

## Tech Talk Musk's Martian Musings © by John McCarthy



Hi, you're tuned to Englishwaves.fr and welcome once again to Tech Talk. Space has figured prominently in the news recently with the Hubble telescope providing further evidence which would indicate that Europa, one of Jupiter's moons, throws jets of water out into space, a potentially significant finding in the search for life beyond Earth and could indeed make it fit for human habitation in the future. However, closer to home, it really is Mars that has fired the human imagination for many years now, possibly because it's one of our closest and most familiar celestial neighbours. The Red Planet has inspired many works of fiction: H.G. Wells's 'War of the Worlds', and subsequent radio adaptation by Orson Welles, which was so realistic that reputedly thousands of New Yorkers fled their homes in fear and panic believing they were witnessing a real Martian invasion. Ray Bradbury and his 'Martian Chronicles', The Edgar Rice Burroughs creation 'John Carter of Mars' and of course more recently on the silver screen two versions of 'Total Recall', 'Mars Attacks', 'Mission to Mars' and Ridley Scott's 'The Martian'.

Mars has also been the subject of considerable scientific research with the Viking Programmes in the mid 70s, Mars Pathfinder and the Mars Exploration Rovers, which is an ongoing mission to study the planet's surface. In fact NASA hopes to send humans to the fourth planet in the 2030s. President Barack Obama himself bravely asserted in a speech on space exploration that: "By the mid-2030s, I believe we can send humans to orbit Mars and return them safely to Earth". Presidential aspirant Hillary Clinton also expressed her hope to advance America's ability to make human exploration of Mars a reality.

Elon Musk, billionaire visionary has now given further impetus to the idea of colonising Mars:

"What we really want to try to achieve here is to make Mars seem possible. There are really two fundamental paths: one path is we stay on Earth forever, and then there will be some eventual extinction event. The alternative is to become a space-faring civilisation and a multi-planet species ..."

Part of a very recent speech by Elon Musk, where he outlined his ambitious vision for manned mission to Mars, which he said could begin in 2022. His company SpaceX is developing an interplanetary rocket and capsule to transport up to one hundred passengers and cargo to Mars. The rocket would comprise a multi-stage launch and transport system with a reusable booster and "interplanetary module" on top of it. However, there remains the thorny problem of finance, as he estimated the current cost of sending someone to Mars at around \$10 billion, although there would be price improvements over time. Funding will come from launching satellites, working with NASA, and private sector funding. His goal is to get the trip equivalent to the cost of a medium house in the States – that's approximately \$250,000.

The SpaceX project has nonetheless come under considerable scrutiny after a series of rocket failures, including the recent much-publicised explosion on take-off in Florida that destroyed a €180,000 Facebook satellite. Many have also been venting their spleen on social media, saying that these vast sums of money would be better spent fighting poverty on Earth and generally cleaning up the planet, while others maintain that it's refreshing to see someone reignite the human exploratory drive, and that by putting so much pressure on themselves, Musk's team may well get something tangible from the venture. After all, UK politicians have been blowing hot air for years about the need for a third runway at Heathrow Airport, and by the time it's eventually finished Musk and his friends may well be relaxing and nonchalantly sipping sundowners on the crimson Martian surface.