

Report #7: November 2022

Presented by the Cosmic Citizens Committee of Now Creations

The intention of the CCC is to provide Now Creations members with education related to this important and ever-emerging topic. It is in that spirit that this information is provided.

The Artemis Program

On July 20, 1969, Neil Armstrong, a 38 year old U.S. Navy pilot-turned-astronaut from the great State of Ohio, stepped out of his Apollo 11 spaceship onto the surface of the Moon. His first words from the lunar surface are immortal: "That's one small step for (a) man, one giant leap for Mankind." After 21 hours and 36 minutes on the Moon, Armstrong and his fellow astronauts Edwin (Buzz) Aldrin and Michael Collins began their journey back to Earth, splashing into the Pacific ocean on July 24, 1969. Their achievement was the fulfillment of President John F. Kennedy's commitment in 1960, in which he said: "I believe this nation should commit itself to achieving the goal, before the decade is out, of landing a man on the Moon, and returning him safely to the Earth."

Over the next two and a half years, a total of twelve men would go to the Moon to explore, and return home safely. Eugene Cernan left the last human footprint on the Moon, December 14, 1972.

That was nearly 50 years ago. You may ask, "Why haven't we been back"? The answer is complex, but in a nutshell, it comes down to money and technology. The Apollo program cost Americans \$26 billion. Adjusted for inflation, this would be approximately \$257 billion today. And, the technology, while cutting edge at the time, was rudimentary compared to what is available today.

Now, governments working together, have decided it is in humanity's best interest to return to the moon, and this effort is named Artemis, after the Greek Goddess of the Hunt and, notably, sister of Apollo. Artemis is a collaboration between NASA, The European Space Agency, The Canadian Space Agency, and the Japanese Aerospace Exploration Agency, and the goal is to establish a long term human presence on the moon. The knowledge gained through this program will serve as a foundation for future efforts aimed at landing humans on Mars.

There are a number of key goals associated with the Artemis program along the way. One of the most significant and evolutionarily important of those goals is to land the first women and people of color on the Moon. As astounding as the Apollo missions were, they were composed entirely of white American men. This was completely consistent with the times, but times have most certainly changed. In NASA's words:

'With Artemis missions, NASA will land the first woman and first person of color on the Moon, using innovative technologies to explore more of the lunar surface than ever before. We will collaborate with commercial and international partners and establish the first long-term presence on the Moon. Then, we will use what we learn on and around the Moon to take the next giant leap: sending the first astronauts to Mars.'

After several scrubbed launch attempts, the uncrewed Artemis I lifted off on November 16, 2022, for a 25 day journey to lunar orbit, and return to Earth. Artemis I will have three mannequins aboard, equipped with hundreds of sensors to collect critical data for future human flights. Artemis II, a crewed flight, is scheduled to lift off on a similar "orbit only" mission in May 2024.

Artemis III, carrying a full crew of 4, is scheduled to land on the lunar surface in 2025, marking humanity's physical return to the Moon.

Of course, there is much to be done between now and 2025, and there will certainly be setbacks and delays. But, how magnificent it will be to hear and see humans on the Moon again, in furtherance of our roles as cosmic citizens!

It is well worth visiting NASA's webpage, dedicated to the Artemis program. There is a short video, and a great deal of fascinating information which goes far more in depth than this report allows.

The web address is: nasa.gov/artemis

Please feel free to contact John Shartle if you have questions about the Artemis program.