

SPACE

Testing Toward the Moon

For millions of veteran space-shot watchers, last week's televised launch of Apollo 7 had more than the usual elements of drama. It was the first U.S. manned flight since three astronauts were killed in a fire on the same launch pad 21 months before. Any more serious trouble would all but wipe out U.S. hopes of landing men on the moon before the end of 1969. Thus, as the towering Saturn 1B rocket lifted ponderously off the pad after a heart-stopping moment of hesitation, U.S. hopes rose with it. At week's end, the eleven-day mission of Apollo 7 was proceeding as near to perfection as space officials had dared hope.

If the lift-off seemed slow and laborious to viewers, there was good reason. Apollo and its two-stage launch rocket weighed a staggering 1.3 million lbs., only slightly less than the 1.6 million-lb. thrust of the Saturn 1B's first stage. As a result, acceleration was gradual; Astronauts Walter Schirra, Donn Eisele and Walter Cunningham were subjected to only a fraction of the oppressive G-forces experienced on earlier flights by Mercury and Gemini crews.

Blackout. Following the shot unerringly for more than a hundred miles, a remarkable Air Force camera called IGOR (for Intercept Ground Optical Re-

cord) brought the shutdown and separation of the first stage, and the ignition of the second stage into full view of the TV audience. Seconds later, viewers also saw the dramatic jettisoning of the Apollo escape tower, which arced high above the spacecraft before plummeting back toward earth. Finally, about 10½ min. after launch, out of IGOR's range, Apollo 7, still attached to the second-stage Saturn 4B rocket, glided into an orbit 140 miles high at perigee and 174 miles at apogee—remarkably close to the programmed 142- by 176-mile orbit. "We're having a ball," Schirra reported happily to ground controllers.

While the flight proceeded uneventfully in space, there was a near crisis on earth. "We've just had a little thrill here in the Apollo control center in Building 30 in Houston," reported the Manned Spacecraft Center's Paul Haney. For more than a minute, he said, there had been a power failure, knocking out lights, control consoles, screens and instruments at the center. But the essential communications systems and the computers that stored and evaluated flight data were powered by NASA's own generators and continued to operate; they never stopped digesting telemetered information from monitoring stations, ships and planes.

Simulated Rescue. After firing thrusters on the attached Saturn 4B to maneuver in orbit, the astronauts cut loose the joined Apollo command and service modules while they were passing over Hawaii. "If this were the lunar mission," explained Haney, "that is approximately the point where we might ignite the Saturn 4B to put us on a lunar trajectory." Instead, Spacecraft Commander Schirra used Apollo's control thrusters to move his craft away from the Saturn 4B and pitched the

spacecraft up and around so that it was facing the rocket. He then nudged the craft to within 5 ft. of the S4B in a simulated docking maneuver. On later missions, Apollo will dock with a lunar module carried by the S4B.

At the end of the week, after they had allowed Apollo to drift about 100 miles ahead of the Saturn 4B, the astronauts fired the service module's powerful propulsion engine twice in orbital maneuvers that once more brought them to a rendezvous with the spent second-stage rocket. This operation, too, had implications for the lunar mission; if the LM should become stranded in lunar orbit on the way to or from the Apollo command module, the larger craft would have to seek it out and dock with it to rescue the two astronauts aboard.

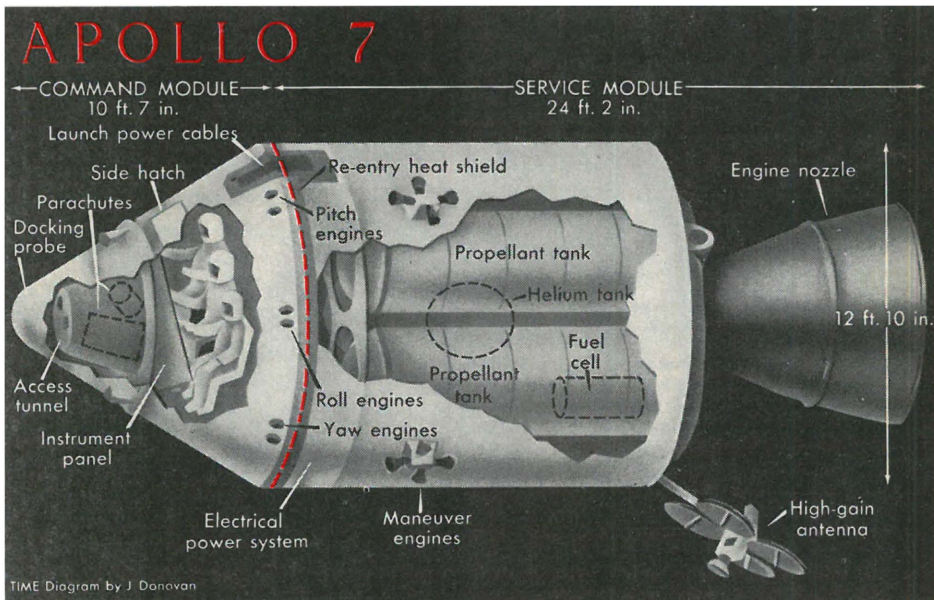
Hot Tip. Despite the effortless maneuvering, Apollo's flight was not without its niggling problems. An oxygen-flow warning light flashed on, but the astronauts quickly determined that a sensor, not the oxygen flow, was at fault. Astronaut Cunningham, 36, a civilian physicist on his first flight, reported increasing pressure in a radiator that cools the spacecraft. The trouble was not serious enough to affect the mission. Astronaut Eisele, 38, an Air Force major also making his first space mission, reported radio interference that sounded like a commercial. "I'm getting a hot tip on some hospital-insurance plan from some guy," he said. "Maybe they're trying to tell you something," a ground controller cracked.

Schirra, meanwhile, was setting new records. The 45-year-old Navy captain, a veteran of near-perfect Mercury and Gemini missions and the first pilot to make a space rendezvous, became the first man to drink coffee and the first to develop a full-blown cold in space. "I've gone through eight or nine Kleenexes with some pretty good blows," he radioed, "and I've taken two as-

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Implications for the lunar mission.



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TIME's job, in a world that gets more complex all the time, is to sort out the essential from the transitory, to get to the bottom of conflicting claims, to pierce through the propaganda and the puffery, to try to get the facts right and to make the conclusions sound.

from TIME Publisher's Letter



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pirins." NASA doctors prescribed decongestant pills that they routinely store aboard Apollo spacecraft.

As the mission headed into its third day, the astronauts had missed only one of their scheduled operations—a live TV transmission from inside the craft. Seconds before the camera was to have been switched on, Schirra complained that the crew was running behind schedule because of several operations that had been added to the flight. "I tell you," he said testily, "this flight TV will be delayed without further discussion." Houston controllers quietly acceded and agreed to reschedule the TV for this week.

Such problems seemed minor indeed, and they did not materially change the sentiment voiced several hours after lift-off by the chief of the Apollo lunar-landing program, Lieut. General Samuel Phillips: "It is a pleasure to announce that Apollo 7 has, up to this moment, conducted a perfect mission—absolutely perfect. Bigger events are coming soon."



SCHIRRA



EISELE



CUNNINGHAM
"We're having a ball."

THE PRESS

OPINION

Nixon's the One

Lyndon Johnson was backed by so many newspapers in 1964 that many Republicans wondered whether the nation's publishers were abandoning the party usually favored by a majority of them. But the G.O.P. is not worrying any more. With only three weeks left in the presidential campaign, the clear choice of the editorial pages is Richard Nixon. Not that the switch has been entirely wholehearted; the Cleveland Plain Dealer, for one, admitted that the decision was hardly "easy." But, said the paper, it had become disenchanted with Humphrey as a "man of the old order. He is campaigning on the past. Richard Nixon is the only candidate in a position to take a new course."

Keeping Cool. More significant was the support given Nixon by the 17 Scripps-Howard papers, including the Washington Daily News and the Pittsburgh Press. All supported L.B.J. four years ago. "In the hazardous world of these times," said an editorial that ran throughout the chain, "including the miserable war in Viet Nam, we need a President who can keep cool, who can make a decision and carry it out, who knows when to hold his tongue and when to use it. Richard Nixon's experience and conduct clearly show these abilities. Hubert Humphrey, especially in this campaign, has created strong doubt that he has comparable abilities."

Other prominent papers are rapidly falling in line behind Nixon. Last week the Los Angeles Times delivered its endorsement, explaining that the G.O.P. nominee has the best chance of "uniting the country and harnessing its energies" because he is most acceptable to the country's vast, silent middle class. The Chicago Tribune will undoubtedly back Nixon; its East Coast cousin, the New York Daily News, last weekend came out strongly for the Republicans.

Most of the Hearst papers, including the San Francisco Examiner, may return to the Republican fold. John Knight's seven newspapers, including the Detroit Free Press, the Miami Herald and the Charlotte Observer, have not yet endorsed a candidate, but it seems likely that they will support Nixon, even though they have been rather dovish on the war. Knight disclosed his personal feelings in a recent column: "Somehow we preferred the old Hubert—dedicated, faithful and true—to the newly contrived candidate who now wears a coat of many colors."

Of Humphrey's endorsements, none was rendered with more enthusiasm than the New York Times's. "Looked at in the perspective of his 23 years in public life," declared the Times, "Hubert Humphrey is a humanitarian, an authentic and effective liberal who can