

Going to Mars: The New Space Race

News correspondent: Thomas

With the recent advance in powerful reusable rocket technology, many companies are hoping to launch people into outer space for the first time in over 45 years, however this time the new race to the stars is powered mainly by private companies, and not governments.

SpaceX announced its plans to go to Mars in a 2017 conference, in which Elon Musk (the founder of Tesla and SpaceX) said:

"You want to wake up in the morning and think the future is going to be great – and that's what being a spacefaring civilisation is all about. It's about believing in the future and thinking the future will be better than the past. And I can't think of anything more exciting than going out there and being amongst the stars."

Elon Musk CEO and lead designer of SpaceX

They plan to use a 2 stage rocket, called the BFR (Big F***ing Rocket) to get a spacecraft into orbit. The BFR will return to earth, where it will have a fuel tank fitted, and then lift off and refuel the spaceship in space, which will then blast off to Mars.

This entire system relies on reusable rockets, which both makes it cheaper and faster. They plan to launch the first manned mission in 2026, although Musk is notorious for his incorrect deadlines.



More info at:

https://www.youtube.com/watch?v=0qo78R_yYFA

SpaceX is not the only private company attempting get men to the red planet, however. Blue origin is also attempting to reach Mars by the mid 2020's.

The name of the rocket is New Glenn, which is also an orbital rocket. 4 BE-4 engines, in stark contrast to the BFR's 42 smaller engines. The BE-4 went in for recent testing, and was highly successful, and has gained a name as one of the most powerful rocket engines ever made.

NASA, despite recent budget crunches is also developing the SLS (Space Launch System) for future Mars missions, and plan to launch the first rockets to Mars in the next decade.

The SLS will have an Orion capsule on the top for manned missions, and a large fairing for satellite launches. They planned to go to Mars by 1982, but loss of political interest in space led to budget cuts, which led to the adoption of the space shuttle system. These rockets were expensive to fix after a mission, and not designed to go out of low-earth orbit.

After the Columbia and Challenger disasters, the program was dropped in 2002, and now NASA can finally start working on Mars and ISS missions full time.

Many of these companies also intend to use these spacecraft for other missions too, such as the SLS, which will be NASA's multipurpose rocket, from satellite launchings to manned missions.

The BFR is being considered to be used in moon missions.

New Glenn is Blue Origins multipurpose rocket, alongside its sibling – New Shepard

The New Space Race is begun, fuelled by private sectors, and more powerful than ever before.