

Hyperloop One team celebrates Nevada desert track test

July 13 2017, by Nancy Owano



Credit: Hyperloop One

(Tech Xplore)—Hyperloop One has accomplished a full systems test and it has reported that the test was successful.

The transportation wonder "theoretically can send aluminum pods filled

with passengers or cargo through a nearly airless tube at speeds of up to 750 mph," as noted in *The Verge* on Wednesday.

What do they mean by "full" test? They tested the system's components[—including the motor, vehicle suspension, [magnetic levitation](#), electromagnetic braking, and vacuum pumping system. They need to know that the components operate successfully as a single, integrated unit in a vacuum.

The significance of the test was that it proves Hyperloop is real, said Hyperloop One. What is more, "By achieving full vacuum, we essentially invented our own sky in a tube, as if you're flying at 200,000 feet in the air," said Shervin Pishevar, co-founder and executive chairman of Hyperloop One.

The vision is that people will be able to move between cities "as if cities themselves are metro stops," as said in the news release.

The video released which shows the test preparation session has its own drama, and a viewer can pick up the tension knowing all the time spent in thinking and engineering Hyperloop One's [test flight](#).

"Power electronics, confirm ready for test...controls,, confirm ready for test...and Test Director, confirm ready for test..."

Work of the group including engineers, fabricators, and welders, helped to make the test successful. Congratulatory remarks included a comment that, step by step, they were getting closer to the real thing.

The Verge said Pishevar described the test as the company's "Kitty Hawk moment."

The test was in a "vacuum environment," conducted on May 12, at their

test track in the Nevada Desert.

So what actually happened in the test? Their news release described the event.

"The vehicle coasted above the first portion of the track for 5.3 seconds using magnetic levitation and [reached](#) nearly 2Gs of acceleration, while achieving the Phase 1 target speed of 70mph. "

Future testing will show faster speeds. Reports said the next campaign will target 250 mph.

In addition to announcing the test, Hyperloop One unveiled the prototype of its pod.

The Verge: "The aerodynamic pod is 28 feet long and constructed of structural aluminum and carbon fiber. Using electromagnetic propulsion and mag-lev technology, it's designed to carry both [cargo](#) and human passengers at near supersonic speeds, Hyperloop One says."

The news release said, "Hyperloop One's Pod is the only vehicle in the world that, with the company's proprietary linear electric motor, achieves autonomous high-speed propulsion and levitation in a controlled low-pressure environment."

Challenges ahead? Of course. Josh Giegel and Shervin Pishevar, co-founders, Hyperloop One: "Getting here wasn't easy. The road ahead won't be any easier. But soon we will all be going farther and faster together."

In a Hyperloop One FAQ, it was said that, "Once we successfully validate our technology in a series of successful [test](#) runs in 2017, we will progress toward building proof of operations facilities around the

[world](#) to obtain international safety and certification standards. Our goal is to have three systems in service by 2021."

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