Opinion
EarthBeat

SpaceX's mega rocket Starship lifts off from Starbase for a test flight, Sunday, Oct. 13, 2024, in Boca Chica, Texas. (AP/Eric Gay)

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The planet Mars has played an outsize role in human imagination since we first looked up at the stars. The fact that this red dot and other planets wandered the sky made them distinct from the stars that stayed in place. Its red glow made it stand out even among the other planets, leading the Sumerians and the Romans to name it after the god of war.

In the 19th century, telescopes were able to see what was thought to be channels on Mars, leading to speculation that there was intelligent life on the planet, which provided rich material for science fiction writers.

It was not until the late 20th century that dreams of space travel became a reality, as humans first orbited the Earth and then landed on the Moon. Going to Mars seemed like the next logical step, although many believed that first we should have a permanent base on the moon.

President Barack Obama decided to skip the moon base and go directly to Mars. During his first term in office, President Donald Trump reversed this decision and focused on the moon, a policy continued by President Joe Biden. Now Trump, under the influence of Elon Musk, has reversed government policy again to focus on Mars.

For generations raised on Star Trek and Star Wars, the dream of going into space is intoxicating. Proponents of the Mars mission argue that the technological spinoffs from NASA programs have been enormous. Satellites, for example, have brought us better communication and weather forecasts as well as GPS.

But attempting to go to Mars is on a whole other scale. It will be a black hole gobbling up all of NASA's budget as well as funding for other science projects. Say goodbye to money for future telescopes, for unmanned trips to other planets and even for processing the data that we are currently receiving from NASA telescopes and probes.

It is ironic that Musk, who wants to slash the federal budget and workforce, is going to financially benefit from the Mars mission, which conveniently is not on the

chopping block. This is a conflict of interest on a trillion-dollar scale. Since Musk was Trump's biggest donor, this looks like corruption on a level never seen in American politics.

According to a 2016 NASA report, the first human mission to Mars could cost half a trillion dollars. The cost of the life support for the Mars mission could be $2 billion or more.

Given how NASA has underestimated the cost of almost every project, I would not trust any estimate, especially one made in 2016.

The International Space Station cost about $150 billion, with an additional $3 billion a year to operate. Compared to Mars, ISS is in our backyard. The Mars mission is more likely to cost 10- or 20-times what ISS cost.

The engineering challenges are enormous if humans are to survive the trip, live on Mars and safely return to Earth. The physiological challenges are also daunting.

During the nine-month trip to Mars, the spacecraft will have to provide for all the crew's needs, including food, oxygen and protection from a hostile environment. Radiation in space is deadly. Without gravity, the body loses bone mass and muscle. On top of that is the psychological stress of living in a confined space. If anything goes wrong, there is no lifeboat or rescue possible.

Before the crew arrives, supplies, equipment and housing must be prepositioned on Mars in order to keep the crew alive. Landing supplies will be difficult since parachutes work poorly in the thin atmosphere. Nor is the atmosphere breathable, and radiation levels will eventually kill you.

Food and water will have to be shipped to Mars until we find and exploit water resources and grow food there. A single crop failure could wipe out the colony. Think Jamestown.

And then there is the return. We have not even been able to return rock samples from Mars, let alone a crew that would experience the same challenges they faced coming to the planet.

Elon Musk says we must go to Mars because if we destroy the Earth, humanity must have an alternative place to live.

In truth, Mars is currently in worse shape than any possible scenario for Earth short of an all-out nuclear war. Nor could a Mars colony survive into the foreseeable future without support from Earth.

It makes much more sense to spend money saving the Earth from climate change, ecological destruction and international conflicts than it does going to Mars.

Yes, we should go to Mars someday, but not in this century. Mars will still be there after we get our act together here on Earth.