

ENGINEERING LIMITLESS POSSIBILITIES

Tory Bruno

03.20.18



**WE'VE HELPED
OUR CUSTOMERS
SAVE LIVES**



**WE'VE HELPED
OUR CUSTOMERS
EXPLORE THE
UNIVERSE**



**RETURNING
HUMANS TO
SPACE
FROM U.S.
SOIL**



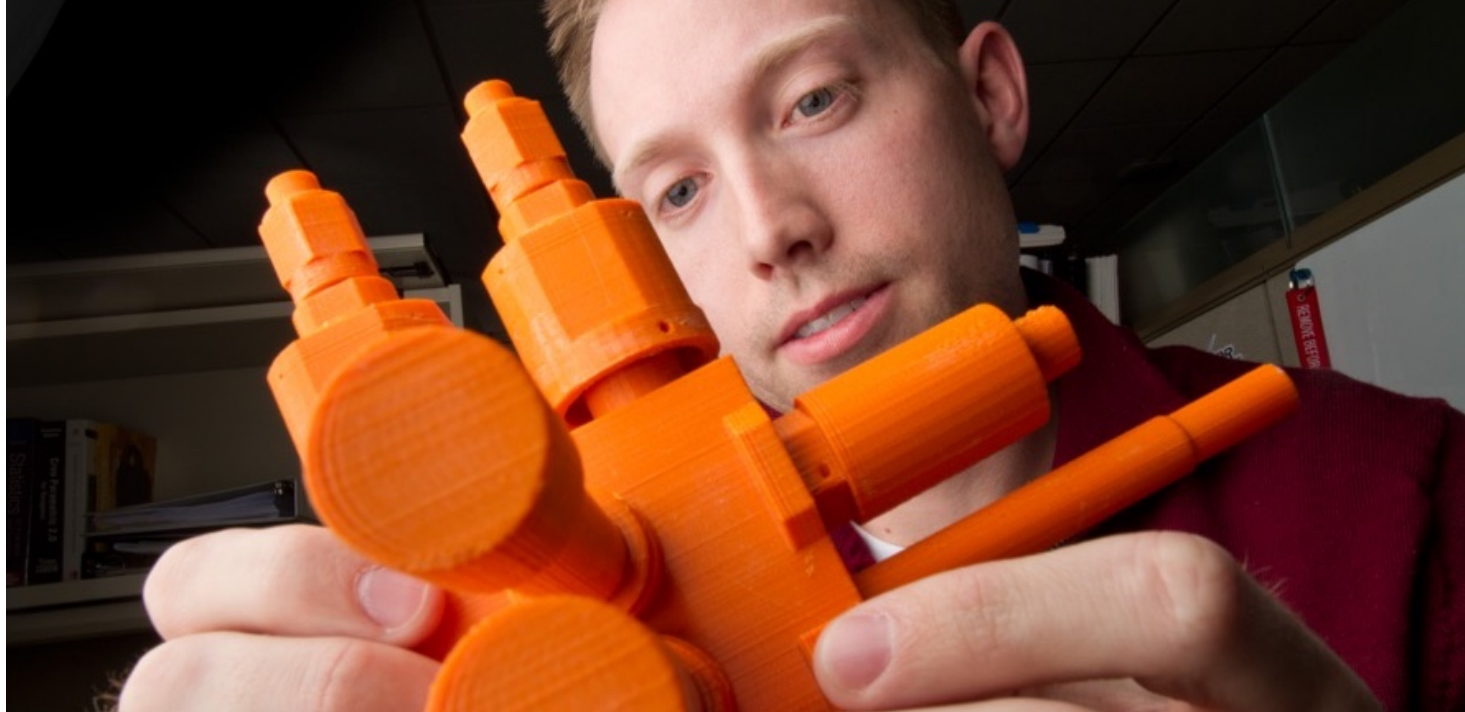
**WE'VE HELPED
OUR CUSTOMERS
CONNECT THE
WORLD**



MISSION SUCCESS...126 AND COUNTING!



**HEADQUARTERS
AND DESIGN
CENTER**
**~1,000 ROCKET
SCIENTISTS**



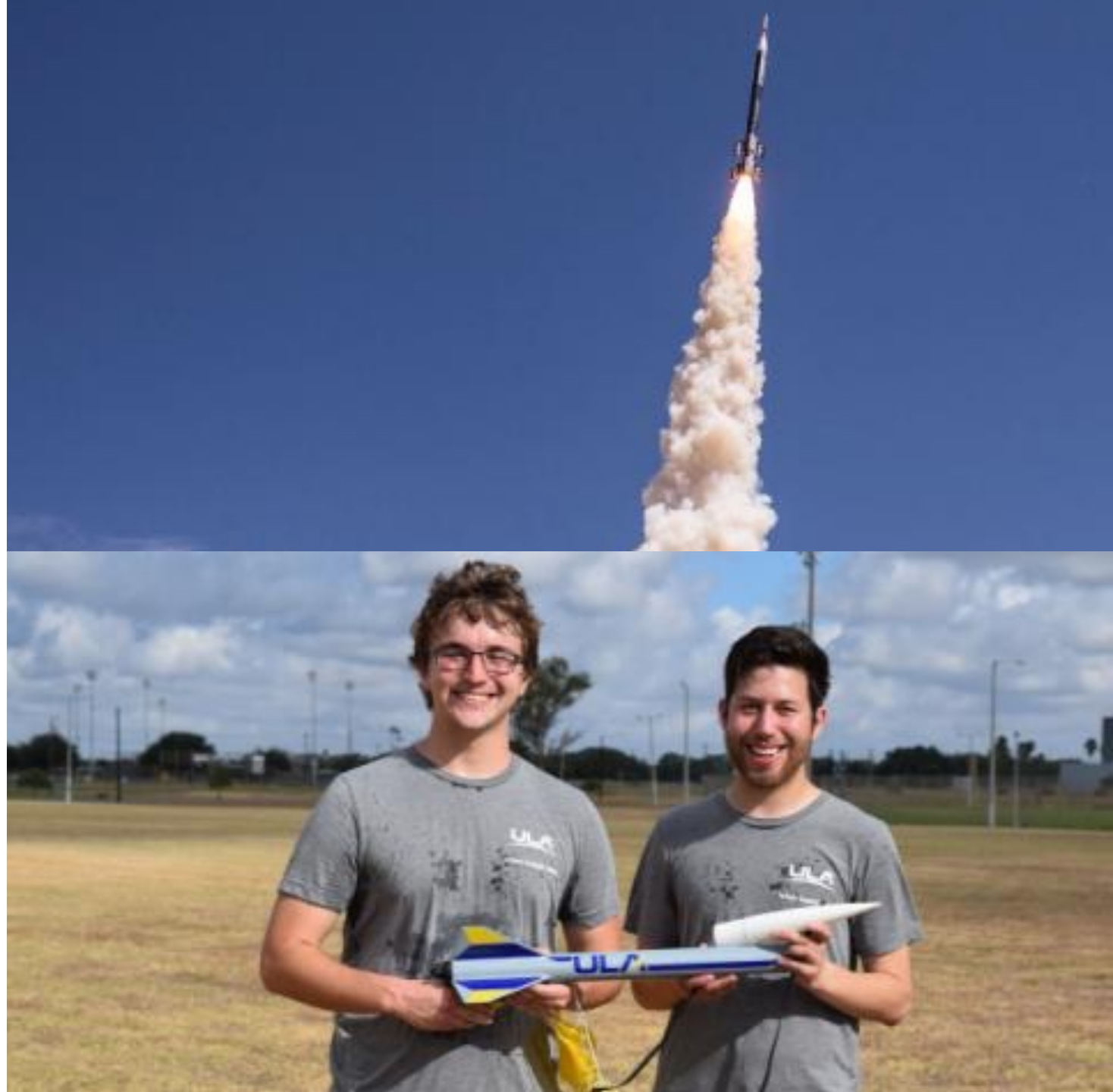
**LAUNCH
OPERATIONS**
5 LAUNCH PADS,
2 COASTS



**PRODUCTION
OPERATIONS
2 MILLION SQUARE
FEET OF
MANUFACTURING**



LAUNCHING THE FUTURE



**UNIQUE
CAPABILITIES**

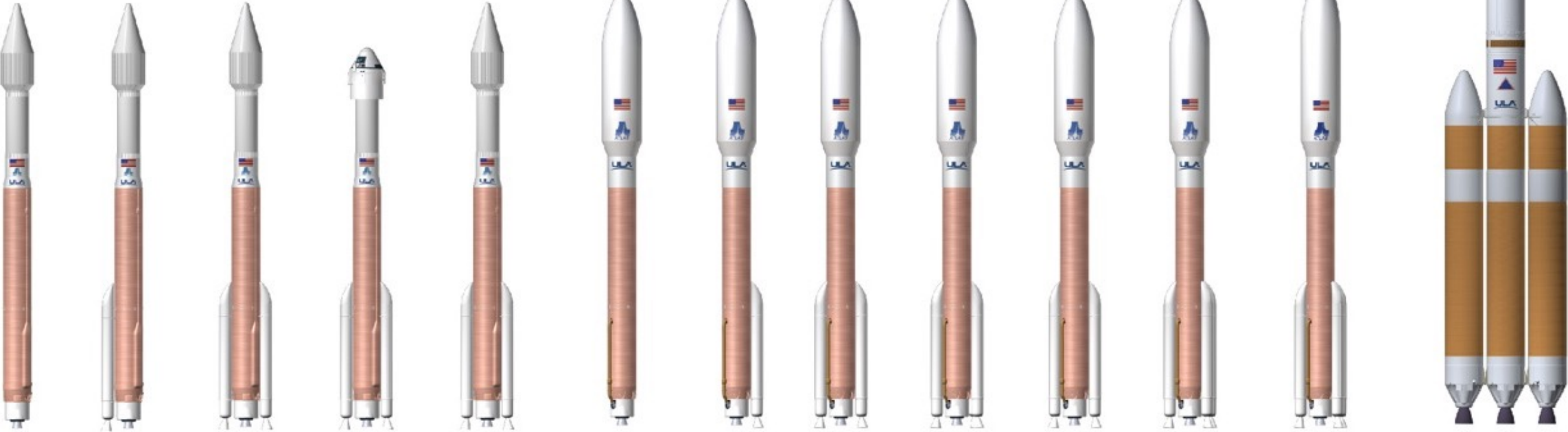
LAUNCHING
ANY PAYLOAD,
ANY ORBIT,
ANY TIME



OUR FLEET

Coming Soon

Coming Soon

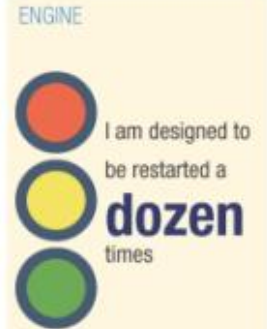
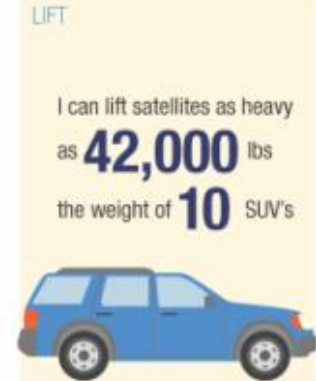
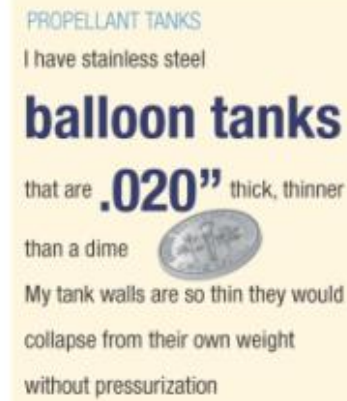
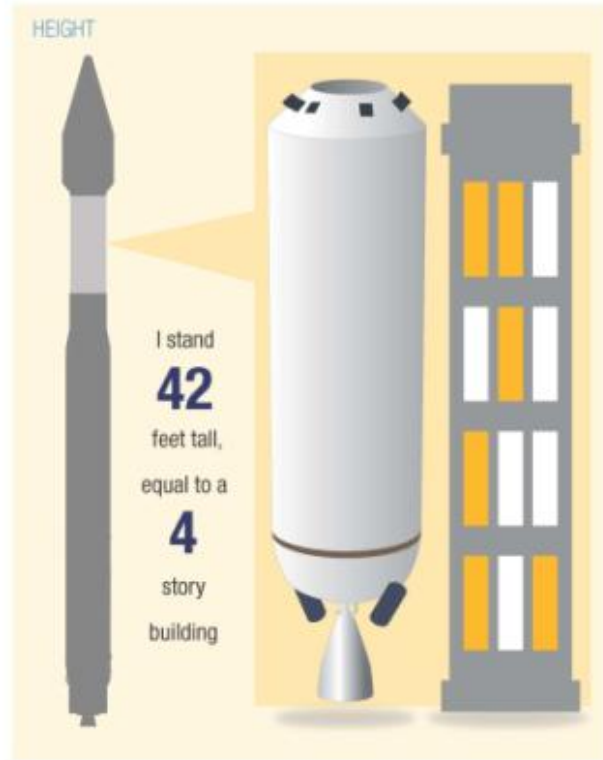


401 411 421 N22 431 501 511 521 531 541 551 552 Heavy

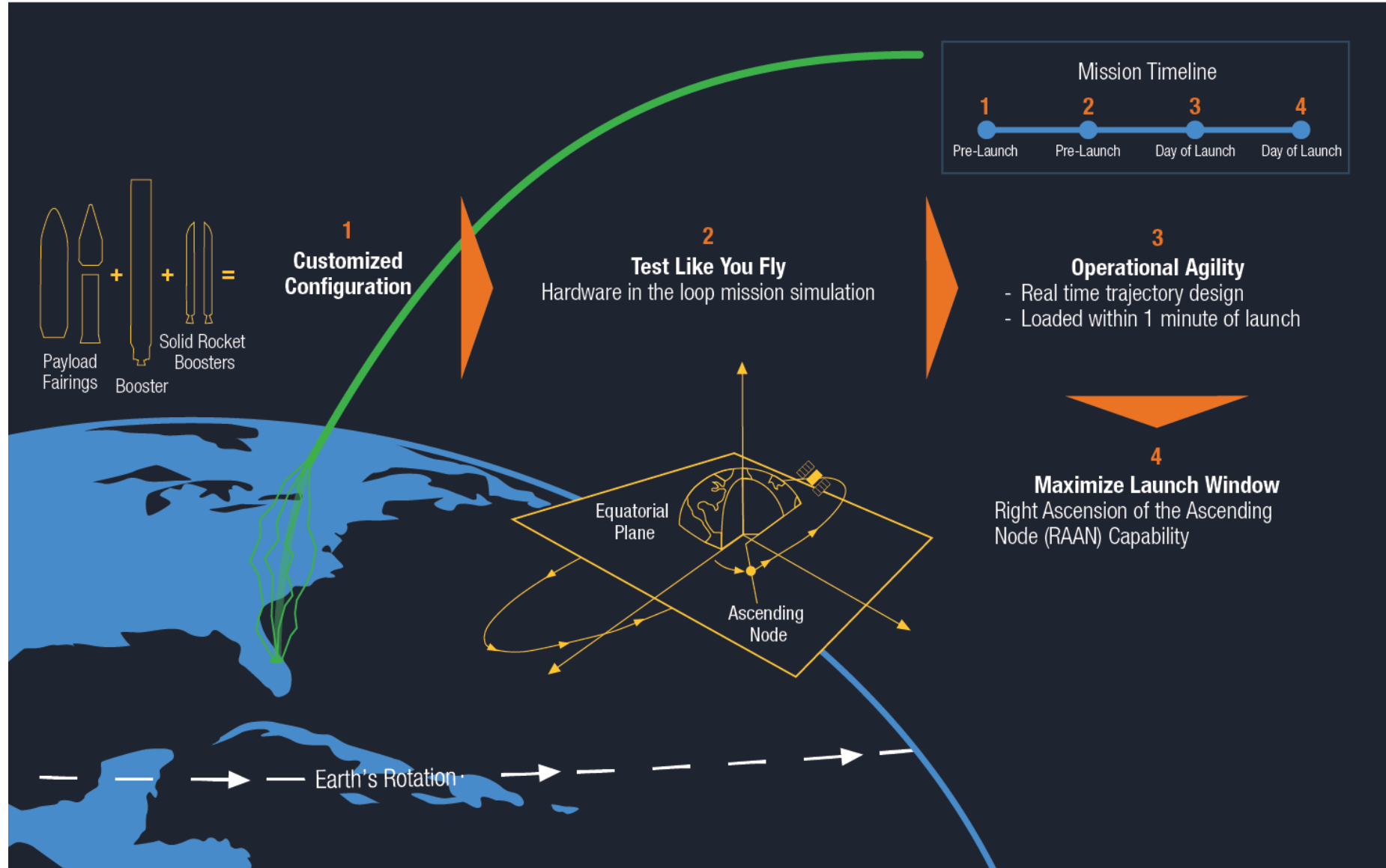
ATLAS V

DELTA IV

THE AMAZING CENTAUR WORLD'S HIGHEST PERFORMING UPPER STAGE

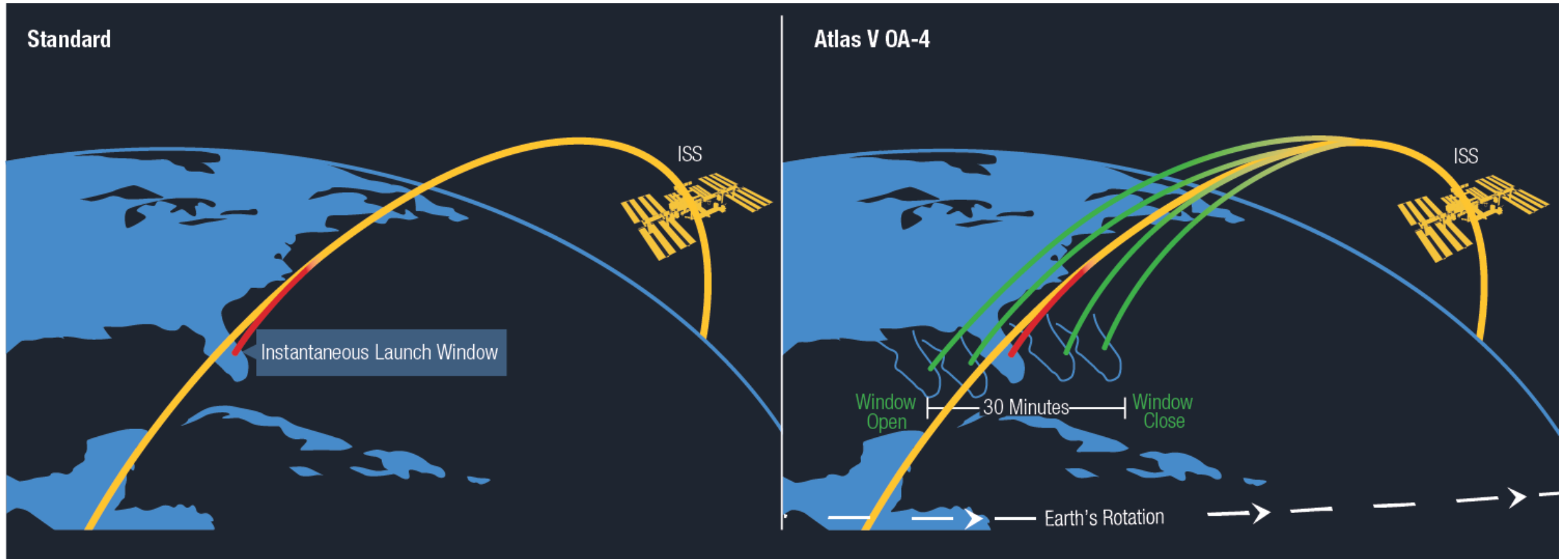


LAUNCHING ON TIME

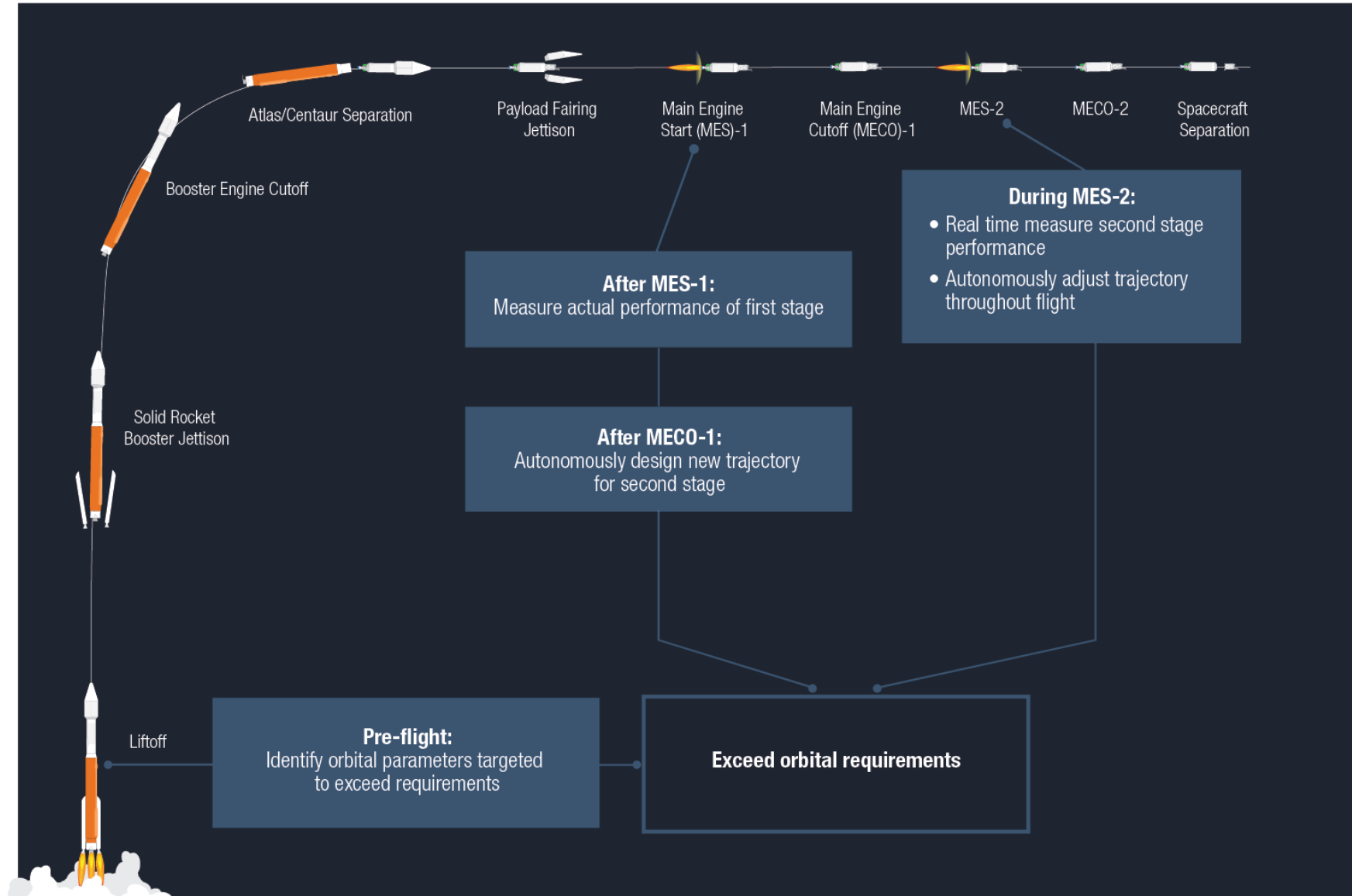


MAXIMIZING LAUNCH OPPORTUNITY TO ISS

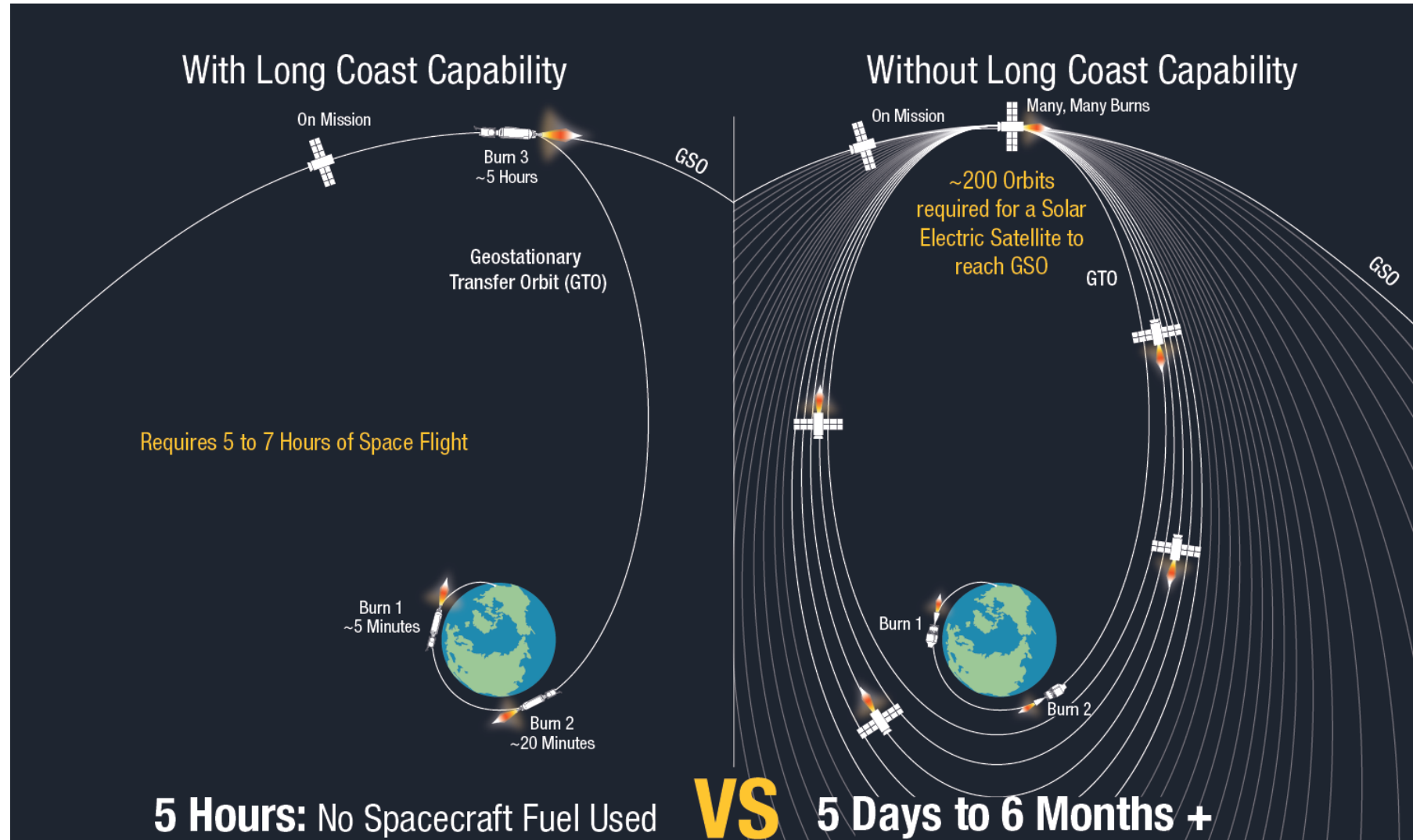
Steering Algorithms Compensate for Earth Rotation



REAL-TIME PERFORMANCE MAXIMIZATION



DIRECT ORBIT INJECTION



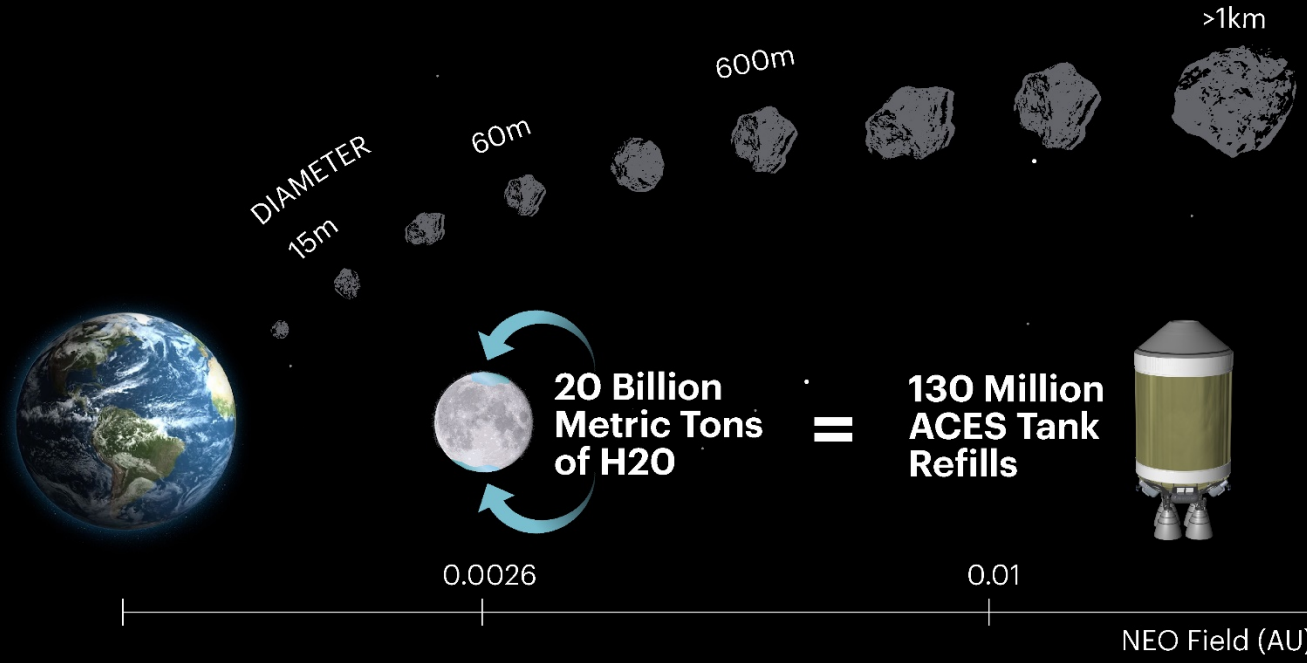
**DEVELOPING A
NEXT GENERATION
ROCKET**

VULCAN CENTAUR

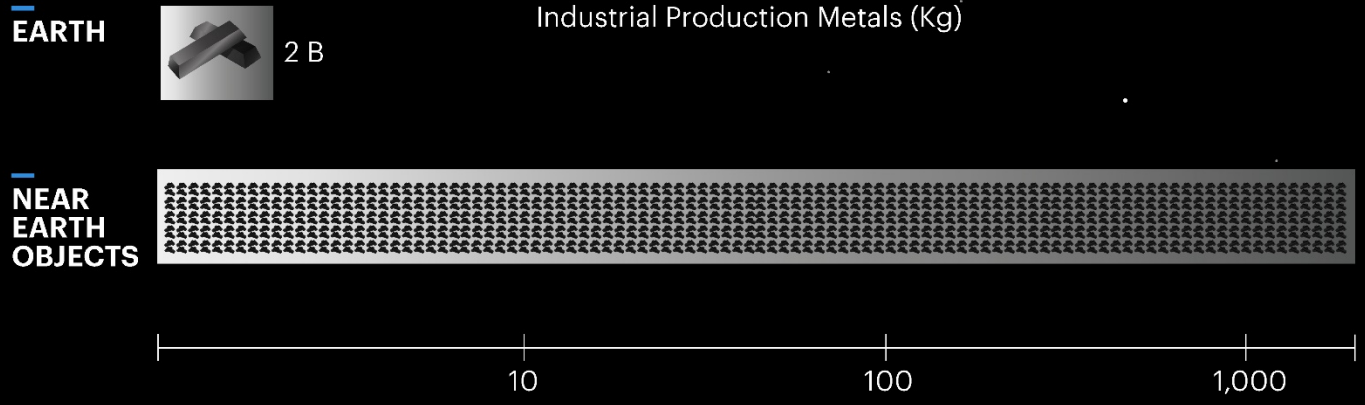
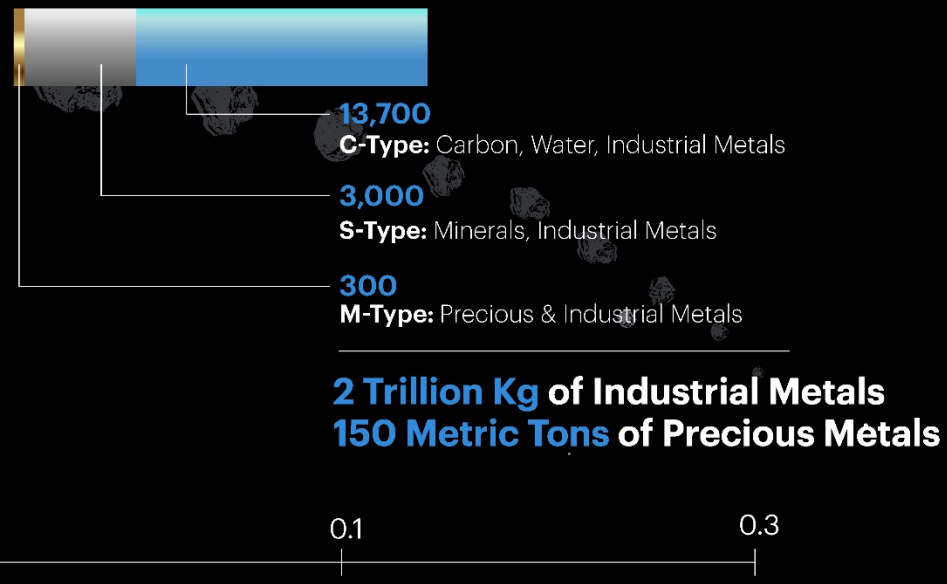


**LIVING
AND
WORKING
IN
CISLUNAR**

CISLUNAR RESOURCES



17,000 NEAR EARTH OBJECTS (NEO)



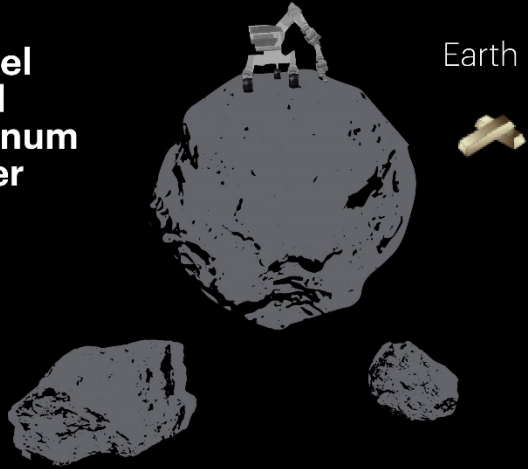
1,000 Years of Earth's Production of Industrial Metal

+

More than the World's Entire Gold/Silver/Platinum Reserves

THE POTENTIAL OF CISLUNAR

Iron
Nickel
Gold
Platinum
Other



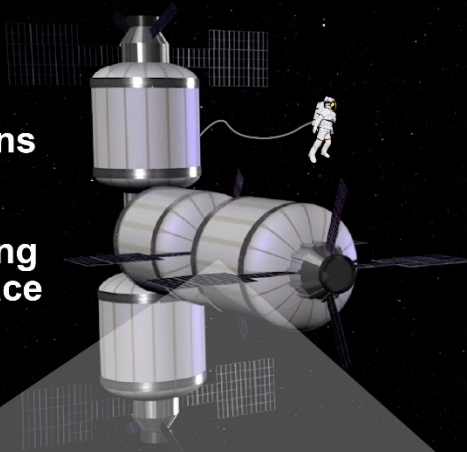
Earth



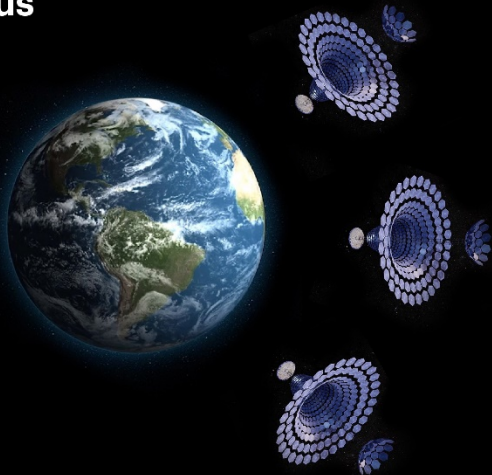
Asteroids



Humans
Living
And
Working
in Space

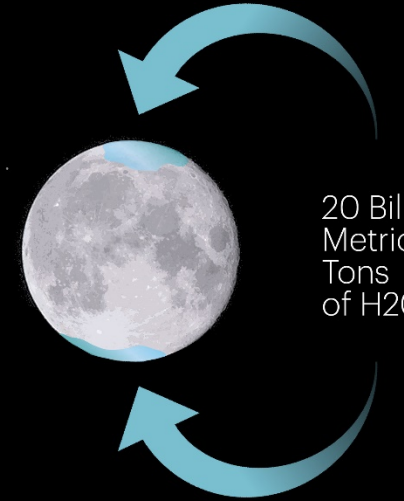


Ubiquitous
Energy



In Space
Propellant

H₂O =



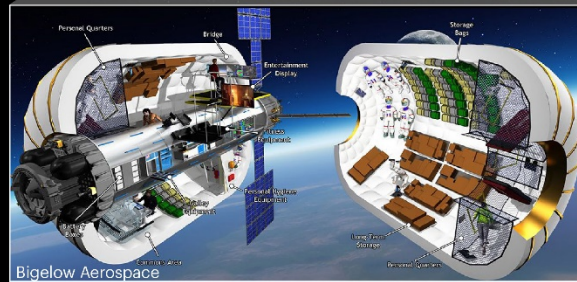
20 Billion
Metric
Tons
of H₂O

New
Materials
and
Manufacturing

Ultra-Pure
Fiber
Optic
Cable



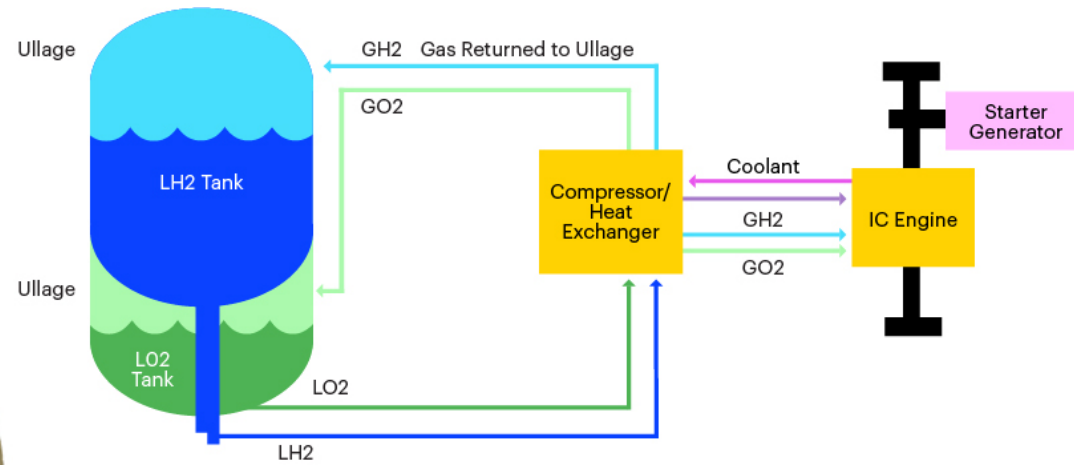
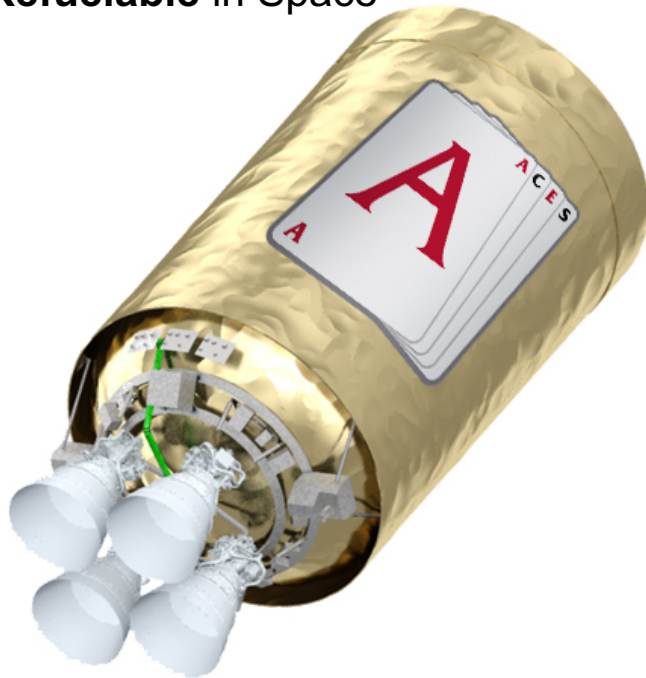
Human
Tissue



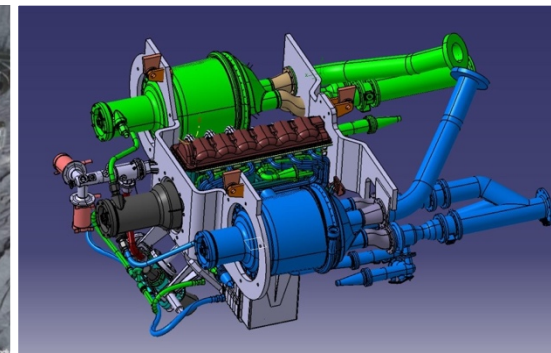
ACES

ADVANCED CRYOGENIC EVOLVED STAGE

- Extreme **Duration**
- **Enormous** Electrical Power
- **High Energy**
- **Refuelable** in Space



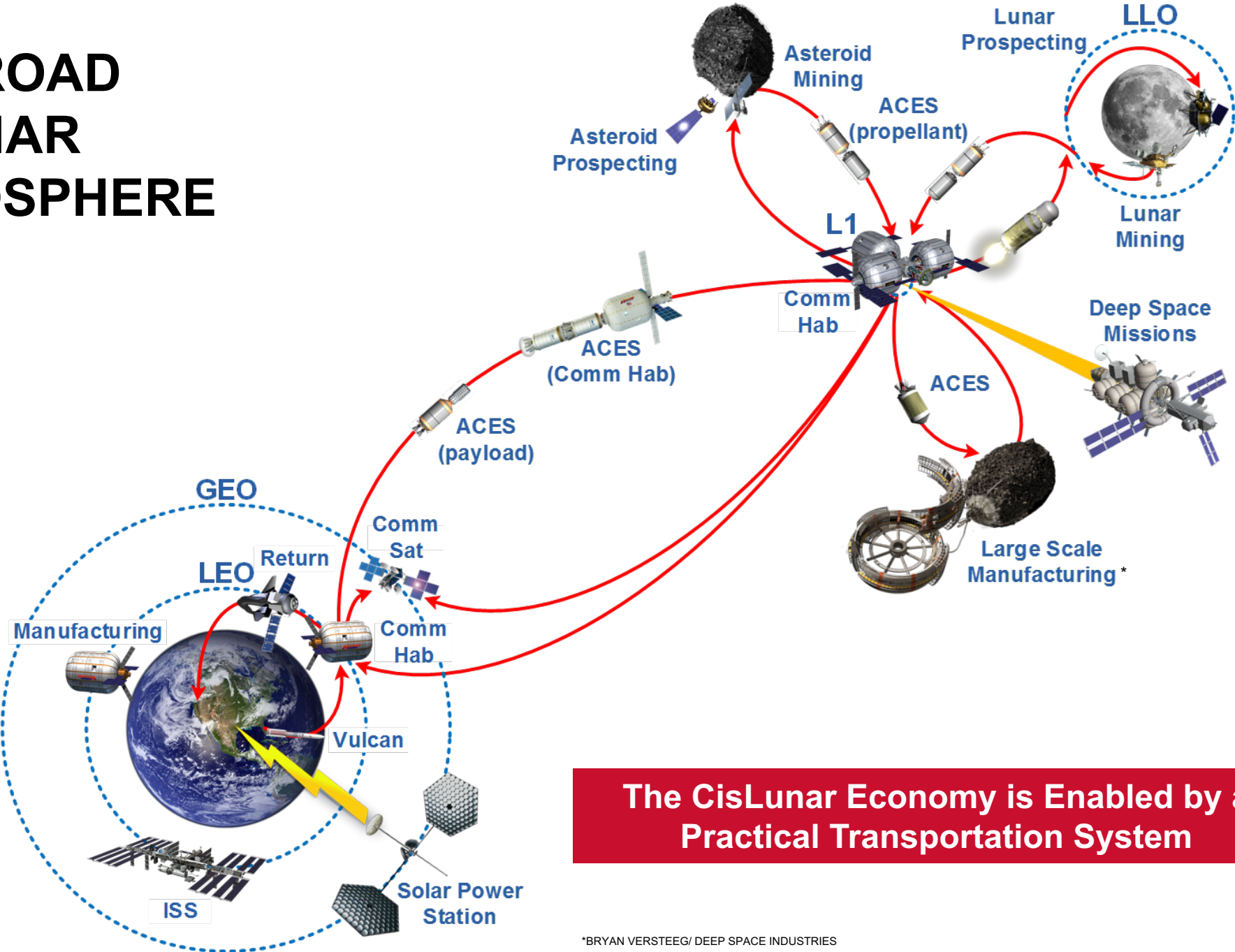
Internal Combustion (IC)
Engine Prototype



Integrated Vehicle Fluids (IVF)
System

Unlocks a Transportation System Between Earth and the Moon

THE BROAD CISLUNAR ECONOSPHERE



The CisLunar Economy is Enabled by a Practical Transportation System



*BRYAN VERSTEEG/ DEEP SPACE INDUSTRIES

CISLUNAR MARKETPLACE

OVER 200 COMPANIES AND ENTREPRENEURS

**MADE IN SPACE – MANUFACTURING
SATELLITES IN ORBIT**

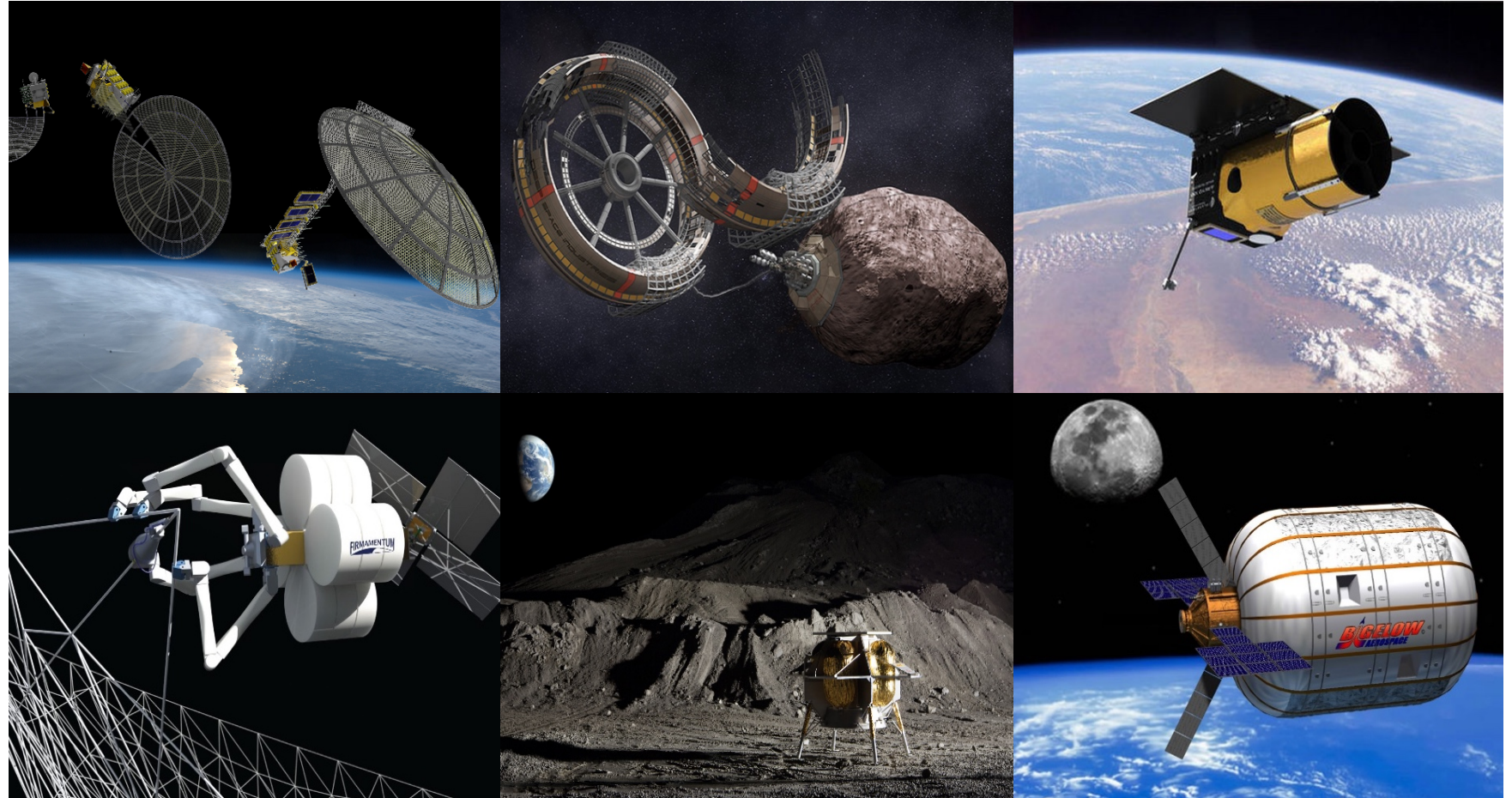
**DEEP SPACE INDUSTRIES – MINING
ASTEROIDS**

**PLANETARY RESOURCES – REMOTE
SENSING FOR ASTEROID PROSPECTING**

**TETHERS UNLIMITED – IN-SPACE
MANUFACTURING**

**ASTROBOTIC – PEREGRINE LUNAR
LANDER**

**BIGELOW AEROSPACE – COMMERCIAL
HABITATS**



TOP LEFT MADE IN SPACE CREDIT NASA, TOP MIDDLE BRYAN VERSTEEG/ DEEP SPACE INDUSTRIES, TOP RIGHT PLANETARY RESOURCES,
BOTTOM LEFT TETHERS UNLIMITED, BOTTOM MIDDLE ASTROBOTIC CREDIT NASA, BOTTOM RIGHT BIGELOW AEROSPACE

**THANK
YOU**

