

JPSS-2 begins launch processing

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Credit: USSF 30th Space Wing/Steven Gerl

Preparations are looking up for the launch of the National Oceanic and Atmospheric Administration's (NOAA) Joint Polar Satellite System-2 (JPSS-2) satellite. On behalf of NOAA, NASA develops and builds the instruments, spacecraft, and ground system, and launches the satellites, which NOAA operates. Technicians recently lifted the satellite to a stand inside the Astrotech Space Operations facility at Vandenberg Space Force Base in California. On board are four advanced instruments that will measure weather and climate conditions on Earth. Launch is targeted for Nov. 1 atop a United Launch Alliance (ULA) Atlas V 401 rocket from Space Launch Complex-3.

Launching with JPSS-2 is a secondary payload, known as Low-Earth Orbit Flight Test of an Inflatable Decelerator, or LOFTID. LOFTID will demonstrate inflatable heat shield technology for atmospheric entry and re-entry. This technology could enable a variety of proposed NASA missions to destinations such as Mars, Venus, and Titan, as well as returning heavier payloads from low-Earth orbit.

Before launch, technicians will stack the JPSS-2 satellite onto a payload adapter canister containing the LOFTID reentry vehicle. Once complete, the assembly will be encapsulated in a protective payload fairing. After encapsulation, the team will transport the encapsulated spacecraft to Space Launch Complex-3 where a crane will hoist it up for attachment to the second stage of the Atlas V 401 rocket.

JPSS-2 is the third satellite in the Joint Polar Satellite System series. JPSS-2, which will be renamed NOAA-21 after reaching orbit, will join

a constellation of JPSS satellites that orbit from the North to the South pole, circling Earth 14 times a day and providing a full view of the entire globe twice daily. The NOAA/NASA Suomi National Polar-orbiting Partnership (Suomi NPP) satellite, and NOAA-20, previously known as JPSS-1, are both already in orbit.

NASA's Launch Services Program, based at the agency's Kennedy Space Center in Florida, is managing the [launch service](#). Live coverage of the launch will air on NASA Television, the NASA app, and agency's website.

Provided by NASA's Goddard Space Flight Center

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