

NASA's Space Launch System **SLS** CORE STAGE

GREEN RUN

POWERED BY AEROJET ROCKETDYNE



>700,000 GALLONS OF PROPELLANTS

109% POWER

1.6 MILLION POUNDS OF THRUST

Green Run is composed of a series of tests validating the core stage design and performance. It also verifies the readiness of the stage to be shipped to Kennedy Space Center for final processing and integration before launch.

SLS CORE STAGE

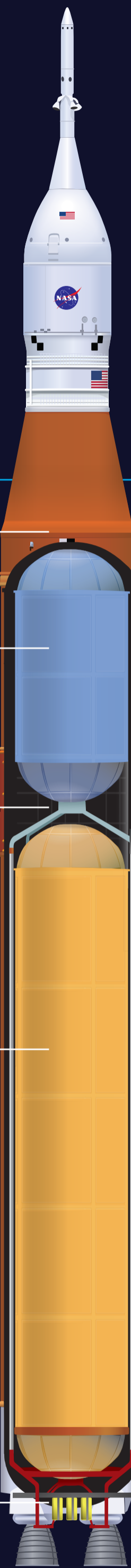
FORWARD SKIRT

LIQUID OXYGEN (LOX) TANK

INTERTANK

LIQUID HYDROGEN (LH2) TANK

ENGINE SECTION WITH 4 RS-25 ENGINES



THE CORE STAGE GREEN RUN INCLUDES SEVERAL FIRST-TIME EVENTS FOR THE WORLD'S LARGEST ROCKET STAGE



First propellant fill-up for the LOX and LH2 tanks

Standing 212 feet tall, SLS has the largest rocket propellant tanks in existence holding 196,000 gallons of liquid oxygen and 537,000 gallons of liquid hydrogen.



First end-to-end flow test of propellants and other fluids through the complete stage

The engines are powered with liquid hydrogen and liquid oxygen propellants from the core stage at a rate of 1,500 gallons per second.



First operational test of FLIGHT avionics

Engines are updated with new controllers (the "brain" of the engine); a technological leap similar to going from a floppy disk to solid state memory using the latest software.



First firing of all four RS-25 engines together

The core stage's four RS-25 engines will operate for up to 8.5 minutes burning 700,000 gallons of propellants generating 1.6 million pounds of thrust, the amount of thrust the engines produce at sea level on the launch pad at liftoff.

NASA's Space Launch System (SLS), Core Stage GREEN RUN Test - powered by Aerojet Rocketdyne

AEROJET
ROCKETDYNE

ROCKET.COM/GREENRUN