **1998:** Construction Begins
-  **2000:** First Crew Arrives
-  **2011:** Assembly Complete

You can't launch a football-field-sized ship all at once. The ISS was built like a giant Lego set, piece by piece, while flying at 17,500 mph. It took over 40 flights to deliver the modules.



THE ULTIMATE TEAMWORK



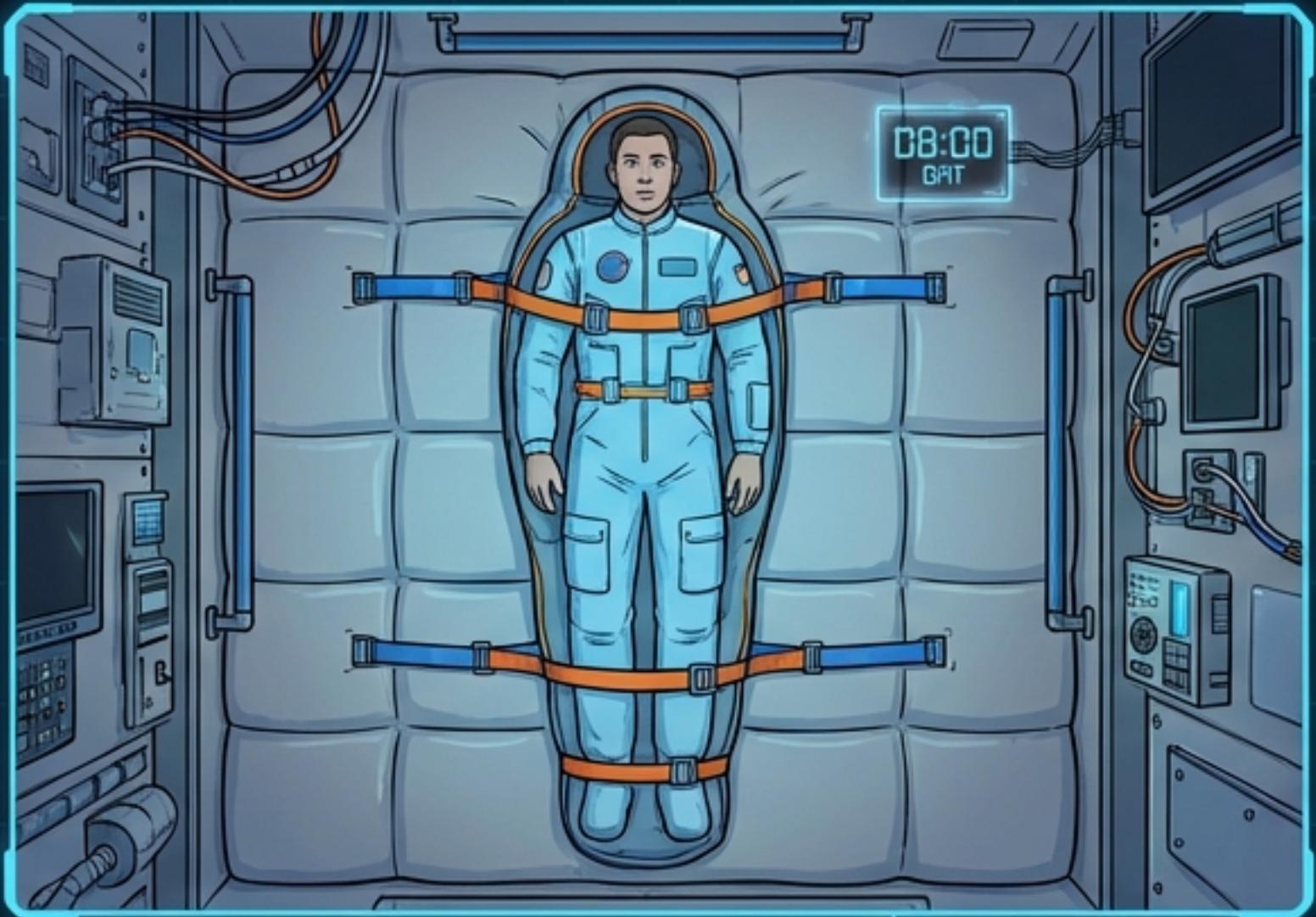
Big Five:

- NASA (United States)
- Roscosmos (Russia)
- ESA (Europe)
- JAXA (Japan)
- CSA (Canada)

15 nations involved. Over 280 visitors from 26 countries.
Peaceful cooperation even when politics on Earth are tough.

LIVING WITHOUT GRAVITY

SLEEPING & HYGIENE



THE BEDROOM: Sleeping bags are strapped to the wall so astronauts don't float away while dreaming.

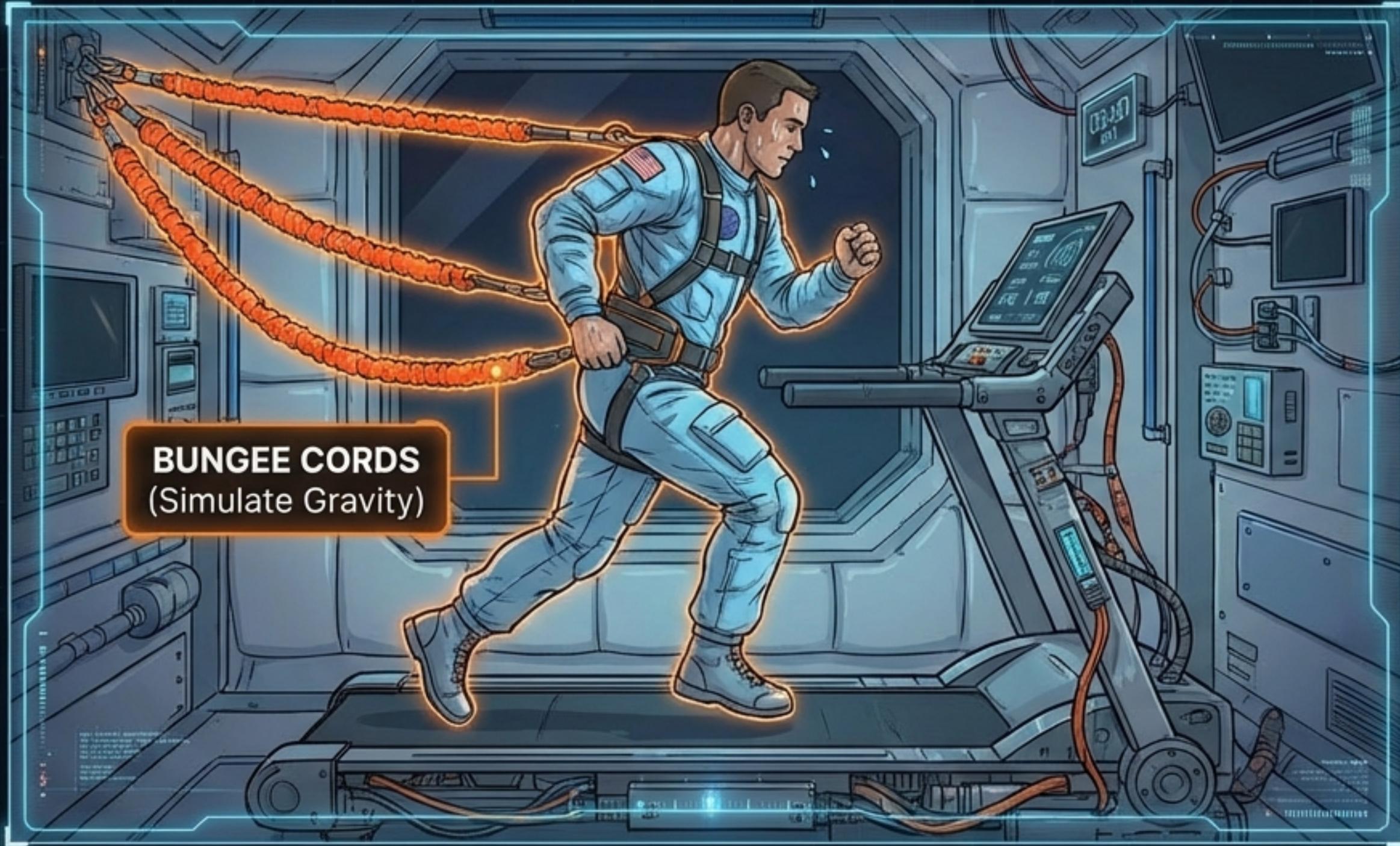
Crew quarters are the size of small phone booths, personalized with family photos and laptops.



THE BATHROOM: No showers allowed! Water floats, so crews use rinse-free soap and shampoo.

THE ORBITAL GYM

FIGHTING GRAVITY



BUNGEE CORDS
(Simulate Gravity)

THE PROBLEM:
Without gravity, muscles shrink and bones get weak (atrophy).

THE SOLUTION:
2 Hours of exercise every single day.

THE GEAR: Treadmills with bungees and weight-lifting machines that use vacuum cylinders.

Rajdhani THE ULTIMATE RECYCLING MACHINE

Waste
Water

93%
RECYCLED

Potable
Water



In space, nothing is wasted. Bringing water from Earth is too heavy and expensive.

"Yesterday's coffee is tomorrow's coffee."

Reduces water needs from 1 gallon per person/day to just 1/3 gallon.

Rajdhani

THE FLOATING LABORATORY

WEIRD PHYSICS



SPHERICAL FLAME
(Microgravity)



FLUIDS: Liquids mix perfectly in space, creating new alloys impossible to make on Earth.



FIRE: Flames burn at lower temperatures and form spheres, helping us design cleaner engines.



MATTER: The Cold Atom Lab creates the 'Fifth State of Matter' (Bose-Einstein Condensate) by cooling atoms to near absolute zero.

HEALING EARTH FROM ORBIT



VEGGIE GROWTH CHAMBER



MEDICAL BREAKTHROUGHS

Protein crystals grow larger and more perfect in space, helping design drugs for cancer and heart disease.



GROWING ORGANS

Human cells grow in 3D (not flat), bringing us closer to manufacturing organs for transplant.



FUTURE FARMING

Testing soil-less farming to grow food for Mars missions and harsh climates on Earth.

EYE ON THE EARTH

THE CUPOLA



The Mission: Protecting our Planet

- Tracking hurricanes and typhoons in real-time.
- Monitoring forest fires and deforestation.
- Measuring plant health to help farmers.

Fun Fact:

Astronauts have taken over 3.5 million photos from this window.

EYE ON THE UNIVERSE

HUNTING THE INVISIBLE



THE HUNTER:
AMS-02 Particle Detector



THE PREY:
Dark Matter and
Antimatter



The Evidence: The AMS-02 captures cosmic rays to find the mysterious 95% of the universe that human eyes cannot see.

STUDENTS IN SPACE

THE NEXT GENERATION OF EXPLORERS



HAM RADIO:

Students can speak directly to astronauts as the station flies overhead via the ARISS program.

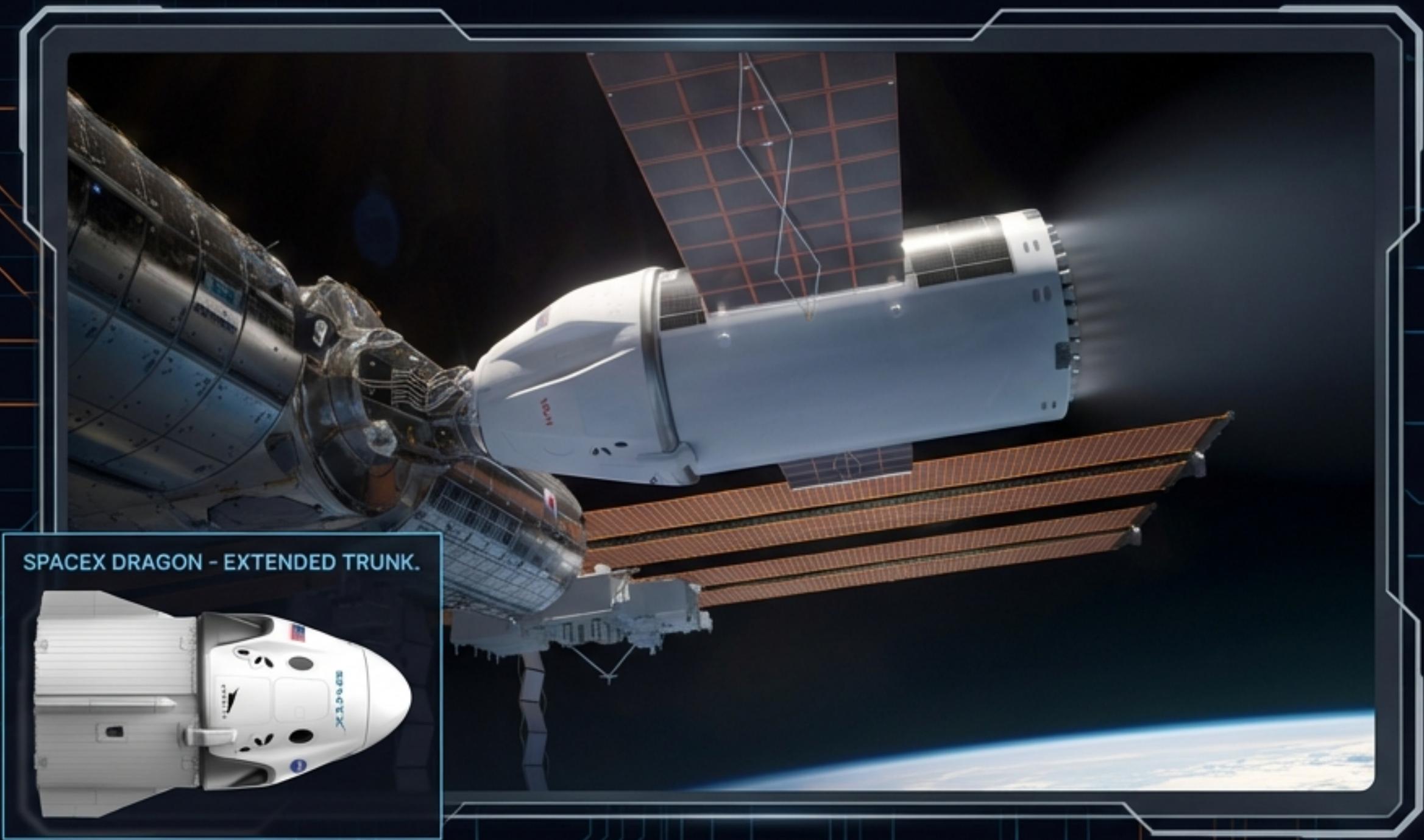
CUBESATS:

Universities and schools build mini-satellites launched right from the station's airlock.

IMPACT:

Over **1 million**
students connected.

THE SPLASHDOWN: 2030



THE PLAN:

Retire the station in 2030.

THE VEHICLE:

A super-sized SpaceX Dragon with 46 engines and 6x the fuel to push the station out of orbit.

THE DESTINATION:

Point Nemo,
South Pacific
Ocean.



POINT NEMO

SPACECRAFT CEMETERY



PASSING THE TORCH

THE FUTURE OF ORBIT



COMMERCIAL LEO DESTINATIONS

(Private Labs & Hotels)

NASA is handing the keys to Low Earth Orbit to private companies.



ARTEMIS GATEWAY

(Orbiting the Moon)

This allows NASA to focus on the next giant leap: The Moon and Mars.



A STEPPING STONE TO THE STARS



The ISS proved we can work together off the Earth, for the benefit of the Earth.



25+ Years
Continuous Presence



3,000+
Experiments



15 Nations
United

The next great space station won't just orbit Earth—it will orbit the Moon. And you might be the one to build it.