Mars One

Dia 2

Mars One is a Netherlands based company, founded by Bas Landsdorp in 2011. The purpose of the Mars One project is to have a permanent colony of humans on Mars by the year of 2025. The mission is a one way ticket, for it is too expensive to create a spaceship that would be able to return home. Mars One raised a lot of attention the past years because of the many volunteers who had applied for the mission. After a while there were over 200.000 applicants! Out of those 200.000 people, only 660 were given an online interview to discuss their motives and enthusiasm to join the company. In that interview they were also informed about the risks, which I will discuss later on. Only fifty men and fifty women were allowed to the next stage: the intensive training.

Dia 3

This is Mars One’s schedule.

The first satellite is used to allow the humans on earth to contact the humans on Mars

The Rover will search for a perfect location for the humans to survive

In 2022 Cargos are going to be dropped which will contain their camps and seeds to plant in the ground.

In 2024 the first group of four humans are to depart from earth

In 2025 they will touch down on Mars

And then, every two years, Mars One will launch another group of 4 people to join the colony.

Two members will be trained in using and repairing all equipment they’ll use.

Two will receive extensive medical training in case of injuries or illnesses.

One will be trained in the geology of Mars, which means he or she is the person to know where to find water.

And the last member will be taught about Exobiology, in other words, the biology of alien life.

Dia 5

The astronauts will travel with the Mars One Spacecraft. The journey would take around 6 to 8 months. Inside, the astronauts will have up to less than 20 square meters of room each.

<https://www.youtube.com/watch?v=iu0gM0_vxIM>

Dia 6

The astronauts themselves are going to be a problem, because if one taps out before the flight, the entire training program has to start over.

Another obstacle and risk is *spaceflight osteopenia*. When you are in space, the lack of gravity will affect the bones of the body: each month, on average, 1% of the bone mass will decay over time. Increasing the vitamine D and calcium intake will result in less decay, but it will still be fatal after a while. Landing on Mars and living there would have some counter effect on the *spaceflight osteopenia*, but the main damage is beyond repair.

The next one is *radiation*. Here on earth our ozone layer blocks most of the suns radiation, but Mars’ ozone layer is way thinner than ours. Longer than 1 hour exposure will lead to extreme mutations or even death. They’ll try planting plants and seeds, for they will turn carbon dioxide into oxygen. And when oxygen reacts with the suns radiation, ozone shall be formed. And exposure to radiation won’t be a problem anymore.

The atmosphere contains 96% carbon dioxide, so space suits have to be worn at all times.

The temperatures will vary from plus 25 to minus 150 degrees Celsius. So they will have to generate huge amounts of energy for maintaining an optimum temperature for as well the humans as plants.

And even the biggest problem of all is the financial cost: around 6 billion dollars is required for this exploration. Even though Bas Landsdorp invested a great amount of his own money into this, the project needs much more. On their website you can even donate to the company right now.

Dia 7

It will inspire tons of people, even children of becoming an astronaut and engineers. As a famous scientist once said: “Engineers, we need more of them, not less!”

Scientists have calculated that by the year of 2050, there would be 9.6 billion people on earth. There is no way we can keep 9.6 billion people happy, nor



