

## **Astronomy Talk 24<sup>th</sup> April 2018**

### **A Life on Mars**

Bud Budzynski from the Crewkerne and District Astronomical Society (CADAS) gave this talk. He started with a bit of his own life story, and moved on to how people have historically been obsessed with Mars, including Schiaparelli, Lowell and Edgar Rice Burroughs.

The main theme of the talk was “why would we want to go there?” Bud commented that Venus is a lot nearer at 28 million miles, but its very hot atmosphere precludes it being of interest.

Mars is on average 48 million miles away, and using a Hohmann orbit, it will take around 8.5 months to get there. Bud talked about the problems of bone, muscle etc. wastage in zero gravity, and whether the astronauts would be able to do anything when they get to Mars. To provide food, air etc., will require about 60 tons of supplies per astronaut: half that if the water is recycled.

Then what? Do you land, orbit or land on Phobos? What do you do if the mission is aborted? You have to wait till Mars is in the right place so that when you return to Earth orbit, the Earth is at that location – the Hohmann orbit home again. That means some months of waiting.

The landing on Mars is spoken of as “7 minutes of terror”, and Bud went through the various stages of air braking, parachute and finally thrusters to land, in the same way as the Curiosity rover landed.

And when we get there, what do we see? We already know a lot about the surface of Mars with all the landers and orbiters, so we’re unlikely to get much benefit or learn much in Bud’s opinion.

At various points Bud asked the audience if they really wanted to go to Mars, given all these problems: they were roundly convinced not to do so!

However, crossing the Atlantic in a few hours would have seemed as outlandish to the Mayflower travellers as going to Mars does to us today. Perhaps the future will make it an everyday event after all.