**ASTRONAUTICS** 

## U. S. Spaceman A-Okay

The United States broke the space barrier on May 5 when the first U. S. astronaut rode the Mercury capsule to an altitude of 115 miles for a suborbital, down-range flight.

## See Front Cover

➤ THE UNITED STATES broke the space barrier May 5 when Alan B. Shepard, Jr., 37-year-old astronaut, rode the Mercury capsule 302 miles down-range from Cape Canaveral, Fla.

At 9:34 a.m. EST the Redstone rocket carrying the Mercury capsule lifted off the launching pad and took the astronaut for a 15-minute trip that made him exclaim, "Man, what a ride!"

The astronaut reported flight data back to ground during the trip, but the verbal message A-Okay (meaning All-Okay) was the most wanted piece of information during the flight to the millions who tuned in on the flight.

In contrast to the hush-hush surrounding the orbital space flight of the Russian cosmonaut Yuri Gagarin on April 12, details of the scheduled U. S. suborbital flight was broadcast to all the world ahead of time as well as at the time of the flight.

The U.S.S.R. does not report failures in its space program, but does claim credit for successes. Every missile or rocket failure as well as successes are publicized in the U.S.

Astronaut Shepard had some difficulty breathing and seeing as he went into space and back, but no more than he was prepared for. The stress on his body, including a "grayout" of his eyes, was less than he

had experienced in training in the centrifuge.

The worst time he had on the suborbital flight was after the flight itself. As he got out of the capsule to be picked up by the helicopter, he unplugged his pressure suit, and the resulting heat was worse than any discomfort during the trip.

He chose to be recovered by the helicopter rather than be lifted on board the rescue vessel in the capsule because this is the method that had been used in pre-flight recovery trials. His successful rescue is seen on the cover of this week's Science News Letter.

The astronaut said he believed no more suborbital flights would be necessary before a manned orbital shot. It had been announced earlier that several suborbital shots are planned.

At the time of launch Shepard was too busy for personal feelings, he said. When the Redstone rocket that carried his capsule 115 miles into space went off, he had also been surprised that the rocket went so smoothly and with so little noise.

During the trip, he did not see the moon or stars. He did see several landmarks in the Atlantic and on the Florida peninsula.

The astronaut reported it had been easy to work the controls during re-entry and while weightless, which he found a pleasant sensation. As he came back to earth, he experienced as much as 11 times

the gravity of earth, or felt 11 times his normal weight. Astronaut Shepard said the advances that can be expected from the flight are in the field of high temperature materials for re-entry vehicles.

The astronaut was given the National Aeronautics and Space Administration Distinguished Service Medal by President Kennedy at the White House on May 8.



FINAL CHECK-UP—Astronaut has check-up before space trip. Sensors, taped on his body, check breathing, temperature and heart beat.



AT 20,000 FEET—Astronaut Alan B. Shepard Jr., is opening his helmet at 20,000 feet in order to get a better view on his way down from the first U.S. space jump.



HELICOPTER RECOVERY—Astronaut Shepard and his Mercury capsule arrive at U. S. Navy carrier.