

Blue Origin building orbital launch vehicle facility

June 30 2016, by Nancy Atkinson



Artist concept of Blue Origin's 750,000 square foot spacecraft factory. Credit: Blue Origin

Blue Origin and its founder Jeff Bezos do a little one-upmanship on the old saying, "go big or go home." With the groundbreaking of their new orbital vehicle manufacturing complex, they are going big AND going home. The new facility will be located near Kennedy Space Center in

Florida and will house Blue Origin's orbital launch vehicle, which Bezos has sometimes referred to as "Very Big Brother." The new facility has a planned grand opening of December 2017.

Blue Origin announced the plans for the complex in September 2015, and bulldozers started clearing ground this week (June 28, 2016). The facility will be where Blue Origin manufactures, processes, integrates and tests its rockets.

"It's exciting to see the bulldozers in action," Bezos wrote in an email update. "We're clearing the way for the production of a reusable fleet of orbital vehicles that we will launch and land, again and again."

Bezos said the 750,000 square foot (70,000 sq. meter) building will be "custom-built from the ground up" and will enable "large scale friction stir welding and automated composite processing equipment," among other things.

The entire launch vehicle will be manufactured in this new facility except for the engines, the BE-4—which Blue Origin says will be flight qualified by 2017—and are currently produced in Blue Origin's Kent, Washington facility. But they plan to build a new, larger engine production facility to accommodate their projected need for higher production rates, and they will conduct a site selection process for that facility later this year.



Site preparation for Blue Origin's new orbital vehicle manufacturing complex in Florida. Credit: Blue Origin

Another little one-upmanship: Blue Origin's new facility will best SpaceX's main factory, which is about 550,000 square feet (51,000 sq. meters). SpaceX's Hawthorne, California building was originally used by Northrup Aircraft to build 747 fuselages (although, SpaceX's total campus of buildings in Hawthorne is over 1.6 million square feet.)

Very Big Brother (VBB) will get an official name at some point, but it will be a vertical takeoff, vertical landing (VTVL) system, like Blue Origin's smaller suborbital New Shepard rocket. The plan is to have VBB's lower stage be reusable and the upper stage be expendable.

For launches, Blue Origin will share Cape Canaveral Air Force Station's Space Launch Complex 36 with Google Lunar X PRIZE team Moon

Express (MoonEx).



Another artist concept of Blue Origin's orbital vehicle manufacturing complex in Florida. Credit: Blue Origin

Source: [Universe Today](#)

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