

# Space Launch System

La fusée de la NASA pour retourner sur la Lune



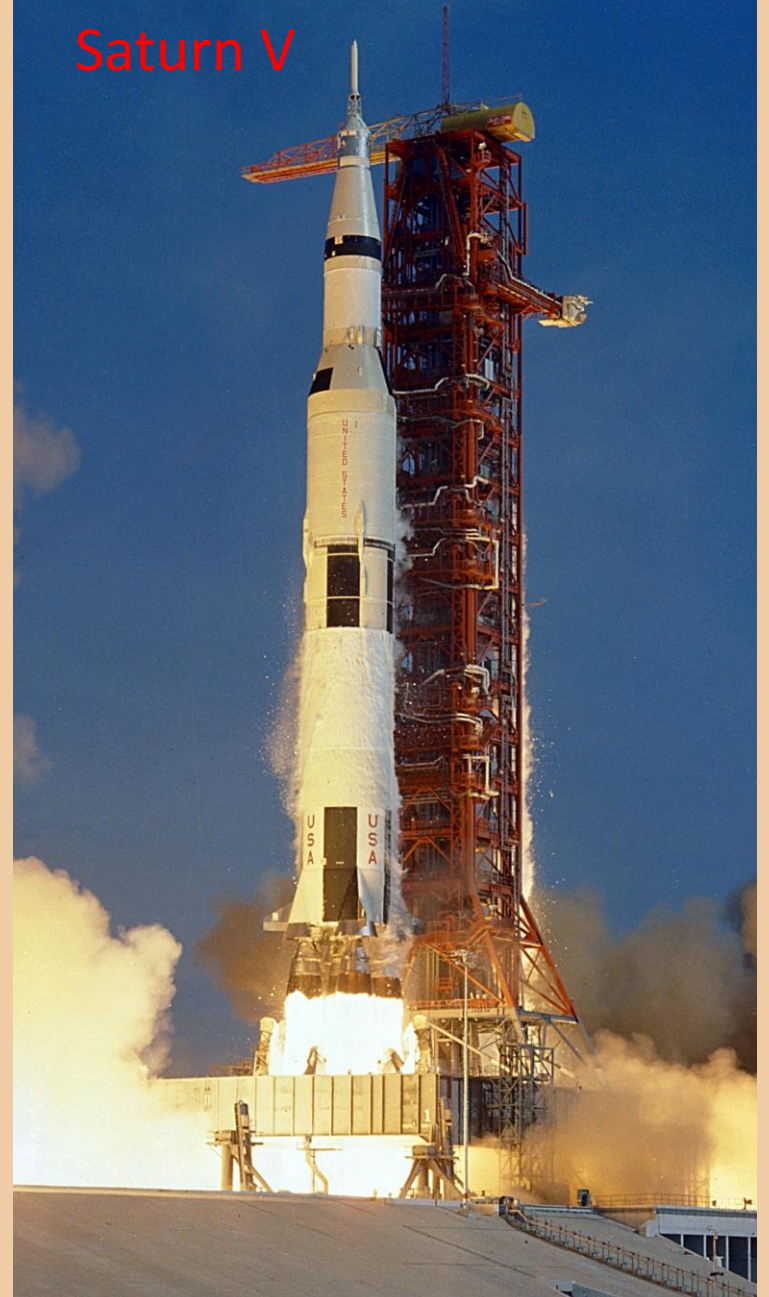


# Space Launch System

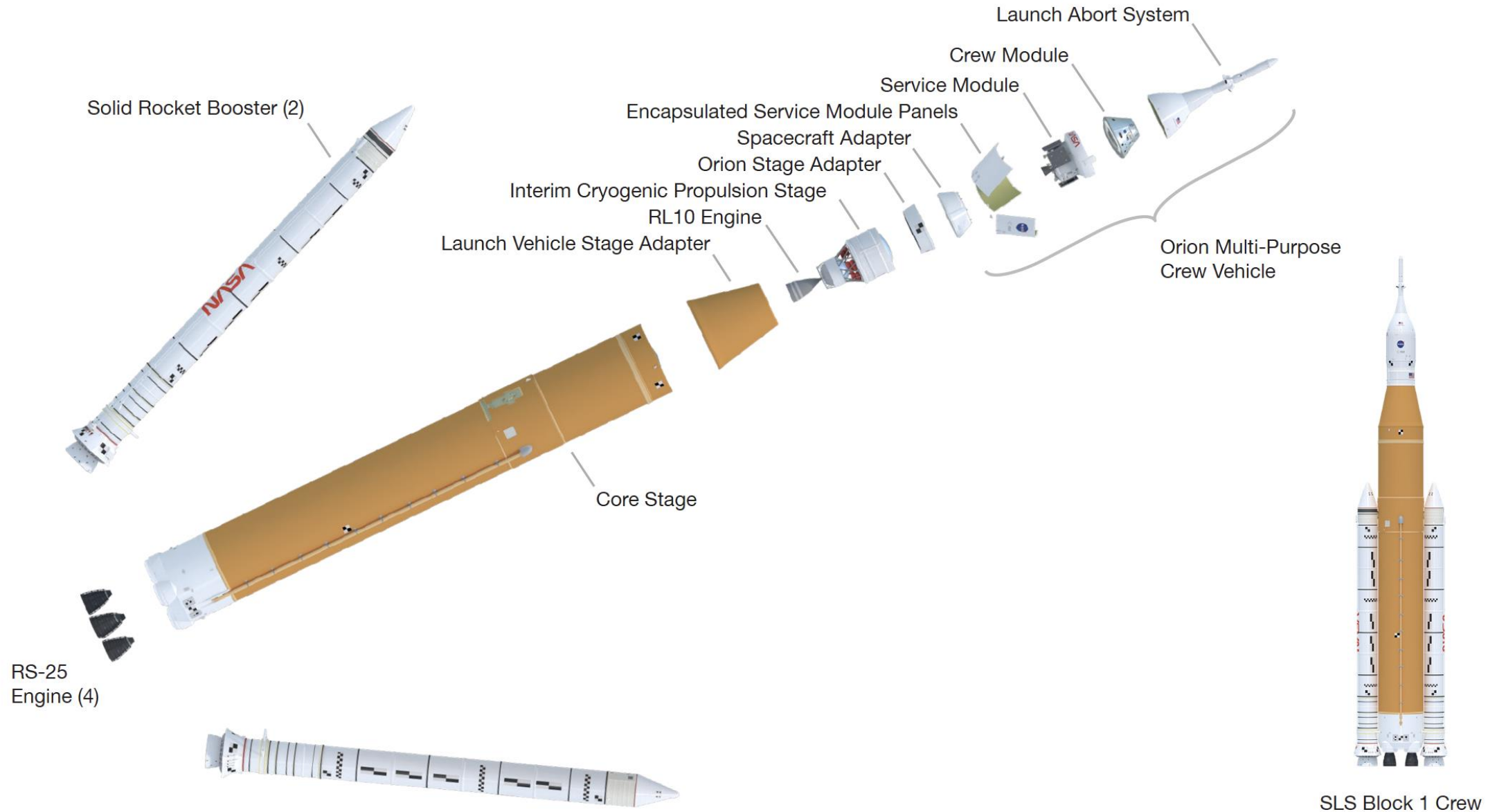
## SLS

# Saturn V

## Navette spatiale



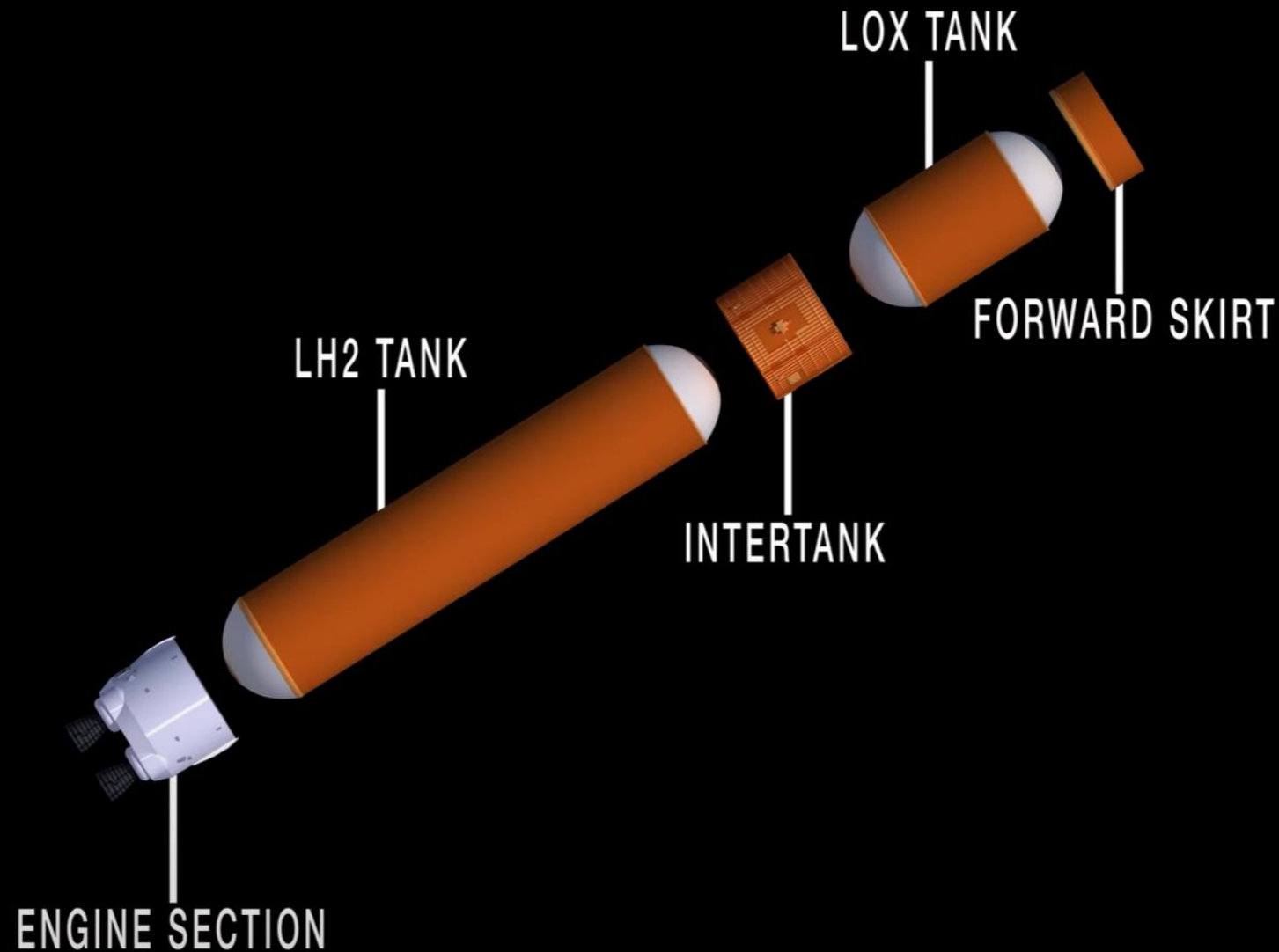
# Block 1 - Initial SLS Configuration





# Core Stage

Étage principal



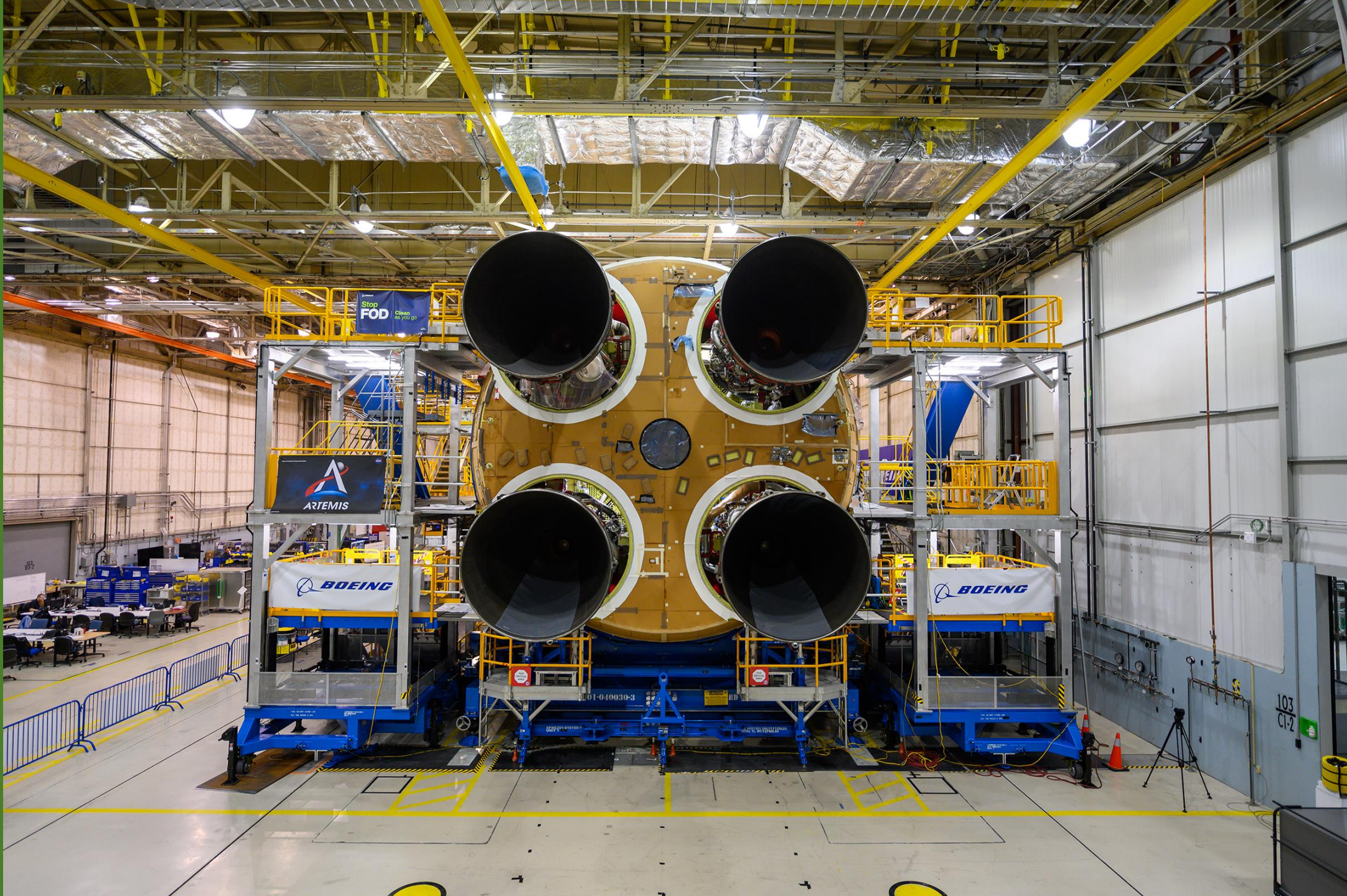
Stages for the first and  
second Artemis missions

# RS-25D

- 16 moteurs réutilisables des navettes spatiales vont permettre quatre lancements de SLS
- Une version non-réutilisable et moins dispendieuse de ce moteur, RS-25E, sera ensuite utilisé.









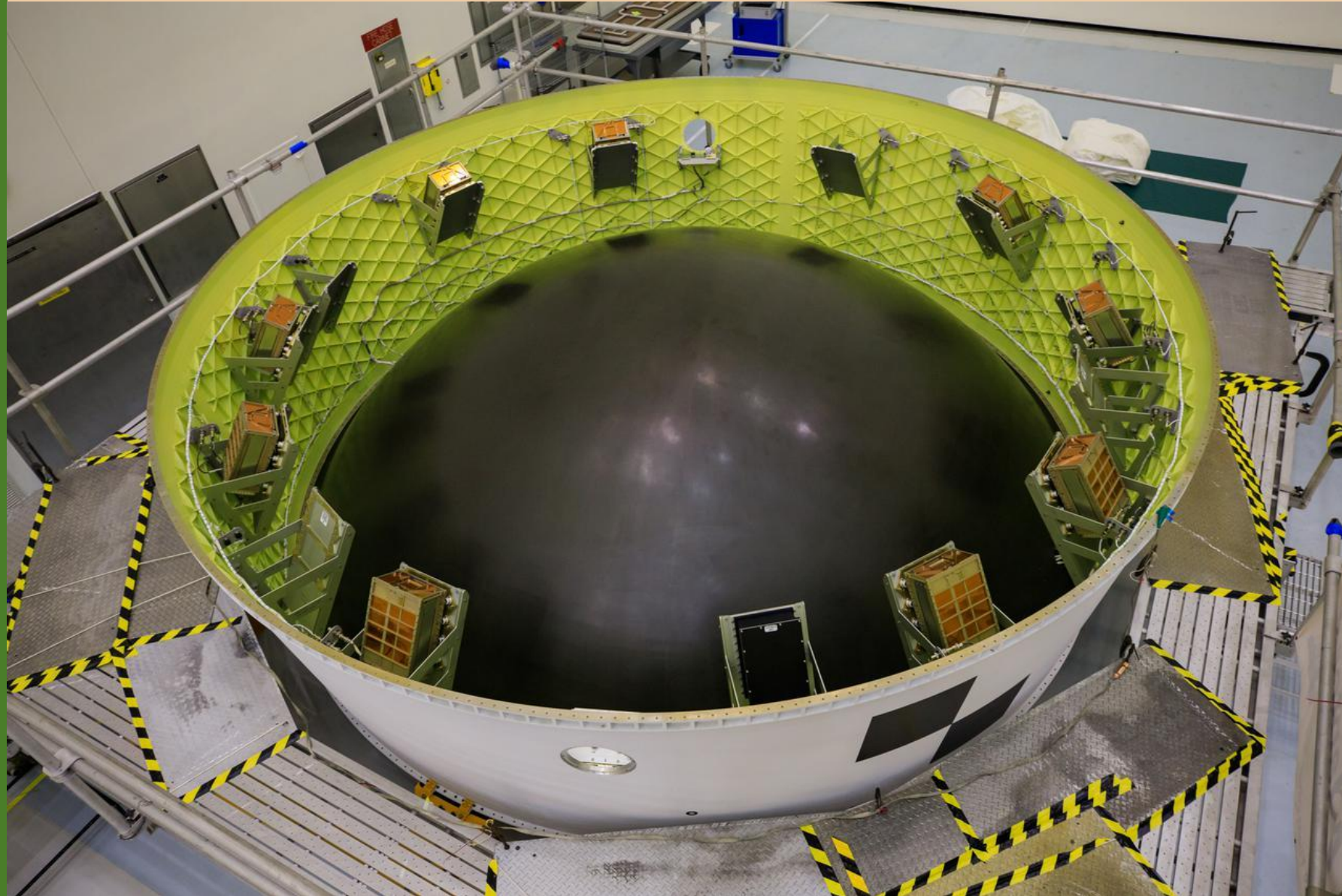


# Interim Cryogenic Propulsion Stage (ICPS)

Étage de propulsion cryogénique intérimaire

Diamètre: 5.1 m  
Hauteur: 13.7 m



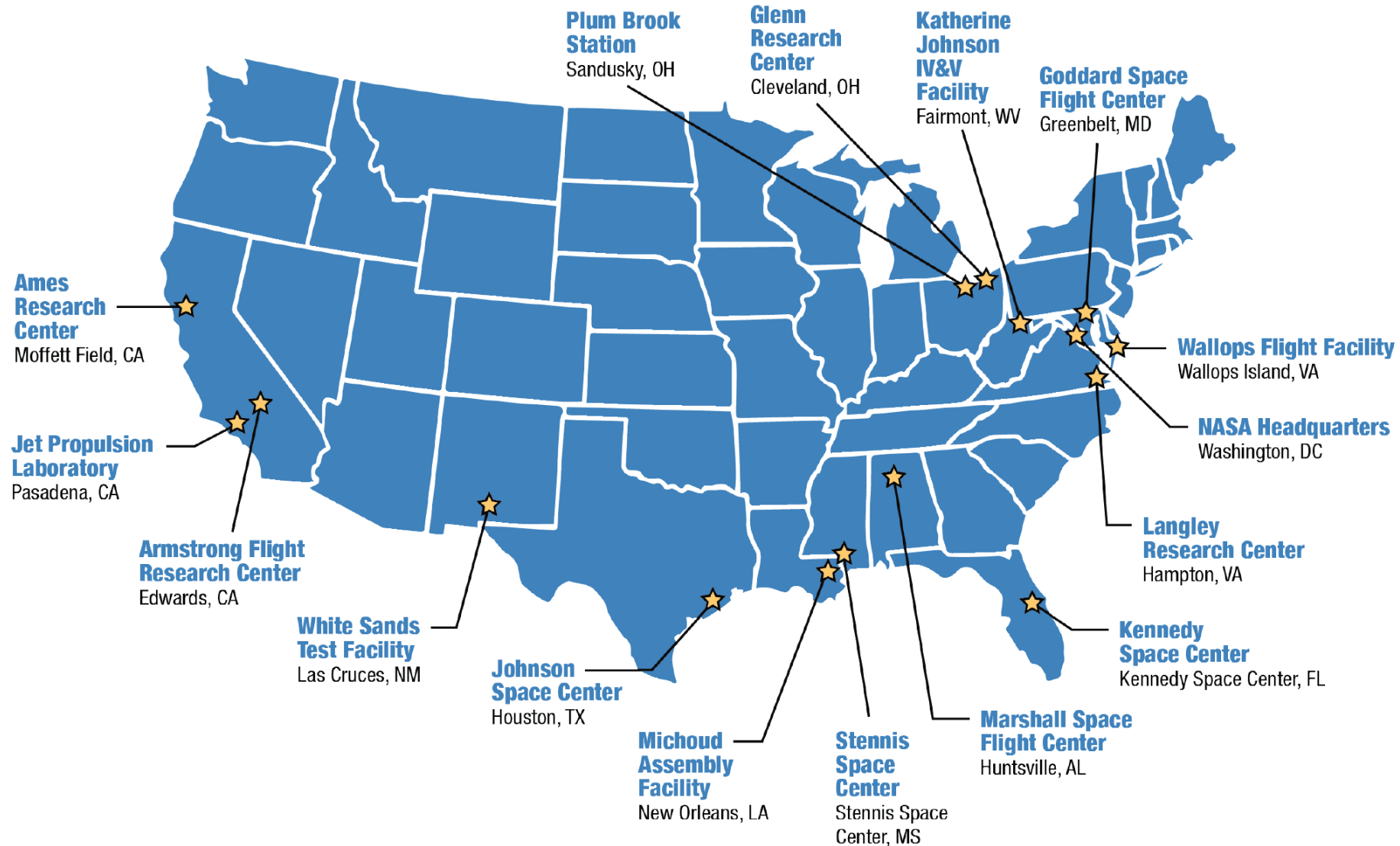


13 cubesats

10 cm x 20 cm x 30 cm



# Key Artemis Contributions by NASA Center





# Partenaires du projet Artemis



Artemis Partners

Every state in America is a part of NASA's Artemis program building the systems to support missions to the Moon, Mars, and 69,693 views  
Published on February 11  
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- SLS Suppliers
  - All items
- Lunar Technology Development
  - All items
- EGS Suppliers
  - All items
- Orion Suppliers
  - All items
- Gateway and Human Lander System (HLS)
  - All items

<https://www.nasa.gov/content/artemis-partners>



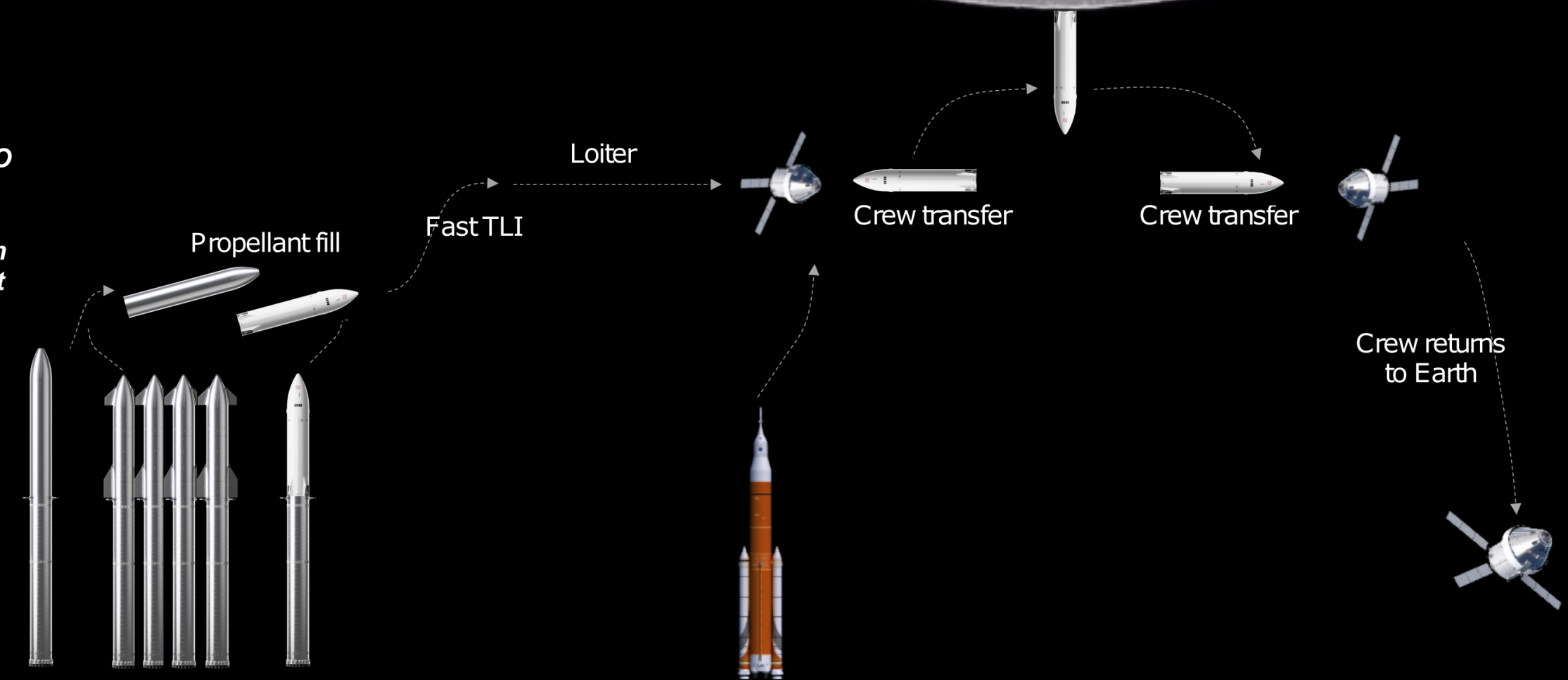
# Artemis III Concept of Operations

*Moon*

*NRHO*

*Earth Orbit*

*Earth*



Propellant aggregation

HLS Starship launches

Extended loiter if needed

Orion launch

Variable Stay on the Moon

Crew returns to Orion



 **John Kraus** @johnkrausphotos · Mar 18  
NASA's **Space Launch System** and SpaceX's **Starship**.

These two heavy-lift rockets will return humans to the lunar surface for the first time since the end of the Apollo program in 1972.



# SLS et Starship



# Space Launch System

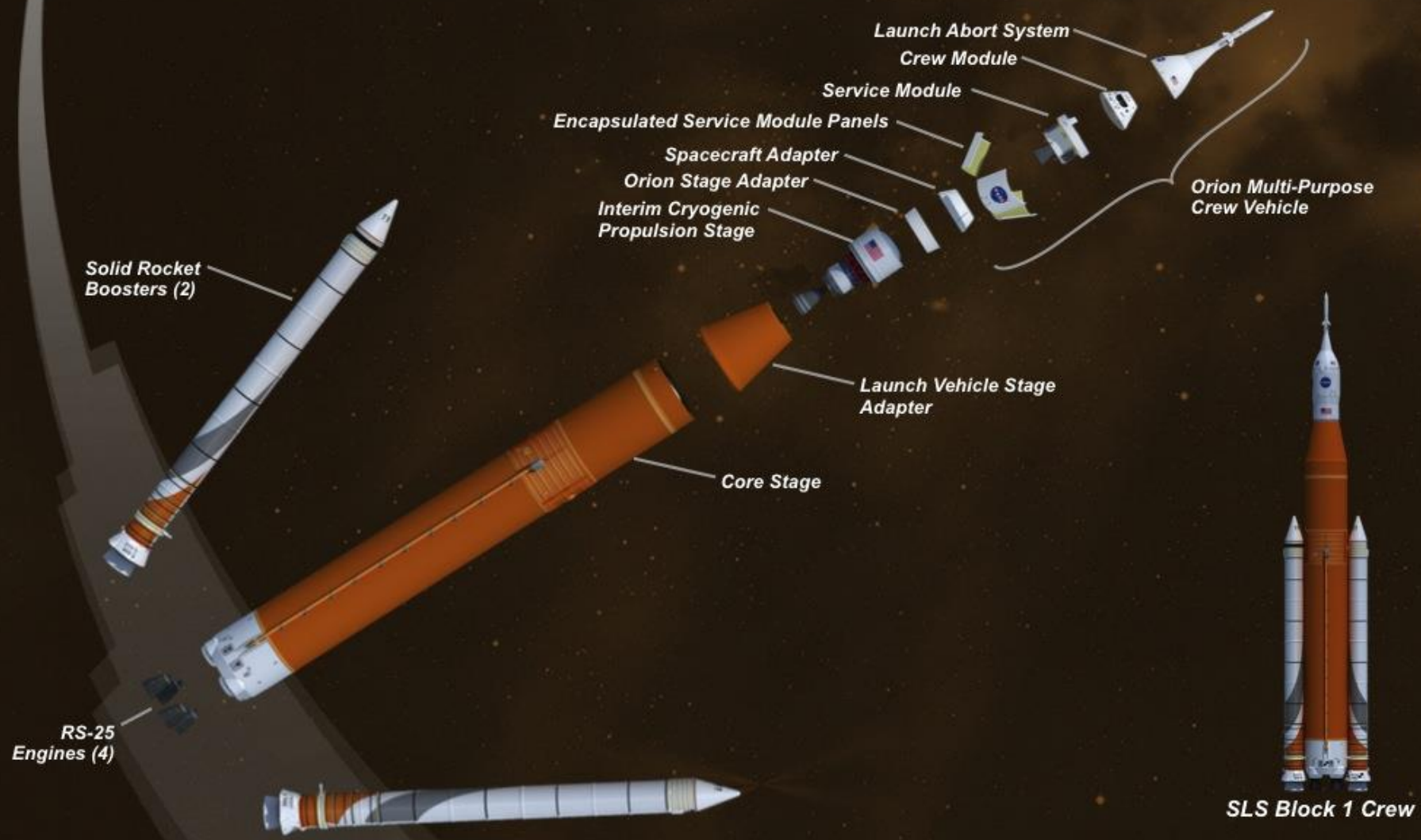
La fusée de la NASA pour

- Retourner sur la Lune
- Envoyer des humains sur Mars
- Missions robotiques plus rapides et avec de plus grandes charges utiles à l'intérieur et à l'extérieur du système solaire

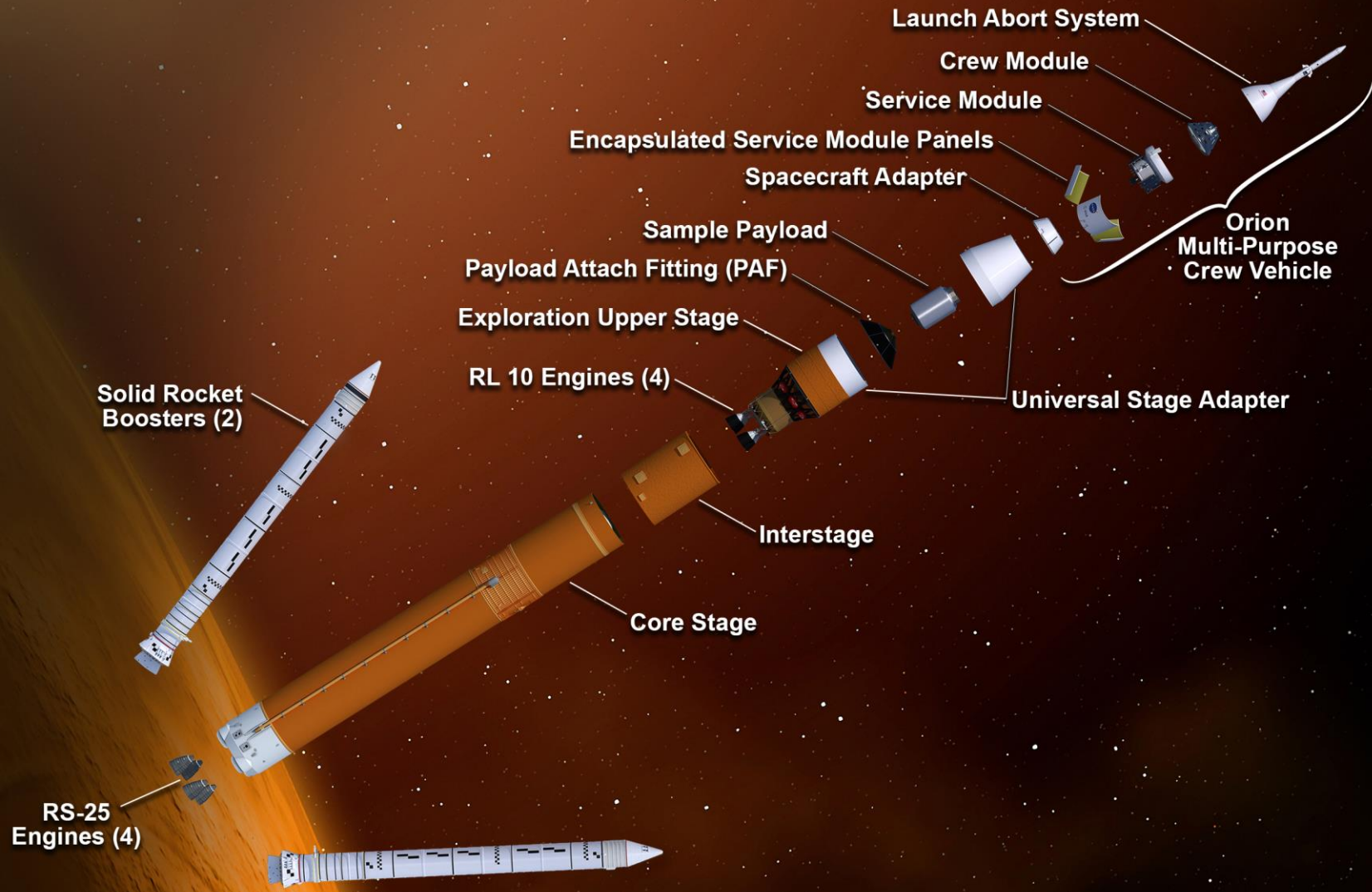




# SLS Block 1 (70-Metric-Ton) Expanded View

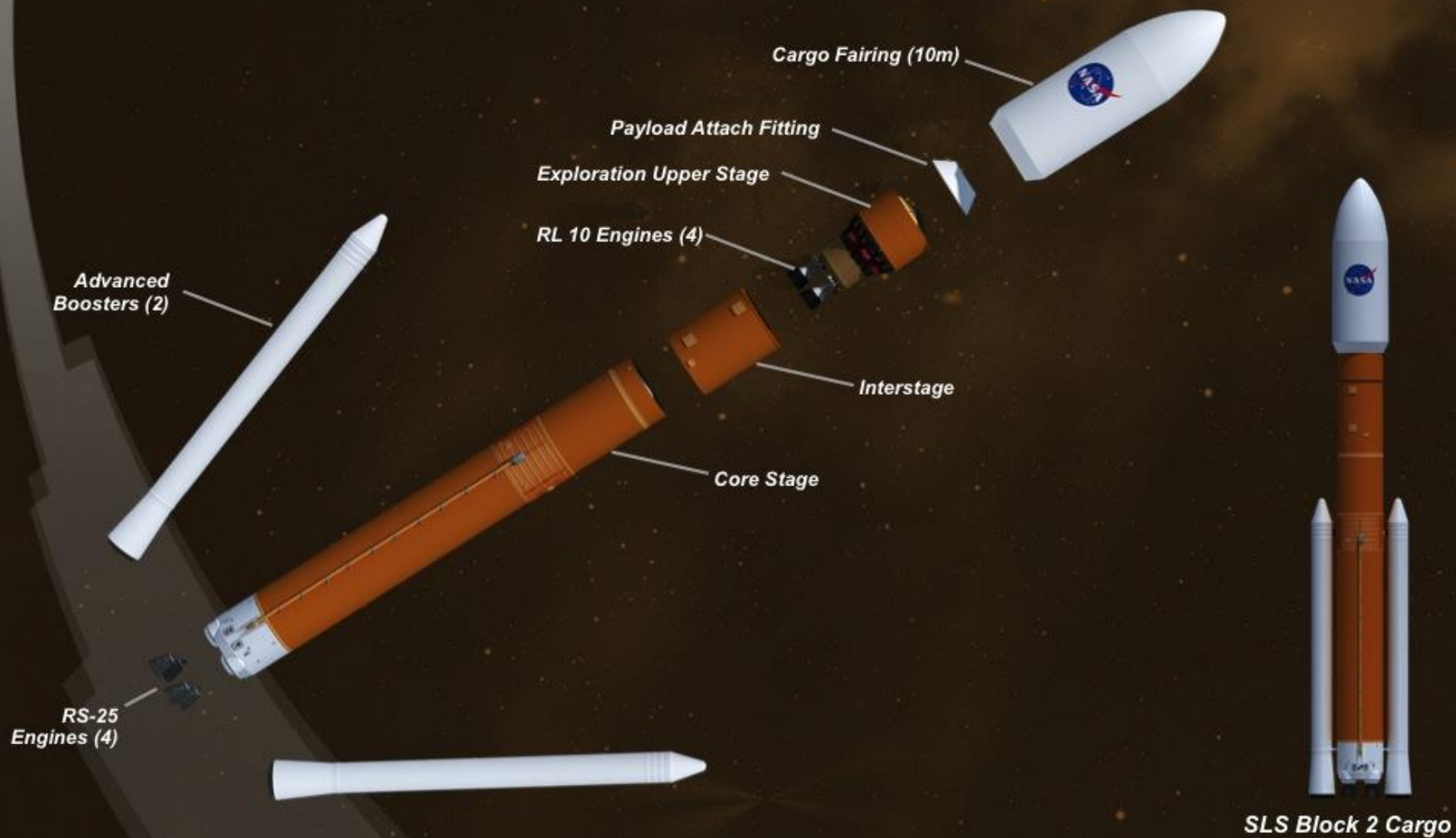


# Space Launch System - Block 1B Expanded View





# SLS Block 2 (130-Metric-Ton) Cargo Expanded View



# Houston we have a ~~problem~~ podcast

<https://www.nasa.gov/johnson/HWHAP>

## Ep 41: The Space Launch System Part 1

Apr 20, 2018 - Paul Bookout and David Smith talk about the most powerful rocket since the Saturn V: The Space Launch System. The experts discuss what the rocket is made of, where it will go, and what will be inside. HWHAP Episode 41

## Ep 42: The Space Launch System Part 2

Apr 27, 2018 - Paul Bookout and David Smith continue their conversation about the most powerful rocket since the Saturn V: The Space Launch System. The experts discuss the construction, testing, evolution and potential of the skyscraper-sized launch vehicle. HWHAP Episode 42

## Ep. 234: SLS

Mar 4, 2022 - John Blevins details NASA's Space Launch System rocket ahead of the Artemis I mission. HWHAP Episode 234.



# Hyperliens

- Animation: [https://images.nasa.gov/details-MSFC SLS 01142021 SLS Orion Animation 0034](https://images.nasa.gov/details-MSFC_SLS_01142021_SLS_Orion_Animation_0034)
- SLS: <https://www.nasa.gov/exploration/systems/sls/index.html>