

~~Take to Wash~~  
File FT-3

THIS IS AN UNOFFICIAL TRANSCRIPT OF THE GEMINI-TITAN 3 MISSION, March 23, 1965

Page #1

Haney: This is Gemini Control - The weather in the Cape Area at the scheduled lift-off time of 9 AM EST is predicted to be partly cloudy with scattered and broken clouds conditions, winds of 10 mph from the SE, visibility of seven miles. Wave heights in this Cape area expects to be 2 to 4 ft. and the temperature predicted for lift-off is 68 degrees. In the down-range recovery area the weather is also reported as satisfactory. In the prime recovery area at the end of the third orbit, winds are running 15 to 20 MPH, the waves 3 to 5 ft. the visibility 10 miles. Back-up pilots Walter M. Schirra Jr. and Thomas P. Stafford spent the night last night in the ready room at pad 16. They retired shortly after dinner which they had with the prime crew, Gus Grissom and John Young in the Manned Spaceflight Operations Building on nearby Merritt Island. After dinner last night Grissom and Young reviewed their flight plan, and went to bed about 9 PM. They were awakened at 4:40 AM this morning by Donald K. Slayton, Assistant Director for Flight Crew Operations, Manned Spacecraft Center. They had breakfast with the following people - these people were the specially invited guests of the crew: Mr. Bastian Halko, Program Manager of the Martin Co., Col. Richard Dineen, Gemini Program Manager, Air Force Space Systems Division, responsible for the preparation and launch of this Titan-II launch vehicle. Dr. Robert R. Gilruth, Director of the Manned Spacecraft Center, Walter C. Williams, Vice-President of Aero-space Corporation, former operations director through out the project Mercury manned flights., Walter Burke, Vice-President, McDonnell Aircraft Corp. makers of the Gemini spacecraft. Christopher Columbus Kraft, Mission director for Gemini 3 mission., Dr. Charles Berry, in charge of the Medical effort here in Gemini, Mr. J. S. McDonnell, the Board Chairman of McDonnell Aircraft, and Alan B. Shepard, fellow astronaut, Donald Slayton, Mr. Charles Mathews, Gemini Program Manager for the Manned Spacecraft Center, Mr. Merritt Preston, Deputy Director of the Kennedy Space Center.

The crew breakfasted with their guests on the following menu. They had: Tomato juice, cantelope, scrambled eggs, a 2 lb porterhouse steak-the crew specified theirs to be medium rare - toast, jelly and coffee or milk at their pleasure. Grissom asked for milk, John Young stuck with his tomato juice and had nothing additional. Following breakfast, and after receiving good wishes from their guests, Grissom and Young drove to pad 16 in a two-car motorcade and arrived there at approximately 6:02 AM. Immediately the suiting-up process began which activity was completed by 6:45 AM and in your TV monitors now you should be able to see the crew under way leaving pad 16 and headed for pad 19. I am advised they left pad 16 about 7:05 AM EST. And the truck is making the turn - its approximately 400 yds. from pad 16 to pad 19 .....the ramp, at which time Grissom and Young will walk to the elevator. ....leading the party, Grissom in the rear I believe, followed by the two suit dressers, Joe Schmitt and Al Rochford. There goes the elevator lifting off, appropriately at 7:09, proceeding to the 11th level.

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unofficial transcript  
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Astronauts Gus Grissom and John Young has entered their spacecraft - they entered at 7:12 AM EST. They are running approximately 5 to 10 minutes ahead of schedule. This has been the course of the action this morning - all events checking out very nicely and if anything the crew running a little bit ahead of time. They took some kidding about their early arrival from the spacecraft test director George Page. He suggested that - he wondered if they might have missed breakfast - they assured him they had not, they had, in fact, eaten a 2 lb. porter-house steak. The count at this time - T-103 minutes - and counting. This is Gemini Control.

Our status is green and go at this time. We had no problems on the range or here at Cape Kennedy. And the board - the status board - for the individual stations around the world is completely green. The storm that was developing off the north west coast of Australia yesterday has shifted so it no longer poses a threat to our Carnarvon station located on exactly the northwest point of Australia. Interestingly the storm was detected by Tiros satellite in a pass yesterday morning, it had hitherto been unrecorded. Another satellite is playing a very important part in this first manned Gemini space flight - that satellite is Syncom II - that is hovering in a figure 8 pattern over the Indian Ocean. Signals will be relayed to Syncom II from the Coastal Sentry Quebec, a ship located half way between Australia and South Africa. This is Gemini Control.

The countdown proceeds at an excellent pace. Flight Director Chris Kraft has approved an early hatch closure. The hatches are going to be closed momentarily some 12 to 13 minutes ahead of schedule. Around the network the story is very much the same - everybody reading everyone else loud and clear and the equipment checking out in excellent shape. This is Gemini Control.

At 7:34 AM EST the hatch is closed on the Gemini 3 spacecraft some 11 minutes ahead of the scheduled count time. This has been the pattern this morning trying to get in events a little bit early - to give them a little more time in the checkout phase. Since the hatch is closed a rather full communications check has been run with each pilot - Grissom sounding off in his deep, crisp, base voice -- Young, a voice slightly higher in pitch and revealing a trace of his Georgia Tech schooling and his Florida upbringing. But both of them sounding loud and clear. Here to witness this first Gemini manned flight is a press contingent that tops any previous manned Mercury flight. We have nearly 1,000 news media here at the press site and advised there are thousands more people from all over the state of Florida lining the beach to witness this event. This is Gemini Control - the count T-76 minutes and counting.

This is Gemini Control. The count at this time is T-69 minutes and proceeding. We are still running 10 to 12 minutes ahead of time on most of our functional tests-everything continuing to checkout in excellent shape. To recap a bit for some of the newcomers at the Press Site, Grissom and Young were awakened this morning at 4:40 AM - they started breakfast at 5:15 with some 12 guests in the crew quarters on nearby Merritt Island. They left the Manned Spacecraft Operations Building at shortly before 6 o'clock, proceeded to the Cape Kennedy ready room adjacent to Pad 19 and by 6:45 AM their sensors were in place on their chests, their suits were on and checked out and they were ready to leave for the short drive over to pad 19. This is Gemini Control.

.....All systems continuing to check out in good shape. The most recent major systems check has been completed on the cabin and environmental suit system. The complete oxygen breathing system checked out very well. Meanwhile Vice-President Humphrey, a visitor here at the Cape today, is at the Control center; included in his party are Dr. Robert Seamens, Associate Administrator of NASA, General Bernard Schriever, Commanding General, The Air Force System Division, Dr. Ed Welch, Executive Secretary of the National Space Council, Congressman Olin Teague of Texas and many other notables. This is Gemini Control.

This is Gemini Control. We are at T-45 minutes and counting. Since the Astronauts entered the capsule, Dr. Berry flight surgeon here in the Gemini Control Center has been watching their heart rate and their respiration rate very carefully on a scope immediately in front of him. He advises that the bio-medical data is exactly normal and completely within the expected rates. The weather here in the Cape area - this is the all important camera coverage is very optimistic at this point. We have one reading on our camera position in Melbourne, 20 miles south of the Cape indicating 50%. The other five positions in the Cape area read very nearly 100 per cent and this is probably one of the most outstanding camera coverage reports we have had at this particular time prior to a Gemini launch. From down range we have been talking with the Public Affairs Officer on the Intrepid - he advises that there, some 700 miles southeast of the Cape, that the weather is scattered clouds, only 2 to 3/10ths cloud cover, about a 20 to 23 knot wind blowing, the waves running 4 ft. He advises that the Navy has given a go for that recovery area, weather looking quite bright and good down there. This is Gemini Control.

This is Gemini Control. The count is T-38 minutes and proceeding, however, from the blockhouse, we have an indication that there may be a leak in an oxidizer line in the first stage of the Titan II booster. And the mission director Chris Kraft has decided to hold this countdown at T-35 minutes, approximately 3 1/2 minutes from now. And to evaluate the situation clearly and to understand exactly what the nature of this problem is. Again I repeat we suspect there is a leak in an Oxidizer line in the first stage of the Titan II booster. This is Gemini Control.

This is Gemini Control. We have been holding the last two or three minutes while a group of pad technicians investigated a leak in the oxidizer line on the pad. They located the source of the trouble - a valve on an oxidizer line - a wrench was applied to the valve - it was given approximately one turn until -- and the leak was eliminated. I repeat, the leak has been eliminated. The line now shows no leakage. We are preparing to pick up the count within a very few minutes. We are holding - still holding, presently, at T-35 minutes preparatory to resuming the count at any moment now. This is Gemini Control.

This is Gemini Control. We are standing by momentarily for the start of the erector lowering - the White Room area has been secured - the White Room being that portion surrounding the spacecraft which is used as a port of entry into the hatches of the spacecraft. The pad crew reports at this time the erector itself and the pad area pretty well clear. We are standing by to start - Gus Grissom confirms that the - everything is in readiness to lower the erector. This is Gemini Control.

. . . momentarily to pick up the count. We're still holding at T-35 minutes. However, we have taken advantage of the hold to go ahead and proceed with the erector lowering. It is down - the launch vehicle standing on the pad still linked up with the umbilical lines to the umbilical tower. Everything aboard still checking out very nicely. Grissom reporting his communications circuits working excellently. Deke Slayton, the Assistant Director for Flight Crew at the Manned Spacecraft Center, advises that he has talked to Betty Grissom at her home in Houston, Gus' wife. He tells me that Betty is go, and he says that he's now trying to reach Barbara Young to check on her status. This is Gemini Control.

We've resumed the count at T-35 minutes and proceeding. The count was resumed at 45 minutes after the hour. Meanwhile, Vice President Humphrey is on the floor of the Control Center with Dr. Seamans. He is chatting with Chris Kraft, Mission Director, on the status of this mission and giving him a message of encouragement and complete confidence. It's quite an animated scene. This is Gemini Control.

This is Gemini Control. The count, T-26 minutes and proceeding. At this time, Mission Director Chris Kraft has just completed a status check with his flight controllers - or shortly will in a very few minutes. Everything checking out very well so far. You may have noticed the striping around the spacecraft. This is a slightly different pattern than you have seen in earlier Gemini flights. Those black stripes were added to raise the temperature slightly in that equipment adapter, which houses most of the major systems onboard, such as the maneuvering system fuel, the environmental control system, water boiler, radiator, and other major items. It includes the batteries; the temperature varies from point to point in the equipment adapter, at the lower end of it in space it runs approximately 100 degrees below zero. Meanwhile, the Vice President made about a five minute visit here on the floor, talking with the Mission Director. He then chatted briefly with Astronaut Wally Schirra. He also talked to Astronaut Gordon Cooper, the capsule communicator here in the Control Center for this mission, and he met Astronaut Gene Cernan, as well as a number of other flight controllers. He's returning to the viewing area of the Control Center from which point, we understand, he plans to observe the flight. This is Gemini Control.

This is Gemini Control. The count is T-20 minutes and counting. At this time we are standing by for a check of the reentry control system propulsion rings, located about the neck of the spacecraft. Each of the thrusters will be blipped. There was the first blip. About 20 milliseconds burst from the B-ring thrusters. Each thruster will be taken in sequence around - there are eight thrusters in each ring - the rings are duplicated, completely redundant, giving us 16 thrusters, which will control the attitude during the reentry phase of the mission. This is Gemini Control.

This is Gemini Control. We're still continuing here the tests - thrusters about the spacecraft - the smaller thrusters, 25 lbs of thrust each, up in the reentry control section have been tested. We're now working on the thrusters in the equipment and in the retro portion of this spacecraft. Each of these thrusters has a capacity of 100 lb thrust. Each of the aft firing thrusters, that is and we have two thrusters which fire in a forward direction - they have a capacity of 85 lb thrust. Spacecraft Test Conductor George Page is working with Astronaut Gus Grissom in these tests, giving him a countdown list - or a checklist, as it were, to assure that the right switches are in the right positions before actuating these thrusters. The count at this time is T-12 minutes and proceeding. This is Gemini Control.

This is Gemini Control. The count at this time is T-10 minutes and counting. We have just completed a status check here in the Control Center, the Mission Director polling the flight surgeon, the guidance, navigation and control officer, the capsule communicator, tank pressure monitor, the booster systems engineer, retro-fire officer, flight dynamics officer, the guidance officer, network and the electrical environmental and communications systems officer. All are in a go status. The Board is green around the Range and we are looking very, very good at this time. The count T-9 minutes. This is Gemini Control.

The status is go. This is Gemini Control.

This is Gemini Control. Count - T-2 minutes and counting. This is Gemini Control with a cross conversation going between Gus Grissom and John Young on the various light position. Everything in a go condition. The count - T- 1 minute and 20 seconds . This is Gemini Control.

This is Gemini Control. We're at T-1 minute , T-60 seconds and counting. T-45 seconds and counting. The range holding a final status check, T-30 seconds. Recorders have gone to fast speed. Twenty seconds. Fifteen seconds. Ten, nine, eight, seven, six, five, four, three, two, one, zero. Ignition. And we have a lift-off. We have a lift-off at 24 minutes after the hour. Rising very nicely. Cabin pressure climbing.

The count 60 seconds -- T+60 seconds. That booster is flying at a speed of 658 miles per hour. The crew is pulling approximately 2Gs. They are now going through the area of max Q. Maximum dynamic pressure exerted on the vehicle. Controllers report here that all systems looking fine. We have three jets in the area here at the Cape photographing this flight and at a very short time you will probably hear a sonic boom if you haven't already as these jets accelerate in excess of Mach 1 in other words the speed of sound. We are two minutes into the flight. The velocity of the vehicle right now is approaching 3,000 miles an hour, the G forces building to 3.3 Gs. The crew reports they are in fine shape and everything looks green in the Control Center. We are coming up on staging or booster engine cutoff. We have a staging report. We have can confirm staging. We have second stage ignition and second stage thrust looks fine. We are three minutes into the flight. The speed of the spacecraft at this time is nearly 6500 miles an hour and accelerating. G forces drop off at booster engine cutoff. They are now building again. The crew is now undergoing about 1.5 Gs. Mission Director Chris Kraft has given the crew a tentative go. Three minutes and twenty seconds into the flight.

(OVER)

There are a few reports from the pilots. They are simply identifying their flight plan very carefully. Four minutes into the flight, Gordon Cooper just told Grissom that he is looking mighty good. Gus gave him a very reassuring laugh. A very calm pilot in command of that spacecraft.

Four minutes and 35 seconds into the mission. The velocity of the spacecraft now approaching 12,000 miles per hour. G forces in the range of approximately 3.5 Gs. The flight dynamics officer reports excellent steering on this vehicle. We remain in the primary guidance phase all the way. We are getting a little bit of distortion on some of Grissom's reports, but they are all very affirmative sorts of reports. I think its in the communications system itself. We are at 5 minutes and 20 seconds in and we are rapidly approaching sustainer engine cutoff point. We are at 10 seconds from SECO or sustainer engine -- second stage sustainer engine cutoff. Standing by for confirmation of SECO. Mission Director advises that they have asked Gordon Cooper to tell Gus Grissom that he is go. Molly Brown reports its very happy about that go.

Jack said that Grissom has separated from the booster at this time -- he is in orbit. Momentarily we will have the numbers on that orbit. It took him some 15 to 16 seconds to separate from his booster. He is in excellent shape at this time out over Bermuda. I believe we have the flight tapes ready from slightly before liftoff. I believe it begins at approximately minus 1 minute and at this time we would like to play those flight tapes for you.

All reports still looking excellent from their spacecraft as they proceed across the Atlantic Ocean. At this time we are in a position to play these tapes for you. I regret the technical difficulty as far as their being played earlier. This tape will begin at approximately minus 30 seconds and proceed through the power stage of flight. The recorders have now been reversed and we're now in a position to play the booster phase of the flight for you.

This is Gemini control. At this time Gus Grissom and John Young have just crossed the coast of northwest Africa. They're in voice communication with the Canary Island station. They've been running through a status check of the environmental system and the communication system. Everything checking out very nicely. The flight proceeding. We're 20 minutes into the flight. This is Gemini Control.

This is Gemini Control. We're 25 minutes into this mission. And everything is doing very nicely. Over the Canary Islands. The command pilot, Gus Grissom, performed control mode checks in all roll, pitch, yaw maneuvers very nicely. He updated his clock. He activated the sea urchin experiment twice. Meanwhile John Young performed communications checks with the Canary station, took a blood pressure reading, pumped up the ~~count~~ cuff on his left arm; he did an orbital update on the computer and he performed a suit integrity check on his suit. We're in good condition at this point. We're over the Kano, Nigeria site and the voice is being remoted back here to the Cape. Gordon Cooper is in conversation with Gus Grissom at this time. This is Gemini Control.

This is Gemini Control. Mission Director advises we have a completely nominal mission at this point. The Retrofire Officer has just supplied the numbers on the elements of this orbit and they are the following: 87 nautical miles (which translates to 100 statute miles), that's the perigee, the apogee is approximately 142 statute miles, or 121 nautical miles. This is Gemini Control.

This is Gemini Control. We're 38 minutes into the mission. At this time the spacecraft just off the southeast coast of Africa. We say again on our orbital numbers - the perigee approximately 100 miles, apogee 140 miles -- those are statute values -- a very nominal orbit. The period we would gauge to be about 88 minutes. In the Canary's pass and checking out the systems Grissom reported later after the Canary's pass to the Kano station some small difficulty in the yaw thruster -- that is, the yaw, the yaw left thruster -- in apparently the electronic elements there are several circuits of electronics available; this was in the secondary electronic circuit. The problem is not considered a serious one and we are going to make another evaluation over the Coastal Sentry Quebec which is positioned in the middle of the Indian Ocean in a very few minutes. This is Gemini Control.

This is Gemini Control. The Coastal Sentry ship in the middle of the Indian Ocean is still in communication with him, a surgeon advises that the data on both pilots is excellent throughout the flight; the respirations and the heart rate completely within the normal range. The systems are being checked again through the Coastal Sentry. We've updated the computer and within a very few minutes the Coastal Sentry should lose contact and within a very few minutes after that our Carnarvon station where Astronaut Pete Conrad is located should be in contact. At 49 minutes into the mission. This is Gemini Control.

This is Gemini Control. Mission Director Chris Kraft, has just advised the Australian station that he's completely satisfied with the system performance at this time. He's told them to give the crew a "go" for the second orbit. Grissom in conversation which I'm hearing through another ear with Pete Conrad advises he also is "go" and this mission is "go" for a second orbit, 51 minutes into the mission. This is Gemini Control.

This is Gemini Control. 56 minutes into the mission and the Carnarvon Capsule Communicator Pete Conrad is still in touch with Gus Grissom. Among the first things Grissom reported during his pass over the Carnarvon station was that he could see quite clearly the lights of Perth that other astronauts have seen in the past. Much of the pass has been spent checking the telemetry systems, the various readings. The pilots have also gone through an extensive update of their clocks and their times for the computers to compute the various retrofire positions if needed. They've also put into the computer a precise reading, a request for a forty-eight foot per second burn over Texas on this first pass. The extent of this burn will be for 73 seconds. I repeat it will be a forty-eight foot per second burn for the duration of 73 seconds. This will have the effect of bringing our orbit

down to a very near circular 100 miles. This is Gemini Control.

This is Gemini Control. We're one hour, eight minutes into the mission, the flight of Gemini-3. The spacecraft moving across the southwestern Pacific Ocean at this point. Vice President Humphrey has left the Gemini Control Center here. He left approximately five minutes ago with Dr. Seamans. He plans to visit several other locations on the nearby Merritt Island facility of NASA and according to plans will return to the Control Center a little later in the mission. We're in a "go" status; we've had a "go" for second orbit. This is Gemini Control.

This is Gemini Control. The conversation between pilot and ground so far in this flight has largely been confined to the normal type of test pilot talk that you would expect. It's a rundown of verification of systems; on the ground the flight controllers and in orbit from either John Young or Gus Grissom. We've heard almost nothing from John Young. The one non-test pilot item that is fresh in our memory is a statement from Grissom and he said "I can see very clearly the lights of Perth." That's as his spacecraft started across the Australian continent. This is Gemini Control.

This is Gemini Control. At this time John Young has activated and deactivated the blood experiment. It was open approximately 20 minutes exposed to phosphorus 32 radiation source. The pilots have also completed an RCS plume check. The RCS is the Reentry Control System. They observed the thruster fire quite satisfactorily from that RCS chamber. At this time the spacecraft is rapidly approaching the Southwest coast of Mexico - one hour, 18 minutes into the mission. We say again we have a "go" for second orbit. We expect to perform a translational maneuver over Texas which should circularize our orbit, bring it down to approximately 100 miles circular. This is Gemini Control.

This is Gemini Control. Within the past few minutes the spacecraft has been in contact with the Rose Knot Victor, a ship stationed approximately 800 miles off the southwest coast of California. They're in conversation now. Meanwhile, over the far eastern Atlantic trouble has developed aboard a C-54 which is an air rescue service plane that reports back here to the Control Center that it is having engine trouble, apparent engine trouble with one engine, they already had another engine feathered. It is a four-engine airplane. It is being diverted to Las Palmas airport in the Canary Islands. It is expected to reach that airport in approximately two hours. That airplane has been on station along with a number of other aircraft around the world. This particular station was a point some 12-1500 miles off the northwest coast of Africa. It is proceeding toward Las Palmas with one engine feathered, and apparent engine trouble in the second of its four engines. This is Gemini Control.



This is Gemini Control. At this time the Gemini-3 spacecraft is directly over Texas. It is about to start its first major translational maneuver. This will involve firing the forward-firing thrusters, specifically thrusters number 11 and 12. They will be fired for a duration of approximately 71-76 seconds and the aim is to circularize the orbit. Whether or not that aim is achieved will be confirmed in later conversations and radar sightings as the spacecraft moves across the southeastern United States. We are one hour and 32 minutes into the mission. This is Gemini Control.

This is Gemini Control. Within the last five seconds the Molly Brown, Gemini-3 spacecraft has completed the translational maneuver by firing their forward-firing thrusters, 85 pounds each, for some 75 seconds. The maneuver has apparently been a successful one demonstrating the extraordinary steering capability of this spacecraft. We are now just coming into voice communication with the spacecraft here at the Cape and we will play that transmission for you live. This is Gemini Control.

This is Gemini Control. We are one hour and 48 minutes into the flight of Gemini-3 spacecraft now approaching the northwest coast of Africa. We are just this moment establishing contact with our Canary Island station during their pass across the Cape and out across Bermuda. You heard the exchange between the pilots. During that exchange the Mission Director advised here that he is completely satisfied with the on-board systems. You recall in Project Mercury it took about one orbit to get all the systems shaken down, as it were, and that's about what it's taken today. We had some small difficulty in one of the electronics modes early in the flight. Another concern arose when we had a slight pressure drop in our OAMS or maneuvering system, fuel pressure, source pressure on the fuel that is and both of these concerns have settled down completely. The maneuvering system fuel quantity has read a very steady pressure since back in the first pass over the Canary Islands. You recall the conversation when the Gemini-3 spacecraft was advised to look for its booster. That would be the second stage of the Titan II which put it in orbit. The pilots will yaw around to be in a position to look for that second stage as they start their swing across the Indian Ocean. They will be in the dark and the booster will be in the light. They should be able to see it some twenty miles below and behind them. We'll be standing by for further reports on that. This is Gemini Control.

This is Gemini Control. This time the Kano station is in contact with our spacecraft taking telemetry data and other quantities. We have, on the basis of radar data, been able to compute our new apogee and perigee. They are as follows: 97 miles, perigee; apogee, 105 miles. That's 97 statute miles by 105 statute miles on top. That's a reduction in the size of the apogee of approximately 35 miles - a truly historic maneuver. Earlier, our apogee had been 100 statute miles by 140 miles in apogee. At the same time, we reduced the period of the orbit by approximately 1/3 of a second - the new orbital period 87 minutes and 2/3 seconds. That is an approximation, but it is close. This is Gemini Control.

This is Gemini Control. The aircraft that we reported in trouble earlier in the eastern ..... is now nearing Las Palmas, its about one hour out of Las Palmas, in the Canary Islands has encountered no further trouble, it has been met by a second aircraft and is be escorted to the airfield at Las Palmas. The flight itself - we are two hours and 8 minutes into the mission. The spacecraft at this time is passing over the southeast coast of Africa and they should at just about this time - we are not in voice contact with the spacecraft at this time - but they should be seeing the booster. One of the prime reasons why they will be able see it unlike past Mercury flights is due to the dramatic change in orbit, wherein they will actually be passing under the booster. They will yaw around and observe it flying some twenty to twenty five miles right over them and they will probably get the best view of it when it is out well behind them. This is Gemini Control.

This is Gemini Control. At this time the spacecraft is directly over the Coastal Sentry Quebec in the Central Indian Ocean, we've had to rely on Syncom II - a communications satellite hovering over the Indian Ocean for contact with that ship. We have to place further reliance on it temporarily because we have lost communications with our Australian Station. However we seem to excellent communications through the use of Syncom II. At this time the spacecraft should be performing a translational burn that will change the flight path very slightly - if entirely successful it will mean that the spacecraft will land at a point some 30 - 40 miles farther north than it would have had it followed the same ground track throughout this planned three orbital mission. We are at two hours 19 minutes into the mission. This is Gemini Control.

This is Gemini Control. We have been advised that we are go for a third orbit. Communications have been out about the last ten minutes with the Carnarvon Station, however, the moment that the station acquires the spacecraft approximately two minutes ago the communications including voice communications came back in. We are listening now to a conversation which is relatively clear between Pete Conrad and Gus Grissom. This is Gemini Control.

This is Gemini Control. We have just completed a pass over Hawaii within the last two minutes. The spacecraft has been raised, has come in contact with the Roseknot Victor ship off the southwest coast of the United States. Characteristically very little conversation going back and forth strictly pilot talk, evaluating systems. Even Gordon Cooper, who *was* not noted as a loquacious pilot during his 22 orbit flight, has been moved to comment on the lack of comment by Gus Grissom and John Young during this flight. They are entirely satisfied with the operation of the spacecraft and our ground systems. We are 2 hours and 57 minutes into this flight. During the Hawaii pass, Neil Armstrong, a fellow astronaut, confirmed the flight is go for the third orbit and at this point we are rapidly nearing the Mexican Peninsula. During the check of his control systems over the Pacific Ocean, Grissom noticed some drift in his eight ball, or flight direction needle on his side of the spacecraft - he seems not unduly concerned about it - apparently it is a slight drift and he is looking into it and I'm sure we will have it solved in very little time. This is Gemini Control.

This is Gemini Control. You have been hearing for approximately the last ten minutes a live transmission from the Gemini 3 spacecraft during the course of that conversation - the subject came up of a slow leak which has caused plenty of questions out at the press site. The answer to the question is - that the spacecraft does seem to have a very slight leak in the yaw thruster. The Mission Director advises that it is of the order of approximately a quarter of a degree per second. It is not considered a problem. Otherwise the spacecraft seems to be performing very nicely. During the Cape pass a digital command was set up resetting clocks, updating computers - everything performing very nicely. Three hours and 16 minutes into the mission. This is Gemini Control.

This is Gemini Control. In the last five seconds the Coastal Sentry Quebec in the mid-Indian Ocean has contacted the spacecraft and conversation is underway there. We have been advised by the Navy downrange in the end of the third orbit landing area there is only 4/10 cloud cover. This condition is confirmed by a picture from a Tiros satellite, a remarkably clear picture, which shows there is a nice sunny open stretch of Ocean waiting for the Molly Brown spacecraft. John Young has been controlling the Molly Brown Spacecraft throughout much of this orbit. The times - the precise times of the pre-retro burn maneuver are being forwarded to the spacecraft right now by the Coastal Sentry Quebec, the signal being relayed by Syncom II. The spacecraft is being advised that the amount of the burn will be, this will be in blunt end forward condition, its rate will be 000, in other words it will be exactly horizontal to the earth with out right or left motion, asking for a burn of 96' per second. The duration of the burn will be 1'49" and this will have the affect of reducing the perigee of the Gemini 3 flight to approximately 50 miles. That maneuver - that pre-retro burn maneuver will be performed slightly east of Hawaii. The spacecraft is now in contact with CSQ in the mid-Indian Ocean. One final happy note on that airplane we reported in trouble much earlier in the flight has landed some 12 minutes ago at Las Palmas without further difficulties. The C-54 that had been in trouble is now safely on the ground. This is Gemini Control.

This is Gemini Control. ....still carrying on a conversation with Gus Grissom over Austrailia - an unusually long pass - much discussion back and forth, reading out fuel quantities. One particular quantity that John Young reported was the fact that the spacecraft still has 55% of its own fuel onboard. This shows very good management of this particular system and this brought some very complimentary nods from the systems people here. The time to the retro fire is a little more than 30 minutes, 30 minutes away. Our precise lift-off time this morning was 9:24 zero, zero - that is 9:24 EST. This is Gemini Control.

This is Gemini Control. The spacecraft is rapidly approaching the Hawaiian Islands we expect to have contact momentarily there and within a minute or two after contact we will be following very closely the pre-retro maneuvering system burns. This is the burn described earlier which will take approximately one minute 49 seconds at a rate of 96 ft. per second. It will have the effect reducing the perigee some 50 miles. Another dramatic reduction and another evidence of the considerable maneuverability of this Gemini spacecraft. We are 4 hours 20 minutes into the mission. We are some 12 minutes and 25 seconds to retro fire. That maneuver will be performed over the California Coast. This is Gemini Control.

This is Gemini Control. There was very little conversation over that Hawaii pass which we just completed a few minutes ago a very successful pre-retro burn was performed. The Mission Director advises that both the time and the rate about some 96 ft per second were achieved in that maneuver. The spacecraft now approaching the Rose Knot Victor, should have access momentarily and we show 4 minutes 37 seconds to retro fire. Pilots have completed their pre-retrofire check list. In the retrofire maneuver they will pitch down 16 degrees their blunt end will be forward, that is, they will be flying with the blunt end leading the flight. The retros with a thrust of 2500 lbs. each will fire 1,2,3,4, fashion. They fire 5 1/2 seconds each. This will decrease the velocity sufficiently to bring them in at the prescribed landing point. Downrange replies that the helicopters have started their engines in the prime landing area. These are the search helicopters. They will be launched at approximately one minute after the hour. This is Gemini Control.

This is Gemini Control. We are coming up now on the final retro maneuver. You can probably hear the counting in the background, 6,5,4, 3, 2, 1. fire. There is confirmation on one retro, we got a second one. We have a good retro fire. We have completed it and all indications are the attitudes were right on. We have an entirely satisfactory retro fire. This is Gemini Control.

This is Gemini Control. Although communications are a little bit spotty, we were able to hear velocity indications read out by command pilot Gus Grissom. He indicated we achieved a 331 ft. per second retarding velocity. The downward vector was 105 ft per second. The attitudes were right on at 16 degree pitch down. This is exactly nominal retro fire maneuver product. This is Gemini Control.

This is Gemini Control. At this time the Molly Brown Spacecraft is entering the blackout or the period of ionization. It is approximately over the Florida Peninsula and some 17 seconds to go. John Young should have energized the communications experiment. The experiment where by water will be released in pulses hoping to punch a hole in that sheet that surrounds the spacecraft as it burns in through the atmosphere. We are all listening very closely here to see what results will come from this experiment. This is Gemini Control.

This is Gemini Control. We are still in the blackout period. Gordon Cooper is following his end of the communications experiment. Is broadcasting a long count, in other words a 1-2-3-4-count repeating it time and again so as to find out what the reception is at spacecraft level. We have as yet heard nothing down here. This is Gemini Control.

This is Gemini Control. Throughout much of this blackout period we have received C-band data, that is the data coming in on a very high frequency. It has continued to come throughout most of this period. The Mission Director is very much cheered by this. This is Gemini Control.

This is Gemini Control. Just three seconds ago we got a brief burst of a conversation from Gus Grissom it sounded like the end of a sentence. Obviously they have been broadcasting also. We are through the blackout period and I believe momentarily Gordon Cooper and Gus Grissom will establish communications. Grissom sounds his usual husky deep voice. Cooper querying him again - are you reading - we get bursts back from Gus, they're not too intelligible, it is primarily a carrier problem. This is Gemini Control.

This is Gemini Control. We just heard from Gus Grissom. He estimates he will be approximately 25 miles short - that's 25 miles short - of the planned impact area. He is down now approximately -- there he reports the drogue chute. The drogue chute is out. I'll listen carefully for the other events. This is Gemini Control.

This is Gemini Control. We have established radio contact from the Carrier Intrepid with the Molly Brown. We are standing by for -- we have a communications drop out from this point -- oops, there he comes back in. We should have a main chute momentarily. We show a main chute indication here in the Control Center-- our light indicating main chute is lighted but we've not heard this from the ship or the spacecraft. And the reports from the Intrepid and the spacecraft now indicate that there is a good main chute, a good main chute deployment. The Carrier is in solid communication with the spacecraft. This is Gemini Control.

This is Gemini Control. We indicate a landing point of 70 degrees longitude, 22 degrees latitude. This is Gemini Control.

This is Gemini Control. An aircraft in the prime recovery area is in voice contact with the spacecraft right now and we are assuming he's on the deck and floating. Stand by one moment please.

.....some 25 to 30 miles north and west of the Carrier Intrepid. We have had a visual siting by an aircraft in the area. We're standing by for additional information. This is Gemini Control.

This is Gemini Control. Additional reports coming up from downrange now giving us a new plot of some 60-65 miles northwest of the Intrepid and our latest advisory says there's a Coast Guard cutter called the Diligence within perhaps 10 miles of the spacecraft. At this time we have only the one visual siting report from an aircraft in the area. The Navy, of course, is very busy comparing plots, radar information, on-board information, and within a very few minutes we hope to have a little more solid information on how the spacecraft looks for you. The general ground rule says that the pilots will remain with the spacecraft until a ship comes alongside. Stand by one, please.

This is Gemini Control. In the last few seconds we've had our confirmation from downrange that one of the Air Rescue airplanes circling in the area has deployed its paramedics, or its jumpers, their purpose is to go down and secure the spacecraft with a large

floatation collar to assist it. I say again, the swimmers have been deployed from an aircraft in the area and they're now swimming toward the capsule. Communications haven't been very cooperative from downrange today but the reports are getting a little better and a little more frequent now. This is Gemini Control.

This is Gemini Control. Two swimmers are in the water, nearing the spacecraft right now. The Carrier Intrepid estimates it will be alongside the spacecraft in approximately fifty (50) minutes. We estimate the splashdown of the spacecraft at 2:18. Eighteen minutes after the hour, Eastern Standard Time. This is Gemini Control.

This is Gemini Control. Our latest reports from downrange have helicopters in the area over the Molly Brown spacecraft. Swimmers have been deployed. A floatation collar now rings the spacecraft. It's floating very nicely. The latest estimate, and I'm sorry if there's confusion over these estimates --we've tried to relay them as fast as they've come in. They've come from many sources. Our latest estimate places the spacecraft some 58 miles from the Carrier. I'd like to correct an earlier indication that the Carrier would be alongside in 50 minutes. I think we should revise that to more like an hour and a half, an hour and 45 minutes. Again that is only a tentative estimate. When things are a little more secure we'll pass that information on. This is Gemini Control.

This is Gemini Control. Vice President Humphrey, who sat out most of this mission in the Control Center is on his feet. He's beaming -- he's congratulating Dr. Gilruth, Director of the Manned Spacecraft Center, General Leighton I. Davis, in charge of the DOD forces supporting the Gemini mission, Dr. Mueller, Director of the Office of Manned Space Flight, NASA Headquarters, and now on the floor Chris Kraft has lighted his post-mission cigar - he's a very happy man. In general, these people are a little bit tired but they're awfully happy after a very successful mission. This is Gemini Control.

This is Gemini Control. The latest report from downrange says this is a direct contact with an airplane in the area with the Molly Brown pilot and command pilot. They advise the airplane that they are staying in the spacecraft; however, they are removing their suits. Apparently they are a little warm. We'll try for an exact temperature down there. I repeat - they are staying in the spacecraft but they are taking off their space suits. This is Gemini Control.

This is Gemini Control. Our latest advisory from downrange places the Carrier Intrepid 42 miles from the spacecraft. This would indicate an additional sailing time of approximately an hour and 20 to 30 minutes. Approximately 80 to 90 additional minutes before the Intrepid is alongside. We have an additional item on the crew -- they are reported to have opened their hatches, they're taking a nice breath of air, giving a thumbs up signal to any and all passing airplanes. This is Gemini Control.

This is Gemini Control. Our latest advisory from downrange indicates that a helicopter pick up will be made of the crew and the helicopters will return them to the Carrier Intrepid now some 40 miles from the spacecraft. Meanwhile Vice President Humphrey has been on the floor of the Control Center the past 10 minutes. He has past among all the flight controllers, I think shaking the hand of each one. Very pleased about the mission. We now can confirm that the Astronauts are in the helicopters, both astronauts in helicopters that are being returned to the Carrier at this time. This is Gemini Control.

This is Gemini Control. The two Astronauts are presently riding in one helicopter and proceeding toward the Carrier Intrepid and should be onboard momentarily. Meanwhile a flight surgeon in the helicopter has past the message to the Intrepid, they have relayed it back to me --the message is --All is well. -- This is Gemini Control.

This is Gemini Control. From the deck of the Carrier Intrepid our Public Affairs Officer onboard advises - the helicopters are expected at the half hour in about 8 minutes they should be on the deck of the Intrepid. This is Gemini Control.

This is Gemini Control. The helicopter bearing Gus Grissom and John Young is now over the deck of the Carrier Intrepid. Momentarily it will touchdown and the red carpet has been spread out on the deck of the Intrepid. I'm advised literally thousands of white suited sailors are deployed around the deck ready to cheer the arrival of these two spacemen. This is Gemini Control.

This is Gemini Control. Gus Grissom stepped out of the helicopter only moments ago aboard the Carrier. He was described as having a big smile on his face, waving to a crowd of sailors, who are thronging around the helicopter. John Young following several steps behind him. Both of them obviously quite happy. Looking great after a splendid 3 orbit mission. This is Gemini Control.

This is Gemini Control. Our two Astronauts were met on a red carpet by RADM Donald M. White and other ranking officers of the Intrepid. They are being escorted at this time to the Admiral's cabin. This is Gemini Control.

This is Gemini Control. The President of the United States is now reportedly talking to John Young. He has just finished a conversation with Gus Grissom on the Carrier Intrepid. On the way in to get that phone call, Grissom made two statements to Public Affairs Officer onboard, he said "it was a great flight" and then he added with a big smile "I'll be ready to take GT-4". We have a report from the Doctors onboard based on the first few minutes of their physical examination. They indicate to us both pilots appear to be in excellent condition. That physical will continue shortly. This is Gemini Control.