



5...4...3...2...1...

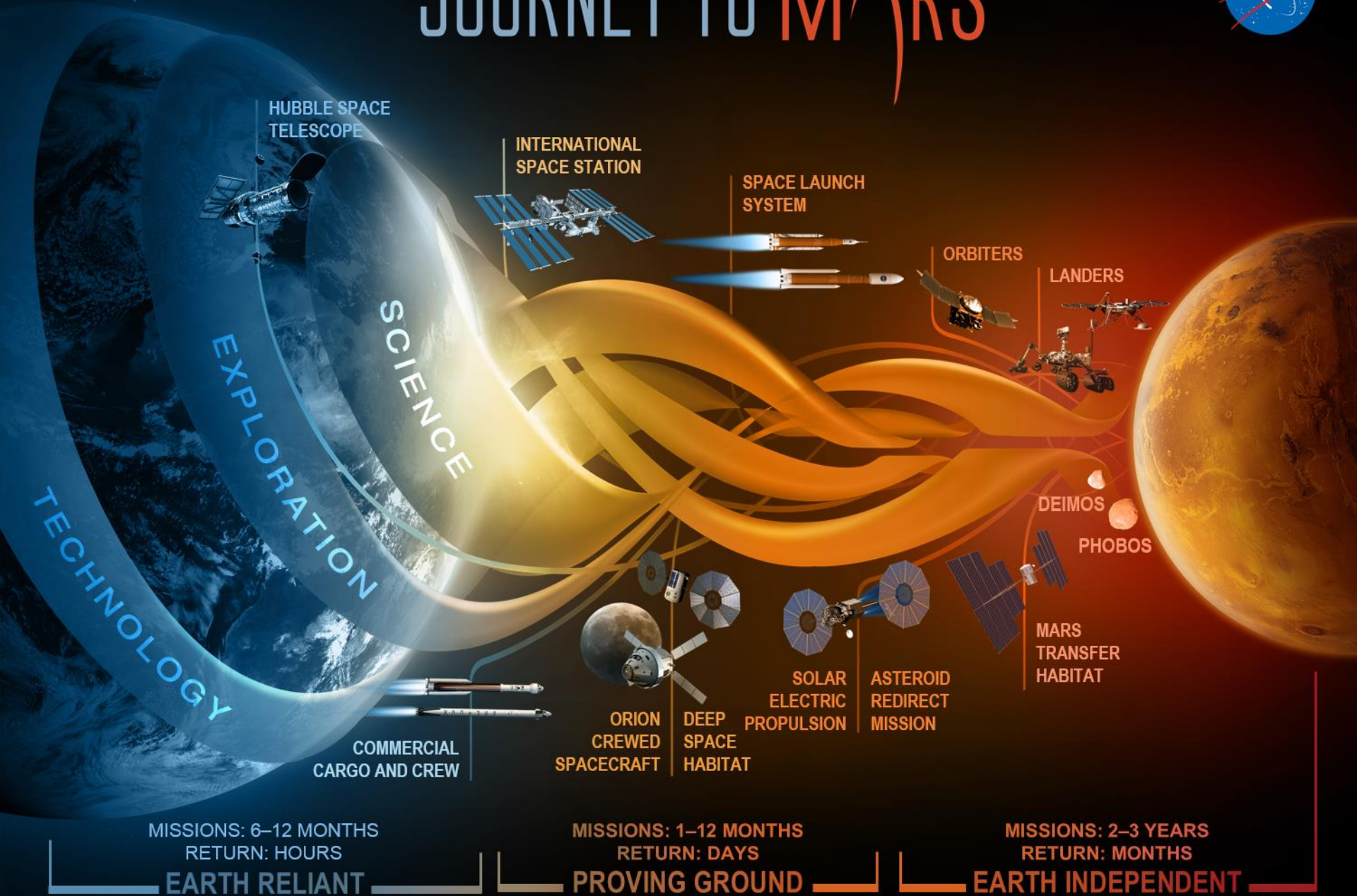
SPACE LAUNCH SYSTEM

**NASA's Space Launch System
Transitions from Design to Production**

Bruce Askins
SLS Infrastructure Lead
May 17, 2016



JOURNEY TO MARS



HUBBLE SPACE TELESCOPE

INTERNATIONAL SPACE STATION

SPACE LAUNCH SYSTEM

ORBITERS

LANDERS

TECHNOLOGY
EXPLORATION
SCIENCE

DEIMOS

PHOBOS

MARS TRANSFER HABITAT

SOLAR ELECTRIC PROPULSION

ASTEROID REDIRECT MISSION

ORION CREWED SPACECRAFT

DEEP SPACE HABITAT

COMMERCIAL CARGO AND CREW

MISSIONS: 6-12 MONTHS

RETURN: HOURS

EARTH RELIANT

MISSIONS: 1-12 MONTHS

RETURN: DAYS

PROVING GROUND

MISSIONS: 2-3 YEARS

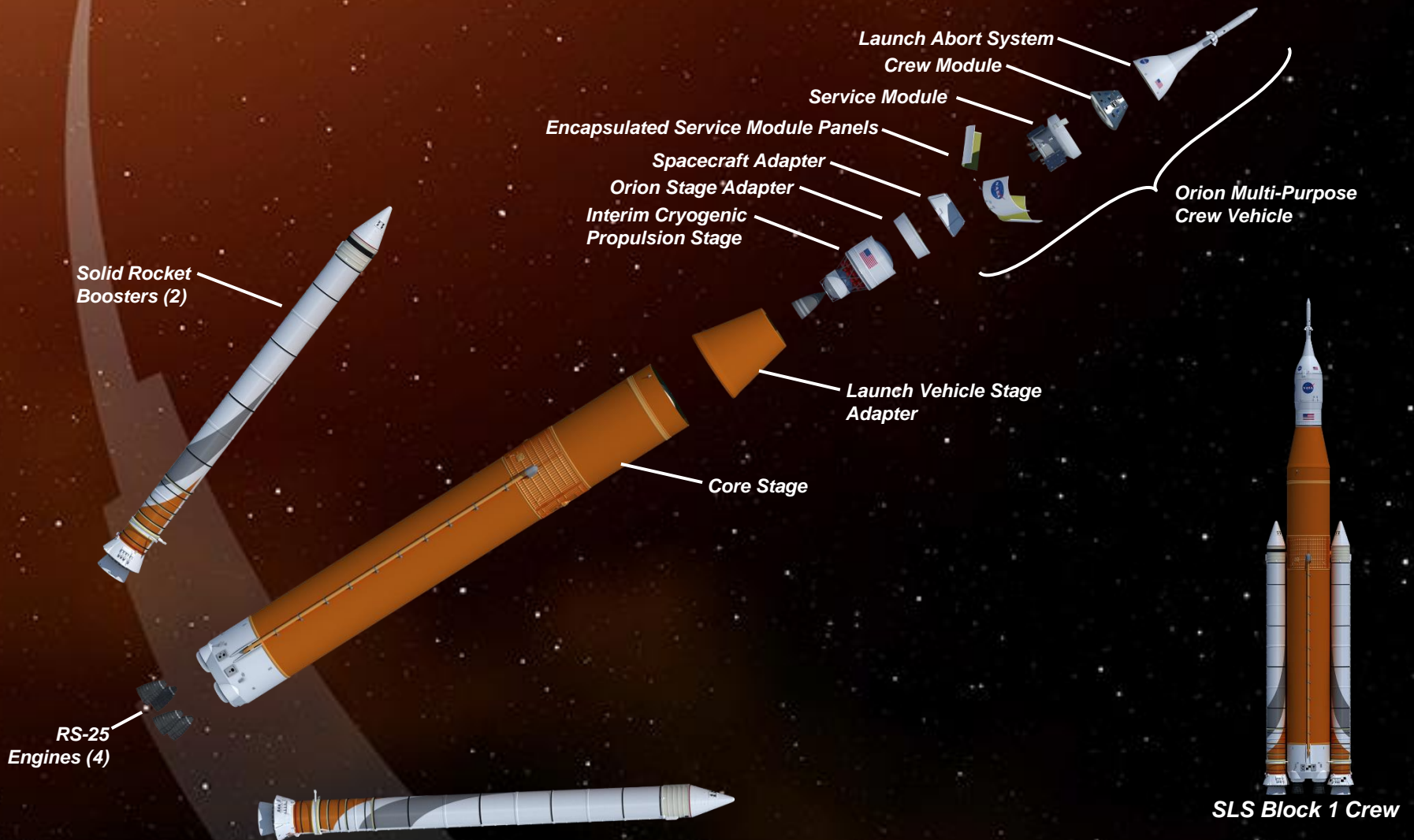
RETURN: MONTHS

EARTH INDEPENDENT

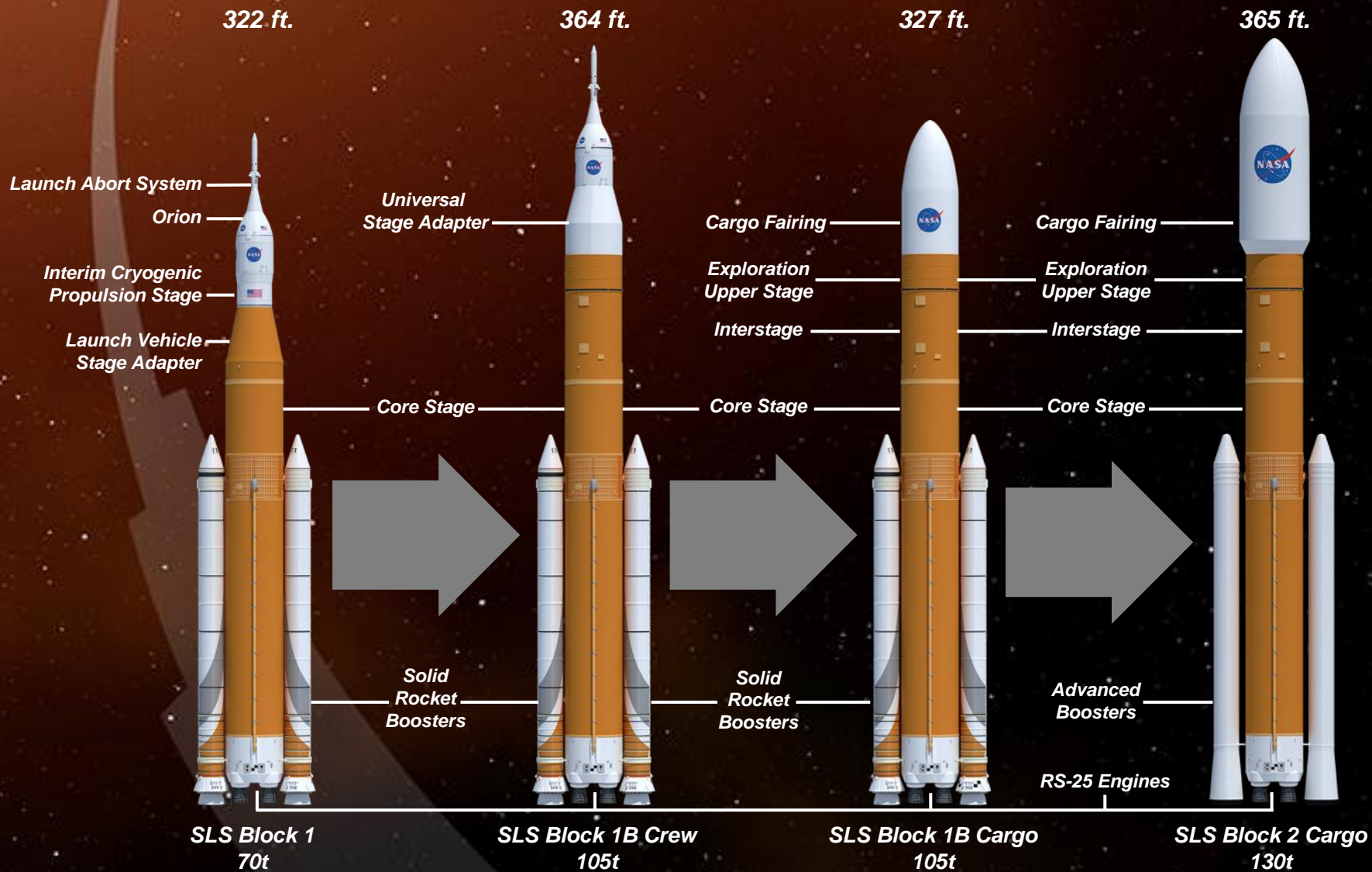
INTRODUCTION



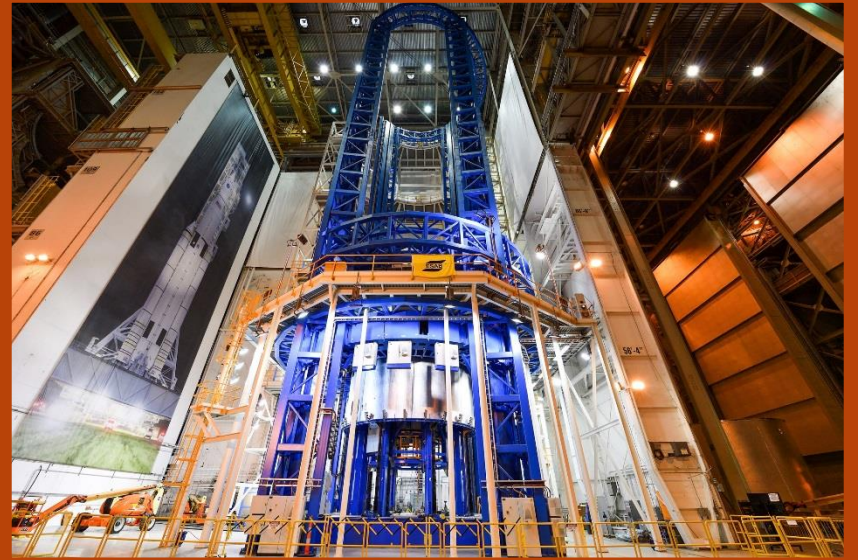
SLS BLOCK 1 CREW VEHICLE



EVOLVING THE SLS VEHICLE



CORE STAGE



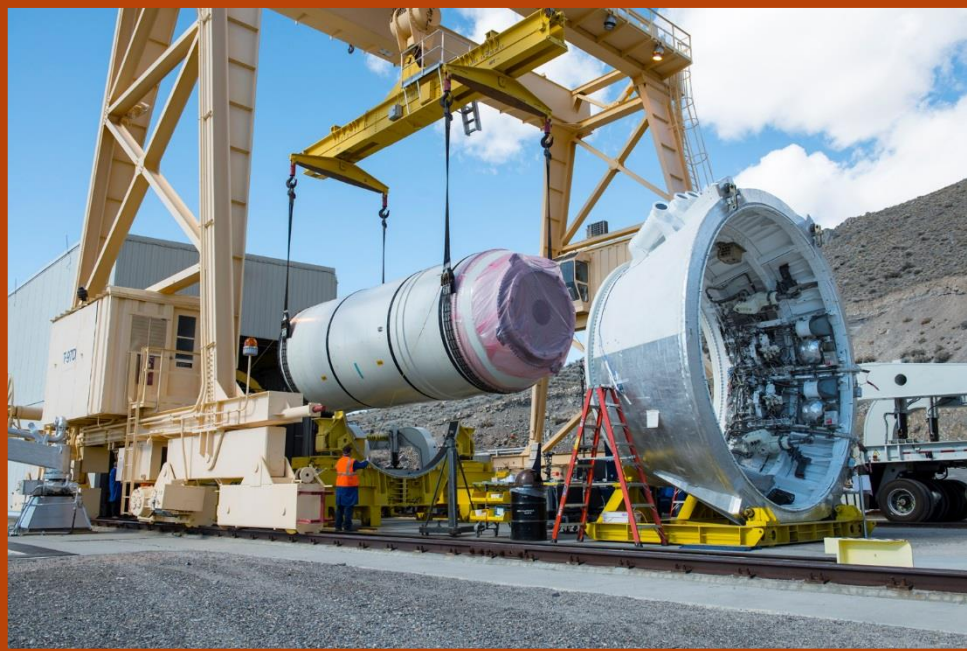
CORE STAGE TESTING



RS-25 ENGINE



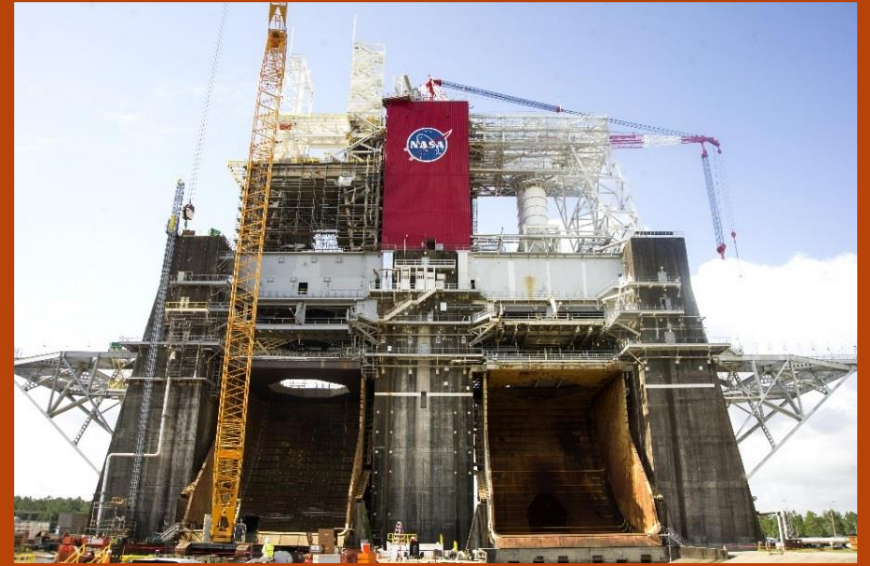
SOLID ROCKET BOOSTER



STAGE ADAPTER WELDING



ADDITIONAL DEVELOPMENT ACTIVITIES



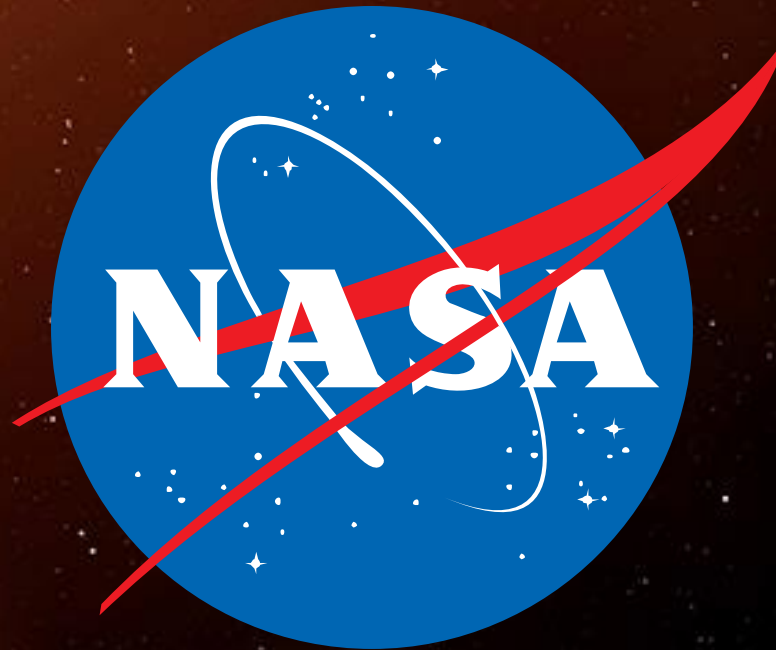
EXPLORATION MISSION 1



COUNTDOWN TO THE FUTURE



QUESTIONS?



www.nasa.gov/marshall