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American History: Man on the Moon

STEVE EMBER: Welcome to THE MAKING OF A NATION – American history in VOA Special English. I'm Steve Ember

(MUSIC AND SPUTNIK SOUNDS)

On a cold October day in nineteen fifty-seven, the Soviet Union launched a small satellite into orbit around the Earth. Radio Moscow made the announcement.

RADIO MOSCOW: "The first artificial Earth satellite in the world has now been created. This first satellite was today successfully launched in the USSR."

The world's first satellite was called Sputnik 1. Sputnik was an important propaganda victory for the Soviets in the Cold War with the United States.

Many people believed the nation that controlled space could win any war. And the Soviet Union had reached outer space first.

(MUSIC)

The technology that launched Sputnik probably began in the late nineteenth century. A Russian teacher of that time, Konstantin Tsiolkovsky, decided that a rocket engine could provide power for a space vehicle.

In the early nineteen hundreds, another teacher -- American Robert Goddard -- tested the idea. He experimented with small rockets to see how high and how far they could travel. In nineteen twenty-three, a Romanian student in Germany, Hermann Oberth, showed how a spaceship might be built and launched to other planets.

Rocket technology improved during World War Two. It was used to produce flying bombs.

(SOUND)

Thousands of people in Britain and Belgium died as a result of V-1 and V-2 rocket attacks. The rockets were launched from Germany. The larger V-2 rocket had the ability to hit the United States.

After the war, it became clear that the United States and the Soviet Union -- allies in wartime -- would become enemies in peacetime. So, both countries employed German scientists to help them win the race to space.

The Soviets took the first step by creating Sputnik.

(SOUND)

This satellite was about the size of a basketball. It got its power from a rocket. It orbited Earth for three months. Within weeks, the Soviets launched another satellite into Earth orbit, Sputnik 2. It was much bigger and heavier than Sputnik 1. It also carried a passenger: a dog named Laika.

(MUSIC)

The United States joined the space race about three months later. It launched a satellite from Cape Canaveral, in the southeastern state of Florida. This satellite was called Explorer 1. It weighed about fourteen kilograms. Explorer 1 went into a higher orbit than either Sputnik. And its instruments made an important discovery. They found an area of radiation about nine hundred sixty kilometers above Earth.

The next major space victory belonged to the Soviets. They sent the first man into space. In April, nineteen sixty-one, cosmonaut Yuri Gagarin was launched in the vehicle known as Vostok. He remained in space for less than two hours. He landed safely by parachute near a village in Russia.

Less than a month later, the United States sent its first astronaut into space. He was Alan Shepard. Shepard remained in space only about fifteen minutes. He did not go into Earth orbit. That flight came in February, nineteen sixty-two, with John Glenn.

By nineteen sixty-five, the United States and the Soviet Union were experimenting to see if humans could survive outside a spacecraft. In March, Russian cosmonaut Alexei Leonov became the first person to do so. A strong tether connected Leonov to the spacecraft. The tether gave him oxygen to breathe. And it permitted him to float freely at the other end.

After about ten minutes, Leonov had to return to the spacecraft. He said he regretted the decision. He was having such a good time!

A little more than two months later, an American would walk outside his spacecraft. Astronaut Edward White had a kind of rocket gun. This gave him

some control of his movements in space. Like Leonov, White was sorry when he had to return to his spacecraft.

Later that year, nineteen sixty-five, the United States tried to have one spacecraft get very close to another spacecraft while in orbit. This was the first step in getting spacecraft to link, or dock, together. Docking would be necessary to land men on the moon. The plan called for a Gemini spacecraft carrying two astronauts to get close to an unmanned satellite.

The attempt failed. The target satellite exploded as it separated from its main rocket. America's space agency decided to move forward. It would launch the next in its Gemini series. Then someone had an idea: why not launch both Geminis. The second one could chase the first one, instead of a satellite. Again, things did not go as planned.

It took two tries to launch the second Gemini. By that time, the first one had been in orbit about eleven days. Time was running out. The astronauts on the second Gemini moved their spacecraft into higher orbits. They got closer and closer to the Gemini ahead of them. They needed to get within six hundred meters to be considered successful.

After all the problems on the ground, the events in space went smoothly. The two spacecraft got within one-third of a meter of each other. The astronauts had made the operation seem easy.

In January, nineteen fifty-nine, the Soviets launched a series of unmanned Luna rockets. The third of these flights took pictures of the far side of the moon. This was the side no one on Earth had ever seen. The United States planned to explore the moon with its unmanned Ranger spacecraft.

There were a number of failures before Ranger 7 took pictures of the moon. These pictures were made from a distance. The world did not get pictures from the surface of the moon until the Soviet Luna 9 landed there in February, nineteen sixty-six.

For the next few years, both the United States and Soviet Union continued their exploration of the moon. Yet the question remained: which one would be the first to put a man there. In December, nineteen sixty-eight, the United States launched Apollo 8 with three astronauts. The flight proved that a spacecraft could orbit the moon and return to Earth safely.

The Apollo 9 spacecraft had two vehicles. One was the command module. It could orbit the moon, but could not land on it. The other was the Lunar module. On a flight to the moon, it would separate from the command module and land on the

moon's surface. Apollo 10 astronauts unlinked the Lunar module and flew it close to the moon's surface.

After those flights, everything was ready.

NASA ANNOUNCER: "Twelve, eleven, ten, nine … ignition sequence start … six, five, four, three, two, one, zero. All engines running. Lift-off. We have a lift-off. Thirty-two minutes past the hour. Lift-off of Apollo 11."

On July sixteenth, nineteen sixty-nine, three American astronauts lifted off in Apollo 11. On the twentieth, Neil Armstrong and Edwin Aldrin entered the Lunar module, called the Eagle. Michael Collins remained in the command module, the Columbia.

The two vehicles separated.

It was a dangerous time. The Eagle could crash. Or it could fall over after it landed. That meant the astronauts would die on the moon.

Millions of people watched on television or listened on the radio. They waited for Armstrong's message.

NEIL ARMSTRONG: "Houston, Tranquility Base here. The Eagle has landed."

"The Eagle has landed." Then they waited again. It took the astronauts more than three hours to complete the preparations needed to leave the Lunar module.

Finally, the door opened. Neil Armstrong climbed down first. He put one foot on the moon. Then, the other foot. And then came his words, from so far away:

NEIL ARMSTRONG: "That's one small step for man. One giant leap for mankind."

STEVE EMBER. That's one small step for man. One giant leap for mankind.

WALTER CRONKITE: "Man on the moon. Oh, boy! Whew, boy!"

RADIO COMMUNICATIONS: "OK, were gonna be busy for a minute."

CBS television newsman Walter Cronkite shared the excitement that he and so many people felt as man first walked on the surface of the moon.

Later, Cronkite would remember the historical significance of that moment in nineteen sixty-nine.

WALTER CRONKITE: "It's hard, I think, to imagine our emotions at the moment. It really was something that had to grip you. It was as if you could have stood at the dock and waved goodbye to Columbus. You knew darn good and well that this was the real history in the making."

Armstrong walked around. Soon, Aldrin joined him.

NASA RADIO COMMUNICATION: "They're setting up the flag now."

The two men placed an American flag on the surface of the moon. They also collected moon rocks and soil.

When it was time to leave, they returned to the Eagle and guided it safely away. They reunited with the Columbia and headed for home. The United States had won the race to the moon.

WALTER CRONKITE: "The thing that made this one particularly gripping was that sense of history -- that, if this was successful, this was a date that was going to be in all the history books, for time evermore. I think we sensed that at the time, sitting there at the Cape [Canaveral], watching that great beast get on its way, that this was it."

(MUSIC)

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