

ASTF (USA) MC666/1
Time: 18:18 CDT, 203:01 GET
7/23/75

PAO Apollo Control. Ground elapsed time 203 hours and 1 minute. Acquisition through the Bermuda tracking station.

CC-H Apollo, Houston. Hello at Bermuda. How are you doing?

ACDR Just super, Dick. We're sitting here observing the whole world from a beautiful vantage point.

CC-H Roger. Is the East Coast pretty tonight? It's been kind of cloudy down here.

ACDR It's been pretty cloudy in most of the area here, but it comes into a clear area right now.

CC-H Roger.

ACDR Yeah. We can see Long Island. In fact, Dick, we just passed over Manhattan.

CC-H Roger.

DMP For Farouk's info, we saw a super circulation pattern off the West coast. Got the kind of panorama it was so big you couldn't get it into EVA camera frames. I wouldn't have any idea of how big an area it covers, but it looks like a super big hurricane, except it wasn't all that dense.

CC-H Roger. Understand.

DMP Yeah.

CMP It was sort of a ring of clouds, I guess you'd say, rather than a hurricane. When we got to Seattle, we were too far north of Seattle to see it. And there were clouds over Canada, but we did pick up some of the glaciers all some fertile land on the Canadian Rockies, glaciers. And Lake Superior was clouded over completely.

CC-H Roger, Vance. Got it.

CC-H Apollo, Houston. I don't want to stop your view of the United States, but when you get out over the ocean there, or at your convenience, I'd like to get the P52 data, and also, I'd like to get somebody, when they have a chance to read the four numbers A, B, C, and D on the Doppler tape recorder assembly. We're still interested in if that second recorder has moved.

ACDR Roger, Dick. We're going to go ahead and get the VTR off and go to VERB 49 for the next maneuver.

CC-H Okay, fine.

CC-H Break. Break. Tom, Houston. Would you stand by. We're getting a bad echo. Let us reconfigure so I can understand you.

ACDR Okay.

CC-H Apollo, Houston. Tom, try it again, please.

ACDR Roger. How do you read?

CC-H Loud and clear. Go ahead.

ACDR Okay. 07, Y in 14 with the two stars. NOUN 05, all zeros; plus 059; minus 63; plus 23. Platform torque, 202:08:45. Over.

CC-H Okay, Tom. Copy. Thank you very much.

ACDR Okay, Houston. How do you read?

CC-H I've got a real loud scratching noise on the down-link, Tom, but I can hear you. Go ahead.

ASTP (USA) MC666/2
Time: 18:18 CDT, 203:01 GET
7/23/75

ACDR All right. (Garble)
CC-H Apollo, Houston. I'm sorry. I can't understand you at all. We're going to have to clear up this noise on the down-link. Stand by.
CC-H Apollo, Houston. We're about 30 seconds from LOS at Bermuda. We'll see you when you when you get locked up on ATS. Stand by.
CC-H Apollo, Houston. How do you read?
DMP 5 by, Dick.
CC-H Okay, Deke. We had a real loud noise when we were going over the hill there at Bermuda, and I didn't copy any of what Tom had passed down to me.
DMP Okay. Stand by 1. We'll get it for you.
CMP Okay, Dick. Recorder readings we copied down as follows at 203 hours and 7 minutes. A is 12; B is 13; C is 11; D is 12.
CC-H Okay, Vance. Thanks a lot. Appreciate it.
CMP Right.
CMP And we'd be curious to know if that's a - if those are reasonable readings, if the things working.
CC-H Well, I think INCO is checking it now. Looking at his pass data, it looks like we might still be having problems with that second recorder. However, it doesn't really matter, because as long as one of them is working, we're meeting our objectives.
CMP Right.
CMP Houston, Apollo.
CC-H Go ahead, Vance.
CMP Okay, Dick. Here we are in the flight plan at a place where we're doing preliminary stowage. Just curious to know if you want us to stow this TV camera now, or would like to keep taking the advantage of getting some 1V of the orbit?
CC-H Vance, our plan now - you've just about filled up the VTR, or if you haven't, there's only a few minutes left on it, and we were not planning on dumping it. What we're planning on doing is - is bringing that home, so in order to support that, I guess we can go ahead and stow it.
CMP Okay. We'll go ahead and stow it.
CC-H Okay.
DMP Houston, Apollo.
CC-H Go ahead, Deke.
DMP Yeah, we're taking film inventory here. It appears we're down to one magazine of 16 millimeter stuff. We're supposed to shoot the entry of the drogue deploy, and now what we've got is color interior. Can somebody give us some reasonable settings so we can use that for exterior?
CC-H Yes. We'll look it up and I'll get back to you.
DMP Thank you.

END OF TAPE

ASTP (USA) MC667/1
Time: 18:38 CDT, 203:16 GET
7/23/75

PAO -trol. Stand by for an Apollo announcement in 10 seconds.

CC-H Apollo, Houston. I've got a DM2 final pad for you if somebody would like to copy in the flight plan.

ACDR Okay, be right with you in a minute.

CC-H Okay.

CC-H And Apollo, Houston. If you'll give us P00 and ACCEPT, we'll get you up in a target load.

ACDR Okay, Dick, go ahead on the DM2 pad.

CC-H Okay, Tom. Are you hearing me loud and clear? I heard an echo there.

ACDR You're loud and clear.

CC-H Okay, fine. Starting with Noun 33. 204, 11, 42.00; minus 019.7 plus 4 balls minus 018.0; 000.13, 635.50, 089.00; 013.1; 18 excuse me, that's delta VC tailoff is 180. Weight, 25, 262, trims, minus 014, minus 076. Go ahead.

ACDR Okay, on the read back. 204, 11, 42.00; minus 019.7 plus all zeros, minus 0180; 000. 136, 355, 0087, 0001. Delta V ignition 31, tailoff 180; weight 25, 262; pitch trim minus 014; yaw trim minus 076, over.

CC-H Roger, Tom. That's a good read back. And there on that other flight - that facing flight plan page, I have one more thing for you. Right up there at the top of the page at about 204 hours, we want you to change the DAP to a VERB 48 and the two registers are as follows: 10102 and 01111. Go ahead.

ACDR Okay. DAP chang in about 204 hours, be 10102, 01111. Over.

CC-H Roger, Tom. That's a good read back and a good pad. Thank you much.

ACDR All right.

CC-H And, Tom, the computer's yours. You can go back to BLOCK.

ACDR Have it in BLOCK.

CC-H Okay.

CC-H Apollo, Houston.

USA Go ahead.

CC-H Vance, just a minor point there. A few minutes before the burn in the flight plan, it's printed in there to get the GIN power optics ON. Since we've had such a series of real good P52s, we didn't give you a burn attitude check, and that power optics ON was assuming that you would have one, and that's why it's in there. No problem.

CMP Okay. You're saying the next DM2 burn that we can leave that switch OFF?

CC-H That's affirmative.

CMP Canuse we won't have an optics check anyway?

CC-H That's affirmative.

ASTP (USA) MC667/2
Time: 19:38 CDT, 203:16 GET
7/23/75

CMP Okay.
CC-H Okay.
CMP Houston, Apollo.
CC-H Go ahead, Vance.
CMP By the way, you know we have a - I don't know if
this has been called down or not, but we have the flight plan supplement.
It's in a special binder. Need to try it out for the shuttle?
CC-H Roger.
CMP And we had to open it and take pages out and put
them in, and had only one comment. It isn't too bad, but it's a little
more complicated than the kind of binder you used when you were in
high school. The one I used in high school had two tabs that you could
press down to open it, which was very handy. This one has a couple of
slide devices that have to be pulled out, and it's a little more
involved - less simple working it, I'd say. And so the only comment
in our evaluation is they might look at just using the standard high
school type.
CC-H Roger. Well, the simpler we can get, I'm sure that's
what we'll want to do. And we'll pass that comment on, and I'm sure
they'll be interested to talk to you guys after you get home. Thanks
Vance.
CMP Okay.

END OF TAPE

ASTP (USA) MC668/1
Time: 19:03 CDT, 203:40 GET
7/23/75

SPKR Go ahead.
SPKR 475.
CC-H Apollo, Houston. For your information, we've been watching you load everything and it looks real good. That - that DAP change that I gave you can be loaded really anytime. I gave you a time of 204 hours but if you want to go ahead and load it now, that - that'd be fine.
CMP Okay, Dick. We'll put her in.
CC-H Okay.
CC-H Apollo, Houston. We're about 2 minutes to ATS
LOS. You're looking real good. We'll see you at Guam here at 204 plus 01, just four minutes from now.
CMP Okay, Dick. Very good.
CC-H Okay, see you then.
CMP Okay.
PAO Apollo, Control. Ground elapsed time 203 hours, 59 minutes. Loss of signal through the ATS6 satellite. Next acquisition will be through Guam. We are approximately 12 and a half minutes away from the second docking module maneuver by the command module. This 23.1 feet per second retrograde maneuver will put Apollo into a 113 by 120 nautical mile orbit. The crew completing activities for the day. They will perform leg ment - leg volume measurements prior to the beginning of the evening meal. And their sleep activity - the sleep period 8 hours of sleep scheduled for tonight will begin at 208 hours even. That's four hours from now. Wakeup time is scheduled for 7:20 a.m. central daylight time. Ground elapsed time of 216 hours. Shortly after wakeup time the clock aboard the spacecraft will be reset to phase elapsed time. This will occur at about 216 hours and 10 minutes tomorrow morning. Acquisition coming through Guam in 20 seconds. We'll hold the line up for Cap Comm Dick Truly. Flight Director is Neil Hutchinson.
CC-H Apollo, Houston. Guam for 7 minutes.
CMP Okay, Dick. Loud and clear.
CC-H Roger.
CMP We're getting ready for the burn.
CC-H Okay and we've been watching you here. You look real good to us.
CMP Okay. Real good.
CC-H Apollo, Houston. We're about a minute and a half from LOS. I'll call you at Rosman at 204 plus 32. You got four good gimbal motors, the trims are okay, everything's looking fine. We'll see you after the burn.
ACDR Okay. Right here it's looking good.
CC-H Okay.
PAO Apollo, Control. Ground elapsed time 204 hours, 16 minutes. Loss of signal through the Guam tracking station. The second maneuver by the command module to move away from the docking

ASTP (USA) MC668/2

Time: 19:03 CDT, 203:40 GET

7/23/75

module should have occurred 4 minutes ago out of contact with Guam station. We will have contact through the Rosman tracking station in 15 minutes and 45 seconds. At ground elapsed time of 204 hours, 16 minutes, this is Apollo Control.

END OF TAPE

ASTP (USA) MC669/1
Time: 19:53 CDT, 204:31 GET
7/23/75

CC-H This is Mission Control. There will be an Apollo announcement in 1 minute.

PAO Apollo Control. Ground elapsed time 204 hours, 31 minutes. The burn - the second burn of the command module and the docking module maneuver was to have been accomplished at 204 hours and 12 minutes, 19 minutes ago. We'll have acquisition through Rosman. We'll have a report on that burn by Apollo Commander, Tom Stafford.

CC-H Apollo, Houston. At Mila for 7 minutes. How do you read?

ACDR Reading you loud and clear, Dick. Burn went fine. The residuals were 0 minus 1 and plus 1, over.

CC-H Okay. Real fine. And what was the MS reading, Tom, after the burn?

ACDR Minus 18.0.

CC-H Okay. Super. Sounds like it was right on. Thank you very much.

ACDR All right, Roger. We're trying to go ahead and get ahead of things so that when - during night time we'll get the light measurements and some other and ZFF and all that. So, when we come out in the day time we can do some more vis ops. Over.

CC-H Okay. That sounds great, Tom.

CC-H And Apollo, Houston. You'd be interested to know that we've got a good lock on the Doppler. Looking real good.

ACDR Hey, that's great. And also, the - on A and B, those reels are still turning, but C and D have not moved.

CC-H Okay. Thanks, Tom.

CC-H Apollo, Houston. We think you need a PRO on the 5018 to get into the orbit rate attitude piece way.

ACDR Stand by. Okay, we'll PRO.

CC-H Okay.

CC-H And Apollo, Houston. We're 1 minute from LOS. We'll see you when you get locked up on the ATS.

PAO Apollo Control. Ground -

PAO Apollo Control. Ground elapsed time 304 hours, 39 minutes with loss of signal through the Rosman, Mila tracking station. Next acquisition in 2 minutes and 50 seconds through the ATS 6 satellite. Apollo Commander, Tom Stafford, reporting that the burn went off fine. And Guidance and Flight Dynamics officers here at the Johnson Space Center reporting to flight director, Neil Hutchinson, all systems aboard Apollo look good following that burn. We'll hold the line up here for CAP COMM Dick Truly.

CC-H Apollo, Houston. Through the ATS. How do you read?

ACDR Read you loud and clear, Dick.

CC-H Roger, Tom. Me too.

DMP Dick, how do you read?

CC-H Loud and clear, Deke. Go ahead.

DMP Okay. Hey, I read your report here the other day on the old crystal growths and I just got through taking another

ASTP (USA) MC669/2

Time: 19:53 CDT; 204:31 GET

7/23/75

series of pictures into where I can see them. I would like to report that I don't see any crystals anywhere. We've got bubbles and three or four units, fairly good size, size of a pea or so, but I see nothing that I would call a crystal in any of them.

CC-H Okay, Deke. Thanks a lot for telling us then.

DMP Okay.

ACDR Okay, Dick. And now that we've got the TV on the VTR, just go ahead and turn the whole thing off. It will be recovered after landing? Over.

CC-H That's affirm, Tom. You can do it. I was going to wait till presleep to remind you cause I wasn't sure where y'all were on the tape, but when you've gotten what you want, just turn all three power switches off and we can forget the VTR till we get it on the ground.

ACDR Okay.

ACDR Houston, Apollo.

CC-H Go ahead, Tom.

ACDR Yeah. Are you reading my DSKY?

CC-H Yes, stand by just a second.

CC-H Yes, Tom. I think I can explain what happened here.

When you PRO'd on the P20 we were out of attitude and the rate was slow, and when you got to the attitude, it slipped out from under you again. What you need to do is PRO again on the P20 and we'll catch up with it. And we see again I got - I'm sorry, looking at it it's obvious you've already done that. So, this time when we catch up we should be squared away. And we're still locked up on the - -

ACDR Okay.

CC-H - - we're still locked up on the Doppler, so no harm done.

ACDR Okay. Are you receiving data down there besides getting it on the recorder up here?

CC-H That's affirm, we are. Well - -

ACDR That's good.

CC-H Tom, let me - I'm not sure I understood your question. Let me clarify that. We are not receiving science data. We are receiving good spacecraft data and systems status so we can keep up with you. But, but you've got the science data - data onboard and we have a couple of primaries that let's us know that we're locked up. So we're doing okay.

END OF TAPE

ASTP (USA) MC670/1
Time: 20:14 CDT, 204:52 GET
7/23/75

DMP Dick, things are quiet down here. I can give you a quick film inventory.

CC-H Okay, Deke. Can you stand by just a second. We're getting ready to change dump modes, I'm going to drop out. I'll call you when we're back up.

DMP Okay.

CC-H Apollo, Houston. We're locked back up on voice. And Deke, I'm ready to copy on the film.

DMP Okay. Just a second. Okay. Here it goes. Okay, we got about 320 frames of 35 millimeter left. 140 of 70 for the silver camera. And about 180 for the black over and above our mapping requirements. We have one mapping pass left which we figure it will take 90 frames. And we only have one mag of 16 left, and that's this interior. We've already talked to you about that one. And that is it.

CC-H Okay. Let me read them back. 320 frames of 35 millimeter left. 140 frames of the silver 70. 180 frames of the black camera over and above the mapping requirements, and 1 mag of 16 millimeter.

DMP That's affirm.

CC-H Okay, Deke. Thank you.

DMP And we will try to budget that so we won't run out early and have to come home with no film.

CC-H Roger. That's the way to do it.

CC-H Apollo, Houston. Is Vance, on the phone?

ACDR Yeah.

CMP Yeah, right here.

CC-H Hey, Vance, you know y'all were talking - or any of you - y'all were talking while ago about the new bookbinder, and - -

CMP Right.

CC-H - - and it turns out that the principal investigator of that experiment is Dr. Theodore Guillory, who happens to be sitting here next to me, and he had a couple of questions he wanted to pass up.

CMP Okay. Gladly talk to Dr. Guillory.

CC-H Rog. The first one was; is the effectiveness of the system degraded when in P20 over the South Atlantic Anomaly or during venting?

CMP Well, if you're venting waste water, no - depends on what you're venting.

CC-H Okay.

CC-H He had one more. It says "Did you notice any crystal redefinition when near the furnace or near Deke?"

CMP Yeah, we didn't think to melt it. We should have done that.

CC-H Roger. Okay. Thanks a lot. I think he's got all his data now.

CMP Okay. (Laughter)

DMP That last one it sounded like a dirty question, but I haven't quite figured it out yet.

CMP Roger.

CMP The old high school notebook theory.

ASTP (USA) MC670/2
Time: 20:14 CDT, 204:52 GET
7/23/75

CC-H Roger. He did say, incidently, that the reason that they - one thought on that high school notebook thing was that most of the books that you have need to be - or in the past we've always thought that they needed to be folded back on themselves and be able to be, you know, clipped with any page open, and that was one of the reasons that they had gotten a little more complicated.

DMP If you'd like one very scientific comment on the books, that new cover, makes orange, strawberry and pineapple juice look better than the old ones.

CC-H (Laughter) Okay.

CMP That reminds me. It's about time to clean the salmon oil off the side window here, on the left here.

CC-H Roger.

CMP Just a medical comment here, Dick.

CC-H Roger. Go ahead.

CMP The last burn was very short, but very violent as usual and - or it seemed that way - and we had a suit bag temporarily stowed in the tunnel, and had forgotten about it, and it almost broke both of Tom's legs when it came down.

CC-H Roger. Understand. I'm glad it didn't. I can remember during Skylab, Joe Kerwin talking about doing some of those burns standing up down there in the LEB.

CMP That's a new thought - to see if a guy could stand 1 1/2 g after a week in zero g.

CC-H Yeah, but we all know what happened to Joe Kerwin, so we'd just as soon you all would sit down for the next burn.

CMP (Laughter)

CC-H Apollo, Houston.

ACDR Go ahead.

CC-H Yeah. We've had such good luck with the platform, and doing the P52s and seeing how we figure that you're going to be spending most of these daylight passes looking out the window and doing Earth observations, and you might want to spend the night pass during eating it's your option, but we'd be satisfied if you just skip this next upcoming P52 here, and we'll get one after you wake up in the morning.

CMP Okay. Sounds fine.

CC-H Okay Vance, thanks.

CMP That's really a super platform, isn't it? I can hardly believe the small errors it has all the time.

CC-H It sure is, and I guess you know this, but's that's an Apollo 14 platform. It went to the Moon and back.

CMP I guess it was an Apollo 14 probe, too, isn't it?

CC-H Yes. It was.

END OF TAPE

ASTP (USA) MC671/1
Time: 20:45 CDT, 205:23 GET
7/23/75

CC-H - - but that it's an Apollo 14 platform went to the Moon and back.

CMP I guess it was an Apollo 14 probe too, wasn't it?

CC-H Yes, it was.

CMP That work good.

CC-H As - as a matter of fact, I - I'm correct by Terry Watson, the - the probe was Apollo 14, the IMU was - the platform went to the Moon the last time on Apollo 17.

CC-H Apollo, Houston. We're 2 minutes from ATS LOS. We'll see you at Goldstone in about 20 minutes. See you then.

CMP Okay, Dick. Incidentally, we were just commenting this - this is a sure good attitude for the doppler experiment, but we kind of need a periscope for Earth ops.

CC-H Roger. FAO was sitting here thinking the same thing probably.

PAO Apollo Control. Ground elapsed time 205 hours, 39 minutes. A little more than 19 hours away from splash down of the Apollo Command Module with Commander, Tom Stafford, Command Module pilot, Vance Brand, and Deke Slayton. The operations here at the Missions Operations Control room of second floor of MOCR, will conclude tomorrow with the splashdown. This marks the sixth manned flight controlled from the second floor. This shift under the direction of flight director, Neil Hutchinson. Second floor, MOCR previously had guided the flight for Apollo 7 and 9, as well as all three manned flights in the Skylab program. So, this marks the sixth, sixth manned flight controlled from the second floor control room. Deorbit maneuver tomorrow is set for ground elapsed time of 224 hours and 18 minutes. At 3:38 p.m., central daylight time, with splashdown at 4:18 p.m., central daylight time. Flight dynamics officer reporting that although the ground track presently is about 6 to 8 miles off west of the previous mission plan tracked. All events should fall on schedule with the service propulsion system ignition coming deep in the - south - south of the Indian Ocean with entry interface 400,000 feet occurring over the Banggi Islands, in the New Heberides Chain and 4 minutes and 56 seconds after the SPS ignition, we will have the 05 G's. Enter S-Band blackout, communication blackout, 4 minutes - 5 minutes and 49 seconds after the entry interface Exit S-Band communications blackout, at 10 minutes, and 58 seconds after entry interface. Max G's at 3.5 coming at 11 minutes, and 36 seconds. Drogue shoot deployment 14 minutes and 51 seconds after entry, main shoot deployment, at 13 minutes, and 34 seconds after entry, and landing coming 20 minutes, and 19 seconds after entry interface. Although we do not have final weather report for tomorrow morning, - for tomorrow afternoon present weather in the recovery area 400 miles northwest of Hawaii. Report scattered clouds at 2500 feet. Visability presently 10 miles. Wave height at 4 feet, and wind at 15 miles per hour. Well with in the exceptable limits of the recovery area. Next acquisition at 14 minutes and 50 seconds, through the Goldstone tracking station. At ground elapsed time of 205 hours and 43 minutes, this is Apollo Control.

END OF TAPE

ASTP (USA) MC672/1
Time: 21:13 CDT, 205:56 GET
7/23/75

PAO This is Mission Control. There will be an Apollo announcement in one minute.

PAO Ground elapsed - Apollo Control, ground elapsed time of 205 hours and 56 minutes. We will have acquisition through Goldstone tracking station in one minute. As the crew of Apollo concludes the leg volume measurements, one of the final medical experiments aboard the Apollo spacecraft, prior to settling down for their evening meal and then preparations for the sleep period, an 8 hour rest period which start at ground elapsed time of 208 hours, a little less than 2 hours from now. We'll hold the line up for Dick Truly, the Cap Comm.

CC-H Apollo, Houston. AOS at Goldstone for about 4 minutes and about 2 minutes into the pass we will have a keyhole of about 45 seconds.

ACDR Roger.

USA Dick, we saw a huge weather cycle down in the Pacific at a GET of 205 plus 56. (Garble) the edges is down and it tapers down to the center which has got just a round - really a open center, but it looks - it is circulating, you can see the whole circulation. It's probably a 150 miles in diameter. You might want to check it with Farouk and the weather people. Over.

CC-H Roger, Tom. We certainly will. Sounds like you a better view of it this pass then you did last time.

ACDR Right, I think so. The only thing we - only time we can see now is just out ob window 1 in this attitude.

CC-H Roger. I understand.

CC-H Apollo, Houston. In about 50 seconds I'm going to drop into a keyhole and I'll call you when I climb out.

ACDR Okay.

CC-H Apollo, Houston. I'm back up. We're about 30 seconds from LOS. I'll give you a call at Quito in 8 minutes.

ACDR Okay.

CC-H Apollo, Houston. Quito for 6 minutes.

CC-H Apollo, Houston. Quito for 4 minutes.

ACDR Loud and clear, Dick. (Garble) - -

CC-H Roger, Vance. Stand by one.

CC-H Vance, Houston. Are you reading me loud and clear?

I thought I heard an echo there.

CMP Yeah, we read you earlier and you apparently didn't hear us.

CC-H Okay.

CMP (Garble) we just heard you then.

CC-H Okay, incidentally, since we went LOS up there at Goldstone we got weather up in recovery to show us the satellite picture that - of the cloud formation that you saw. For your information, there's a big bull located right at the center of the circulation pattern and on the - let's see, the eastern edge - the leading edage of the cloud pattern that's close to the western coast of the United

ASTP (USA) MC672/2

Time: 21:31 CDT, 205:56 GET

7/23/75

States is a cold front. So the cloud characteristics - it just turns out that the cloud characteristics of the weather pattern looks like a tropical storm but of course that's not what it is.

CMP Okay. Well, I'm glad it isn't. This would be kind of an odd place for a tropical storm would have been may guess.

CC-H Rog. Well, we - we do have a satellite picture of it and it certainly looks like one and it's - covers a tremendous area.

CMP Yeah, we were impressed by the spiral arms on it.

CC-H Roger.

CC-H Apollo, Houston. We're one minute from LOS, I'll give you - we'll be talking to you again when you get locked up on the ATS. And if you guys are eating supper and would like to hear some news, I have a little bit for you. When we get to ATS.

CMP Really would. Very good, Dick, whenever you're ready,

CC-H Okay, when we get locked up on the satellite, I'll have it for you, Vance. The EECOM - Charlie Dumis and his EECOM friends back in his staff support room really out did themselves tonight. We had standing rib roast and all the trimmings.

CMP You mean Charlie served you again, huh? I thought maybe the G&C GMC's would be serving tonight. (Garble)

CC-H I'm not sure how this happened but Charlie has been treating us every night.

END OF TAPE

ASTP (USA) MC673/1

Time: 21:40 CDT, 206:18 GET

7/23/75

PAO Apollo Control. Ground elapsed time 206 hours, 18 minutes. Loss of signal through Quito, Ecuador. Next acquisition will be the ATS-6 satellite in 2 minutes and 30 seconds. CAP COMM, Dick Truly, calling to the attention of the crew that the EECOM officer here at the Mission Control Center, Charlie Dumis, and his people again providing a scrumptious meal for the flight directors. While the crew of Apollo eating their last evening meal aboard the spacecraft and Tom Stafford had shrimp cocktail and beef steak, cream corn, vanilla pudding. Vance Brand had beef and gravey, also corn - cream corn, shortbread cookies and pineapple and coffee. While Deke Slayton again had beef and gravey, stewed tomatoes, fruit cocktail, and grape drink. As the crew eats their evening meal Dick Truly promised to read up the evening news along with some gee-whiz facts that the Mission Control Center here has worked up for the crew. He'll read those up at the ATS 6 pass. Crew's sleep period to begin in approximately 2 hours, 8 hour rest period with a wakeup call scheduled for ground elapsed time of 218 hours - 216 hours that is, 216 hours at 7:20 a.m., central daylight time to start their last day in orbit. Revolution 127 concluding as the crew begins their 128th revolution since launch from Cape Kennedy on July 15th. At splashdown tomorrow, the total revolutions of the Apollo crew will be added to that previously recorded on the Mercury, Gemini, Apollo, and Skylab flights. At splashdown the American astronauts will have circled the globe 3,422 times during the 6 Mercury, 10 Gemini, 11 Apollo, and 3 Skylab missions. July 24th in addition to being the day that ASTP will splashdown, is also the same day in 1969 July 24th when Apollo 11 splasheddown after it's historic journey to the Moon, the first lunar landing. The crew of Apollo 11, Neil Armstrong, Buz Aldrin - -

CC-H Apollo, Houston. Through the satellite.

DMP Okay. Read you five by, Dick.

CC-H Roger, Deke. And if y'all are interested in some news, I have it here.

DMP Great. We're standing by.

CC-H Okay. President Ford said today the United States is earnestly seeking progress in easing Middle East tensions, but cautioned it might not work. Ad - addressing delegates to the American Legion's annual Boy's Nation in the White House rose garden, Ford said the differences are still very serious in the search for a new interim agreement between Egypt and Israel. The Senate lead - leadership has abandoned further efforts until September to break the deadlock over the contested New Hampshire Senate seat. It is off, majority leader, Mik - Mike Mansfield, Democrat of Montana, said today when reporters asked if the Senate would take up the elections dispute again before an August recess of Congress. Florida laymen have broken up a bee rustling operation in which they say thieves harvested nearly 500,000 dollars in honey by switching brands on stolen hives. Bee keepers from seven south Florida counties were busy Wednesday picking out their hives from nearly 1,200 recovered in a Tuesday raid on a Quansat Hut honey factory in rural area of Palm Beach County. All the bee keepers have

ASTP (USA) MC673/2
Time: 21:40 CDT, 206:18 GET
7/23/75

their own brands on their hives. Some of them know their stock so well they can identify the bees themselves, said Sergeant James Greer of the Sheriff's Department. Officers from nine state and local enforcement agencies were involved in the raid on one edge of Palm Beach County, center of the 30 million pound per year honey production. In the state bee keeping is a 10 million adot - 10 million dollar a year industry. In sports, last night the Astros lost a 2 to 1 decision to the Montreal Expos. Pretty Susan Jerns of Houston won her seventh title as a style jumper in the women's division of the National Parachute Association meet, and Tom you'll have to pronounce this one for me. Colleyqua, Oklahoma, I think it is. What is it? Tellequa.

ACDR How do you say that? Tellequa.

CC-H Tellequa. Okay. I learned something everytime I come over here. Professional football is just a few weeks away. The Oilers are in full swing at their training camp in Huntsville. The word on the player-management dispute is that the teams will start the season on time, but they're still deadlocked at the bargaining table over several issues. There are predictions in Athens, Greece that over 90 thousand fans will turn out to watch a US all-star basketball team play a Greek team in an outdoor stadium. And Muhammed Ali and Joe Frazier are already drumming up business for their October 1st title match in Manilla. Ali says his routine will defeat Frazier and Frazier says it's an imitation to a bombing of Ali. You guys are still in the news and there's a whole lot of interest in your splashdown tomorrow. Deke, your Aunt Sadie Link in Wisconsin made the headlines today. She was talking with telephone from up there and she said she was ready to go in to space herself anytime. Her statement came in a response to a question put by reporters after the inflight news conference when you remarked you thought your Aunt in Wisconsin could come up and do this job physically. She also said that she couldn't remember you as being particularly interested in flight as a boy, but I guess that came after he got away to school, she said. Incidentally, bef - while ago I talked to all of your homes, and everybody's doing real fine and very excited about the splashdown tomorrow.

ACDR Well, I thank you very much, Dick. Appreciate that.

CC-H Incidentally, speaking of the - -

ACDR Dick.

CC-H Yea, go ahead.

DMP Just saying my Aunt Sadie didn't disappoint me. I expected fully she'd be ready to come.

CC-H Roger, that. Incidentally, when you guys splashdown tomorrow, it will be within about 4 hours of 6 years from the splashdown of Apollo 11. And at the end of your mission I thought we'd pass up a little data to you, at the end of your mission the United States will have collected 22 thousand, 468 man hours in space, that's over 2 years. You make 43 astronauts we've flown in 31 flights and in total we've chalked up 30 - 3 thousand and 422 manned revs of the Earth.

ASTP (USA) MC673/3
Time: 21:40 CDT, 206:18 GET
7/23/75

Might also point out that when we saw these figures we decided to - to get the figures ourselves. And so the - Neil Hutchinson asked the silver team, just the guys working here on the consoles tonight to figure up how much flight control experience that we have and I'm talking about people out here in the front room and just people directly supporting us in the staff support rooms and over in the Mer. Not, of course, including all the other people that work on the space program, but it turns out that - that we have actually, of the people here tonight that you're talking to now, we have collected 122,838 hours of flight control experience during manned flights. And that's 14 years and assuming the other two teams are of similar experience that's 42 years. And, incidentally, Deke, I know you've been in the program a long time, but our network controller tonight first controlled Al Sheppard on Mercury Redstone 1.

DMP	(Garble), he's still there.
CC-H	That's right - -
DMP	Give him my regards.
CC-H	So are we, Deke.

END OF TAPE

ASTP (USA) MC674/1
Time: 21:50 CDT, 206:08 GET
7/23/74

DMP I didn't know there was anybody left as old as Al Sheppard.

CC-H Well, as a matter of fact, when we total up the - when we totaled up the numbers, it turns out that for the first two - he controlled the first two Mercury missions, - there's another fellow here that came onboard for the third and fourth one, another one came onboard for the fifth one, and by the time we flew the last Mercury mission we had four guys that are still here tonight right now, helping control you guys. So we don't give up easy, just like you.

DMP Super.

CC-H And incidentally Deke, our INCO said that he worked for Wilbur Wright.

DMP (Laughter)

CC-H You can guess who the INCO is.

DMP Yeah. Is he still wearing those sporty boots he had on?

CC-H I can't see that well down there. I'm not sure.

CMP I didn't know the Wright airplane had a radio in it.

CC-H (Laughter) Roger.

CC-H Ed started with semifours(?), Vance.

DMP Tell him to stick around for another 5 and we'll take him for a ride in the Shuttle.

CC-H Okay.

DMP Give you a change to get up here and look around for a change, instead of yakking down there at INCO.

CC-H I'll drink to that.

DMP So will we.

END OF TAPE

ASTP (USA) MC675/1
Time: 21:57 CDT, 206:37 GET
7/23/75

DMP Dick you still with us?
CC-H Sure am, go ahead.
USA Okay, just sitting here thinking about experiments - things we might not have given you any information on - the old fishing this morning had a slight mortality rate for the first time. We lost three out of one package over night last night. Just wanted somebody to know that so that they wouldn't get all up tight if they discovered it when we landed, and thought it happened in reentry.
CC-H Roger, Deke, thanks lots. I got it.
CC-H Apollo, Houston. If you'll give us ACCEPT we'll - get your loads up for the evening.
DMP Okay. You got her.
CC-H Okay. Thank you.
CC-H Apollo, Houston. We're through with uplink. The computer is yours and - when you go to BLOCK. You might - you might after that - you might go ahead and give us a VERB 74 for the evening dump.
CC-H Apollo, Houston. We have about 20 more minutes here in this ATS pass. We're planning on - what we'd like to do is clean up all our evening stuff here. And we'll give you a call at Goldstone, and we'll make that the last call of the evening. That's about 30 minutes prior to the scheduled time.
CC-H So if some - -
CMP Okay, we're - we're - we're still eating, and sounds great, so, we don't have that much to do but -
CC-H Okay.
CMP We don't have much to do after we finish and we're almost finished.
CC-H Okay, Vance, I tell you what, I don't have a whole lot of clean up to do either, so it y'all are going to finish here, in - in a few minutes, why don't you give me a call and we'll do it real quick.
CMP Okay. Yeah, we can talk to you at Goldstone.
CC-H Rog. Vance, we just wanted to get our presleep stuff done here over the ATS while we've got it - we still have about another 18 minutes.
CMP Okay.
CMP Houston, Apollo.
CC-H Go ahead Vance.
CMP I can give you volts, BAT C, pyrobat-A, pyrobat-B, and they're all 37.
CC-H Okay, - I'll - thanks Vance, and another thing we want tonight, is get a reading on the RCS quantities.
CMP Okay.
CMP Okay, A 67, B is 61, D - let me start that again.
CC-H Okay.

ASTP (USA) MC675/2

Time: 21:57 CDT, 206:37 GET

7/23/75

CMP Okay, - yeah, A is 67, B is 61, and 60 for C, 59 for D, and ASM 15 percent.

CC-H Okay, another thing that we're going to want - when you can is to get a readout on the Doppler - tape recorder. And also I wanted to talk to you - I wanted to throw one switch on - get you to throw one switch on panel 3. It's the S-band normal power amp - high switch and put it to LOW.

CMP Okay, that's done, stand by for the Doppler.

CC-H Okay.

CMP A is 6 and 1/2, B is 2, C is 11 and D is 12.

CC-H Okay, Vance, thanks very much. Let me talk to you a little bit about the water situation - the waste tank is got a lot - got a good bit of water in it - but the potable tank is about half full, so we'd like you to put the potable tank inlet valve to OPEN. And you kind of have your choice tonight on the secondary coolant loop - we have sufficient water, and it's - to - for you to either run the loop all night, and let it automatically cycle on and off or if you'd like to secure the loop before you go to bed, you can do that. And in - in either --

CMP We'd like to run it.

CC-H Okay that's fine with us, and so we'll just assume that the loop is going to be running all night. And - -

CMP And we'll - close the potable -

CC-H No, - no open the potable tank. We want it's only about half full if we didn't open the tank - potable tank, we'd have to do a water dump. We don't want to have to do that.

CMP Okay, I lost track of what position it was in.

CC-H Okay, it's - we want it OPEN.

CMP Right. And we still have to the LIOH change out. And the set the vent valves, - -

CC-H Roger. And - EECOM says that any time that it is convenient, you can go ahead and open the potable tank valve now, and leave it open. And that's all the things on my list except - with the checking on the liOH canister, and that kind of thing, and we still have about 10 minutes, here at ATS so I'm standing by.

CMP Okay.

END OF TAPE

ASTP (USA) MC676/1
Time: 22:24 CDT, 207:02 GET
7/23/75

CMP Houston, Apollo.
CC-H Go ahead, Vance.
CMP Okay, Dick. We got your potable inlet valve to
OPEN, and we've changed out the LiOH, so maybe EECOM see that on his
instrumentation there.

CC-H Okay, thanks a lot. Saved me a call cause he
wanted me to make sure you got the potable inlet open cause if you hadn't,
we'd have had to wake you up probably at some point and bug you.

CC-H Apollo, Houston. We're two minutes to LOS ATS.
Goldstone at 207 plus 32. See you there.

ACDR All right. Thank you.

PAO Apollo control. Ground elapsed time 207 hours,
13 minutes. Loss of signal through the satellite. Next acquisition
will be in 17 minutes and 39 seconds through Goldstone. Final stateside
pass for the crew this evening. Scheduled to begin their sleep period
at 208 hours, 46 minutes from now, with wake-up at 7:20 a.m. central
daylight time to begin final preparations for the Apollo de-orbit maneuver,
the ignition for 7 second burn of the SPS service propulsion engine
which will bring back the crew of Apollo to splash down in the Pacific
Ocean near Hawaii, at 4:18 p.m. central daylight time tomorrow. Next
acquisition in 16 minutes and 45 seconds through Goldstone. At ground
elapsed time 207 hours and 15 minutes, this is Apollo control.

END OF TAPE

ASTP (USA) MC677/1

Time: 22:51 CDT, 207:30 GET

7/23/75

PAO This is Mission Control. There will be an Apollo announcement in 1 minute.

PAO 207 hours, 29 minutes ground elapsed time. Apollo now about 2 minutes away from acquisition through Goldstone, California. Revolution 127 takes the Apollo down the entire west coast of both Americas and across the mainland of Chile then out into the south Atlantic Ocean. This should be the good night call. The crew's only got about 30 more minutes of wake time left and they'll probably need all the sleep they can get tonight. We'll wait acquisition through Goldstone.

CC-H Apollo, Houston. Goldstone for 2 and a half minutes.

ACDR Roger, Dick.

CC-H Roger.

DMP Hey, Dick, you with us?

CC-H Yes, sir. Go ahead.

DMP Okay. We just saw what we think is a possible volcano. I don't know whether you got any operating down there or not, but it was about 207 - was it 18 or 19? 207:19:20, a very large - kind of a mushroom type thunderstorm - looking thing with a large stream of gray-brown smoke going downstream, mixed to it white. And all that I could interpret it to be would be a volcano. If not it was certainly a tremendous oil flare. Can anybody track that one for us?

CC-H Okay. We'll correlate that time and see if we can check it out.

DMP Thank you.

CC-H Apollo, Houston. We're 1 minute from LOS. We're going to make this the last call of the - of the evening, so it's - we've certainly enjoyed working with you here on ASTP and we'll see you guys when you get back to Houston. So everybody say good night, Dick.

ACDR Good night, Dick.

DMP Good night, Dick.

CMP Good night, Dick.

CC-H Good night.

CMP Good night silver team.

ACDR Yeah. Thanks a lot for all your help, it was just tremendous.

CC-H Roger. We really enjoyed it. We'll see you guys when you get home. Have a nice splashdown.

ACDR All right. It's been a real ball. Thank you for the help.

CC-H Okay.

CC-H Okay.

PAO Loss of signal through Goldstone. As we expected, the good night call up from CAP COMM, Dick Truly. Later on this morning around 4 a.m., Houston time, we'll be expecting a Soviet Soyuz crew press conference. Probably will last about an hour. And that will be, as I understand, also in English. Once again the Soviet Soyuz crew

ASTP (USA) MC677/2

Time: 22:51 CDT, 207:30 GET

7/23/75

press conference later on this morning about 4 a.m., Houston time.
At 207:35 ground elapsed time, this is Apollo Control.

END OF TAPE