

Man on Moon Shoots For Mars

Buzz Aldrin flying high 38 years after Apollo 11

By Michael G. Williams

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"It was so exciting in a way that you couldn't allow it to overcome you. You would just kind of go along with it as if it was normal, and you knew it wasn't, but you tried to remain as calm and cool as you could."



This is how Buzz Aldrin recalls his first step onto the moon's Sea of Tranquility—a step that millions of television viewers around the world watched on July 20, 1969.

And while he's best known for this mission, Aldrin's early career highlights also include logging 290 hours of flight time in space, serving on the Gemini 12 and Apollo 8 missions, and earning a Ph.D. in astronautics from MIT—all by the age of 39.

From that point, the natural inclination for most might have been to kick back and coast through life, but that's not Aldrin's style.

From the moon to Mars

The moon was just the beginning. Now, the 77-year-old Apollo 11 astronaut is shooting for Mars. "In 1985, I developed techniques for cycling orbits between the earth and the moon," Aldrin says. "I sort of put those on the backburner and concentrated on cycling orbits between earth and Mars."

These "Aldrin orbits," as they've come to be known, are elliptical orbits around the sun that swing inside earth's orbit and then out beyond Mars, essentially functioning as a celestial conveyer belt that could carry spacecrafts between the two planets. According to Aldrin, this type of technique would bring travel time to around five months each way.

To do this, Aldrin envisions spacecrafts called "cyclers," which would use minimal fuel for the several-million-mile journey, instead relying on the gravitation pull of the sun and the planets to move it along its path. Using these crafts, Aldrin and researchers at Purdue University in Indiana hope to jump-start the exploration and, ultimately, colonization of the Red Planet.

Potential survival

“The overall benefit of exploring Mars is the potential survival of the human race, having an alternate habitat in the event that something drastic and unforeseen occurs here on earth,” he explains. “This could be the sudden or gradual appearance of a large object on a collision course with earth, or it could be conflicts here among people that threaten the planet’s habitability.”

Aldrin also points out the similarities between earth and Mars that make the Red Planet a feasible destination for humans. A day on Mars is 24 hours and 30 minutes; it has subterranean water and ice at the poles; its gravitational pull is twice that of the moon’s; and it has an atmosphere similar to that on earth at 100,000 feet, making spacesuits simpler and less cumbersome.

Opening space to everyone

These are the benefits that could make establishing a permanent settlement on Mars a reality, but this is just one of many projects in which Aldrin stays immersed every day. For years, he’s developed plans for opening space to everyday people, serving as a leading proponent of adventure space travel.

Aldrin’s 1993 patent for a permanent space station, combined with the availability of NASA’s space shuttle after its retirement in 2010, may very well mean space hotels and habitats that will take tourism into the solar system. He founded the ShareSpace Foundation, in part, for this purpose.

In addition to tourism, Aldrin’s nonprofit organization works to bring together the great minds of space exploration to spread awareness and enthusiasm through media outlets like the Discovery and History Channels. This educational component also extends to motivating young people in grades K–12.

Overcoming addiction

But for Aldrin, these endeavors aren’t mere diversions. They keep him going, and have ever since his recovery from a bout with addiction. “I survived inherited depression and life-threatening alcoholism,” he says. “Now coming up on 29 years of sobriety, I have evolved with increasing confidence, stimulation of imagination, and innovation.”

Aldrin notes that, while he’s a different person now, he had to go through a period of growth and change during his 40s and 50s in response to a difficult transition from a structured military life to one in corporate America. To do this, he stuck with what he knew and focused on the future of space travel.

Pioneering efforts That seems to be the stamp that’s marked most of Aldrin’s career—a collection of pioneering efforts. He’s a dreamer who works to make realities.

In 1962, President John F. Kennedy asked, “But why, some say, the moon? Why choose this as our goal? And they may well ask, why climb the highest mountain? Why, 35 years ago, fly the Atlantic?”

Aldrin has spent a lifetime answering these questions, and he shows no signs of stopping.