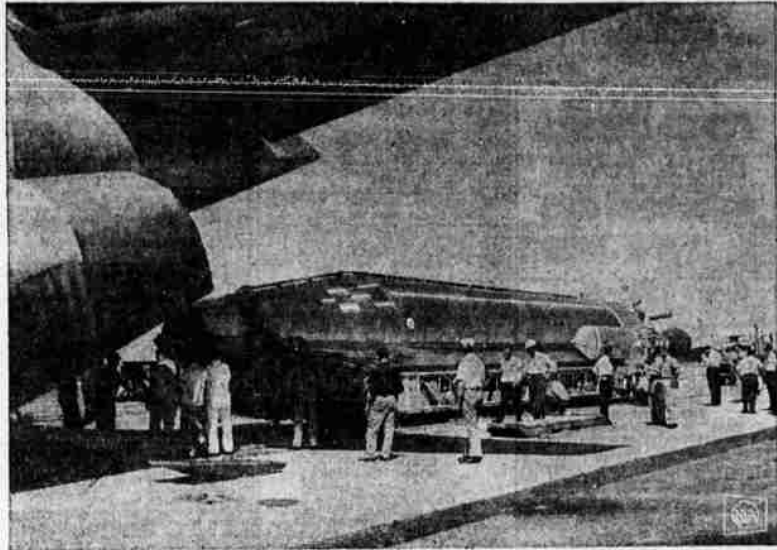
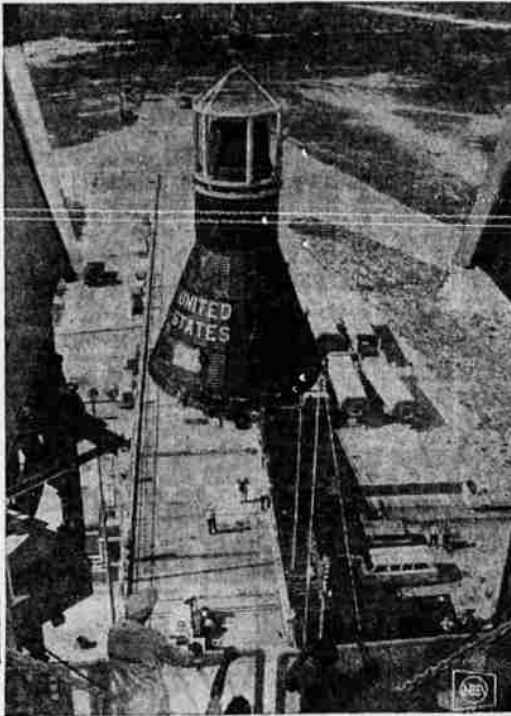


Gordon Cooper Soars Into Space In Mercury-Atlas Capsule

Rocket, Capsule and Man . . .



ATLAS ARRIVES—The 130D Atlas rocket destined to lift astronaut Leroy Gordon Cooper into space arrives by air at Cape Canaveral, Fla. The launch vehicle has one and one-half stages powered by five liquid-fueled engines: two booster engines, a sustainer engine that takes over after the boosters drop off and two small vernier engines for directional adjustments. Atlas has 300,000 parts (50,000 of them moving parts) and delivers 360,000 pounds of thrust, or seven million horsepower, the equivalent of 46,000 passenger cars. Cooper's flight will probably be the last manned mission for the Atlas because it is too puny to lift the two-man Gemini and three-man Apollo capsules.



CAPSULE CAPPING—Astronaut L. Gordon Cooper's Mercury capsule, "Faith 7," is carefully hoisted for placing atop its Atlas booster at Pad 14 at Cape Canaveral, Fla. When the escape rocket is attached to the nose of the 2,500-pound capsule, the entire Atlas-Mercury will tower 95 feet.



FLIGHT FEDORA—America's sixth Mercury astronaut L. Gordon Cooper tries on the helmet he will wear for 34 hours in space during his 22-orbit flight in the "Faith 7" capsule. Closing the helmet's visor actuates a valve to inflate an airtight seal around the visor.

Death Beckons Man In Tiny Space Ship

CAPE CANAVERAL (UPI)—When L. Gordon Cooper Jr. crawled into his little spacecraft, he was aware that death might be looking over his shoulder. There was nothing strange about his awareness. Every test pilot who ever flew has possessed it. And all of the astronauts have known all along that sooner or later a space pilot—of their generation or ones to come—would die in the performance of duty.

This does not, however, mean that the Mercury astronauts have ever brooded much about the hazards of their trade. They are all intelligent men. They know what the dangers are. And they know everything that has been done to assure their safety in the face of danger.

Five men before Cooper put their lives on the line to test the dependability of rocket-spacecraft combinations in the Mercury program. Their faith and their confidence were justified.

So it was a confident Cooper who went aboard his Faith-7 spacecraft. If anything should go wrong with his mighty and potentially explosive Atlas booster, he knew that an automatic safety system would go into action in seconds to carry him away from danger.

If anything should go wrong in orbit, he knew that backup equipment could instantly be put to work — by himself or his monitors on earth — to make things right again. In past flights things have gone wrong, and the decisions made and actions taken to correct them have been the right ones.

So it is safe to say that Cooper felt little if any fear. He was too busy, for one thing. For another, he had every reason to have faith in the people and the equipment to which he was entrusting himself.

The fact remained — as one veteran once put it — that "every time an astronaut gets into his capsule and is strapped down for flight, he knows it may be his last day on earth."

Cooper Family Awaits Orbit With Variety Of Emotions

TAYLOR LAKE VILLAGE, Tex. (UPI)—Mrs. L. Gordon Cooper took her two daughters into seclusion today for her husband's expected attempt to orbit the earth 22 times.

She declined, through a National Aeronautics and Space Administration spokesman, to comment on the possibility that clouds may force a delay or postponement of her husband's flight.

"I'm happy everything seems to be going OK," is the most she has said in recent days about the flight.

The Coopers—pretty Mrs. Trudy Cooper, daughter Camala, 14, and daughter Janita, 13—will not venture out of their home until astronaut L. Gordon Cooper is safely down from his flight.

A NASA spokesman from time to time will tell the reporters besieging the Cooper home what they are doing and what they have to say, if anything.

Cooper's wife refused to admit any anxiety for her husband. But Cooper's mother, Mrs. Hattie Cooper, in Tecumseh, Okla., admitted she was worried, but at the same time eager for her son to get on with the flight.

"Now that they are all set, I'm real eager for them to get on with the flight," Cooper's mother said. "I know Gordon is eager too. We're ready."

"Of course, I worry. Mothers always do. Mothers always fear the unknown. But if his strength gives out, the good Lord will provide a little more."

Cooper's wife and two daughters and his mother watched their television sets for news of the flight. So did Cooper's maternal grandmother, Mrs. Orena Herd, with whom his mother is staying in Tecumseh.

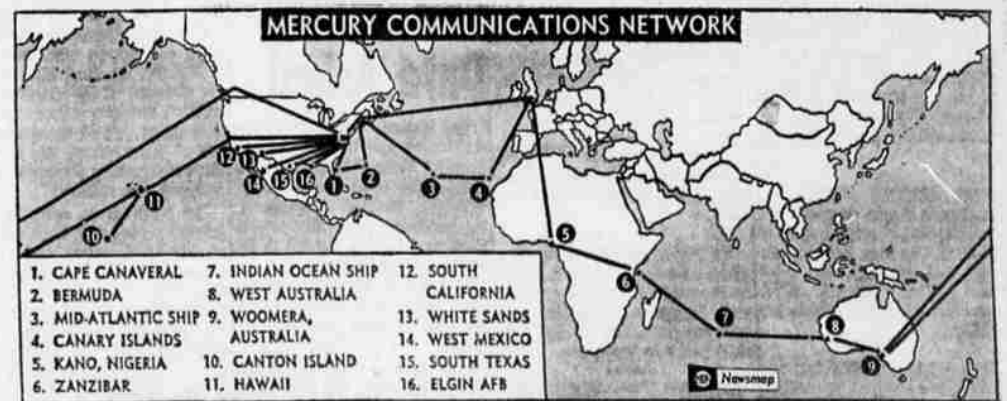
Cooper is a native of Shawnee. His father, LeRoy Gordon Cooper Sr., died in 1960 of cancer. His mother now lives in Carbondale, Colo., but came to Tecumseh for a visit.

Cooper's wife and daughters live in the Houston area, as do the other astronauts, because the manned spacecraft center is in Houston. Taylor Lake Village is a development of \$30,000-\$50,000 homes near Houston.



LIFE NORMAL — Mrs. Gordon Cooper smiles as she goes to her car to take her daughters Jan and Pam to their classes at Webster Junior High School. The girls had gone to school yesterday when the shot was postponed, but stayed home today to watch their father on television.

Outposts On Islands, Deserts Track Capsule



ORBIT OUTPOSTS—Map spots the network of communications stations which will follow the Mercury capsule around the world when America sends its first astronaut into orbital flight. The stations are connected by means of radio, submarine cables and land lines. Hub of the entire system will be Goddard Space Flight Center in Beltsville, Md.

Tiny Television Camera Goes Aloft With Cooper

A tiny television camera that you can hold in one hand opens the way for millions of Americans to become "armchair astronauts."

The camera went aloft with astronaut L. Gordon Cooper Jr. on his planned 22-orbit journey through space, marking the first time that a television device had been used on a U.S. manned orbital mission.

Scientists put the camera alongside Cooper to give Americans in their living rooms on earth a view through the portal of the astronaut's bell-shaped Mercury space capsule.

There were a myriad of views possible—the vast panorama of space itself, or an inward peek at the astronaut during weightlessness within the tight confines of the spaceship.

The camera, without its lens, measured 2 1/3 inches in diameter and 8 inches in length. It is made of aluminum and weighs just 2 1/2 pounds.

The schedule called for Cooper to take the pictures himself. The camera was rigged to a transmitter that could flash the photographs at the rate of two frames per second back to three receiving stations on earth. The master receiving station is at Cape Canaveral.

Equipment here was set up to record the transmissions on video tape. The National Aeronautics and Space Administration planned to release the tape to television networks for nationwide transmission.



ASTRONAUT'S DINNER — Beef sandwiches, grape juice concentrate and fudge cake — identical to those which astronaut Gordon Cooper will use during his space flight, are displayed here. Holding the food samples is Dr. Lawrence Dietlein, head of the space medicine branch of the Manned Spacecraft center in Houston.



Local transportation was pressed into service—in this case, a camel—during station construction on Grand Canary Island.



Native crew puts finishing touches on Project Mercury telemetry building at Kano, Nigeria, one of a world-wide network.



Good view is afforded this tracking and communications site located atop Tranquillon Mountain near Port Arguello, Calif.



Sandy scrub country stretches out for lonely distances around this isolated Mercury ground station in Western Australia.

Russians Expected To Launch More Spectacular Space Shots

WASHINGTON (UPI) — U.S. officials expect Russia this year to launch several space shots more spectacular than L. Gordon Cooper's 22-orbit mission.

The first of these may be imminent.

On the basis of known Soviet rocket power and the apparent trend of the Russian space program, officials have listed the following 1963 possibilities:

—A manned orbital flight of eight days to test systems for a later moon mission and to get further information on human reaction to weightlessness.

—A rendezvous mission in which manned satellites would be coupled in orbit. This also would be in preparation for an attempt to put men on the moon in some later year.

—The launching of a two-man spacecraft.

U.S. space officials believe Russia has enough rocket power to send a manned spacecraft around the moon and back, although this shot may not be on the Soviet program for 1963.

Actually, the Russians could attempt to land men on the moon now if they had perfected the rendezvous technique. But unless they have an unsuspected new and more powerful rocket, this would require nearly 15 separate launchings into earth orbit.

These launchings would be used to assemble a spacecraft which then would take off for the moon. An attempt of this magnitude appears highly unlikely until the Russians have tested the rendezvous method.

The Russians are perhaps two years ahead of the United States in manned space flight. This country has put four times as many spacecraft into orbit as Russia, but the Soviets hold a substantial weight lead.

They are not perfect, however. Informed and responsible sources list more than two dozen failures which the Russians have never acknowledged.

Space Ship At-A-Glance

CAPE CANAVERAL (UPI)—Astronaut L. Gordon Cooper's space capsule at-a-glance:

Name—Faith-7.

Dimensions—9 1/2 feet tall, six feet across the base.

Weight at launch—About 4,000 pounds, including escape tower.

Weight in orbit—About 3,000 pounds.

Weight after landing—About 2,400 pounds.

Fuel supply—66 pounds of hydrogen peroxide.

Batteries—One 1,200 watt-hour battery and five 3,600 watt-hour batteries to provide power for mission and for landing.

Hatch—Explosive, which can be jettisoned by pulling a plunger inside capsule or by pulling a cable. Hatch also may be removed by outside recovery teams.



MOTHER AND GRANDMOTHER — Tracing the planned orbit of astronaut Leroy Gordon Cooper on a globe of the world are Cooper's mother, Mrs. Hattie Cooper, left, of Carbondale, Colo., and grandmother, Mrs. Orena Herd of Tecumseh, Okla. Cooper plans to spend "orbit days" with her mother in Tecumseh, Okla.



HIGH SCHOOL GIRLS — Here are Gordon Cooper's two teen-age daughters, Jan, left, and Pam as they leave their home on way to school in Webster, Tex. The girls stayed home today to watch the astronaut in orbit.