

ASTP (USA) MC543/3
Time: 22:38 CDT, 159:16 GET
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CMP Okay.
CC-H Incidentally, while you're looking for the updates book, have you had a chance yet to sequentially try out each of the audio centers and see if that affects the tone that you -- the loudness of the tone you hear?
CMP Yes, we did. Let's see -- yeah, Deke has the data for you here.
DMP Yea. We don't hear it on panel 9 or 6. It appears that panel 10 is the only one it's coming through on.
CC-H Okay. That is a good data point. Understand panel 6 and 9 you don't hear anything. Panel 10 is the only thing and I will thing about that one a lot. It's a good thing we tried it.
DMP Right.
DMP Crip, you wanted our batteries. They're all 37 volts.
CC-H All 37. Okay, Deke. Thank you much.
DMP Right.
CC-H And after we -- after we get the uplinks up there, we'll be getting a VERB 74 from you.
DMP Okay.
CMP Okay, Dick. I have the block data book.
CC-H Okay. When you're ready to copy in a minute, I'll start with NOUN 33.
CMP Okay. And this is which rev?
CC-H This is rev 123.
CMP Okay. Ready to go.
CC-H Okay. 200 36 49 minus 19 42 plus four balls plus 0180 359 330 003 1770 0007 199 16056 25751 2531 2650. And if we'll stop right there, we're about to stop the -- we'd like to stop the waste water dumps right here.
CMP Okay. The dump is stopped and go on with your read-back, if you wish.
CC-H Okay, fine, Vance --
CMP For your readout.
CC-H Yeah. Right. Okay the NOUN 66 is NA. I'm starting them again with bank angle. 312053 3232 3524 plus 2200 minus 161 --

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CC-H - -plus 2200, minus 16173. Go ahead.

CMP Okay. Rev 123 readback. 200, 36, 49, minus 1942, plus all zips, plus 0180, 359, 330, 003, 1770, 3 zip 7, 199, 16056, 25751, 2351, 2650, NA, 312053, 3232, 3524, plus 2200, minus 16173.

CC-H Okay. And I got a couple of notes for you. The - at SCS - at CM SM SEP, we want you to yaw right to 048 degrees. Note number 2, a NOUN 48 pitch trim. minus .20, yaw trim, minus .82. And the two weights, the DSM weight 25690, the DM weight 4500. Go ahead.

CMP CS - CM SM SEP yaw right, 048 degrees on the ball, NOUN 48, pitch minus .20, yaw minus .82 weight CSM 25690, and DM 4500.

CC-H Okay. And guidance is through with the uplinks. The computer is yours, you can go back to B DCK, and we're ready for the VERB 74.

CMP Okay. We'll give it to you in just a second.

CMP Do you need ACCEPT for a VERB 74?

CC-H Negative. We do not.

DMP Okay.

CMP Okay. You have it.

CC-H Okay.

CMP And we have a question about using bags versus direct over the side urine dumping here.

CC-H Okay. Go ahead.

CMP Of course, we understand that whenever SIM BAY is in operation or about to be operated, that collection is required, and I in the the flight plan - it seems to assume that the only time during this experiment period that you can do anything other than collect is during bag dump times, like early this morning. I must admit that I'm a little confused on the philosophy because it seems like the only time it should be necessary to collect is when you're - when you have the SIM BAY open. Or any cover open. Or any experiment affected by contamination going. Could you clarify the rule for me?

CC-H Okay. I'll tell you what, Vance, let us research it and get you a straight answer back up.

CMP Okay. Yeah, like - Okay, like for example tonight, it seems like everything's closed up tight. No reason to store tonight at all.

CC-H Okay. Stand by just a second.

CC-H Vance, Houston. The rule, as I'm told is simple. You cannot dump closer than 15 minutes to any cover on the various experiments coming ipen. So, for example, right now, there's no problem at all in going ahead and dumping.

CMP Okay. Well, that's kind of what we've assumed.

CC-H Okay.

CMP Yet, I think - the only thing that brought the question up was that we had a dump period early this morning and it seems like, you know, we could be dumping like now or anytime.

CC-H Yes. You're right. Hey, listen. One question that I had. We haven't seen a change in the partial pressure. Have you done a LIOH canister change?

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CMP Yes, I have. I just completed it.
CC-H Okay. Fine. I tell you what, we - -
CMP About 10 minutes.
CC-H Okay. Copy. We've got about 20 minutes left in
this ATS pass, and I'm standing by, but I've been through my complete
list of data. If I think of anything else, I'll be calling you again,
but I'm satisfied with my list.
CMP Okay. Very good. Thanks for the news. We have a few
more things to do around here tonight, and then we'll be winding down
again.
CC-H Okay. Great.
CC-H Apollo, Houston.
CMP Go ahead.
CC-H Vance, somebody pointed out to me a good - an easy
way to look at this flight plan and determine if it's okay to do a urine
dump, and that is anytime you find a period after the entry, "activate
primary evaporator, " and before the next entry that says, "deactivate
the primary evaporator. In our present steam duct configuration, you can't
activate the primary evaporator, but you could do a urine dump. So
if you're ever in doubt, that's one quick way to check, because those
times have been carefully checked against the experiment pads.
CMP Okay. Very good.
CC-H Roger.
ACDR Dick, speaking of the evaporator, do our ECS friends
think we're ever going to get that bear alive again or not? Over.
CC-H Let me get an official answer. When I was back in
their back room a while ago, they were talking about possibly having
the problem cured sometime tomorrow, but I'm really not up on it. I'll
get back to you.
ACDR Okay.
CMP Just one point, you know, we won't probably be
asleep for another hour and a half or so, at least. We could certainly
go into an attitude to point that duct at the Sun for awhile.
CC-H Vance, we've had a lot of discussion in the last
couple of night about an attitude that would work, but it just turns
out that we don't think it would do any good, and we're a little
close on RCS propellant on maneuvers, anyway. It turns out where it's
frozen is not accessible to exterior sunlight, and so that just
wouldn't cure the problem.
CMP Okay. And how are we standing, incidently on
RCS these days. I haven't asked for about 2 or 3 days.
CC-H Well, I'm looking at the plot, and it's - and it's -
we're just a hair above the experiment redline, and what that means is
that assuming that we hold our own, which we have been doing in
just about ever since we got into the experiment phase, we should be
able to complete all our desired experiment objectives on the nominal
timeline to the end of the mission.
CC-H And of course that - -

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CMP Okay. Check.
CC-H And of course that still maintains the deorbit
redlines.
CMP Right.
ACDR Houston, Apollo.
CC-H Apollo, Houston. Go ahead.
ACDR Roger, Dick. The one thing now - needs clarified
as far as the overboard dumps and the SIM BAY experiments, you know.
What about, for sleep tonight. In other words, the battery vent is
naturally opened. Do they want us to put on the elbow for the waste
management drain, and let - have that dumped overboard for the night?
Over.
CC-H Ah - -
ACDR In other words, it's kind of little cabin purge.
CC-H Tom, negative. We do not - We do not want a purge.
ACDR Okay.
CC-H Incidentally, Tom. We were talking off the loop here
about the evaporators. We're not sure that we're going to get the -
during the mission here, we're not sure if we're ever get use of the
primary evaporator back or not. Time will tell. We are - We do think
that we'll be able to try the secondary evaporator tomorrow morning.
We're waiting on the steam duct temperature to get up to 70 degrees. It's
been rising, and presently it's at 63 degrees. We think it'll be high
enough in the morning.
ACDR That sounds good. Thank you.
CC-H Okay.

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ACDR - -sounds good. Thank you.
CC-H Okay.
CMP Houston, Apollo.
CC-H Go ahead, Vance.
CMP Just a kind of a little item for the visual observations people, in particular oceanographic. We've talked a lot with them about gyres and eddies and that sort of thing. And something that I saw yesterday that I didn't think to report till just now, although I did report on tape I think, was the fact that just south of Hawaii, there was a line of circles, you might say, running east and west. And it looked like a line of circles - like a chain you might say. And if you look at one of those - and you can see them only because of the clouds. And it just made us wonder if maybe that was - perhaps the boundary of a current.
CC-H Okay, Vance. I copied that and we'll pass it to those guys and see what they think.
CMP Okay. Must have been a hundred miles long, or maybe two hundred.
CC-H Okay. Copy.
CC-H Apollo, Houston. We'd like the three pow - VTR power switches on panel 400 to ON so we can be dumping that tape recorder tonight.
CC-H And we'll sleep with them on.
CMP Okay, will that be - dumping be going on most of the night, or will it be finished in a couple of hours?
CC-H I'm not real sure what the schedule is. Hang on.
CC-H Vance, Houston. We're not gonna be dumping the VTR for about 4 hours, at about 163 hours.
CMP Okay. It's kind of like a little heater in here and that's - that was the only reason. But it's not that much of a problem.
CC-H Okay. One other thing, we'd like to sleep with the - with the door to the LiOH canisters area open again. That's panel - down around panel 350. And that's again to allow some heat to get in and around the steam duct. And I have one question about the check that ya'll did to determine that panel 10 audio tone - the tone was working when you listened to panel 10. We just wanted to make sure that that check was done on the headset and not the speaker box.
CMP That's correct, Dick. That's verified. It was on the headset.
CC-H Okay. Was the tone that you heard on - on the headset on panel 10, was it a normal tone or was it still also of low volume?
CMP It was very normal.
CC-H Okay.
CMP Even - even louder than normal. Well - well certainly

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not weaker. It was normal, certainly not weaker.

CC-H Okay. We'll be thinking about that one over the night and - and if we think of anything that'll help the situation we'll be getting back to you in the morning.

CMP Okay.

CC-H Apollo, Houston. One thing, we still haven't seen indications that that LiOH canister has been changed even though obviously you have changed it. Wonder if you'd check to make sure that that diverter valve down there is in BOTH.

USA Yes it is. We have the door open, we can see it.
And Tom's jiggling it.

CC-H Okay, thank you.

DMP (Garble) Dick, I'm happy to report we've found our flash attachment again.

CC-H Hey, good. I imagine up there you got so many little things that at any given time about 4 of them are lost.

DMP Yeah, everything disappears but it all shows up sooner or later.

CC-H Roger.

ACDR Houston, Apollo.

CC-H Go ahead, Tom.

ACDR Yeah, I just wondered how the weather is down in Houston. Over.

CC-H Well I haven't seen it for about 8 hours, but when I came to - over here to the moger this afternoon, it was a beautiful warm sunny day. We had a little rain in downtown Houston but it was really pretty. And Bo - -

ACDR Very good.

CC-H And Bo is here and he's gonna be taking over for the midwatch and he just got here and said it's still pretty outside.

ACDR Hey, that sounds great. Thank you.

CC-H Okay.

DMP Dick, still there?

CC-H Sure am. We've got about another 3 minutes.

DMP Okay. One question then, if it doesn't get answer now, you can have the experimenters look at. Is there any other magazine, DAC 16, we could use for shooting the fish experiment. I shoot up all of 128 today, I mean yesterday and Tom used part of 129, so we've probably got enough to do one more day, but - we'll need another magazine I believe.

CC-H Okay, we'll have an answer for you in the morning.

DMP Okay, no big deal.

CC-H Okay. And we're a couple of minutes to ATS LOS and this is the goodnight pass, we'll be calling you first thing in the morning. And if you want to do a voice check or call us for anything, we'll be standing by for - if you can just look in the flight plan and to see where we're gonna have AOS's for the next couple of hours or so. Be

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sure and sleep with the sleep - speaker box on and we'll see you in the morning.

DMP Okay. (Russian)
ACDR Real good, thank you now.
CC-H Rog. Goodnight.
PAO Apollo Control.

Apollo Control. Ground elapsed time 159 hours and 52 minutes, with a goodnight from CAP COMM Dick Truly to the crew of Apollo as they cross over the Japanese Islands. Wakeup time tomorrow morning is set for 168 ground elapsed time or 7:20 a.m. central daylight time, Tuesday. The start of another day for the crew of Apollo to conduct Astronomy, earth environment, life sciences and medical experiments aboard the Apollo command module. The crew was given a pat on the back today by CAP COMM Dick Truly from the principal investigators here at the mission control center on the performance of the scientific experiments aboard Apollo. Reporting that specifically 3 experiments were producing good data, that of the - the search for extreme ultraviolet from celestial sources. This is the ultraviolet experiment - extreme ultraviolet experiment. And the helium glow, this is a search for intensity and spatial distribution of helium fluorescent in selected regions of the night sky. And the SAM or the stratospheric aerosol measurement experiment. Tomorrow the crew is - got another day of activity along the earth resources line. Deke Slayton commenting that maybe tomorrow they might be able to see the extremely large oil slick which has been reported off the coast of Key West in Florida. He said hopefully tomorrow they might pass near enough to see it. Today it was overcast in that area and they could not spot the oil slick. Tomorrow the crew has been asked to perform the earth observation experiment along revolution 104 shortly after getting up in the morning at about 9:10 in the morning they'll be asked to look at and photograph the Humboldt Current off the coast of Peru. And as Apollo passes over the coastline they will be asked to describe and photograph the dune fields in the Peruvian desert. And as they pass over Venezuela, they'll be asked to photograph the Orinoco River delta in Venezuela. Then later in the day, at 1:50 in the afternoon or ground elapsed of 174 hours and 30 minutes, if there are storms in the West Pacific, they'll be asked to photograph them and as they pass over Hawaii they'll be also scheduled to take photographs of Hawaii. And as the vehicle passes over the peninsula or lower California, they'll be asked to photograph the Bahia Concepcion and attempt to observe if there are any internal waves in the Gulf of California. And as the vehicle crosses north, they'll be asked to photograph and take - and give vivid description of any callor - color oxidation zones in the Sudbury area of Canada, which is north of Lake Huron. Again wakeup time will be at 7:20 a.m. central day time Tuesday. A goodnight call just given to the crew several minutes ago as the crew crosses the north Pacific in revolution 97 in the mission of Apollo/

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Soyuz. At ground elapsed time of 159 hours and 56 minutes, this is
Apollo Control.

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Time: 01:04 CDT, 161:42 GET

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PAO This is Apollo Control. At ground elapsed time 161:42. Very minimal activity here at Mission Con - about 30 minutes ago the high gain antennas on the Apollo and the ATS satellite high gain antennas had a bit of a problem locking on to each other. And there was a couple of moments where we thought the crew was going to be asked to make some panel changes, but the antennas finally locked on. INCO doesn't expect any further problems with the satellite this evening, not that that was any real problem. Crew's scheduled for about 6 hours and 15 minutes more of sleep. Tomorrow morning when they get up they'll be taking more Earth observations pictures. And later on in the day continuing the astrophysical experiments, which were begun last Thursday. Our next status report will be about an hour from now at 162:38. At 161:43 ground elapsed time, this is Apollo Control.

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PAO 162 hours and 43 minutes ground elapsed time, this is Apollo control. The Apollo presently just west of the Indian sub-continent on revolution 99. Because of the attitude of the spacecraft, later on this evening there will be no communications through the ATS satellite beginning on revolutions 101 and continuing through revolution 102. We've had a change of shift here at mission control, Flight Director, Don Puddy now on shift with CAP COMM Karol Bobko. And in making his evening check around mission control room, the experiments officer notified the flight that the electrophoresis hardware MA-011 seems to be acting up today. They noticed a high voltage on the third sample, 335 volts, which is about 85 volts above nominal for that hardware. And at that high voltage the samples would not - would not proceed through the hardware toward the separator tubes, but would rather be drawn towards the outside glass of the separator assembly itself. So apparently on sample three for the MA-011 experiment no real good results for sample three. And also, Tom Stafford's biomedical data was once again mostly lost today during his exercise period. The flight surgeon reported that they got a little bit of data, and conjectured that there is a possibility that the exercise equipment itself is interfering with the biomedical data belt. But he indicated that there was no reason to change the biomed belts out, and that the crew would return wearing the ones they were assigned at launch. At 163:50 ground elapsed time we're expecting a VTR dump from Apollo, and that will contain video of a fish experiment and the stratospheric aerosol measurement hardware being installed. Also according to the crew some random docking module shots. Other than that there is very little going on here at mission control, a very quiet nominal evening here and, above, Apollo. Our next status report will be at 163:43, at 162:46 this is Apollo Control.

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Time: 03:00 CDT, 163:39 GET

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PAO 163 hours, 39 minutes ground elapsed time, this is Apollo Control. Spacecraft presently west of the coast of South America and about 3 minutes away from acquisition through the ATS satellite. We were scheduled for a video tape replay this ATS pass. Apparently the network people are having some problems getting lines in through the Andover satellite receiving station in Maine. The telephone company people are working on that problem now. We have Dr. Jerry Hordinsky's flight medical report, ASTP medical status report number 7. Under crew health, Dr. Hordinsky indicates no problems at this time and under remarks he indicates that Tom Stafford today repeated biomedical data and that data as received was technically poor but short segments that were able to be identified were medically acceptable. So as we mentioned earlier, Tom Stafford having some problems with his biomedical data belt. Vance Brand also had experiment data - medical data taken today and Dr. Hordinsky reports that that data was both technically and medically acceptable and Deke Slayton is expected tomorrow to be hooked into his biobelt after completion of the exercise period. The exercise appears to create too much noise in the signal and it's Dr. Hordinsky's conjecture that it's that noise which is interfering with the data on Tom Stafford. Also for tomorrow, on rev 106 there was scheduled to be a soft X-ray data take and the science team here at mission control is having a lot of problems with the hardware for the MAO48 experiment. The experiment involves hardware which uses very high voltage, 3 thousand volts, and it operates much like a geiger counter in detecting X-ray. An x-ray enters the detector assembly which contains methane and argon gas and causes and arc between grid wires. And those grid wires are at 3 thousand volts potential. The arc is then detected and that's the data that's being interfered with. Apparently the grid wires inside the detector assembly are arcing on their own. However, ASTP project scientist, Tom Giuli, indicates that they got about 2 hours of usable data on that experiment. And 2 hours apparently is enough for the PI to make heads or tails out of the soft X-ray field in the celestial sphere around the Earth. So although the hardware is apparently get - getting worse as time goes on, there is data which is acceptable to the PI. So the requirements of that experiment have been met, at least in a small measure. Our next status report will be at 164:38 ground elapsed time. At 163:42, this is Apollo Control.

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Time: 05:00 CDT 165:38 GET
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PAO 165 hours 38 minutes ground elapsed time. The Apollo presently over Central Africa on revolution 101. Absolutely no problems here in mission control Houston or aboard the Apollo. And this would be if anything a negative report. Our next status report will be 1 hour from now, at 166:38 ground elapsed time. At 165:38 this is Apollo Control.

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ASTP (USA) MC550/1
Time: 05:59 CDT, 166:37 GET
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PAO 166 hours 37 minutes ground elapsed time. This is Apollo Control. Apollo presently in the South Pacific Ocean, midway between Australia and South America. Crew is scheduled for an hour and 20 minutes more in their sleep time. And then following wakeup, they've got a couple of housekeeping functions to perform. And then they get about an hour for breakfast. Following breakfast, 2 of the crew members - the Apollo commander, Tom Stafford, and Deke Slayton - check that - Vance Brand - are scheduled for an Earth observations pass. And at that time the Apollo will be going over the western coast of South America. Yesterday the crew looked at the Humboldt Current. Today they'll be doing the same thing. And then east of the mountains - the Andes Mountains - they'll be looking at dune fields in the Peruvian Desert and the Orinoco River delta in Venezuela. Later on this morning, following the Earth observations pass, all 3 crew members will be involved in astrophysical experiments, the extreme ultraviolet and helium glow experiments. They're having some problems with the soft x-ray hardware, and at least one of the soft x-ray experiments is being traded out for an extreme ultraviolet pass tomorrow. Our next status report will be at 167:38. At 166:38, this is Apollo Control.

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Time: 07:00 CDT, 167:38 GET
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PAO 167 hours 38 minutes ground elapsed time. This is Apollo Control. Spacecraft presently over eastern China heading down through Guam on revolution 102. Present orbital parameters for the Apollo are an apogee of 120.7 and perigee of 115.0 nautical miles and a period of 1 hour 28 minutes 39 and 1/2 seconds. We've got this morning's daily operations report from the ASTP program manager. And on the experiment status, extreme ultraviolet telescope experiment, MA083 indicates that yesterday primary data was obtained on revolutions 88, 89, and 90 and supplemental data was taken on revolution 94. All of this being good data according to the report. And for the helium glow experiment, MA088 data was taken on revolution 92 and 93 at look angles of 020 and 340 degrees and those scans were intended to complete the survey of helium concentration in the vicinity of the solar system. The soft x-ray experiment, MA048 continues to exhibit such rations of data and we mentioned the cause of those problems earlier. In the geodynamics, MA0128 experiment, data is scheduled to be taken today. And the doppler tracking experiment, MA089 which is adjunct to the geodynamics experiment, the transmitter experiment was placed in warmup. That experiment uses the undocked docking module. Photographs of the crystal growth were obtained and the stratosphere aerosol measurements MA007 was turned on and they've completed several successful passes with that instrument, the principal investigator being very pleased with that data. MA066 furnace sample is presently in the furnace and they've had a few problems with the MA011 electrophoresis hardware but most of the data from that experiment looks good. The active biostack MA0197 was switched off yesterday and that completes the crew attention for that medical experiment. Photographs of the killfish hatching and orientation, MA161, were taken yesterday and we had some television of that. Zone-forming fungi photographs are scheduled every 12 hours, that continues. And Earth observations passes yesterday on revs 88 and 90 were conducted as scheduled and once again the crew is scheduled for several Earth observations passes today. The primary evaporator duct continues to ice up, however they going to turn that on very shortly. And the crew has reported a reduction in the caution and warning tone in the headsets with no apparent degradation in the speaker box tone level. All comm system functions seem to be normal. Available information from the crew indicates that the caution warning system tone is functioning and they'll probably be working today to determine whether that's an audio problem or a headset problem. But the caution warning system apparently does not have any thing wrong with it. Dr. Hordinsky's presently consulting with his medical team specialists. The most likely subject for the apparent poor data quality that they're receiving on biomedical telemetry is the electrical harness which actually connects the EKG electrodes to the biomedical data belt. And all indications from the data they got yesterday are that the harness is at fault and there is one spare biomedical assembly on the Apollo and so what they're going to do

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today is just change out one of the electrical harness itself with a brand new one and see if that clears up the problem. The crew is scheduled to be awakened in about 15 minutes and we understand today's wakeup music is entitled the Legendary Stardust Cowboy. So in about 15 minutes we'll be expecting Legendary Stardust Cowboy Music. At 167:43 ground elapsed time, this is Apollo Control.

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A STP (USA) MC552/1
Time: 07:18 CDT, 167:55 GET
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PAO - - 167 hours, 55 minutes ground elapsed time. The Apollo just northwest of acquisition through the tracking ship Vanguard, which is moving westerly to support the Viking launch in August. Later on this morning, the crew is going to change one of the MAO-48 data takes to extreme ultraviolet data take because of the hardware problems with the MAO-48. And the Cap comm is going to have several pad updates for the crew when they get up; probably uplink those following breakfast since there's several of them and it might take quite a while to get all of the changes. About 7 seconds away for a 5 minute pass over the Vanguard. Once again, we're expecting the legendary Stardust Cowboy as the wakeup music.

CC-H Apollo, Houston through Vanguard for 3 and 1/2 minutes. Good morning.

CC-H Apollo, Houston through Vanguard for 3 minutes. Good Morning.

MCC-H (Music.)

ACDR Sounds like a little different atmosphere than what we're living in.

CC-H Roger. We have a little bit over 2 minutes until LOS here.

ACDR Okay, Bo. I got up a couple of minutes early and turned OFF the jet monitor and all that and got the VTR power OFF and the TELEMETRY OFF, and got the DAP reset. And I'll go ahead and - you want us to get locked up on ATS before we go to that Earth OBS - VIS attitude for P20? Over.

CC-H Apollo. You'll have to be in that VIS OBS attitude to get locked on.

ACDR Okay. We'll set it up.

CC-H Roger. And just one other item; we're going to delete the waste water dump and I'll call that out when we get up on ATS, just in case you got to it early.

ACDR No we haven't done that. Thank you, Bo. How's the weather in Houston this morning? Or have you been out to see, ?

CC-H Someone who walked in said a slightly overcast day, but it looks like it's going to be nice. And we've got a little over a minute until Santiago at 168:17.

PAO Loss of signal through the Vanguard. Next acquisition will be about 15 minutes from now and that will be through the tracking station Santiago. At 168:02, the Apollo crew is awake and this is Apollo Control.

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PAO 168 hours, 17 minutes ground elapsed time. Apollo presently on revolution 103 nearing the coast of South America. Acquisition about 30 seconds away through Santiago. Also the - -

CC-H Apollo, Houston through Santiago and then ATS.

ACDR Hello, Bo. Guess we're gonna be locked on good on ATS; we got the angle set up.

CC-H All right sir. When someone has a chance I have a couple of flight plan changes and the first book we'll need is the flight plan.

ACDR We've got that.

CC-H When someone's settled down, give me a call and I'll be ready.

ACDR Go ahead. I'm ready.

CC-H Okay. The first one is that waste water dump at 168:29 and we just want to delete that. And we're go - we're going to try to get the secondary evaporator activated, but we'll do that just a little bit later when we finish our DSC dump and have COMM.

ACDR Okay.

CC-H Next one is on page 4.3-45 at about 171:10. Where it says VERB 49 maneuver to COMM attitude.

ACDR Okay. That's 140 - say again Bo. I'm sorry.

CC-H The time was 171:10 and it's under your column AC it says VERB 49 maneuver to COMM attitude.

ACDR Roger. Go ahead.

CC-H We'd like to change that 260 to 240.5.

ACDR Got it.

CC-H So it now reads, 261, 240.5, and all zeros. And then down below where it says -

ACDR Okay. Hang on. And this was 240.5, 000, 000 ?

CC-H (Garble)

ACDR I got it Bo. 240.5, 260, and all balls.

CC-H Negative. It's 261, 240.5, 000.

ACDR Got it.

CC-H Down just below DM height measurements, change the ATS high gain yaw 74 to 70 - to 95.

ACDR Roger. Yaw from 74 to 295.

CC-H That's not 295, change it to 095.

ACDR Okay.

CC-H And, that's all I have for the flight plan for right now. The next item would be the systems checklist and then I'm going to have a couple of updates to go in the flight plan supplement on the X-ray and EUV pads.

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CC-H Apollo, Houston. Over.
ACDR Go ahead, Bo.
CC-H When someone has a chance I'd like to give you a procedure for the secondary evap. I thought you might not mind me calling because it might make it a little cooler.
ACDR You better believe we'd like to hear about it.
CC-H Okay. It's systems checklist, page 1-18.
ACDR 1-18. Stand by. Okay. We're getting the systems checklist.
CMP Okay, Bo. We just got a master alarm and there's no indicator light on to tell us what - - what it was caused by. And I'm ready to copy on 1-18.
CC-H Okay. We think it's probably an O2 flowhigh, you had an accumulated cycle when you dumping urine.
CMP Right.
CC-H Okay, did you say you had the checklist, Vance?
CMP That's right, ready to copy.
CC-H Okay. That's one - -
CMP Good morning, by the way.
CC-H - - Good morning, yes. That's 1-18.
CMP Okay, copy.
CC-H Step 14, ACTIVATE secondary evaporator. We would like you to draw an arrow to show that that last step, which is secondary cooler loop pump AC1, should be done as the first step in ACTIVATION of the secondary evaporator.
CMP Yes, that sure seems reasonable. Okay.
CC-H Okay - -
CMP Do you want us to try it now?
CC-H - - and the other thing we'd like you to do first is on panel 377, glycol to radiator SEC NORMAL. And then do that little three step procedure that's on S1-18, step 14.
CMP Okay. 377 to NORMAL, and then do this - --
CC-H Roger. Then do that three step modified procedure.
CMP Okay. We'll start doing it.
CC-H Roger.
PAO Flight director Don Puddy indicating that the change-of-shift briefing will occur at 8:30 this morning. With him he'll have J. J. Conwell, his experiments officer. Once again, change-of-shift briefing at 8:30 in the main auditorium.
DMP Okay, Vance is coming on now, Bo.
CC-H Okay, we're watching.
CC-H Apollo, Houston. We're watching the secondary evaporator and it's - we'll give you word on it here in just a minute and I also have an update for the x-ray pad, rev 104.
CMP Okay. Bo, we'll kind of - oh - arms - arms full of food and stuff right here. Could we wait and catch that in a few minutes?

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CMP Well, if you need it right away - -
CC-H Negative. We don't need it right away but we
are going to have to have before the end of this ATS pass because
you're going to be starting into that stuff. But we've got like 40
minutes left in the ATS pass.
CMP Okay. Just a second.
CMP Okay, are we going to need any other books while
we're at it - other than the update's book - while we're out scrounging
books?
CC-H Negative. We need the supplement, - the flight
supplement for this helium glow, pad number 104 - for the x-ray pad
number 104.
CMP Okay. We're looking it up, then
DMP Good morning Bo. Deke here.
CC-H Good morning - -

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DMP Morning, Bo. Deke here.
CC-H Good morning, sir.
DMP Say, could you tell me what your local time is?
Some things are quiet here, I'll just try to find us one.
CC-H It's just a couple of minutes after 8:00.
DMP Okay. Thank you. We're back on rather normal hours,
aren't we?
CMP Okay, let's go. I've got rev 104, x-ray pad.
CC-H Roger. At the DET of 40 minutes, which is the
one before zero. Delete x-ray cal background cue card through MED.
CMP Okay. At 40 I deleted x-ray cal background cue
card through MED.
CC-H At 59:30, delete x-ray.
CMP Delete x-ray at 59:30.
CC-H At 2 minutes, substitute for 344, 341.7.
CMP 341.7 at 2 minutes in the roll
CC-H And the pitch, instead of 291, should be 288.2.
CMP 2882.
CC-H Roger. At 3:19 add, in the data column, x-ray ops.
CMP At 3:19 add x-ray ops in the data column with VERB
21 and all that.
CC-H Roger.
CC-H At 5:19, delete the roll of 334 and the pitch of 249
and add, in the data column, high voltage power OFF CENTER.
CMP That's done.
CC-H Okay. And at 9:36, x-ray high voltage power to 2.
CMP Go.
CC-H At 14:36, delete 310 in the roll and 259 in the pitch.
And add high voltage power OFF.
CMP Go.
CC-H At 17:07, delete everything.
CMP Okay.
CC-H At 18:03, delete everything.
CMP Okay. 18:03 - no VERB 21 and all that stuff.
CC-H That's correct. At 21:08, change the time to 21:20.
CC-H And at what was 21:08, add high voltage power - to 2.
CMP Okay. At what now is 21:20, add high voltage power 2.
CC-H That's right. And there're some changes in the
maneuver times. But I won't give you those.
CMP Okay. In other words, our counting up to time at
the top will get later. Is that right?
CC-H Negative. That remains 170:34:36, just as it was
on the original.
CMP Okay.
CC-H And we'll have a change for a later pad, later, but
there is one other item that I should get in now, before I let you people

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go back to eat. And that is that, on the cue card x-ray ops, you should change high voltage power 1 to read, high voltage power 2.

CMP Understand. So the nominal, in other words, is just always high voltage power 2.

CC-H Roger. And there's one thing we'd like you to check. On panel 3 - the DC indicator - would you verify that it's on main bus A.

DMP Verify it's not. I got it on fuel cell 3. I just finished purging it.

CC-H Okay. That, probably, is a bad call on my part. We were having that question from the evening. Do you know if it was on main A all night?

DMP Well, I can't verify where it was all night. I started fuel cell purge. I took it - from whoever it was, down in fuel cell 1, and went on through. And I just ended up purging 3.

CC-H Okay. Well, we'll just -

DMP Just a second - I suspect it was probably on BATT C, since that's the last thing I checked.

CMP Just out of curiosity - Does that affect your TM, or what?

CC-H Roger. Let me find out from EECOM exactly how.

CC-H Roger. It was a battery voltage that was dropping off. And we thought that perhaps it was on the battery, rather than on main bus A. But we just wanted to check.

CMP Okay.

CC-H And I'm sorry for all the callups, but - we thought we should get those in, so that you'd be able to start off on those x-ray pads with all the newest information. Enjoy your breakfast.

DMP (Garble.)

ACDR While we're on that subject, Bo - Do you guys only read what I've got selected, up here? I didn't realize that.

CC-H Negative. We can read others. But I guess, when it's selected on one of the batteries over a long period of time, it causes the battery voltage to decrease.

ACDR Okay.

CC-H Apollo, Houston. No need to answer. Just a bit of information. That secondary evaporator, at this point, looks good.

CMP Glad to hear it.

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CC-H - - information that secondary evaporator at this point looks good.
CMP Glad to hear it.
ACDR Bo, as a note of extreme interest, we have 5 more new fish this morning.
CC-H Roger. 5 more new fish.
ACDR Yep. We're going to be overrun with them here by Thursday. I hope they aren't sharks.
CC-H We've been trying to find the size hook you'd use for those fish, but so far we haven't been able.
ACDR Well, I've been trying to do a little improvisation up here, but I haven't had much success.
ACDR Those tie-down ropes are just a little big for fishing rope.
CC-H Apollo, Houston. I have a little news here if you people would like to hear it while you're having breakfast.
CMP Sounds great, Bo. Roll her.
CC-H Okay. This is news items, San Francisco, outgoing
Hew secretary Caspar Weinberger attacked the nation's welfare policy Monday and called for wholesale changes to save the nation from bankruptcy and get recipients back to work. In what he billed as his farewell speech as secretary, Weinberger said current welfare programs are threatening to destroy the nation economically and they are not doing the job for which they were intended. He called for the immediate abolition of food stamps, aid to families with dependent children and supplementary income allowances and said they should be replaced by a cash grant based on income and a strong work requirement. Washington D. C.; Attorney General Ed - Edward Levi deploring it as a terrifying fact of life, Monday reported serious crime for the first 3 months of 1975 was 18 percent above the same period last year. And for some crimes including robbery up 28 percent and burglary up 20 percent, the increases were larger. Levi also made public the figures for all of 1974, indicating that crime rose 17 percent for that year as a whole. He said the 18 percent rise in crime for the first quarter of this year, compared to the 15 percent rise in the first quarter of last year over the preceding year. Athens: Christina Onassis, one of the world's richest women, will marry Alexander Andreadis, son of a business tycoon. The sudden wedding - -

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CC-H - - is one of the world's richest women, will marry Alexander Andreadis, son of a business tycoon. The sudden wedding will take place today in a small chapel and Jacqueline Kennedy Onassis will attend. Mrs. Onassis(sic), 24, inherited her father's shipping and business empire. Aristotle Onassis' fortune had been estimated in the hundreds of millions of dollars. Mrs. Onassis had been expected to marry Peter Goulandris of another Greek shipping family who had been her constant companion for months.

CC-H Washington. The Senate Finance Committee voted Monday to provide tax benefits for firms which buy equipment to develop new sources of electric power. A 12 percent tax credit would be permitted on investments in equipment used to convert wasted fuel, to convert organic material into methanol or other synthetic fuels, to tap geothermal heat, to mine coal too deep for ordinary mining equipment, or to buy oil-shale equipment, coal slurry pipeline from coal liquefaction or gas liquefaction gear.

CC-H New York. 56 percent of Americans feel President Ford is doing only a fair to poor job. A 9 point drop in his job rating since the Mayaguez incident May 12th, the Harris survey announced Monday. The poll showed 56 percent of those questioned gave Ford a negative rating and 41 percent approved of the way he was handling his job; 3 percent were not sure.

CC-H United Nations. The 15 members of the U.N. Security Council met behind closed doors Monday night on the continuation of the U.N. peace keeping forces in the Sinai Desert. When the Council appealed to President Anwar Sadat, he agreed to a continuation of the force in the desert. The mandate expires Thursday. The appeal was adopted 13-0, with China and Iraq not voting.

CC-H East End, Massachusetts. Larry Kopunik is having trouble with peanut butter and sharks. He's determined, however, to celebrate the nation's Bicentennial in his own way. Kopunik is paddling on a surfboard from Cape Elizabeth, Maine, to Corpus Christi, Texas. He left on July 4th and paddled to East End. A few days ago, he cut his finger trying to hold on to an offshore target ship and eat a peanut butter sandwich at the same time. "I didn't want to give up my sandwich," he said, so I sat on my finger, but it didn't work, the bleeding didn't stop; I collected quite a few sharks. Kopunik says his supply of peanut butter sandwiches provided nourishment, but he wonders about his luck while eating them. Earlier during the journey, there was a nervous moment when a huge oil tanker passed within yards of him in heavy fog while he held onto a buoy so he could eat his sandwich.

CC-H And Pine Bluff, Arkansas. An inmate at the state's Women Reformatory at a prison farm, choked to death Monday on her chewing tobacco. The women had been undergoing treatment for a nervous condition which caused fainting spells. Officials said that it appeared that she fainted in the prison bathroom and choked on the tobacco while unconscious.

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CC-H And a last article of our news this morning is a new development in underwear which may help to dispel domestic discord around the house. A firm has come out with deodorized underwear. The underwear is treated with a secret deodorant formula during the manufacturing processes. The company says it contains - continues to fight odor through 50 machine washings. The firm has a whole line of No-smell items for men, including socks, shorts and T-shirts, but at this point there is no such line for women.

ACDR How about sending us up a batch of those; we could use them.

CMP Yeah, we hadn't had a shower for a week, Bo. You hit us right where it hurts.

CC-H Sorry. We can't get any of that underwear up to you guys right now.

DMP (Russian)

CC-H Say again, Apollo.

CMP (Russian)

CC-H (Russian)

CMP That it ?

CC-H That's it.

CMP (Russian)

CC-H (Russian) Sorry we can't find anything better to read up to you.

CMP That was good.

ACDR Yeah, some of those items make us glad we're up here instead of down there, Bo.

CMP Sure a lot easier to - to travel those miles this way than on that surfboard, I'll tell you.

CC-H At least no sharks up there. The biggest thing you have are the killifish.

DMP Haven't seen any.

ACDR They're getting bigger all the time.

CMP If we see any outside the window, we'll let you know, though.

CC-H And Apollo, Houston. Now that we've given you a report of what's happening down here, if somebody has a chance we'd like the morning report from you. Sometime before we go out of ATS coverage; that's about 14 minutes from now.

ACDR Okay. We're still eating here and we'll be able to give it to you pretty fast once we get it here.

CC-H Okay.

CMP If we do see any sharks up here, it'll mean we're in a very low orbit, Bo.

CC-H Roger.

CC_H And Apollo, Houston. Just a bit of information. The reason there are so many changes on X-ray pad is because we're

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CC-H finding that they're getting good data when the X-ray's
left OFF for a couple of minutes, and so that explains most of the turn
OFF's and turn ON's in the pad and some of the deletions to give it a
chance to be OFF for a couple of minutes between data takes.

CMP Yeah, we understand.

END OF TAPE