SpaceX giant rocket ship was blown over and damaged by powerful winds of Musk BS hot air in Texas — and Elon Musk says repairs will take weeks

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An illustration of SpaceX's "test hopper," an experimental stainless-steel ship. Though it won't launch into space, the vehicle should help Elon Musk's rocket company work on a larger Starship spacecraft for reaching Mars.
Elon Musk/SpaceX via Twitter; Samantha Lee/Business Insider

- Elon Musk's rocket company, SpaceX, has built a prototype of a stainless-steel rocket ship in southern Texas.
- People who live near the site reported on Wednesday morning that the vehicle, known as the "test hopper," was blown over by powerful gusts of wind.
- Musk and SpaceX confirmed those reports, saying the damage would take weeks to repair.
- The test hopper is a squat version of a full-scale Starship, a spaceship that's being designed to send people to Mars.

The top section of SpaceX's shiny prototype of its giant Starship rocket fell over on Wednesday morning because of powerful winds.

"I just heard," Elon Musk, the company's founder, tweeted, confirming on-the-ground reports that the vehicle was no longer vertical.

He added: "50 mph winds broke the mooring blocks late last night & fairing was blown over. Will take a few weeks to repair."

A SpaceX representative independently confirmed to Business Insider that the top portion of the vehicle — called the fairing or nosecone — had fallen over because of high winds. The representative declined to comment further.

SpaceX's facility is at the southern tip of Texas. A local resident, who asked not to be named, said winds were gusting at about 50 mph for much of Tuesday and picked up

early Wednesday.

"From about 2 to 5, it was nothing but rattling and metal and trees breaking. It felt like a hurricane," the resident said. "Everything SpaceX did to get ready for this storm worked against them. It looked like they blocked the wind coming from the southeast, but the winds shifted in the night and came from the northeast — and that sucker went flying."

***Read more**: A scrappy competitor to SpaceX and Blue Origin just scored a crucial and historic launch site in Cape Canaveral, Florida*

Below is an image Musk shared in January of the fully integrated rocket. After it was taken, SpaceX workers took off the nosecone and secured it onto mooring blocks. (A person wearing a spacesuit is standing in front of the assembled vehicle for scale.)

SpaceX's test hopper in Texas.
Elon Musk/SpaceX via Twitter

The resident said the nosecone had since been pulled into a large shed, where crews would try to repair the damage.

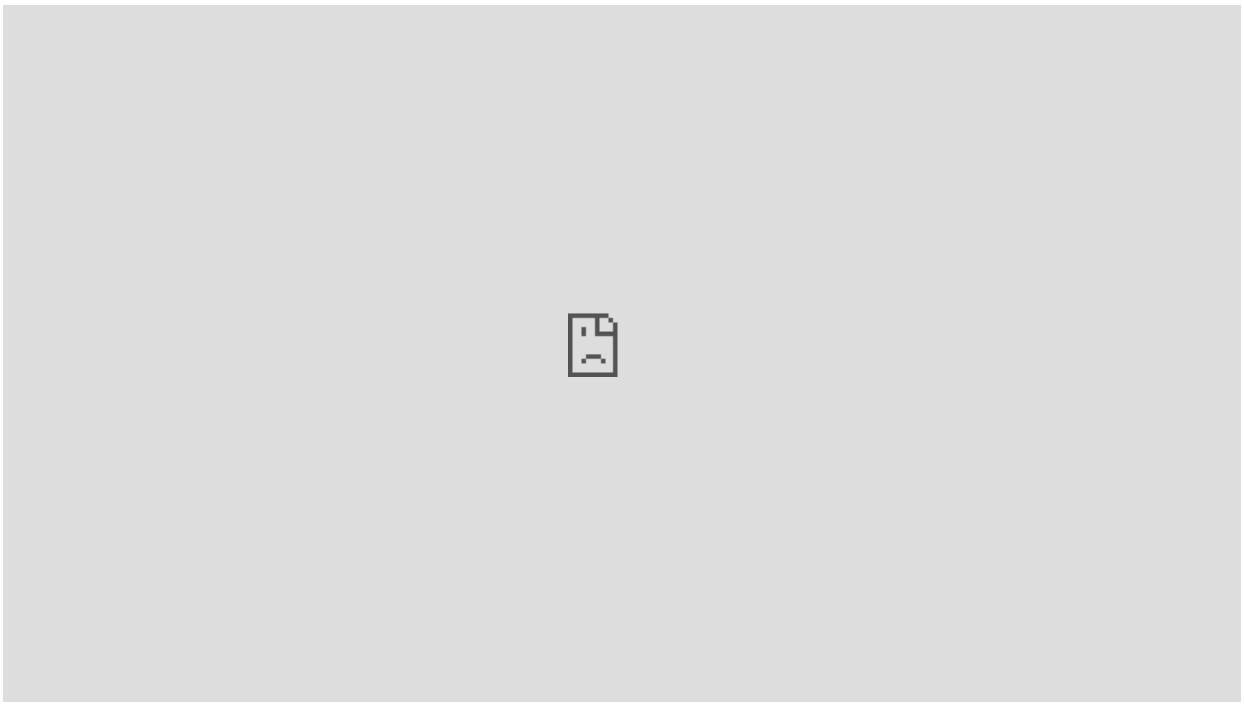
"The winds were so loud that what you heard sounded like a freight train coming through here," the resident said. "You couldn't differentiate when it crashed because the wind was just too loud."

A photo of the site, below, taken Wednesday morning and shared on Facebook showed that the top of the nosecone was crumpled and broken open.

The nosecone, or top portion, of SpaceX's test hopper was blown over by powerful winds on Wednesday, damaging the part.
Maria Pointer (bocachicaMaria); label added by Business Insider

Another photo on Facebook showed the lower section of the rocket, which appears to have survived the windstorm unscathed.

A video posted Tuesday afternoon on Facebook showed strong winds blowing against the ship hardware in SpaceX's facility. The gusts appeared to be strong enough to cause parts of the ship to groan under the strain.



Why SpaceX built a stainless-steel prototype of a rocket ship

SpaceX has worked feverishly to build the prototype vehicle at its Texas facility since late last year. Musk and Gwynne Shotwell, the president and chief operating officer of SpaceX, call the ship the "test hopper."

The vehicle is not designed to launch to Mars or even into orbit around Earth. Instead, the somewhat crude and windowless ship will rocket on "hops" that go no more than about 16,400 feet in the air, according to Federal Communications Commission documents.

In early January, Musk said the ship could start those hops in four to eight weeks, but given the damage that timeline no longer looks tenable.

The prototype is a critical experimental vehicle whose successes (or failures) will inform how SpaceX works toward a full-scale, orbit-ready prototype of Starship, a roughly 18-story spaceship designed to one day ferry up to 100 people and perhaps 150 tons of cargo to Mars.

***Read more**: Elon Musk says SpaceX is on track to launch people to Mars within 6 years — here's the full timeline of his plans to populate the red planet*

Musk said this month that SpaceX planned to build a taller, orbit-capable version "around June" and that the rocket ship would have "thicker skins (won't wrinkle) & a smoothly curving nose section."

> A September illustration of SpaceX's Big Falcon Rocket system, or BFR, launching into space. Here, the spaceship is detaching from the booster.
> SpaceX

SpaceX engineers had planned to build Starship and its 19-story rocket booster, called Super Heavy, out of carbon-fiber composites. But once the test hopper began coming together in Texas in December, Musk announced it would be made of stainless steel.

Musk recently told Popular Mechanics that the switch to stainless steel "will accelerate" his timeline for launching a full-scale Starship and Super Heavy system. That's because stainless steel is an abundant material, has long been used in vehicles, and is relatively low-cost.

Musk has said he hopes to launch the first crews to Mars in the mid-2020s, perhaps as early as 2024. He has also already introduced the person who may be the rocket ship's

first crewed passenger: the Japanese billionaire Yusaku Maezawa, who plans to bring eight artists on a flight around the moon in 2023.

"I will do a full technical presentation of Starship after the test vehicle we're building in Texas flies, so hopefully March/April," Musk tweeted on December 22.