

First-ever SpaceX payload delivery set for launch

November 25 2013, by Ken Kremer



Falcon 9 during processing at Cape Canaveral Pad 40 ahead of launch scheduled for Nov. 25, 2013. Credit: SpaceX

The maiden flight of the next-generation commercial SpaceX Falcon 9 rocket from the firm's Cape Canaveral launch facility is set to soar to space on Monday afternoon, Nov. 25 on a ground-breaking mission that



will be the company's most difficult ever.

The upgraded Falcon 9 booster is slated to haul the commercial SES-8 telecommunications satellite for SpaceX's first-ever payload delivery to a Geostationary Transfer Orbit (GTO).

Liftoff is scheduled for 5:37 p.m. EST from SpaceX's Space Launch Complex 40 pad at Cape Canaveral Air Force Station.

Pad 40 is the same location as all prior SpaceX launches from the Florida Space Coast.

SpaceX CEO Elon Musk tweeted that this <u>launch</u> of the Falcon 9 will be the "toughest mission to date."

This mighty new version of the Falcon 9 dubbed v1.1 is powered by a cluster of nine of SpaceX's new Merlin 1D engines that are about 50% more powerful compared to the standard Merlin 1C engines. Therefore it can boost a much heavier cargo load to the ISS, low Earth orbit and beyond.

The next-generation Falcon 9 is a monster. It's much taller than a standard Falcon 9 – some 22 stories tall vs. 13 stories.

In anticipation of Monday's planned liftoff, SpaceX engineers successful completed a wet dress rehearsal and engine hotfire test this past Thursday.





Credit: SpaceX

Spectators can view the launch from local public areas, beaches and roads – just as with any other liftoff. The launch window extends just over an hour until 6:43 p.m. EST. Weather outlook is 80% favorable at this time but deteriorates in case of a 1 day delay to Tuesday.

SpaceX is planning a live webcast of the launch with commentary from SpaceX corporate headquarters in Hawthorne, CA.

The broadcast will begin at approximately 5:00 p.m. EDT and include detailed discussions about the Falcon 9 rocket, launch and flight sequences as well as about the SES- 8 satellite.





Falcon 9 SpaceX CRS-2 launch on March 1, 2013 to the ISS from Cape Canaveral, Florida.- shot from the roof of the Vehicle Assembly Building. Credit: Ken Kremer

The webcast can be viewed at <u>spacex</u>.com/webcast" target="_blank">www.<u>spacex</u>.com/webcast .

The first launch of this next generation Falcon 9 v 1.1 rocket occurred on Sept 29, 2013 on a demonstration test flight from a SpaceX pad at Vandenberg AFB carrying a Canadian weather satellite to an elliptical earth orbit.

S-8 is a hybrid Ku- and Ka-band spacecraft that will provide communications coverage for the South Asia and Asia Pacific regions.



It was built by Orbital Sciences spacecraft, weighs 3,138 kg (6,918 lbs) and will be lofted to a 295 x 80,000 km geosynchronous transfer orbit inclined 20.75 degrees.

Source: Universe Today

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