

Thaxted Astronomical Society

News

Features

NF0085

SpaceX To Build Starlink Constellation Around Mars

<https://www.dailymail.co.uk/sciencetech/article-8874025/SpaceX-aims-build-Starlink-mega-constellation-MARS.html>

SpaceX aims to build a Starlink mega constellation around MARS to provide internet to the one million people the firm will send to colonize the Red Planet

Daily Mail 26th Nov 2020 >

- **SpaceX revealed plans to bring its Starlink satellites to Mars**
- **The firm wants to provide internet to those who colonize the Red Planet**
- **The satellites would act as a communication bridge between Mars and Earth**
- **CEO Elon Musk has plans to send one million people to Mars by 2025**

Elon Musk has an ambitious plan to build a city of one million people on Mars and believes SpaceX's Starlink satellites will play a key role in the mission.

The company's president and COO Gwynne Shotwell recently shared details with TIME magazine about bringing this technology to the Red Planet.

'Once we take people to Mars, they are going to need a capability to communicate,' says Shotwell.

'In fact, I think it will be even more critical to have a constellation like Starlink around Mars.'

Not only will the satellites beam internet to those living on Mars, but the team will act as a bridge for the planet to communicate with Earth.

<https://www.dailymail.co.uk/sciencetech/article-8874025/SpaceX-aims-build-Starlink-mega-constellation-MARS.html>

SpaceX aims to build a Starlink mega constellation around MARS to provide internet to the one million people the firm will send to colonize the Red Planet

Daily Mail 26th Nov 2020 >

Although SpaceX has its sights set on Mars, Shotwell said they are not giving up on Earth – it is to give ‘humanity another shot in case there were to be some horrible event’ on our planet.

‘Elon founded this company with the entire purpose of building a space transportation capability that would allow humans to move to other planets,’ Shotwell says in the interview.

‘I remember when I was interviewing with Elon in 2002 and he had such an ambitious goal, it sounded absolutely insane at the time.’

Now almost 20 years later, it doesn’t actually sound that insane. Well at least not to the insiders.’

Musk has had his heart set on colonizing Mars for many years and is not shy about how he plans to make it happen.

This past January, he was aiming to put a million people on the Red Planet by 2050. He planned for three flights a day - or 1,000 flights a year - with 100 people on each one.

And in 2017, the tech tycoon had the idea to send two cargo ships to Mars in 2022, followed by four other vessels - two with cargo and two with human settlers in 2024.

<https://www.dailymail.co.uk/sciencetech/article-8874025/SpaceX-aims-build-Starlink-mega-constellation-MARS.html>

SpaceX aims to build a Starlink mega constellation around MARS to provide internet to the one million people the firm will send to colonize the Red Planet

Daily Mail 26th Nov 2020 >

'I want you to understand that we are not giving up on Earth when we talk about building capability to move humanity to other planets,' Shotwell explains in the interview.

'It's not giving up on Earth, it's actually just giving humanity another shot in case there were to be some horrible event.'

Along with Starlink, SpaceX's Starship rocket is also a key player in humans becoming an inter-planetary species.

Musk shared the craft's progress during the virtual Humans to Mars Summit last month, saying the rocket 'is making progresses,' but also raised concerns about building a base on the planet.

Musk suggested constructing a self-sustaining city will be 'difficult' and there will be a number of dangers settlers may face while developing the galactic civilization.

'I want to emphasize, this is a very hard and dangerous and difficult thing,' Musk said.

'Not for the faint of heart. Good chance you'll die. And it's going to be tough, tough going, but it'll be pretty glorious if it works out.'

<https://www.dailymail.co.uk/sciencetech/article-8874025/SpaceX-aims-build-Starlink-mega-constellation-MARS.html>

SpaceX aims to build a Starlink mega constellation around MARS to provide internet to the one million people the firm will send to colonize the Red Planet

Daily Mail 26th Nov 2020 >

Although Musk has painted a picture of humans on Mars, he has stated in the past that he himself may never make it due to SpaceX's lack of progress.

'We've got to improve our rate of innovation or, based on past trends, I am definitely going to be dead before Mars,' Musk said during a discussion in March.

<https://www.dailymail.co.uk/sciencetech/article-8874025/SpaceX-aims-build-Starlink-mega-constellation-MARS.html>

SpaceX aims to build a Starlink mega constellation around MARS to provide internet to the one million people the firm will send to colonize the Red Planet

Daily Mail 26th Nov 2020 >

ELON MUSK'S SPACEX SET TO BRING BROADBAND INTERNET TO THE WORLD WITH ITS STARLINK CONSTELLATION OF SATELLITES

Elon Musk's SpaceX has launched the fifth batch of its 'Starlink' space internet satellites - taking the total to 300.

They form a constellation of thousands of satellites, designed to provide low-cost broadband internet service from low Earth orbit.

The constellation, informally known as Starlink, and under development at SpaceX's facilities in Redmond, Washington.

Its goal is to beam superfast internet into your home from space.

While satellite internet has been around for a while, it has suffered from high latency and unreliable connections.

Starlink is different. SpaceX says putting a 'constellation' of satellites in low earth orbit would provide high-speed, cable-like internet all over the world.

<https://www.dailymail.co.uk/sciencetech/article-8874025/SpaceX-aims-build-Starlink-mega-constellation-MARS.html>

SpaceX aims to build a Starlink mega constellation around MARS to provide internet to the one million people the firm will send to colonize the Red Planet

Daily Mail 26th Nov 2020 >

ELON MUSK'S SPACEX SET TO BRING BROADBAND INTERNET TO THE WORLD WITH ITS STARLINK CONSTELLATION OF SATELLITES

The billionaire's company wants to create the global system to help it generate more cash.

Musk has previously said the venture could give three billion people who currently do not have access to the internet a cheap way of getting online.

It could also help fund a future city on Mars.

Helping humanity reach the red planet is one of Musk's long-stated aims and was what inspired him to start SpaceX.

The company recently filed plans with the Federal Communications Commission (FCC) to launch 4,425 satellites into orbit above the Earth - three times as many that are currently in operation.

'Once fully deployed, the SpaceX system will pass over virtually all parts of the Earth's surface and therefore, in principle, have the ability to provide ubiquitous global service,' the firm said.

<https://www.dailymail.co.uk/sciencetech/article-8874025/SpaceX-aims-build-Starlink-mega-constellation-MARS.html>

SpaceX aims to build a Starlink mega constellation around MARS to provide internet to the one million people the firm will send to colonize the Red Planet

Daily Mail 26th Nov 2020 >

ELON MUSK'S SPACEX SET TO BRING BROADBAND INTERNET TO THE WORLD WITH ITS STARLINK CONSTELLATION OF SATELLITES

'Every point on the Earth's surface will see, at all times, a SpaceX satellite.'

The network will provide internet access to the US and the rest of the world, it added.

It is expected to take more than five years and \$9.8 billion (£7.1bn) of investment, although satellite internet has proved an expensive market in the past and analysts expect the final bill will be higher.

Musk compared the project to 'rebuilding the internet in space', as it would reduce reliance on the existing network of undersea fibre-optic cables which criss-cross the planet.

In the US, the FCC welcomed the scheme as a way to provide internet connections to more people.