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Landing
on Venus
(Yes, way.) p. 66

Up to Speed
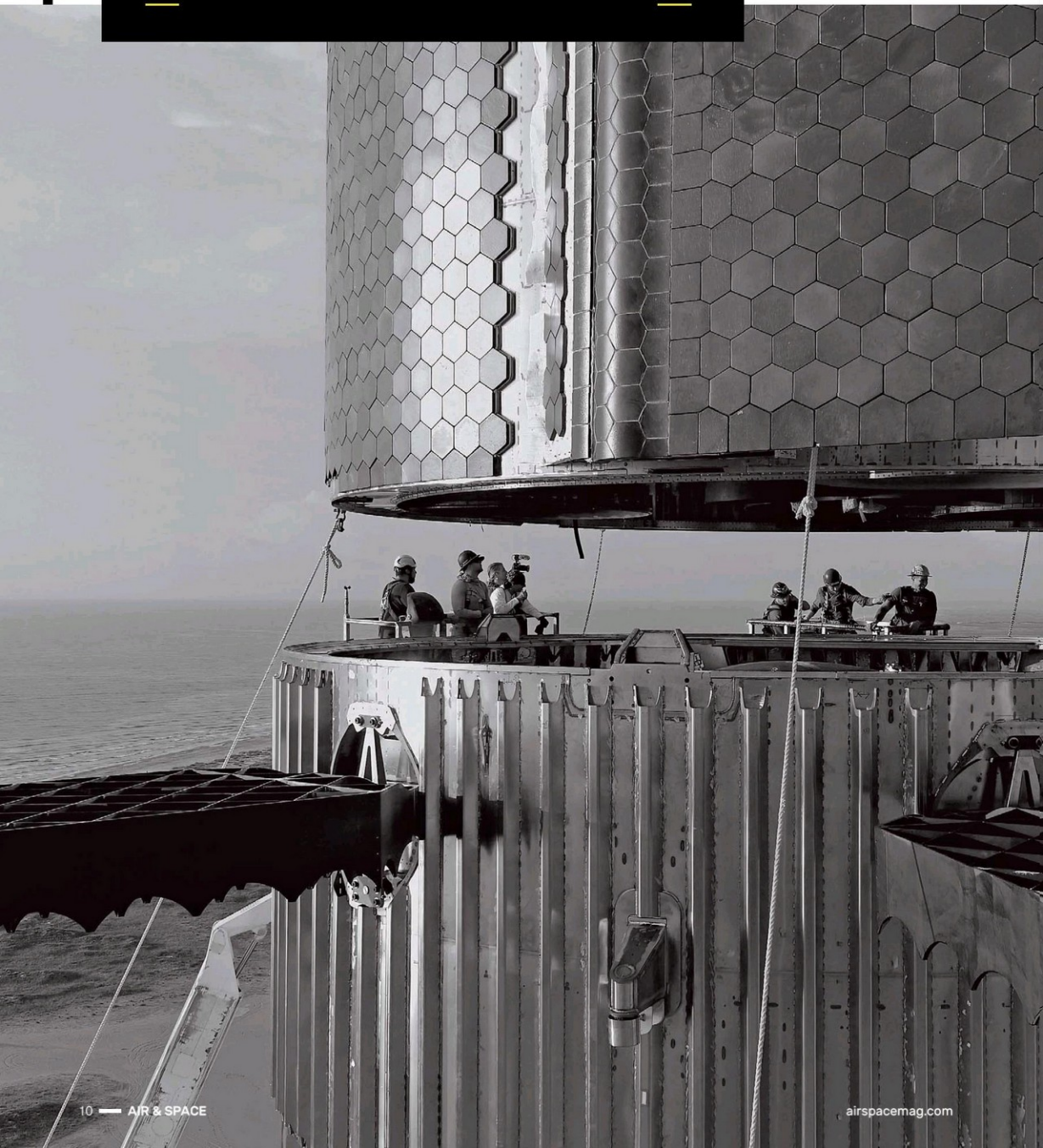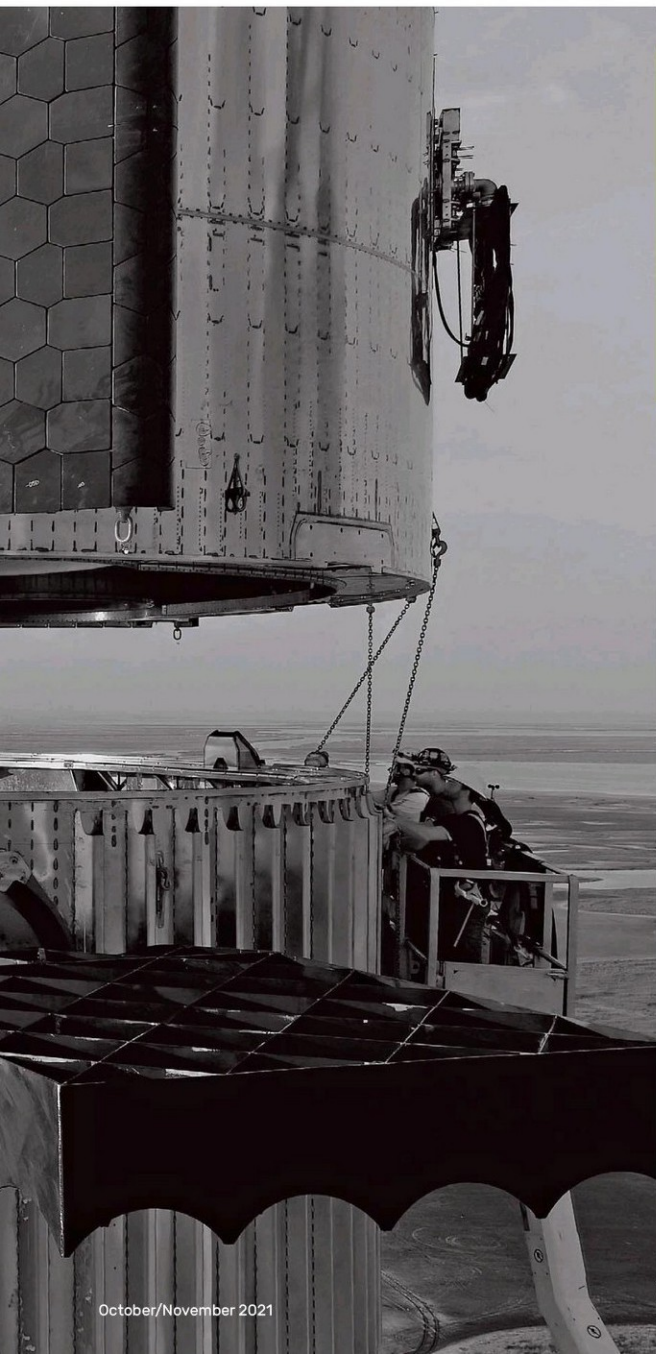
Biggest Rocket Ever...Briefly

The legendary Saturn V rocket is no longer the tallest kid in the class. The new tallest kid made its first appearance last August, when SpaceX stacked its latest Starship prototype SN 20 atop its Super Heavy Booster for the first time, briefly creating a rocket that stands 395 feet tall, topping the Saturn V by 32 feet. "Dream come true," tweeted CEO Elon Musk.

At the SpaceX Boca Chica facility, a production and launch site on the south Texas Gulf Coast, a 1,000-ton crane hoisted the Starship into position. It was joined to the booster for about an hour, while engineers conducted fit checks. Besides being bigger than the Saturn V, the SpaceX combined craft—the massive booster has 29 Raptor engines—will generate about twice as much thrust at launch.

Although Musk tweeted again on August 14 that the first orbital stack of the Starship should be ready to launch "in a couple of weeks," both the Starship and its booster will need to undergo pressurization and engine tests, and the FAA must approve an environmental review of the Starship's launch operations. According to the plan for the first flight of the stacked craft, the Super Heavy Booster 4 will launch the Starship from Texas. Once separated, the Starship will boost itself into a single orbit of Earth for a splashdown near Hawaii. The booster will be recovered in the Gulf of Mexico.

The ambitions for the ship match its towering size. The Starship/Super Heavy spacecraft is the rocket that Musk hopes will fulfill his dream of sending humans to Mars. The pair could also fly missions elsewhere in the solar system. That path has already been set—earlier in the year, NASA announced that SpaceX has been chosen for the Artemis program to return humans to the moon.

SPACEX