

## Mars pioneers should stay there permanently, says Buzz Aldrin



**The first astronauts sent to Mars should be prepared to spend the rest of their lives there, in the same way that European pioneers headed to America knowing they would not return home, says moonwalker Buzz Aldrin.**

In an interview with AFP, the second man to set foot on the Moon said the Red Planet offered far greater potential than Earth's satellite as a place for habitation.

With what appears to be vast reserves of frozen water, Mars "is nearer terrestrial conditions, much better than the Moon and any other place," Aldrin, 78, said in a visit to Paris on Tuesday.

"It is easier to subsist, to provide the support needed for people there than on the Moon."

It took Aldrin, Neil Armstrong and Michael Collins eight days to go to the Moon -- 380,000 kilometres (238,000 miles) from Earth -- and return in July 1969, aboard Apollo 11.

Going to Mars, though, is a different prospect.

The distance between the Red Planet and Earth varies between 55 million (34 million miles) and more than 400 million kms (250 million miles).

Even at the most favourable planetary conjunction, this means a round trip to Mars would take around a year and a half.

"That's why you [should] send people there permanently," said Aldrin. "If we are not willing to do that, then I don't think we should just go once and

have the expense of doing that and then stop."

He asked: "If we are going to put a few people down there and ensure their appropriate safety, would you then go through all that trouble and then bring them back immediately, after a year, a year and a half?"

NASA and the European Space Agency (ESA) are sketching tentative plans for a manned mission to Mars that would take place around 2030 or 2040.

Based on experience culled from a planned return to the Moon, the mission would entail about half a dozen people, with life-support systems and other gear pre-positioned for them on the Martian surface.

Aldrin said the vanguard could be joined by others, making a colony around 30 people.

"They need to go there more with the psychology of knowing that you are a pioneering settler and you don't look forward to go back home again after a couple a years," he said.

"At age 30, they are given an opportunity. If they accept, then we train them, at age 35, we send them. At age 65, who knows what advances have taken place. They can retire there, or maybe we can bring them back."

Many scientists argue that sending humans to Mars is a waste of money compared with unmanned missions that deliver more science and point out the risks from psychological stress and damage to DNA from fast-moving sub-atomic particles called cosmic rays.

Aldrin, though, argued that given the time lag in communications between Earth and Mars, it made sense to have human explorers who could make decisions swiftly and on the spot.

And, he said, going to Mars provided a rationale for manned flights, which were designed to "do things that are innovative, new, pioneering."

On that score, Aldrin said the US space shuttle and the International Space Station (ISS) were a disappointment.

The shuttle "has not lived up to its expectations, neither has the space station," said Aldrin.

The United States will be without manned flight capability for around five years after the problem-plagued shuttle is withdrawn in 2010, while the ISS, still under construction, may cost as much as 100 billion dollars, according to some estimates.