

Space News **ROUNDUP!**



VOL. 2, NO. 16

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

MAY 29, 1963

Cooper Wraps Up One-Day Flight During MA-9

Project Mercury Does It Again; Pin-Point Splashdown Despite Last-Minute Difficulties

A host of last-minute hitches in otherwise smooth operations failed to keep Astronaut L. Gordon Cooper from his appointed rounds, May 15. He made 22 of them, spent a day and a half in space, calmly accepted the failure of his electrical system late in the flight, and brought Faith 7 down by hand a mile closer to the prime recovery ship than did his predecessor, Astronaut Walter Schirra.

When it was all over, he summed it up in two words: "great." The 36-year-old pilot, youngest of the original Project Mercury astronauts, took the hair-raising finish of his flight with as little display of emotion as he had shown during the series of minor upsets in the MA-9 schedule. "I was not overly concerned with my safety," he said later. "I had every confidence that I could get it back fine."

The second half of the two-day split countdown for the flight began at midnight May 14, in spite of the fact that after eight consecutive days of clear weather at Cape Canaveral, skies were suddenly cloudy. Watchers monitoring three quarters of the world's weather reported an all-clear in the recovery zones, but it was cloudy at the Cape.

By dawn Tuesday morning, the situation had cleared up. The countdown steadily neared the finish line as Cooper climbed aboard his spacecraft at 5:36 a.m. and prepared for lift-off.

Around the world, 19,000 men, 28 ships and 172 aircraft spread a safety net of recovery force.

Then it happened: the huge, complicated Atlas launch vehicle, was "go", the miniature

but no less complicated spacecraft was go; the weather was go; Cooper was go. But the simple deisel engine which must move the Pad 14 gantry away from the firing line was not. It wouldn't even start.

Everything came to a standstill for two hours and nine minutes while the trouble was pinned down: a faulty fuel pump. It was fixed. The gantry moved back. The count moved ahead. Now it was all set.

Only flight officials knew that a faulty radar system at the Bermuda tracking station, which had been giving minor trouble since 8 a.m., was growing worse. At 9:57 a.m., 14 minutes before liftoff, the radar

climbed out of Faith 7 and nonchalantly went fishing Tuesday afternoon. He didn't catch anything.

By mid-afternoon the faulty radar was fixed. Countdown picked up again at midnight. Fate seemed to have finished with her practical jokes, for the count proceeded so smoothly that lift-off was only four minutes behind the earliest possible moment at 8:04 a.m.

The Atlas launch vehicle performed "nearly perfectly better than any previous system at the Bermuda tracking station," flight director Walter C. Williams said later. It was within 15 or 8 a.m., was growing worse. At 9:57 a.m., 14 minutes before liftoff, the radar

The Bermuda radar is a critical factor in determining orbital insertion.

Cooper's comment: "He said he 'immediately felt right at home in the bird... I guess I expected max Q area (maximum dynamic pressure during launch) to be a little more vibration... a lot less than I expected."

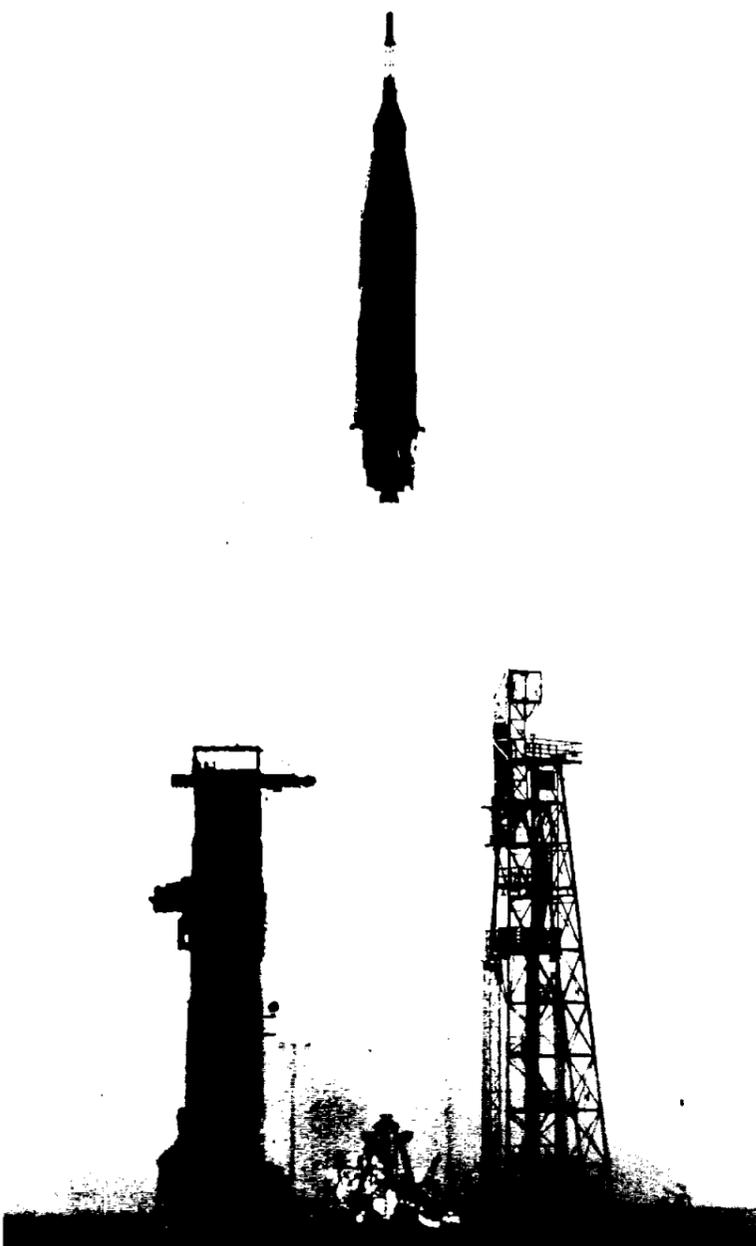
Cooper, who was calm during the countdown

He was close enough to the spent booster after separation and turnaround to read the writing on its side.

Of drifting flight, he said later, "This is a very pleasant mode, very relaxing, no problems at all on worrying or wondering what your attitude was—you tend to become the center of focus on the flight and relate everything to the spacecraft as to what you can see from the window." In all, Cooper spent 13 hours and seven minutes in drifting flight, twice as much as the entire duration of MA-8.

After one blood pressure exercise over Muchea, Cooper saw the moon, in the wrong place according to his star chart. "I was convinced they had fouled up and put it in the wrong place, but suddenly I realized I was facing around to

(Continued on page 2)



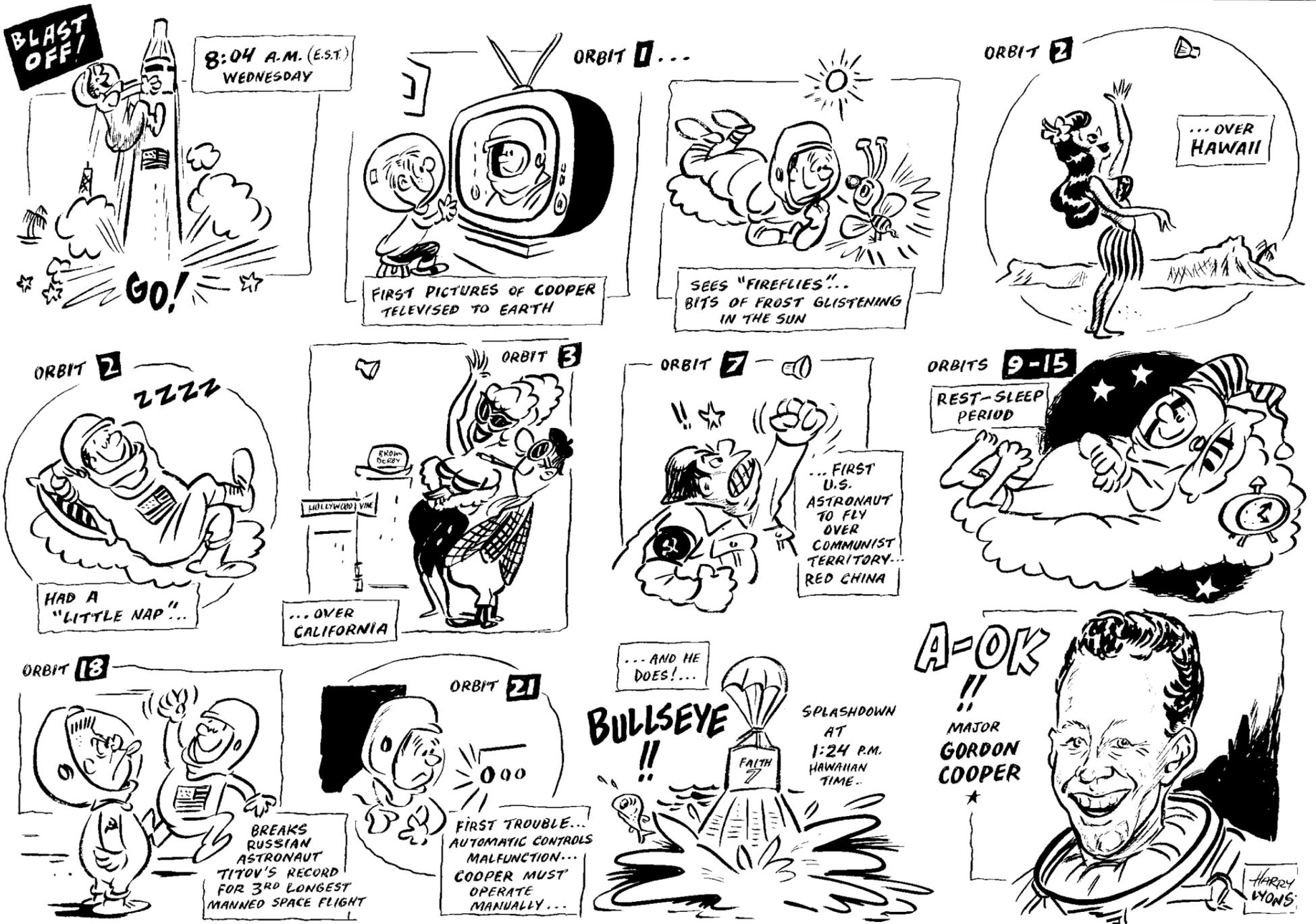
LIFTOFF! Atlas 130-D thunders from the pad at 8:04 a.m. May 15, carrying Faith 7 and Astronaut L. Gordon Cooper into orbit as Project Mercury achieves its original goal—a day-long flight. The mission gave the U. S. a total of 34 orbits.



SPLASHDOWN, incredibly close. Had it not been for the stiff 20-knot breeze tugging at his 65-foot ringsail parachute, Cooper's landing might have been within two miles of the carrier Kearsarge. Touchdown point was 4.4 miles away.



COOPER WAVES as he leaves Hangar 5 on launch morning, headed for the transfer van that will take him to Pad 14 and the waiting Mercury-Atlas 9. It was a few minutes after 5 a.m. A half-hour later he climbed aboard Faith 7 for the long trip.



Sleeping, Eating No Problem, But Mixing Is

(Continued from page 1)

the East and had to add 50 minutes onto my star chart to have the proper location . . . I found the moon was, indeed, in the right place."

In complete command of himself and his craft from lift-off on, Cooper settled the problem of whether man can sleep in space handily when he dropped off for a catnap at the end of his second orbit, well ahead of the planned 9th-to-15th orbit sleep period.

"Roger, I'm really comfortable," he told the California tracking station. "In fact I had a little nap."

Over the South Atlantic on his third orbit, the astronaut released a 5.75 inch sphere from Faith 7, the first time a satellite has been released from another satellite. Its two flashing xenon lights trailed him through the next three orbits, although he was unable to spot them on the first two night passes.

When he finally did see it, he "thought somebody was launching something in front of me. I finally saw that little rascal strobing and it was the flashing beacon. I also saw it on the next two night passes." The last time he saw the beacon it was an estimated 17 or 18 miles away from the spacecraft.

On the fourth orbit, the pilot was busy recording radiation measurements and eating some of a variety of food he brought with him (bite-sized peanut butter sandwiches, beef and gravy, chicken and gravy, grape juice, orange juice, bacon squares, beef sandwiches, and fruitcake squares).

After nearly five hours in flight he "ate four brownies and drank six gulps of water." He ate again at six hours and 15 minutes and again after 11 hours. "At 26 hours and 15 minutes after liftoff I ate fruit cake and had five or six gulps of water. I had a light snack at 28 hours and 30 minutes and at 28 hours and 59 minutes. I really had to force myself to eat. I never did feel too overly hungry. I think the food we had along was adequate although it was so much work to get some of it . . . I tended to perhaps not eat as much as I should have. I ate one whole box of food cubes. They were all good but of the dessert type and you get tired . . . of desert."

Cooper said he did not have much success mixing the water with the new Gemini-type dehydrated food, in its special plastic bags. He managed to mix a little beef potroast with water, but in doing so got water scattered in the weight-

less cabin environment because of a leaky connection.

A test of the suit cooling system and how it functioned with the cabin cooling system off went off on schedule with no problems.

"At the end of six hours and 15 minutes, I turned off the cabin fan, turned off the cabin cooling and started the experiment to see if we actually needed to utilize all this coolant quantity throughout the flight when you're powered down. I might add that we did not. The temperatures remained very reasonable . . . we left the coolant flow and cabin fan off until just prior to re-entry and we powered up, cooling it down very slightly."

Cooper saw a three-million candlepower light on the ground in South Africa, plus a nearby city, without difficulty.

But the inflatable balloon which was to measure aerodynamic drag in space failed to eject. The same experiment failed once before when Astronaut Scott Carpenter's flight when the balloon ejected but did not fully inflate.

The seventh orbit marked the first of seven passes over Communist China.

Later, Cooper said from the recovery vessel that he could see smoke curling from villages in the Himalayas as he passed

over, and that he saw the American Atlantic coast as far north as Washington.

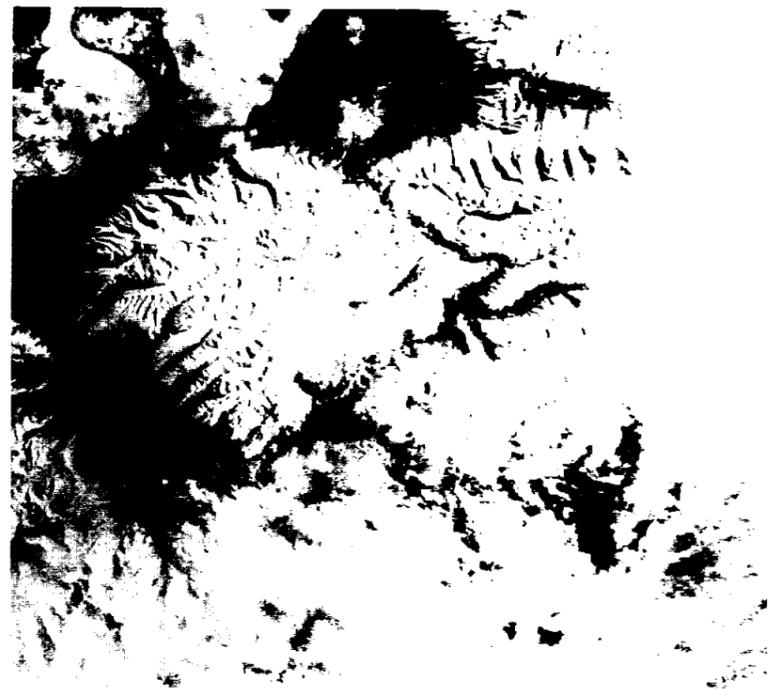
During much of the flight he was occupied with taking numerous special photographs, including the Zodiacal light and night airglow layer, the moon and horizon in a lunar navigation experiment, and clouds.

As was planned, Cooper

slept intermittently for seven and a half hours beginning during the ninth orbit. He awakened at 5:26 a.m. Thursday morning without the aid of the "alarm clock" signal from the Muehea station.

"I tried my best to remember what dreams I had and I know I was sleeping normally and perhaps having the same type

(Continued on page 11)

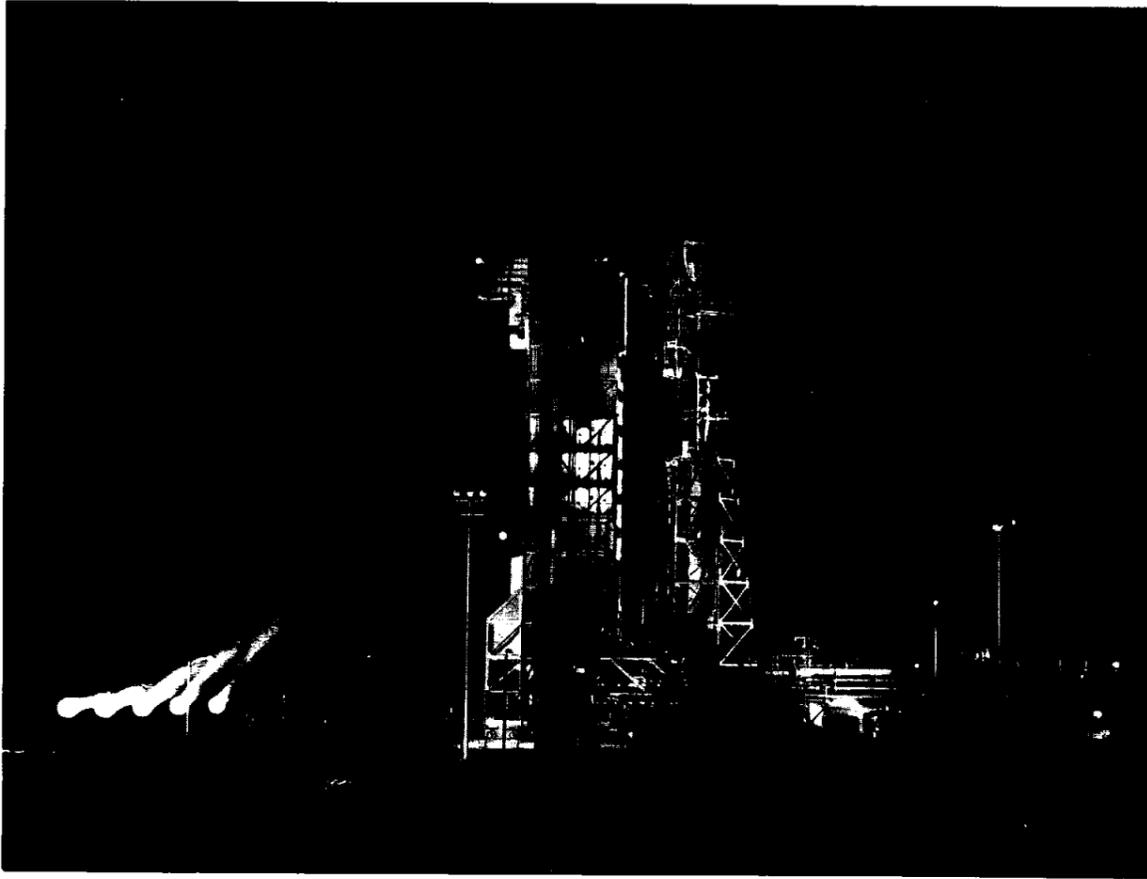


THE WRINKLED FACE of the Himalayas looks back at Cooper's spacecraft as he hurtles past, 100 miles up. This picture was among the ground studies taken by a special on-board camera.

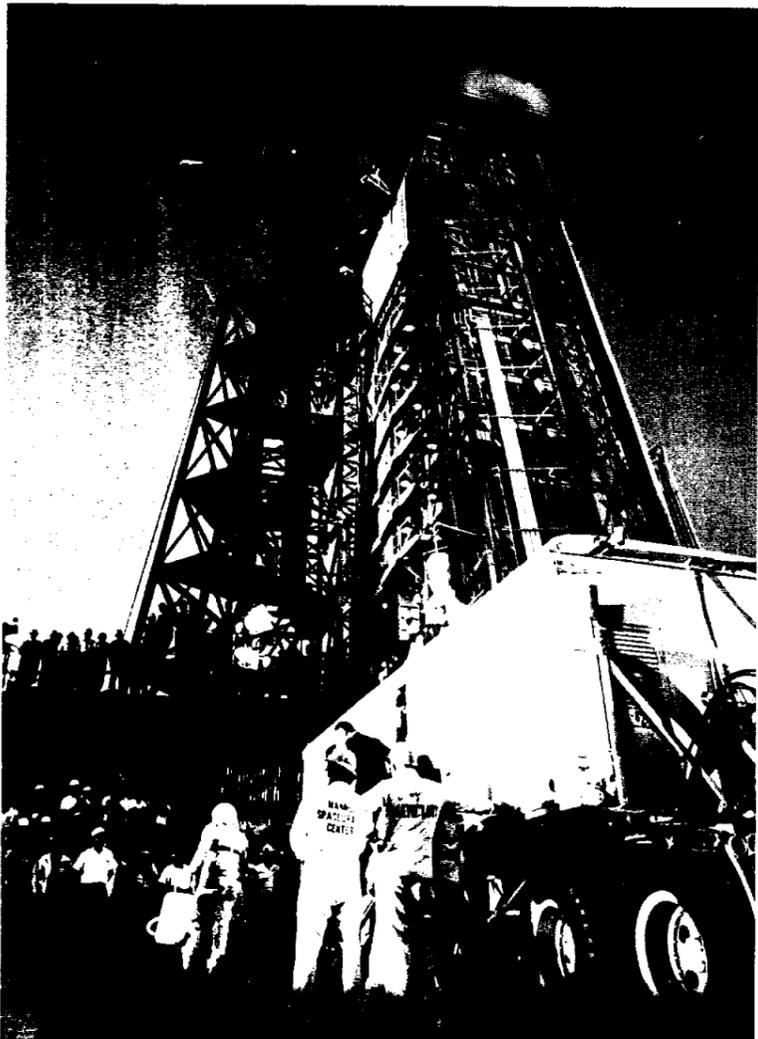


THE DAYS BEFORE the flight were busy ones for the Mercury team, especially Cooper and his backup pilot, Alan Shepard (top left). Cooper got a brief respite as he took 14-year-old Cam, 13-year-old Jan and his wife Trudy to the top of the Saturn gantry for some typical tourist rubbernecking during a family visit to the Cape (top right). In the gray of early morning, he exercised on the beach (left), trotting past the dim outlines of a Saturn gantry rising to challenge the moon. Meanwhile, Cooper's own bird sat out the last of its stay on Pad 14, (right) a strange shape among the palms. Four days before the flight came the final mission review (lower left) with operations director Walter C. Williams and Preflight Operations chief Merritt Preston. On Sunday morning before the flight, Cooper attended church in Cocoa Beach and afterwards signed autographs for young parishoners outside the church.





THROUGH THE NIGHT Monday the floodlights glittered on Pad 14 as the countdown proceeded perfectly. But at 9:57 Tuesday, a scant 14 minutes away from lift-off, the flight was scrubbed. Cooper, who had been lying on his back for six hours, climbed out again with a grin (top right). "... and I was just getting to the real fun part," he quipped. The next morning, the process started all over again. An early breakfast (left) with Astronauts "Deke" Slayton and Wally Schirra and Dr. Howard Minners; a 4 a.m. medical check; the careful application of his bio-sensor patches (right) by medical technician Nelson Parsons; and suiting up. Pad 14 was still dusky as he descended from the transfer van and headed for the gantry elevator (lower left) surrounded by crowds of officials and newsmen. At 5:33 a.m., Cooper climbed feet first into Faith 7, (lower right) almost certainly wondering whether or not this one would be the real thing either. It was.



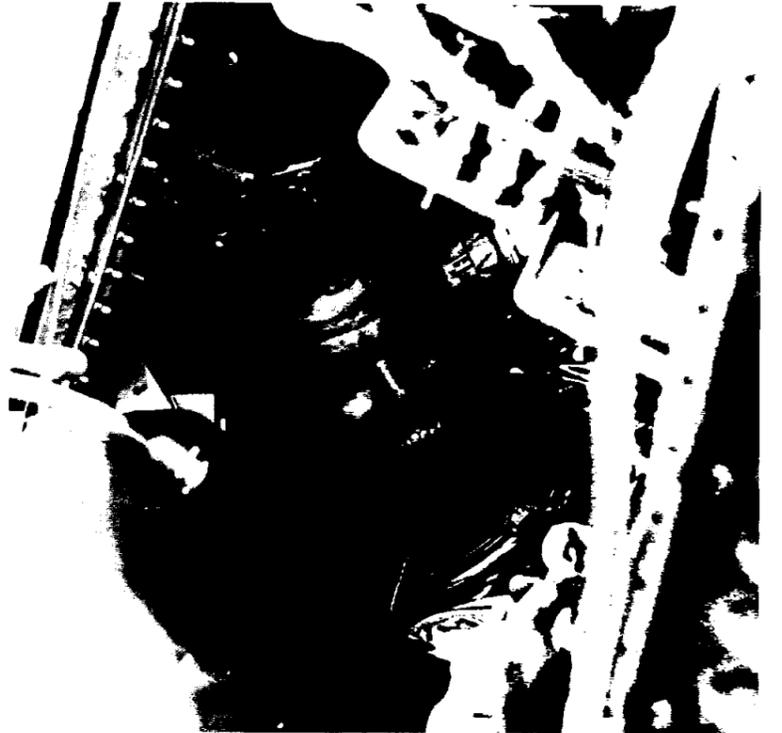
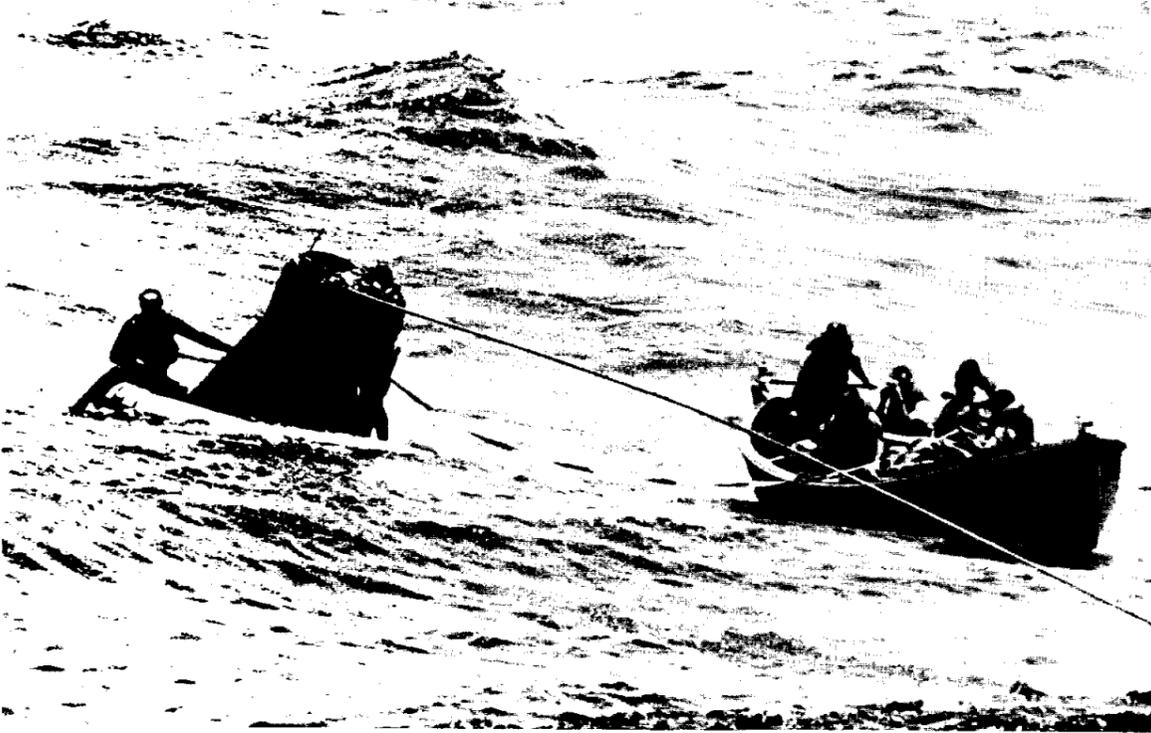


THE LONG WATCH began for Mercury Control, where the news from overhead was mirrored in the face of flight director Walter C. Williams. Things proceeded smoothly through the early orbits (top left). Later, as Cooper slept, Mercury Control was awake, two of its watchers (top right) Williams and backup pilot Alan Shepard. Cooper was awake again when the big board showed him over Zanzibar on the 16th orbit (left). The face of Edward White II, (right) one of the nine astronauts in training for programs beyond Mercury registers intense concentration as he listens in. At lower left, the decision to continue for 22 orbits shows on the face of Williams (standing), and Flight Operations chief Cris Kraft. Weariness registers on the faces (lower right) of MSC Director Robert R. Gilruth, NASA Office of Manned Space Flight Director Brainerd Holmes and Williams, "after the ball is over."





JUBILATION, in the Pacific and on the coast of the Atlantic. Cooper's happy grin as he talks to his wife from aboard the Kearsarge (left) mirrors the expression of Dr. Charles A. Berry in Mercury Control as he, too, assures her that recovery is effected and all is well (right). Frogmen settling the flotation collar around Faith 7 as the carrier's motor-whale boat stands by (middle left) recall nearly identical pictures of the end of Astronaut Walter Schirra's six-orbit mission last October. Tired and sweat-soaked, but obviously in the best of spirits, Cooper greeted his welcoming committee with a grin the moment the hatch was blown aboard the Kearsarge (middle right). Supported by Doctors Charles App (left) and Richard Pollard (right, picture at lower left), he made his way down a strip of red canvas "carpet" as a Marine honor guard saluted, headed for medical tests, phone calls and rest. Later, Kearsarge Captain Eugene P. Rankin presented Cooper with an oversized "key to the ship" and a plaque (lower right). The Kearsarge moved off toward Honolulu and the first of a series of celebrations.



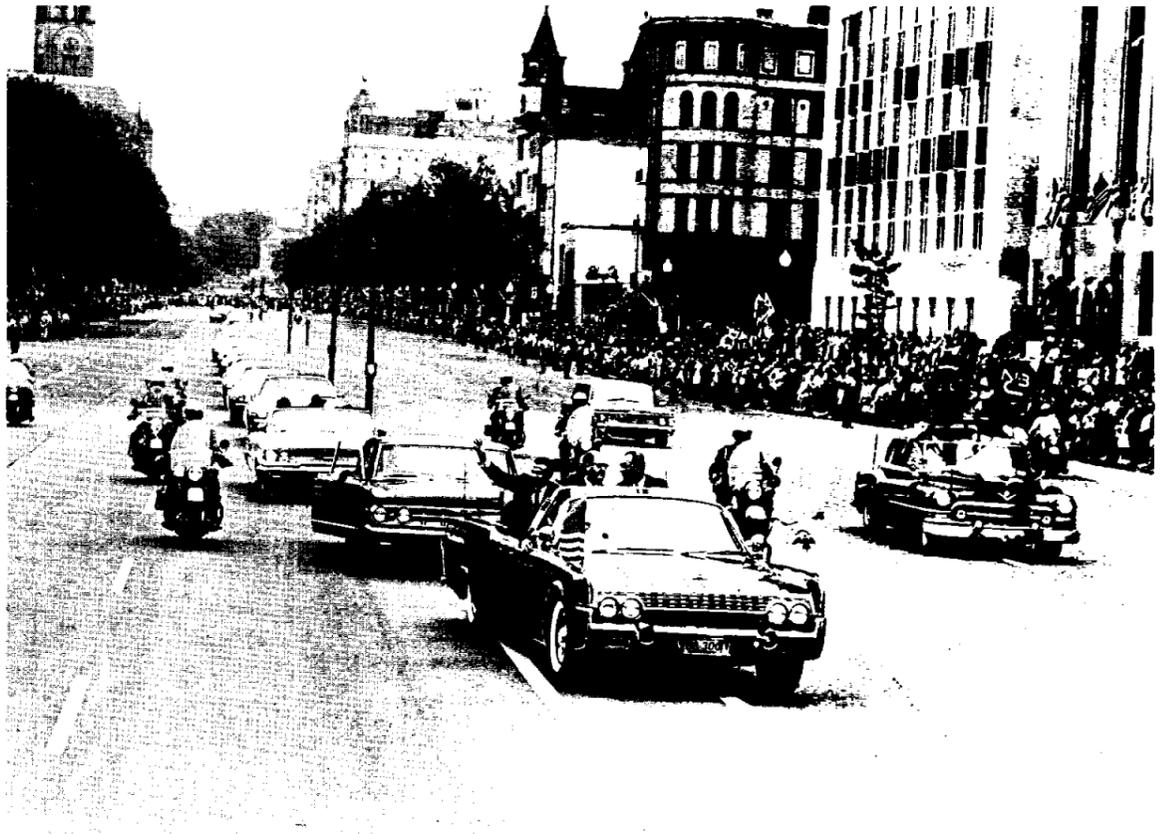


COOPER SETS FOOT on solid ground for the first time since lift-off as he arrives at Hickam AFB, Hawaii (top left), from aboard the Kearsarge. The 2,000 Hawaiian admirers that met him at Hickam gave him a warm traditional greeting (top right.) A motorcade to Iolani Palace, Hawaii's state house, brought him before the biggest turnout in Honolulu's history (middle left). Arriving at Patrick AFB, Fla. the following day (middle right) Cooper was greeted by another 80,000 fans, a large portion of them at the airfield (left). After a medical debriefing and a private luncheon at Patrick AFB, a motorcade formed to take the party to the Carriage House Motor Inn and the Mercury News Center. The crowd before the press center in Cocoa Beach began gathering two hours before Cooper arrived for the first of his after-flight press conferences (right). Cooper gave news media a brief run-down on his 22-orbit flight.



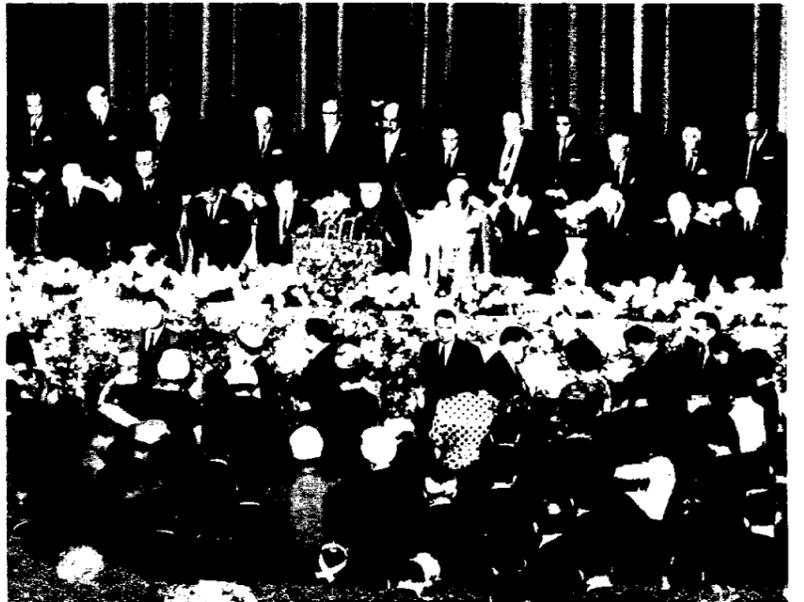


ARRIVING in the nation's capitol May 21, (left), the Coopers were greeted in the Rose Garden of the White House (right) by President Kennedy, who presented awards to Cooper, Project Mercury Manager Kenneth Kleinknecht, Flight Operations Chief Cris Kraft, Pre-flight Operations Chief G. Merritt Preston, Langley Research Center Director Floyd L. Thompson and Maj. Gen. Leighton Davis, commander AFMTR, Cape Canaveral. Group achievement awards were presented to Navy Recovery forces and Air Force Space Systems Division. Leaving the White House (middle left) the party made its way via motorcade (middle right) to the capitol building (lower left) where Cooper addressed a joint session of Congress. A State Department luncheon followed (lower right) at which exotic replicas of Faith 7 orbiting over an edible globe furnished an unusual dessert for the guests.



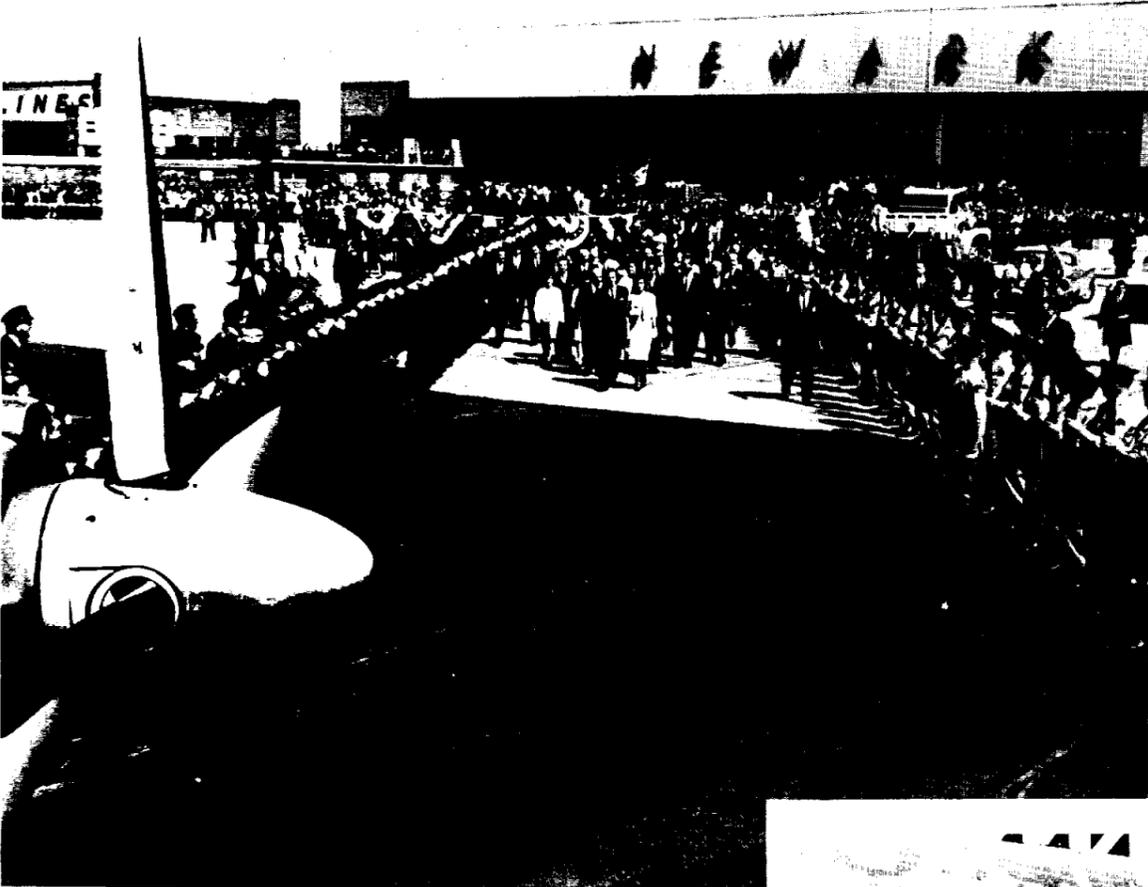


TWENTY-NINE HUNDRED tons of ticker tape and paper rained down on the official party as they drove through the concrete canyons of New York Wednesday, witnessed by a wildly cheering throng estimated at four and a half million persons (above). A mayor's luncheon at the Waldorf Astoria followed ceremonies at City Hall (right). Part of the reception line included (left) NASA Administrator James Webb, New York City Mayor Robert Wagner, Cooper and Vice President Lyndon B. Johnson. "New York goes for you in a big way," Mayor Robert Wagner said at the luncheon, "America owes much to each and all of you... for adding to the sum of knowledge about the cosmos."





CAM TAKES THE WHEEL (left) in a boat ride on Manhattan waters, on the menu for the children in the official party after the luncheon Wednesday. Left to right are Charlene Berry, Cam Cooper, and Linda Kleinknecht. Thursday Cooper addressed a National Council of Boy Scouts meeting and was surprised by the appearance of his former scoutmaster, J. Heston Heald (right). Another ceremony was in store for Cooper at the Newark, N. J. airport (middle left) where he was presented with a silver medallion by Governor Richard Hughes. Arriving in Houston later the same day (right) Cooper was met at the airport by Congressman Bob Casey, Mayor and Mrs. Cutrer and Senator Ralph Yarborough, plus half a hundred other city and county officials (lower left). His long parade tour ended with a final trip down Houston streets (lower right) before 300,000.



The SPACE NEWS ROUNDUP, an official publication of the Manned Spacecraft Center, National Aeronautics and Space Administration, Houston, Texas, is published for MSC personnel by the Public Affairs Office.

Director Robert R. Gilruth
Public Affairs Officer John A. Powers
Chief, Internal Communications Ivan D. Ertel
Editor Anne T. Corey

One Retrostrap Came Flying Over . . . And Got White Hot

(Continued from page 2)

of dreams that I have when sleeping on earth, but I couldn't remember any of them when I woke up. The sleep seemed to be very normal except slightly more sound.

"All through this period I did not feel like sleeping any great length of time because I was having some small difficulty with the suit cooling circuit needing small adjustments on it. It worked satisfactorily; I maintained a very livable temperature in the suit throughout the flight. It did take a lot of adjustment though, and frequently.

"In the sleep when I would wake up I would discover my arms floating out in front of me. It was rather distracting, particularly because we had a lot of switches up there. I didn't want to float through to too many of these switches, and, although I always had everything powered down and power completely off, still it seems like you shouldn't sleep with your arms hanging out there that way. It seemed like kind of an odd position.

So finally I would fold my hands and stick my thumbs in around my helmet restraint straps. It felt a little more comfortable that way and I felt more at home with myself."

It was on Faith 7's 19th loop that the first indication of trouble developed. A small green light, supposed to flash only when the spacecraft is reentering the earth's atmosphere, came on. The spacecraft continued with seeming perfection, but officials were worried.

By the 20th orbit, strenuous checking had uncovered the fact that part of the spacecraft's automatic electrical system was not functioning.

Cooper set up his attitude for reentry and fired his own retro-rockets using the fly-by-wire system, with Astronaut Glenn literally "talking him down."

"I ran checks and discovered I had lost both 250 inverters, both standby and ASCS inverter. Neither one would start so we decided we would reenter completely without the auto pilot . . . I had a few other minor little problems on the last orbit (a rise in the carbon dioxide in the suit circuit and a decrease in oxygen in the cabin circuit) but I did not really trust these gauges too strongly. I still felt fine."

As he came out into daylight on the 22nd orbit, Astronaut John Glenn began to count Cooper down to retrofire from the Pacific Command Ship "Coastal Sentry Quebec."

"Using the earth as the attitude reference," Cooper said later, "and my small little rate indicators for rate, I had everything all set and at zero count watched the retros. They fired with a good strong thump." Cooper said the controls got a little mushy as reentry began.

"I applied the proper roll rate at this time . . . Very shortly after, I noticed a lot of burning particles coming past and considerable heat on the outside. One retrostrap came flying over and sat there right in front of the window. It proceeded to get warmer and got red hot, white hot and broke into several pieces and floated away, burning. I noted the fire ball that John Glenn had described oscillating to the rear of the spacecraft. Everything went very normally. The oscillations were held very close and I felt that the reentry g's were no problem at all."

Cooper said he entered clouds at below 50,000 feet, and deployed the drogue chute manually at 42,000 feet as planned. "It came out with a big rattle and roar and a thump and then the main chute deployed itself statically at about 11,000 feet. The minute it deployed, two helicopters were orbiting around me.

"Real fine play, old Gordo," commented Glenn. "You've got a good head."

The perfection of reentry was demonstrated by the splashdown, 4.4 miles from the prime recovery ship Kearsarge.

Splashdown came at 6:24 p.m. EST, just 34 hours, 20 minutes after liftoff. Cooper had traveled 540,000 statute miles at a speed of 17,546 mph.

Later, he told Air Force Secretary Eugene Zuckert, who extended congratulations, "I knew we'd get some boys in blue up there."

Cooper said later the "fireflies" reported on earlier flights were coming from the peroxide attitude thrusters insofar as he could tell. He mentioned that he used only half of his automatic control fuel and half of his manual fuel despite the length of the flight and had several days of oxygen left.

Five Cities Give Gordo One Celebration After Another

MA-9 Pilot L. Gordon Cooper, Jr. returned to earth to be faced with a round of parades and related activities from Honolulu, Hawaii to Houston, Texas — via Cocoa Beach, Florida; Washington, D.C.; New York City and the Newark, New Jersey airport.

Crowds viewing the parades were estimated at 250,000 in Honolulu, 80,000 in Cocoa Beach, 250,000 in Washington, 4,500,000 in New York and 300,000 in Houston.

Cooper dropped a wreath onto the sunken battleship, Arizona, in Pearl Harbor as a special Armed Forces Day tribute May 18, before his helicopter landed at Hickam Air Force Base, Hawaii. He was met by his wife, Trudy, daughters Cam and Jan, and about 2,000 wildly cheering service personnel and civilians.

A 15-mile parade ended at Iolani Palace, Hawaii's state house, where Cooper was presented with the Statehood Medallion and the first Regents' Medal to be presented by the University of Hawaii. The City, County and State made notable mention of the fact that Cooper had met his wife and was married while attending the University of Hawaii.

Police officials said it was the biggest turnout in Honolulu's history—greater than General Douglas MacArthur received on his return from Japan in 1951, and well ahead of President Eisenhower's greeting in 1960.

Cooper remarked in front of the Palace: "It's a great day to see all these wonderful people and I'm thankful everything turned out successfully. Hawaii has changed a lot but the people are still as friendly. I don't know why I ever left."

After the ceremonies at the state house there was a reception at Governor John A. Burns' mansion, where Cooper met local dignitaries as well as a group of old friends.

Late that evening, the party boarded an Air Force transport plane for a non-stop flight to Patrick Air Force Base, Florida. Arriving Sunday, they were greeted by another enthusiastic crowd. Following a medical debriefing and a private family dinner, Cooper faced the news media representing the major networks, wire services and individual outlets to give them a brief run-down on his epochal flight.

Monday allowed a brief respite for the party before the Washington and New York City celebrations.

On Tuesday the Coopers, accompanied by fellow astronauts and other MSC officials, made the trip from Cocoa Beach to Washington and were greeted in the Rose Garden of the White House by President John F. Kennedy. It was

here, too, that Cooper was reunited with his mother, Mrs. Hattie Cooper who was in Tecumseh, Oklahoma during the flight, and who was accompanied by Washington by Vice President Lyndon B. Johnson.

The President presented Cooper with the National Aeronautics and Space Administration's Distinguished Service Medal. The citation said Cooper "demonstrated man's ability to conduct engineering and scientific investigations in orbital space flight and added significantly to man's knowledge of space technology."

In addition, Kennedy presented NASA Medals for outstanding leadership to five men who helped support Cooper's successful flight. They were: Kenneth H. Kleinknecht, Project Mercury manager; Christopher C. Kraft, director of MSC's Flight Operations Division; G. Merritt Preston, chief of MSC's Preflight Operations Division and MSC's Cape Operations; Floyd L. Thompson, director of Langley Research Center; and Maj. Gen. Leighton I. Davis, commander of the Air Force Missile Test Range at Cape Canaveral.

The President also presented group achievement awards to Rear Admiral Harold G. Bowen, Jr., Chief of Cruiser-Destroyer Flotilla 4, for the recovery forces, and to Maj. Gen. Ben I. Funk, head of the Air Force Space Systems Division, for its work in managing and developing the Atlas launch vehicle.

President Kennedy noted that Cooper had made his flight on the anniversary of Charles A. Lindberg's flight from New York to Paris. "Both flights were equally hazardous, both were equally daring," Kennedy said.

Following these ceremonies the group moved to the Capitol where Cooper addressed a joint session of the Congress.

The next official stop for the Cooper encouragement was a luncheon at the Benjamin Franklin Room at the State Department in honor of Cooper and his flight in Faith 7.

On Wednesday morning the pilot of the MA-9 mission and his family departed for New York City and the resounding cheers of a crowd estimated at four-and-a-half million persons determined to get a glimpse of the man who had spent more time in space than any other American.

In addition to cheers, the crowd rained 2900 tons of ticker tape on the astronaut and his cohorts. (A sign noted "Littering \$25 Fine. Don't Litter Today.")

It was interesting to note that as the motorcade passed

up "Mercury Way" a number of the city's sanitation department workers leaned on their brooms and cheered wildly despite the job which faced them following the salute.

Mayor Robert Wagner told Cooper at the City Hall, "New York goes for you in a very big way. America owes much to you, to each and all of you. But in a larger and truer sense, it is the world and all humanity who are in your debt for adding to the sum of knowledge about the cosmos, for bringing the day of the moon shot closer, but above all, for enriching the world treasury of heroism — an international treasury which belongs to all humankind."

During Mayor Robert Wagner's luncheon at the Waldorf Astoria in honor of Cooper, NASA Administrator James E. Webb and the Mercury team, the Mayor presented Cooper with the New York City Medal of Honor and a Scroll for Distinguished Service.

President Herbert Hoover, now 88 years old, attended the luncheon, to pay tribute to Cooper. The astronaut was one year old when Mr. Hoover became President of the United States.

Hoover linked the name of Cooper and his fellow astronauts with those of other great American explorers — Lewis and Clark, Lindberg, and Byrd. He said "each of these men have added spirit and character to our country. There could be no greater tribute than this to any man and no greater service to our people."

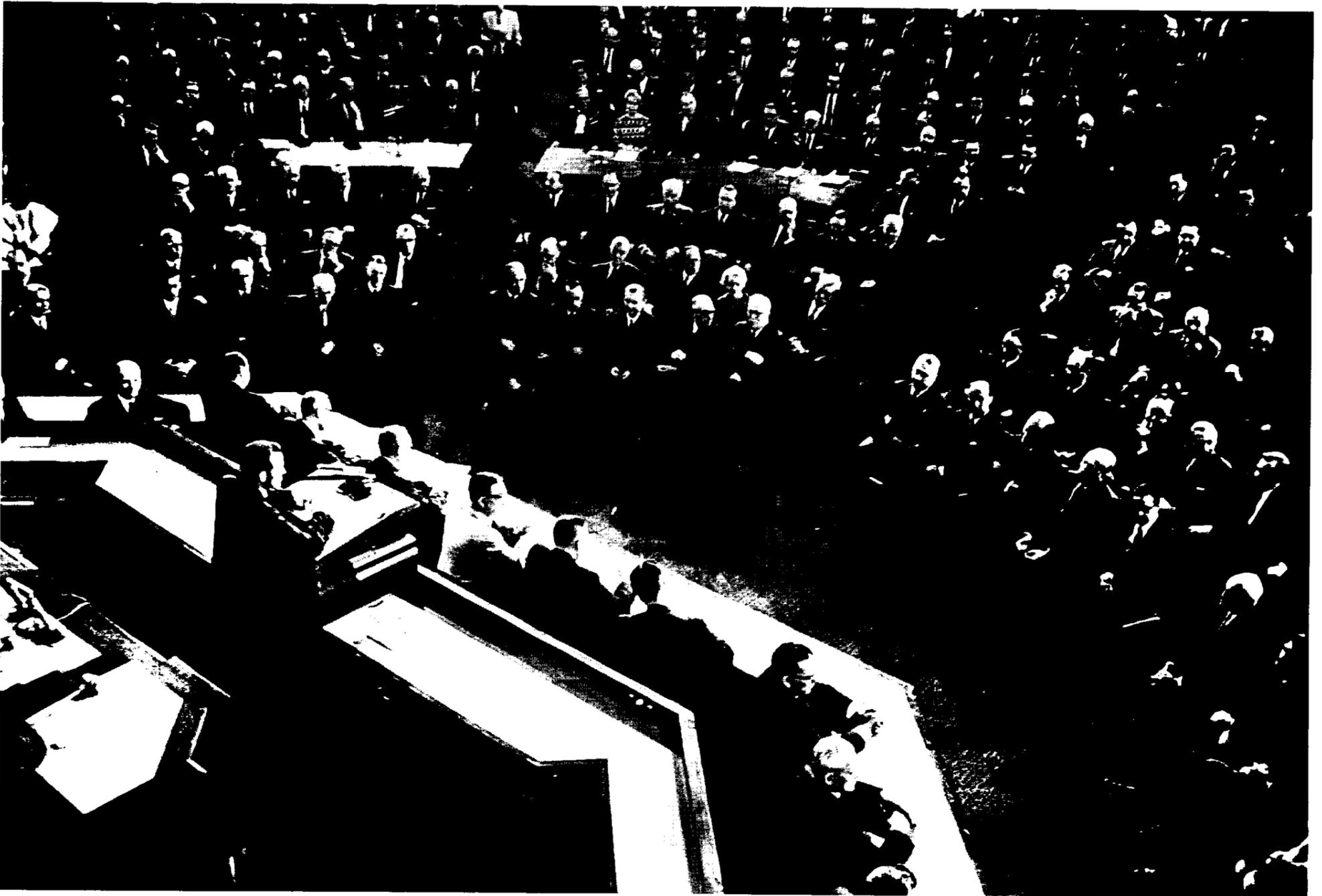
Last Thursday morning, Cooper started another busy day by addressing the 2,500 adult leaders attending the 53rd annual meeting of the National Council of the Boy Scouts of America.

A Life Scout of Troop 10 of Shawnee, Oklahoma, Cooper expressed his regret that he had not gone on to earn his Eagle Scout rating. He received a citation for his "bravery, skill and self reliance in America's longest orbital flight in space."

Cooper was later surprised by the appearance of his former scoutmaster, J. Heston Heald, now of McLean, Virginia.

Another ceremony was in store for Cooper at the Newark, New Jersey, Airport, where Governor Richard J. Hughes presented him with a silver medallion from the people of New Jersey.

The party then boarded NASA planes for the return trip to Houston, brief ceremonies at the airport and at the Coliseum, and a downtown parade, the last of the busy schedule, which was witnessed by an estimated 300,000 spectators. It was the largest turnout in Houston's history.



Public Response Shows U.S. Confident We Can Conduct Peaceful, Open Research, Says Cooper

"I think of all things that I am constantly amazed at is the public's response to this program . . . it is tremendously impressive," Astronaut L. Gordon Cooper told both houses of Congress and packed galleries May 21. The parades and activities following each flight "show that Americans want to express their feelings and their confidence that we . . . can conduct peaceful research programs; that we can conduct them openly, and under the surveillance of every man, woman and child in the entire world."

Congress met his statement with applause.

"You cannot imagine what an honor it is for me to be invited here," Cooper said initially.

Wreath

"The other day, when we came back into Honolulu, . . . from the carrier U. S. S. Kearsarge, it was Armed Forces Day. Flying in the helicopter from the carrier we deviated over the U. S. S. Arizona and I threw a wreath out on the tomb. I thought as I did so of the many thousands of American military who fought and died and those who are still

fighting and dying, and who will in the future fight and die that we might have a country free to conduct the research and development of a peaceful scientific program such as the one I am now in.

Military

"I think that this program is composed of many members of the military such as myself, who are integral members of the National Aeronautics and Space Administration, as well as civilians from all walks of life and all avenues of endeavor. I don't think I have ever been with a team that was more dedicated, or striving harder, or was more completely sold on their product than is the total space effort . . . particularly the manned space flight effort in which I am involved.

"I think one thing that we are proving is that man is very definitely a primary part of the space vehicle system, . . . that man can still function with his brain, his thoughts, his body. Aided by the various intricate parts of hardware which we developed over the years, he can still accomplish his mission, take varied courses of action, and conduct research.

"The door to manned space flight was opened by the gentlemen who appear with me," Cooper added, and in turn introduced each of his fellow Mercury astronauts present.

Calling Alan Shepard's flight a "momentous occasion," he introduced Virgil Grissom as "a man riding on top of the rocket and getting into space.

Glenn

"Next there was gentleman whom . . . the entire world knows and loves and respects, John Glenn . . . John is doing some ambassadorial work in Japan for us. He phoned yesterday morning via long distance to extend his best wishes and to say that he wished he could be here.

"He was followed by Scotty Carpenter in Aurora 7.

"We then had a very complete systems wring-out, elongation of flight, and engineering test flight in Wally Schirra's Sigma 7. And then followed myself."

After the introduction of each astronaut there was applause from the listeners.

"I named my spacecraft Faith 7 for three reasons," Cooper said. "First, because I

believe in God and country; second because of loyalty to the organization—to the two organizations, actually, to which I belong—and third, because of confidence in the entire space team.

He was loudly applauded.

"I am not much of a preacher," Cooper said in closing. "But while in flight on the 17th orbit I felt so inclined to put a small prayer on the tape recorder in the spacecraft—it was over the middle of the Indian Ocean in the middle of the night. Things had been going so beautifully, everything had been working perfectly, and it was an ideal flight. I was encouraged to read a transcript of this prayer as an ending."

Prayer

Cooper closed his speech with a quiet reading of a humble prayer, first uttered more than 100 miles above the earth.

"Father, thank You, especially for letting me fly this flight. Thank You for the privilege of being able to be in this wondrous place, seeing all these many startling, wonderful things that You have

created. Help guide and direct all of us that we may shape our lives to be much better Christians, trying to help one another, and to work with one another rather than fighting and bickering. Help us to complete this mission successfully. Help us in our future space endeavors that we may show the world that a democracy really can compete, and still are able to do things in a big way, and are able to do research, development, and can conduct many scientific and very technical programs. Be with all our families. Give them guidance and encouragement, and let them know that everything will be OK

We ask in Thy name. Amen.

"Whether space will become a force for good or ill depends on men. I strongly believe it will be a sea of peace."

Edward C. Welsh
Executive Secretary
President's Space Council

"Man's opportunities for scientific exploration of the Moon are practically unlimited."

Space Science Board
National Academy of
Sciences