

# ARTEMIS

Roadmap for long-term exploration of the Moon, Mars, and beyond



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ASEB/SSB & BPA  
Joint Spring Meeting  
June 2, 2026

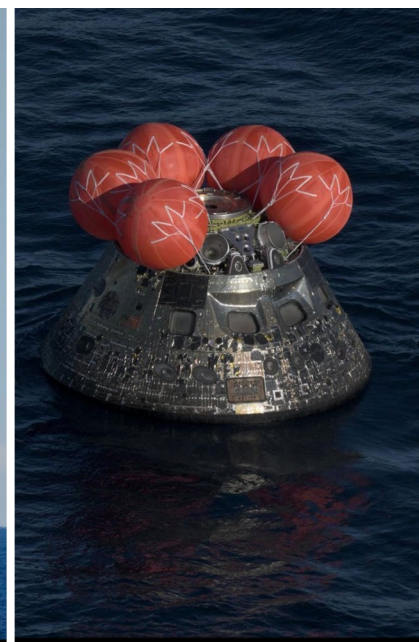
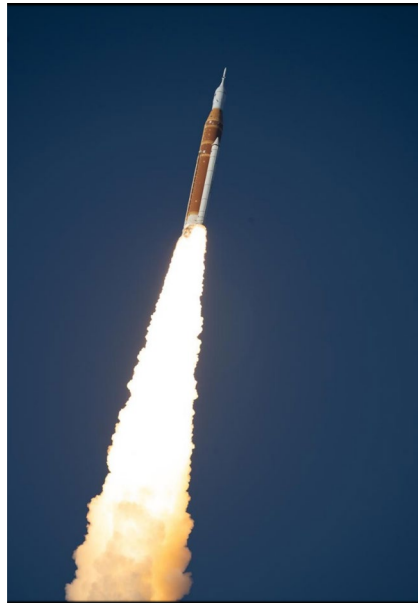


# ARTEMIS II

## Mission Review

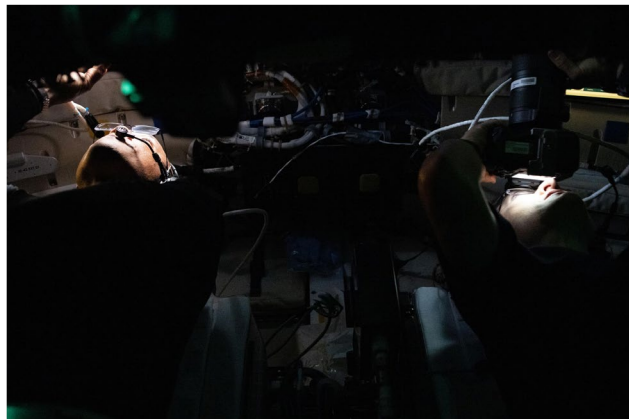
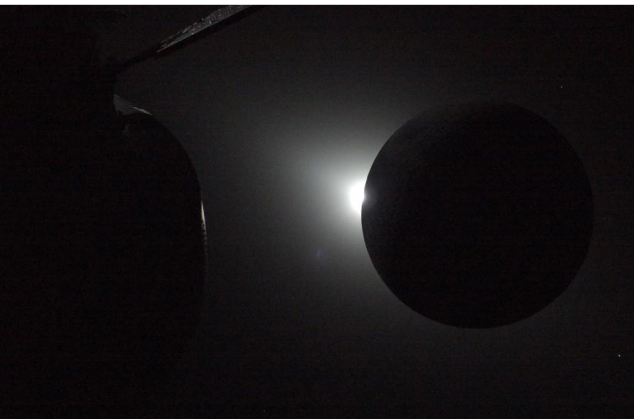
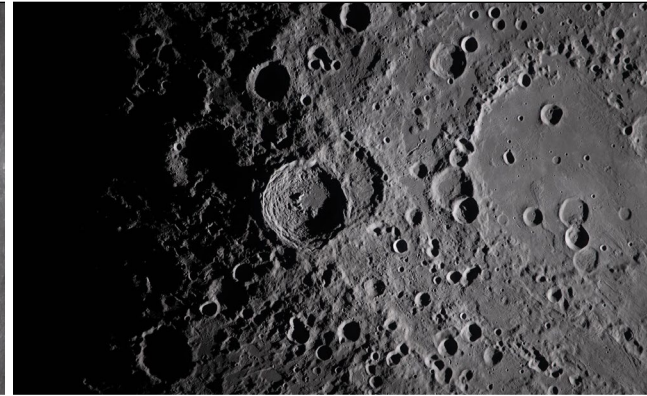
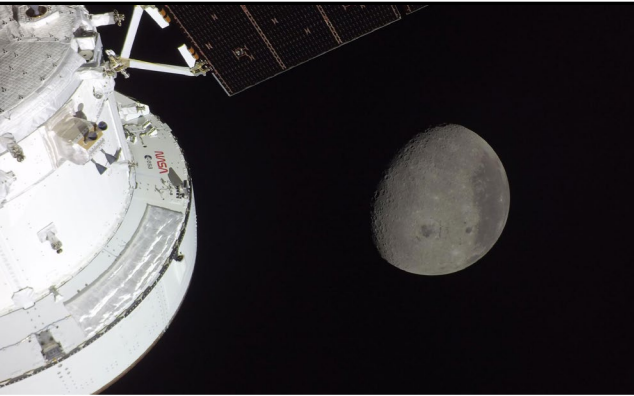


# Launch to Splashdown





# Artemis II: Science Enabling Exploration







# Artemis Ignition and Moon Base

# ACHIEVING THE VISION MOON BASE



## SYSTEMS



TRANSPORTATION



AUTONOMY &  
ROBOTICS



LOGISTICS



COMMUNICATIONS  
& POSITIONING,  
NAVIGATION, AND  
TIMING



HABITATION



POWER



MOBILITY



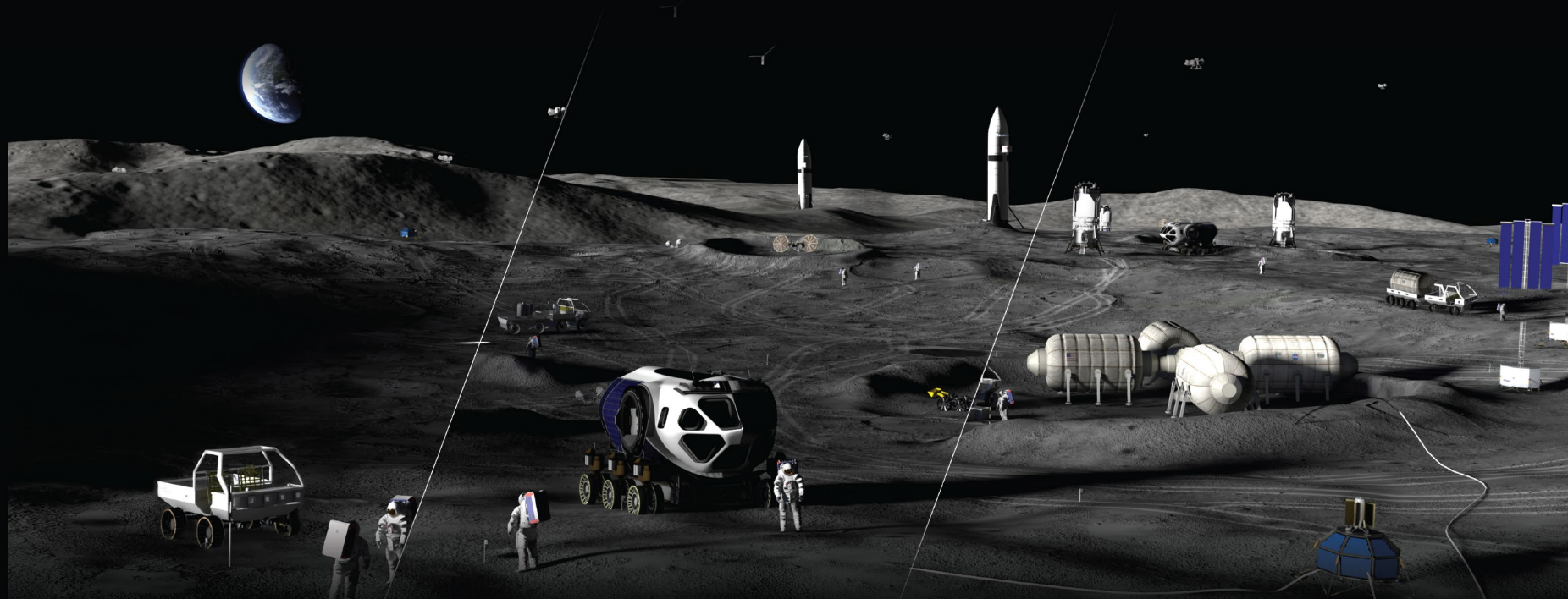
PHASE  
01



PHASE  
02



PHASE  
03



**NOW - 2029**

SECURE RELIABLE ACCESS TO  
LUNAR SURFACE AND EXPERIMENT

**2029 - 2032**

ESTABLISH INITIAL MOON BASE  
OPERATING CAPABILITY

**2032 - BEYOND**

ACHIEVE SEMI-PERMANENT  
CREW PRESENCE

## PROGRESSION



LAUNCHES

● 25

● 27

● 29



LANDINGS

● 21

● 24

● 28



CARGO TO SURFACE

● ~4,000 KG

● ~60,000 KG

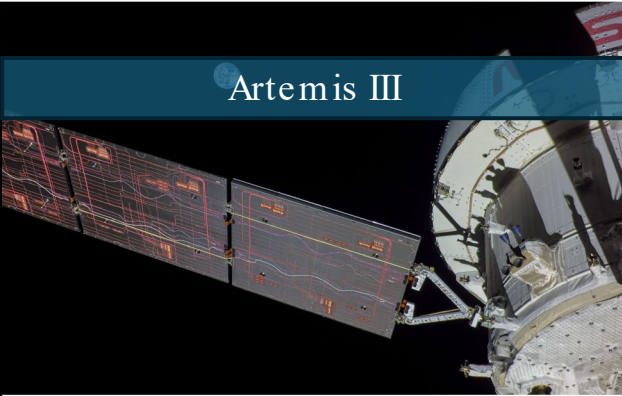
● ~150,000 KG

BUILDING AN ENDURING LUNAR PRESENCE



# Artemis III and Beyond: Progress and Milestones

Artemis III



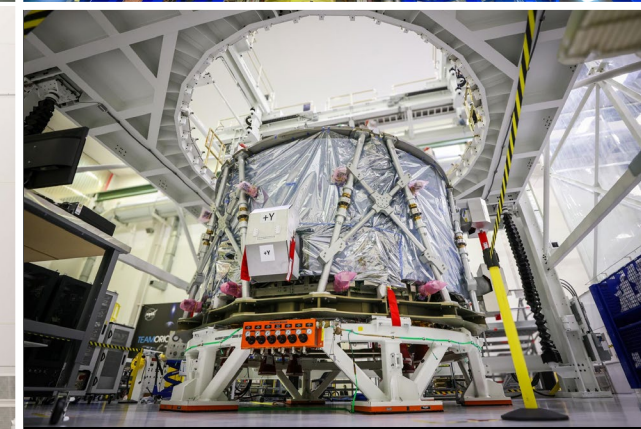
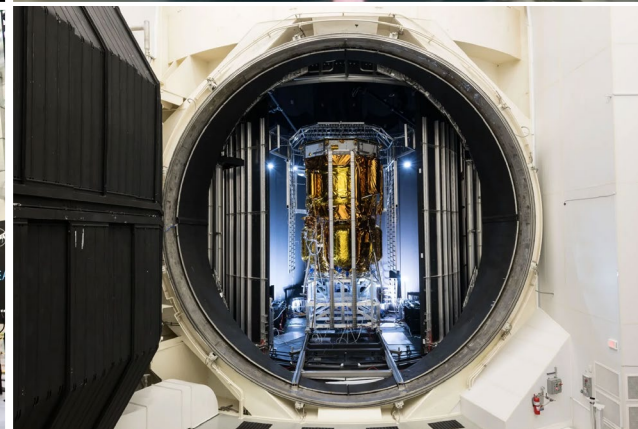
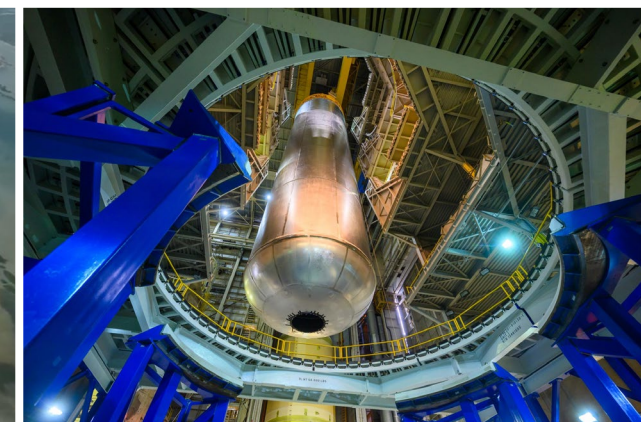
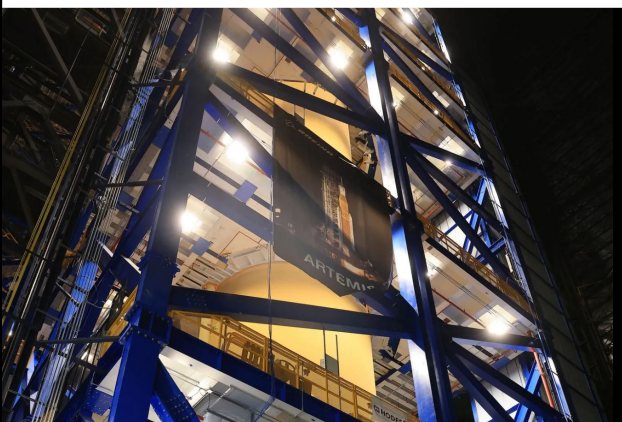
Human Landing System



Artemis IV



Artemis V+







# ARTEMIS

M O N B A S E

HUMANITY'S FIRST OUTPOST  
ON THE LUNAR SURFACE





# Notional Plan for 2027 Artemis III Earth Orbit Mission

## GOALS

Buy down as much risk as possible prior to crewed lunar landing mission:

|                                                                                                                            |                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Demonstrate multi-launch campaign                                                                                          | Test xEVA hardware on orbit                                                       |
| Demonstrate Orion Rendezvous and Proximity Operations with lander(s) in Earth orbit                                        | Demonstrate critical Human Landing Systems and vehicle performance in Earth orbit |
| Demonstrate crewed docked operations in Earth orbit                                                                        | Demonstrate Orion Permeable Heatshield                                            |
| Demonstrate increasing mission cadence with prompt turnaround of pad and ground systems with incorporating lessons learned |                                                                                   |

## SUPPORTING MISSIONS

### Supporting Demonstration Missions

Lander Propellant Transfer and Aggregation Demonstration in Earth Orbit



## CREWED MISSION (Current State)

### CREW INFO

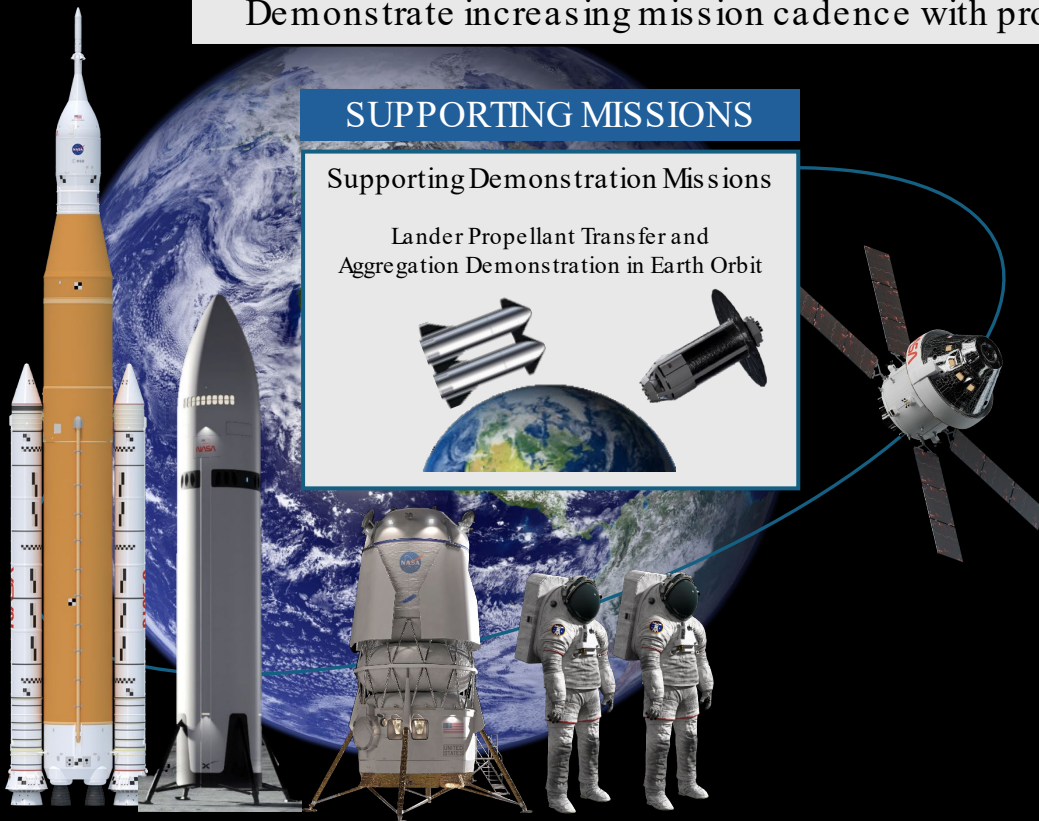
|            |           |
|------------|-----------|
| TOTAL CREW | ≤ 4 (TBD) |
|------------|-----------|

### ELEMENTS

|       |                                |
|-------|--------------------------------|
| SLS   | Block 1<br>TBD: ICPS OR spacer |
| ORION | Crewed, RPODU capable          |
| HLS   | Starship AND/OR Blue Moon      |
| xEVA  | TBD: Axiom AxEMU               |

### ASSUMPTIONS

|                        |                                                                   |
|------------------------|-------------------------------------------------------------------|
| ORION – HLS RPOD       | Earth orbit                                                       |
| CREW INGRESS           | Crew ingress events                                               |
| DOCKING                | Multiple docking/undocking events                                 |
| TOTAL MISSION DURATION | ≤ 21 DAYS (Orion, mission extension with lander augmentation TBD) |
| ORION LANDING          | San Diego FLETAHOT                                                |





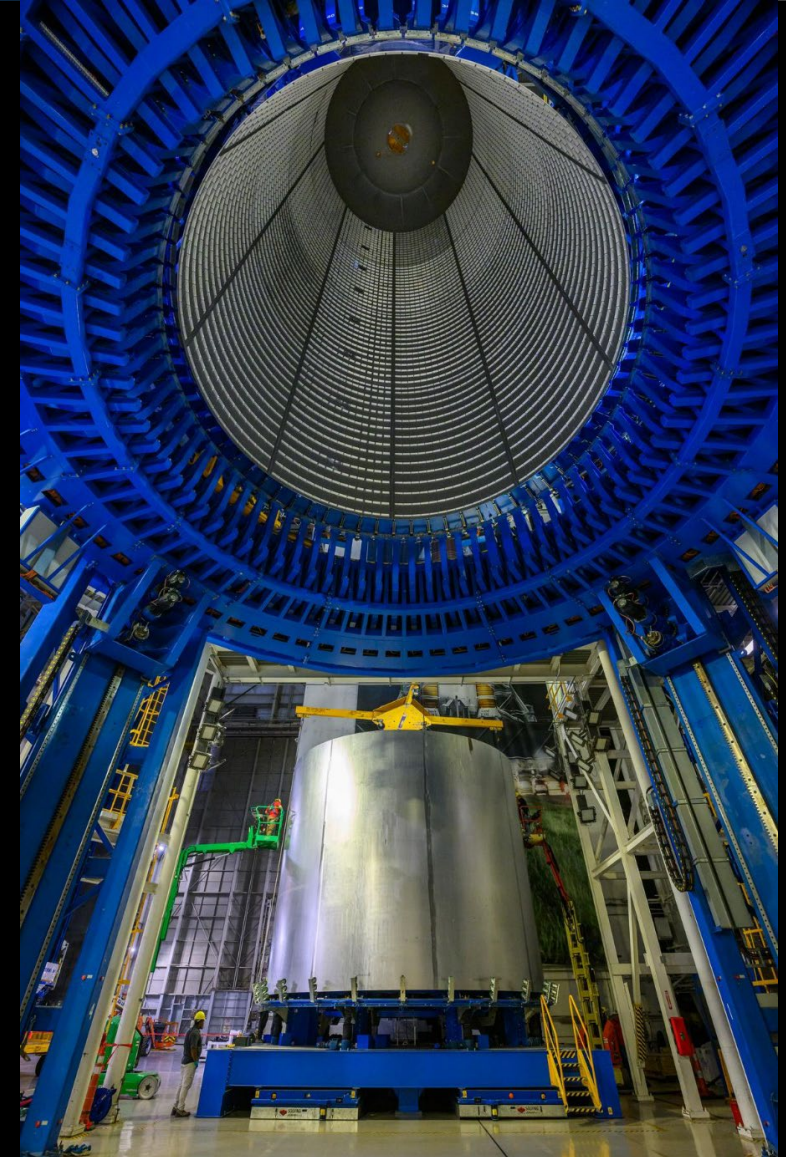
# Artemis IV Progress



Lunar surface suit testing: January 20, 2026



Arrival of ESM4 at KSC: December 22, 2025

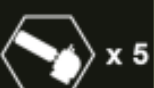
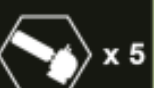
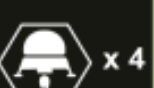
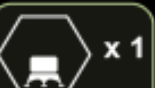
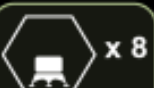
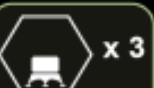
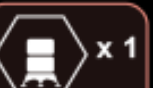
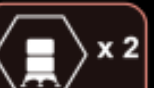
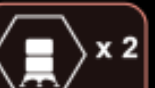
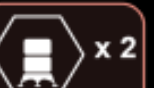
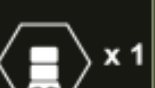
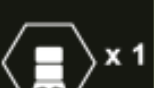
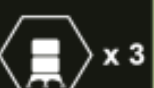
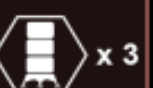
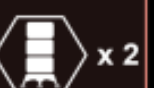
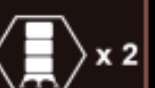
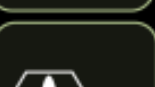
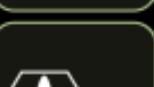
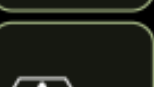
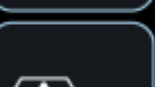
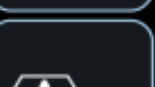
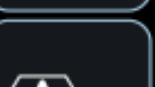


Artemis IV liquid hydrogen tank barrel Michoud: October 3, 2025



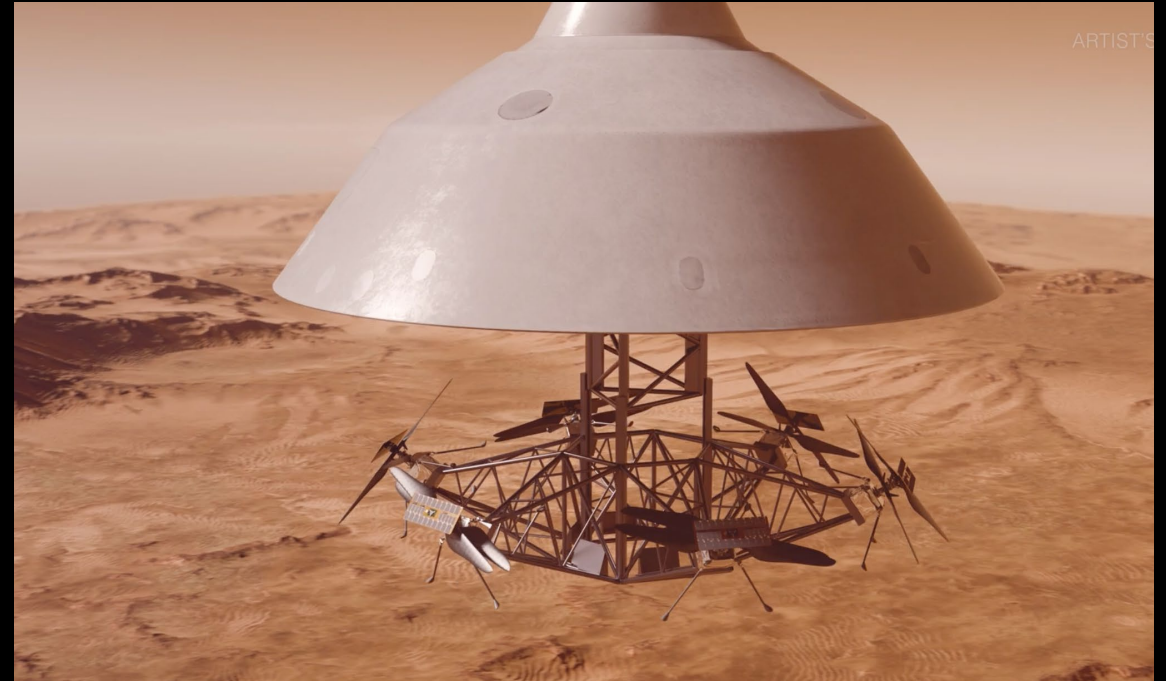
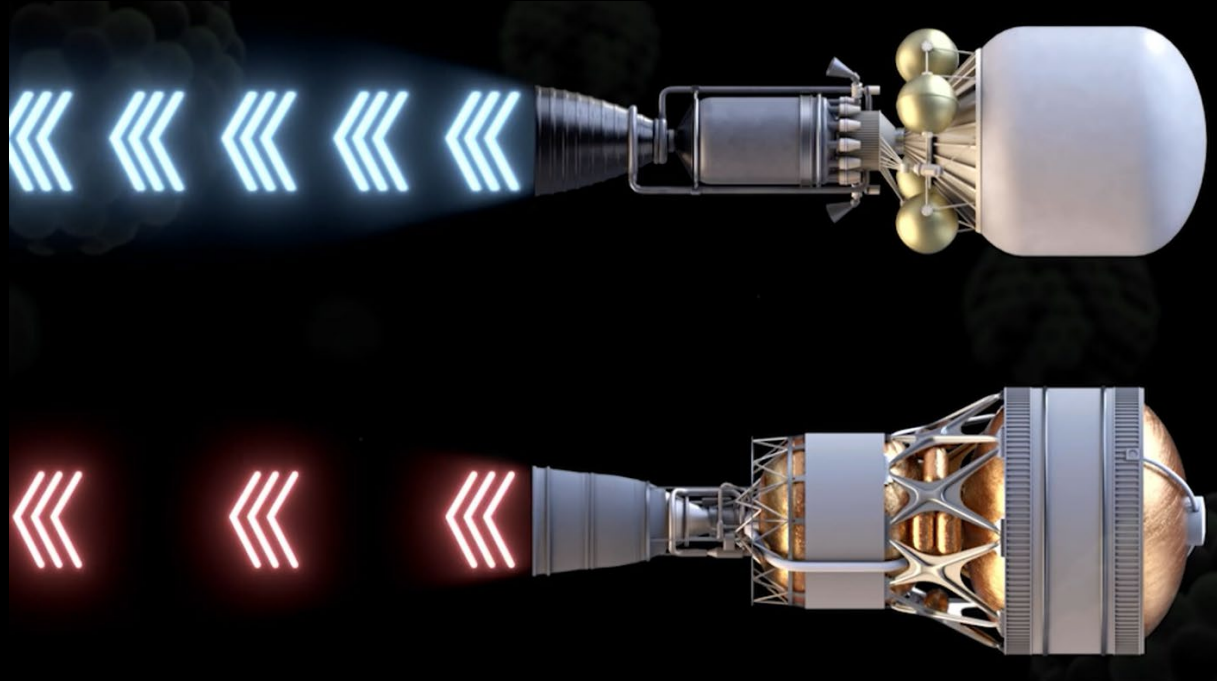
# Moon Base: Infrastructure Needs to Meet Demand



| PHASE<br>YEAR<br>INVESTMENT | PHASE 01                                                                                |                                                                                          |                                                                                           | PHASE 02                                                                                  |                                                                                           |                                                                                           |                                                                                           | PHASE 03                                                                                  |                                                                                           |                                                                                           |                                                                                           |
|-----------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
|                             | 2026                                                                                    | 2027                                                                                     | 2028                                                                                      | 2029                                                                                      | 2030                                                                                      | 2031                                                                                      | 2032                                                                                      | 2033                                                                                      | 2034                                                                                      | 2035                                                                                      | 2036                                                                                      |
|                             | \$10 BILLION                                                                            |                                                                                          |                                                                                           | \$10 BILLION                                                                              |                                                                                           |                                                                                           |                                                                                           | \$10 BILLION +                                                                            |                                                                                           |                                                                                           |                                                                                           |
|                             |                                                                                         |                                                                                          |                                                                                           |                                                                                           |                                                                                           |                                                                                           |                                                                                           |                                                                                           |                                                                                           |                                                                                           |                                                                                           |
| SURFACE AND ORBITAL ASSETS  |  x 1   |  x 2    |  x 1    |  x 1   |  x 1   |  x 1   |  x 1   |  x 1   |  x 1   |  x 1   |  x 1   |
|                             |                                                                                         |  x 5    |  x 5    |  x 1   |  x 4   |  x 1   |  x 4   |  x 2   |  x 1   |  x 1   |  x 1   |
| LANDERS                     |                                                                                         |                                                                                          |  x 4    |  x 2   |  x 2   |  x 3   |                                                                                           |                                                                                           |                                                                                           |                                                                                           |  x 1   |
|                             |                                                                                         |                                                                                          |  x 3    |                                                                                           |  x 1   |                                                                                           |                                                                                           |                                                                                           |                                                                                           |                                                                                           |                                                                                           |
| LAUNCHES                    |  x 1   |  x 8    |  x 3    |  x 1   |  x 2   |  x 3   |  x 2   |  x 1   |  x 2   |  x 2   |  x 2   |
|                             |  x 1   |  x 1    |  x 3    |  x 3   |  x 2   |  x 1   |  x 2   |  x 3   |  x 2   |  x 2   |  x 2   |
| LAUNCHES                    |                                                                                         |                                                                                          |  x 4   |  x 1  |  x 2  |  x 3  |  x 2  |  x 2  |  x 3  |  x 3  |  x 4  |
|                             |  x 2 |  x 10 |  x 12 |  x 6 |  x 7 |  x 7 |  x 7 |  x 7 |  x 7 |  x 7 |  x 7 |



# Space Reactor 1 (SR-1) Freedom | Skyfall Mars Helicopters



SR-1 Freedom Launch: December 2028



Delivering Skyfall — Three Ingenuity-class helicopters

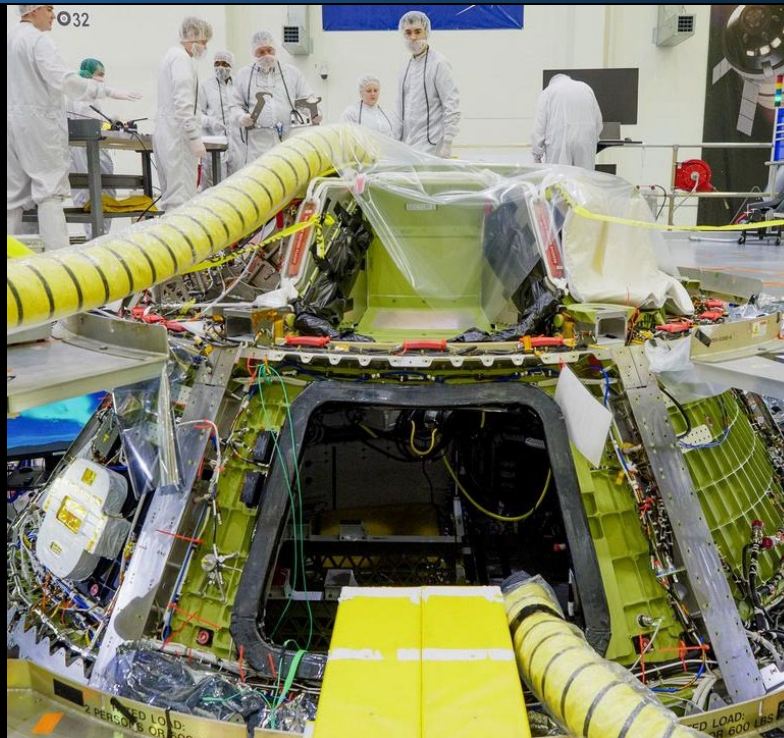
Credit: AeroVironment



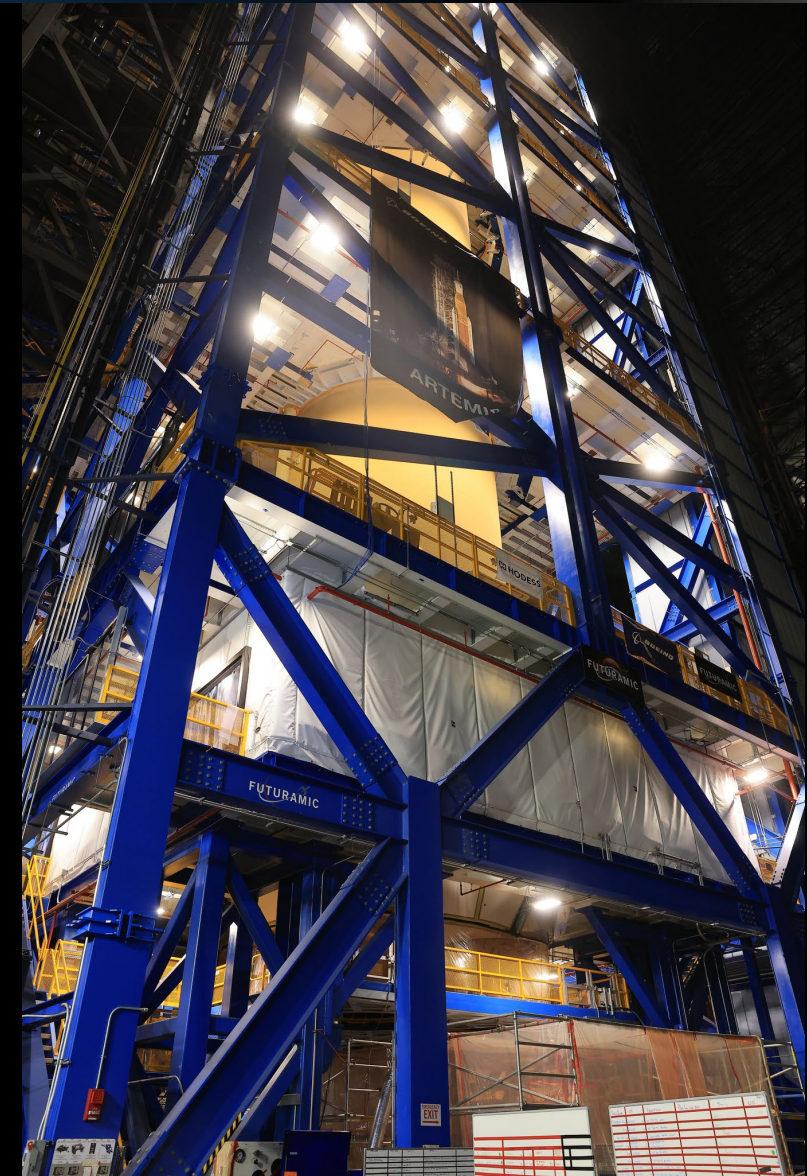
# Artemis III Progress



Artemis III service module acoustical testing: May 7, 2026



Orion crew module at KSC: March 5, 2026



Core stage in High Bay 2 of the VAB: May 12, 2026





# Notional Plan for 2028 Initial Crewed Landing Mission

## GOALS

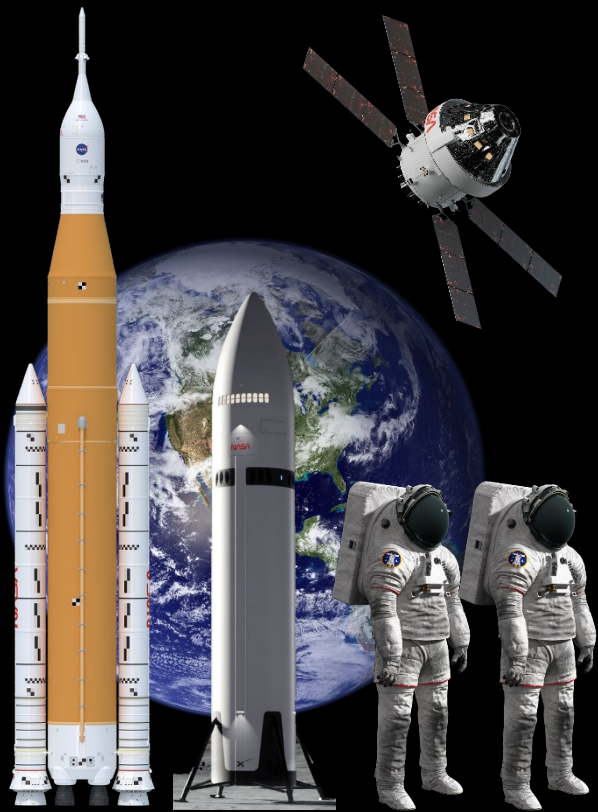
Demonstrate crewed lunar landing near the lunar South Pole

Demonstrate multi-launch campaign

Collect lunar surface samples

Demonstrate xEVA suits on the lunar surface

## SpaceX



## CREWED MISSION (Current State)

### CREW INFO

|                    |   |
|--------------------|---|
| TOTAL CREW         | 4 |
| LUNAR SURFACE CREW | 2 |

### ELEMENTS

|       |                                    |
|-------|------------------------------------|
| SLS   | Block 1 Crewed (ICPS or Centaur V) |
| ORION | Crewed, RPODU Capable              |
| HLS   | Starship / Blue Moon               |
| xEVA  | Axiom xEMU                         |

### ASSUMPTIONS

|                                   |                           |
|-----------------------------------|---------------------------|
| LANDING REGION                    | SOUTH POLE (84-90 deg)    |
| # EVAs                            | 2 to 4 EVAs / 1 to 2 EVAs |
| TOTAL MISSION DURATION            | ≤ 21 DAYS                 |
| LUNAR OPS (INCLUDES SURFACE STAY) | 7 DAYS / 6 DAYS           |

## Blue Origin

