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

SPACE LAUNCH SYSTEM

Future Opportunities for CubeSats on NASA's Space Launch System

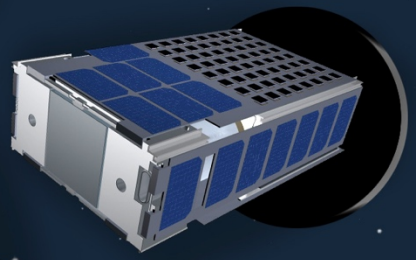
David Hitt

August 7, 2018

EXPLORATION MISSION-1: LAUNCHING SCIENCE & TECHNOLOGY SECONDARY PAYLOADS

13 CUBESAT EXPLORERS

GOING TO DEEP SPACE WHERE FEW CUBESATS HAVE EVER GONE BEFORE.



1

PRIMARY MISSION

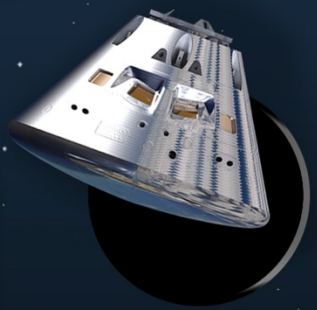
TESTING SLS AND ORION

SPACE LAUNCH SYSTEM (SLS)

LIFTS MORE THAN ANY EXISTING LAUNCH VEHICLE

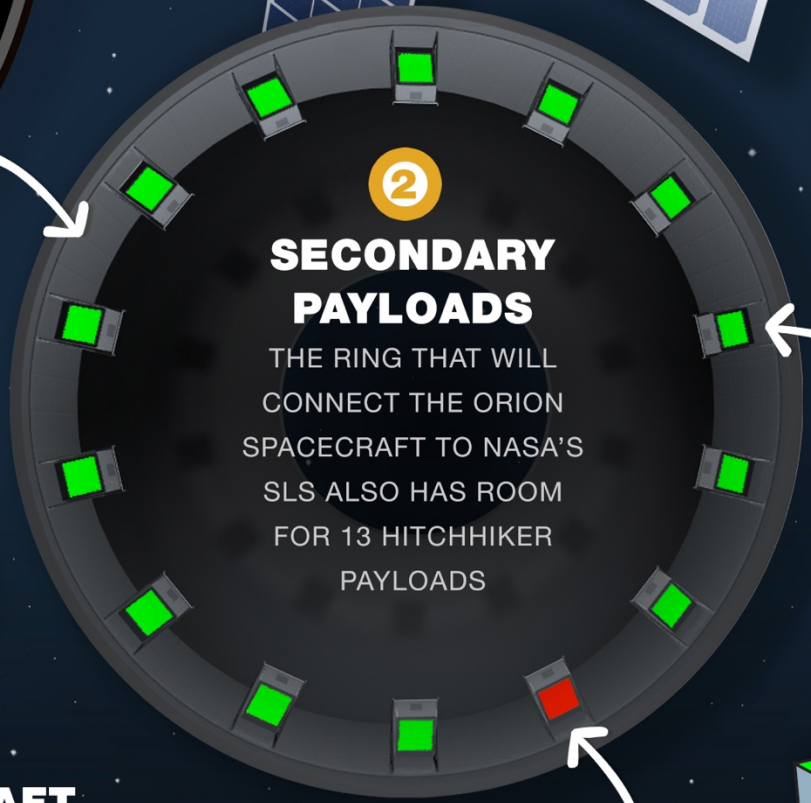
ORION STAGE ADAPTER

SUPPORTS BOTH PRIMARY MISSION AND SECONDARY PAYLOADS



ORION SPACECRAFT

TRAVELING THOUSANDS OF MILES BEYOND THE MOON, WHERE NO CREW VEHICLE HAS GONE BEFORE



2

SECONDARY PAYLOADS

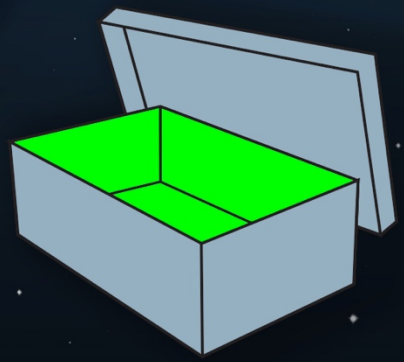
THE RING THAT WILL CONNECT THE ORION SPACECRAFT TO NASA'S SLS ALSO HAS ROOM FOR 13 HITCHHIKER PAYLOADS

AVIONICS

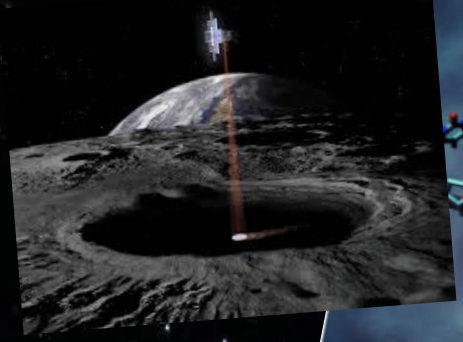
(SELF-CONTAINED AND INDEPENDENT FROM THE PRIMARY MISSION) SEND CUBESATS ON THEIR WAY

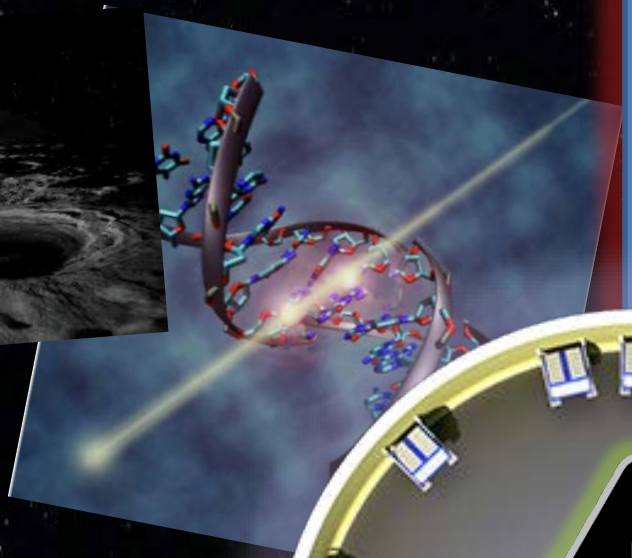
SHOEBOX SIZE

PAYLOADS EXPAND OUR KNOWLEDGE FOR THE JOURNEY TO MARS



#RIDEONSLS





JAXA

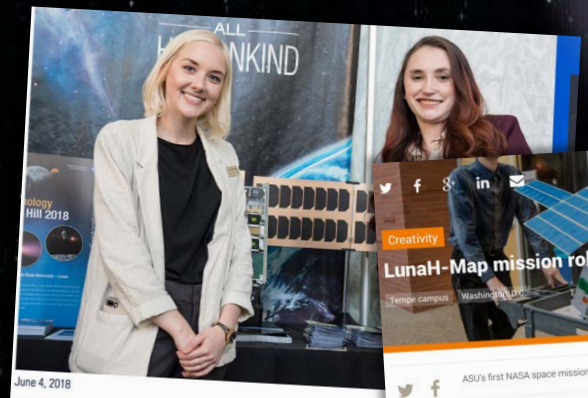
agenzia spaziale italiana

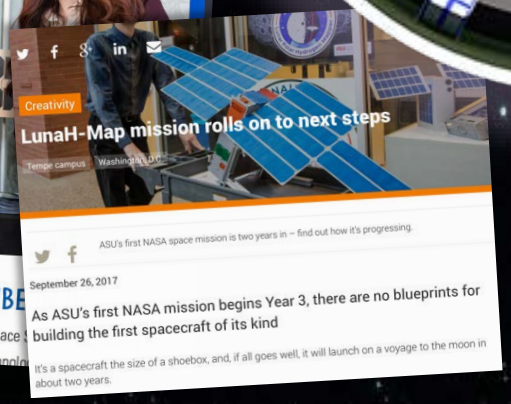
SCIENCE

COLLABORATION

EDUCATION

TECHNOLOGY





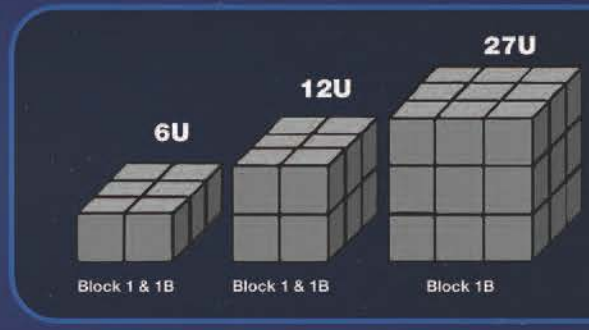
SPACE LAUNCH SYSTEM

SECONDARY PAYLOAD (SPL) ACCOMMODATIONS

National Aeronautics and Space Administration

NASA

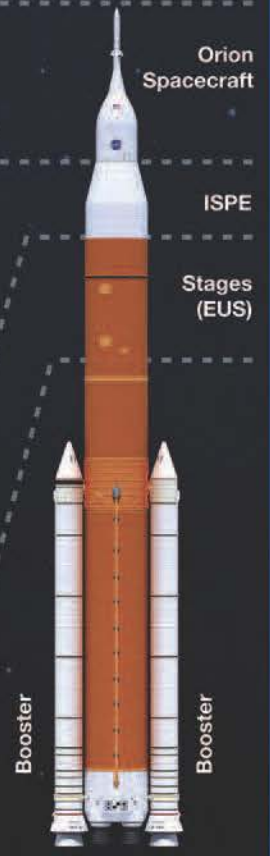
SLS Block 1 Elements
(Crew Configuration)



Secondary Payload
Up to 17 places ≤ 12U

Secondary Payload
Up to 21 places ≤ 27U

SLS Block 1B Elements
(Crew Configuration)



www.nasa.gov

DEEP-SPACE EXPLORATION AND CUBESATS