

ASTP (USA) MISSION MC76/1
Time: 20:05 CDT 05:15 PET
Date: 7/15/75

USA Houston, Apollo.
CC-H Apollo, Houston, go ahead.
USA Ah, Bo, we've noticed the last our or two, it seems like the temperature is increasing a little bit in the cabin, and it's not too hot yet, but it is up on the gage to about 77. Do you have any suggestions for cooling it down?
CC-H Roger, we'll look on that, we understand that it has been increasing, and it is now about 77.
USA Roger, I wouldn't say that it's anything serious, but we're kind of looking ahead, and if we had a way to get it a little cooler now, we'd probably like it.
CC-H Understand.
USA Okay, Bo, we're going to start the maneuver, if it's alright with you guys.
CC-H Understand.
USA Okay, we're maneuvering, Bo.
CC-H Roger, be advised that you will probably loose comm with us.
USA Okay, you must have made a fast trip back to Houston, over.
CC-H Yea, well we stopped at (garble), but it has been 5 hours and 20 minutes since you launched.
USA How did the launch look, pretty good?
CC-H Oh, it was great, it was a nice day, you could see staging on the television just fine, although you couldn't see it from the ground out the window too well. But, it was really beautiful.
DMP Man, you should have seen it from where we were.
CC-H Yes, I'll bet you it really looked great to you Deke.
DMP Certainly did.
DMP There maybe something else that is almost as good, but its been so long since I've seen it, I couldn't compare.
CC-H Deke, we're having a bit of a problem understanding you, we think it might be that your mikes have slipped out from in front of your lips.
DMP Just as well.

END OF TAPE

Tape 77 - not transcribed -- recording of dead air

ASTP (USA) MISSION MC78/1
Time: 20:25 CDT 05:35 PET
Date: 5/15/75

USA Houston, Apollo.
CC-H Apollo, Houston We read you clear but weak.
USA Okay, (garble) look real good (garble)
CC-H Roger. Understand you're standing by for the burn,
just reminder to bank B(?).
USA Roger. Understand.
PAO This is Apollo Control. The displays here in the
Control Center showed the - phasing burn number 1 as it was underway
aboard Apollo. However the loss of signal at Orroral Valley coincided
fairly closely with the cutoff of the burn, and therefore it'll be the
next station, Hawaii, in 15 minutes, before we get a report from the
crew on the phasing maneuver which was scheduled to be 67.2 feet per second,
raising apogee to 128.2 nautical miles. We will return in 15 minutes,
for tracking station Hawaii. At 5 hours 40 minutes, Apollo elapsed
time. This is Apollo Control.

END OF TAPE

Tape 79 -- not transcribed -- recording of dead air

ASTP (USA) MC80/1
Time: 20:37 CDT, 05:47 PET
7/15/75

PAO This is Apollo Control. 5:53 Apollo elapsed time. About a minute and 40 seconds away from acquisition again through the Hawaii tracking station. We'll stand by for - we already do have AOS, slightly ahead of the predicted time. We'll stand by as spacecraft communicator Karol Bo Bobko talks to the crew through Hawaii.

CC-H Apollo, Houston through Hawaii for 2 minutes. How do you read?

USA (Garble)

CC-H Roger. I have a couple of items. Is there someone free to copy?

USA Yes, go ahead. (Garble)

CC-H The LEM ascent data which goes on page 1-6 of the rendezvous book. I'm sorry, that's 1-7 of the rendezvous book. Is 127818.

USA (Garble)

CC-H And we're going to do a purge burn, and that's going to be done at about 6:30, and we'll have more information when we get into ATS coverage.

USA Roger. Purge burn at 6:30. Would you repeat the first one?

CC-H Roger. LEM ascent data on page 1-7 which is about the center of the right hand side. CSM weight, 27818.

USA We had a Keyhole. Please repeat. We had a cut out.

CC-H Roger. That's 27818.

USA Okay, 27818, Bo?

CC-H Roger. And on panel 377, we'd like you to put the glycol to radiator secondary to the NORMAL position. Did you copy that Apollo?

USA Roger. Copy.

CC-H Roger. And we're - -

END OF TAPE

ASTP (USA) MC81/1
Time: 20:47 CDT, 05:57 PET
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CC-H Did you copy that Apollo?
DMP Roger. Cop that.
USA Roger, and we're flowing coolant through the secondary loop to cool you off some. And we'll get back with that problem when we have next communications pass.
DMP Okay. You're intermittent, Bo. We're only reading you periodically.
CC-H Roger. Let me try that again. We're doing that to cool you off and we'll have more information when we have another comm pass.
DMP Copy.
DMP Hey, could you repeat the position you wanted on 377, please Bo?
CC-H That was glycol to RADIATOR, secondary to NORMAL.
CC-H And Apollo, Houston. We'll see you again at Bermuda at 6:15.
DMP 6:15. And Bo, for your information our water quantity is oscillating (garble) the middle. (Garble) a little bit then it quits.
CC-H Roger, it's the water quantity transducer we understand is bad.
DMP Well, oscillating and it's doing it only in the WASTE position. Only about 60 to 80 percent.
CC-H That was 60 to 80 percent, right?
DMP Yes, 6 zero to 8 zero. Just a constant oscillation.
CC-H Roger.
PAO This is Apollo Control. Loss of signal through Hawaii, next station in 12 minutes will be Bermuda. We'll return at that time. Presently the Apollo crew coming up on an eat period, their evening meal and then go immediately into the first rest period - eight hour rest period on the mission. At about 7 hours, 50 minutes Apollo time the mission timers and the command module computer clock aboard the spacecraft will both be synchronized to Soyuz ground elapsed time. Up until now Apollo's been operating in what's called PET or phase elapsed time, which really amounts to Apollo time after liftoff. Returning in 11 minutes, at Bermuda, this is Apollo Control, 6:03 Apollo elapsed time.

END OF TAPE

ASTP (USA) MISSION MC82/1
Time: 20:57 CDT, 06:07 PET
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CC-H Apollo, Houston through Bermuda. How do you read?
USA (Garble)
CC-H Roger. Would you please accept. So we can give
you the rendezvous REFSMMAT.
USA (Garble)
CC-H And if you - if I can have someone's ear for a
second, I'll explain a little more about the cooling procedure.
USA Okay, we're all listening.
CC-H Roger. We're going to hold this configuration for
a while, to see if that helps. And we will probably also activate the
secondary evaporator later on this evening, so it cools the cabin down
well before sleep.
USA Sounds like a good idea.
CC-H Okay, now I have a procedure here for this PSM
purge, and what we're going to do is essentially turn off the RCS quads
turn on the PSM and then simultaneously with both hand controllers
command sim - opposite rolls, for 12 seconds, to burn out any pos - -
END OF TAPE

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CC-H -- and simultaneously with both hand controllers, command same - opposite rolls for 12 seconds to burn out any possible bubble that may be there.

DMP Yes, okay. We got it copied down, Bo. We're gonna turn off the four RCS and turn on the VSM and then opposite roll using the two hand controllers for 12 seconds.

CC-H Roger. And we have a significant procedure here, but we'd like to go through it over Ascension and go through it step by step with you so that if we lose ATS coverage, we'll be able to still have you at Ascension.

DMP Okay.

CC-H They're just afraid that when you go opposing rolls, there may be some residual rate that might pull you out of our ATS window. Apollo, Houston. You can go back to block and as soon as you can get that P52 out, that would be good, so that we can then work on the purge procedure.

DMP Okay. Stand by. And you have block, Bo.

CC-H Roger. And Apollo, Houston. We're standing by for high gain acquisition when you have a chance.

DMP Okay. (garble)

CC-H Apollo, Houston, say it again.

ACDR Okay. We're transmitting on ATS, I think, are you reading us?

CC-H Roger. Reading you loud and clear.

DMP Okay.

DMP Houston, Apollo, you reading my DSKY.

CC-H Apollo, Houston, we are not reading your DSKY because we're dumping the DST data and also we have quite a bit of interference and it's difficult to understand your transmission.

DMP Okay, Bo.

DMP Brand just finished option (garble).

CC-H Apollo, Houston. Our communications are so bad we're not reading you.

END OF TAPE

ASTP (USA) MC84/1
Time: 21:17 CDT, 06:27 PET
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USA Houston, Apollo.
CC-H Roger, Apollo. Houston here. We read you loud and
clear now.
USA Roger. Well, we completed the P52 option 3, also
option 1.
CC-H Roger. We did not read that because we were dumping
data, so if you could give them to me I'd appreciate it.
USA Ready to copy?
CC-H Ready.
USA Okay, on the P52 option 3 stars 01, 41; 905, 4 balls
1; Xm minus 39; Y, plus 3; a, plus 33. Torqued: 6 hours, 24 minutes and 0
seconds.
CC-H Understand. Stars 01, 41, 4 balls 1, minus 39 plus 3
plus 33, 6:24:00.
USA Roger. Now on option 1, star 01, star 41, the same
ones; 95, all balls; down 93, plus 354, plus 423, plus 140; and we torqued at 6
hours, 27 minutes and 40 seconds. Over.
CC-H Understand, 01, 41, all balls, plus 354, plus 423, plus
140, 06:27:40.
USA Roger.
CC-H Thank you.
USA And I guess we're coming up to Ascension now. We're
ready to copy the - the (garble) procedure.
CC-H Roger.
CC-H Apollo, Houston. This procedure is fairly long and
we think it might just be easier if we let you do it as we read it over
Ascension.
USA Okay.
CC-H As you prefer though.
USA Go ahead.
CC-H Okay this is the PSM activation first. It's SCS
control, mode CMC 3.
USA Okay, SCS control and CMC in 3. All right.
CC-H SMRCS quad helium A, B, C, and D closed. Talkback
4 to barberpole. And we're not at Ascension yet so don't do them until
we get there.
USA Okay, I understand. Next step SMRCS quad helium
4 closed, talkback barberpole and we're holding on.
CC-H Roger. And do you want me to continue with the
procedure then and you copy it?
CC-H Apollo, we have through Ascension now.
CC-H Apollo, Houston. How do you read?
CC-H Apollo Houston. Over.
CC-H Apollo, Houston. Over.
USA Go ahead, Bo.
CC-H Roger, we have Ascension now and you can start on

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that procedure and I'll continue when you're ready.

USA Okay, we've been hear you all along, you haven't heard us and we're closing 4 SMRCS quad heliums now.

CC-H Roger.

USA And that's complete.

CC-H And next there's the SMRCS propellents, 4, A, B, C, and D closed. Talkback 8 should be barberpole.

USA Houston, do you read me?

CC-H Roger, we read you. The next step is SMRCS propellant, A, B, C, and D closed; talkback 8 barberpole.

CC-H Apollo, Houston. Did you copy my last?

USA Houston, Apollo. How do you read?

CC-H Roger. We read you loud and clear. How do you read me, sir?

CC-H Apollo, Houston. How do you read us now?

CC-H Apollo, Houston. How do you read us?

USA Loud and clear.

CC-H Roger. We read you now also.

USA We've been reading you.

CC-H I'm sorry then for making so many calls. We haven't been reading you.

USA Roger. Just meant that it must have been some kind of a mixup through the station or something. Okay, we did close SMRCS quad helium, Bo.

END OF TAPE

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USA That must have been some kind of mix up through
the station or something. Okay, we did close the SM RCS quad helium, Bo.
CC-H Okay, now.
USA barberpoled.
CC-H And now we need the SMRCS propellant, A, B, C, and
D CLOSED. And talkback H should be barberpoled.
USA Okay, we have four SM RCS quad propellants CLOSED
with 8 barberpoles.
CC-H Roger, and then the SMRCS PSM helium OPEN, talkback
USA Okay, PS helium OPEN talkback tray.
CC-H And SMRCS PSM propellant A, B, C, and D open talk-
back 4 tray.
USA Okay, complete. We have PSM propellant A, B, C,
and D OPEN and 4 gray.
CC-H And then the SM RCSm PSM manifold isolation OPEN,
talkback gray, and we'd like you to do it but it already should be done.
USA That's right it's a verified, but I'll hit it again.
And it's grey.
CC-H And then B MAG MODE 3, rate 2 and that's a verify.
DMP Verified, AUTO Bo.
CC-H AUTO RCSS ELECTS16, main A, main B.
DMP They're selected to 16 (garble)
CC-H And then rotation hand controller in normal power
two of them to AC/DC.
USA Two AC/DC - Controllers AC/DC.
CC-H Roger, manual latitude roll to acceleration command,
and pitch and yaw and rate command.
DMP To roll ann accel command, you on rate command.
CC-H Roger. And then listen here for just a second.
What we'd like you to do is using the - the rotation hand controllers
1 and 2, simultaneously command plus and minus roll for 12 seconds of
continuous command time and that will be eight yets ON. And try to
get them ON and OFF at the same time of course you might have some var-
iations, and it's possible that you might loose comm with us.
USA I understand, and we're still in CMC free. I under-
stand we should go to SCS now, is that affirmed?
CC-H Negative. We'd like you to do it in (garble)
USA Okay, understand. CMC.
CC-H And then after the burn we'd like you to go MAN at
roll to rate command SCS control made to CMC AUTO and allow the DAI'
to damp the rates.
USA Roger, understand.
CC-H And then - -
USA We're ready to start our plus and minus yaw for 12
seconds.
CC-H And then let --It's a plus and minus roll for]2

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seconds, and let me finish the procedure in case we happen to lose comm with you.

USA Roger, roll.

CC-H And after the AUTO, after the burn do the AUTO RCS Select roll 4 to OFF - RHC normal power 1 OFF. And then do a VERB 49 maneuver back to the sleep attitude that's listed in the flight plan at approximately 625, which is 018, 170, 330.

DMP Roger, we've got that.

CC-H Okay? We're watching for your burn.

USA Okay - we'll start the plus and minus roll in a few seconds.

CC-H Roger, Houston, Apollo, try to be careful not to modulate that so you don't get any differential roll out of one hand control or the other. We're watching.

DMP Complete

CC-H Beautiful is the word we get down here.

USA Okay, looked good here, no big rates.

CC-H Roger, that's just what we thought.

DMP We're already (garble) back to our sleep attitude.

USA Houston, Apollo.

CC-H Apollo, Houston, if someone has a second, we'd like the burn report from MC 1.

DMP Okay, I've got it here, Stand by. Okay, on MC 1. It was on time. The residuals, minus one tenth plus one tenth minus one tenth. Delta VC after trim was 14.1. Everything was alright.

CC-H Roger, copy. I have a couple of items, Apollo, for the presleep checklist if somebody has a chance to copy. When they do, just give me a call.

USA Stand by. Houston, while we're digging this sleep checklist up I have another thing, a little nagging problem here. We don't know if we have a problem or not, but it concerns the urine system. We've hooked up the urine system, but it is either dumping overboard at a very slow rate, or not at all. We find that it's such a slow rate that there's still some urine left in the collector after several minutes, after it has been used. We wonder if somebody down there knows what the flow rate should be?

CC-H Roger, we copy your problem.

USA And advise that we followed the procedure and verify the urine dump heaters and all that sort of thing.

CC-H Roger, I understand.

DMP Okay, Bo, I'm ready to copy your preflight checklist data.

CC-H Roger, the first one is in the CSM systems checklist on page 147. Number 9, the VTR cooling activation. And on page 148, number 12 the (garble) cooling activation.

DMP Okay, got it.

CC-H And, like you, we see both of those pieces of equipment getting slightly warm. And while in STDN contact, you can

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do this now. On panel 274, we would like circuit breaker DM power, main B CLOSED. And we'll call you when to open it - and it's so that we can get some data from the DM.

DMP Okay, you want it closed now?

CC-H Roger, we have data, and we can watch it.

DMP Okay, it's closed.

CC-H And on panel 181 - CM 1 TV station power switch OFF. And CM 2 TV station power switch OFF, and that's on the presleep checklist.

ACDR Okay, you want them OFF now?

CC-H Yes, we do want them OFF now, and we would like to know if they were on at this time.

ACDR No, neither one of them were ON.

CC-H Roger. Thank you very much.

END OF TAPE

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USA (Garble)
CC-H Roger. Thank you very much. And those are all the notes we have for you.
DMP Okay, (garble)
CC-H And Apollo, Houston. We've gotten enough DM data. You can pull the circuit breaker on panel 27⁴, DM power MAIN B to OPEN.
DMP Okay. Coming OPEN. Mark it.
CC-H Thank you.
DMP And if you want your scientific report for the day, zero G does not seem to disturb the adult female mosquito who's flying about here beautifully.
CC-H Roger. Understand. (Laughter) Understand you're going to feed it to the fish.
DMP Well, we thought we would feed him ourselves for a few days and then we'll feed it to the fish.
CMP Another alternative is to bring him back alive and give him a pair of astronaut wings.
CC-H Roger. And has our activation of that belt on a 377 glycol radiator made any difference in the cabin temperature?
CMP Yes. It's beginning to improve. It feels much better.
CC-H Thank you. And Apollo, Houston. We'd like to know if you think that that's going to be a good enough thing or if we should try something else to make the cabin still cooler.
ACDR Yes. The trend is starting to get cooler, Bo. If it keeps on it should be in good shape.
CC-H Understand. Thank you.
CC-H Apollo, Houston. I have an answer to one of your questions. The urine will dump 1.25 pounds per minute.
CMP Okay. Then, we've got somewhat of a problem with this urine system because it isn't dumping anything close to that rate.
CC-H Okay. And we're looking into the problem further.
CMP Okay. It may turn out that we can use a backup scheme here pretty quick. We might have to use a bag or something because it's been quite a while.
CC-H Understand.
CMP Or, how about dumping without the filter.
CC-H Understand. We're looking at it.
CMP Okay.
CC-H And the other is we need a waste water dump and we'd like you to time it instead of using the gage and we would like a 4 minute waste water dump and you can start any time.
CMP Understand.
CC-H Apollo, Houston. Over.
ACDR Go ahead.
CC-H The first suggestion on the urine dump is to close the waste stowage vent valve while you are dumping urine and see if that helps.
ACDR Okay.

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CC-H And the other is that there is a filter - -

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CC-H -- while you're dumping urine and see if that helps.
ACDR Okay.
CC-H And the other is that there is a filter in our R-11
and we don't want you to dump without a filter, but you may try a new
one.
CMP Okay. A new filter of the same type. Roger.
CC-H Yes. But we'd like you to try the waste stowage
vent valve first.
CMP Understand.
ACDR Okay. We've already turned that off.
CC-H Apollo Houston, understand. You said you've tried
to dump with the waste stowage vent valve OFF and it didn't seem to help
any.
ACDR No. We haven't. I just turned it off now, Bo.
CC-H Okay.
ACDR We'll have to check it here in a minute.
ACDR Okay, Bo. The water dump is off.
CC-H Roger. Understand.
ACDR Bo, we changed the filter and that greatly improved it.
CC-H Roger. Understand. Thank you.
ACDR Houston, Apollo.
CC-H Apollo, Houston. Go ahead.
ACDR What country are we over now, Bo? We didn't have
time to get the map out.
CC-H You're coming up over Australia now.
ACDR Okay. Thank you.
CC-H You're welcome.
CMP How's it going over in Soyuz, Bo? Anything new?
I suppose those guys are asleep now, huh?
CC-H Roger. They've been put to bed.
CC-H Vance, looks like the only problem they've had so far
is a problem with one of their TV cameras and they're working on that to see
if they can get it to work.
CMP Okay. Well, it's good that they haven't had any
more problems than that.
CC-H Roger.
CC-H Apollo, Houston. Just asked you a question on that
waste dump. We understand it's working properly now. Did you
do both of those steps or did not the waste stowage vent make any
difference and then you put the filter in?
ACDR Well, I don't think it's working yet, Bo. I was
just about to experiment with it but it still seems to be full of liquid.
CC-H Understand.
ACDR (garble)
CMP We think there's some suction in the device because
if you close the cap for a little while and then put it to VENT, you
hear a hissing which is quickly over again, but it must be a - -

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USA - -lights, because if you close the cap for a little while then put it to vent, you hear a hissing, which is quickly over again, but it must be a very small flow - flow restriction of some kind.

CC-H I understand and we just have a little while until LOS and and we'll be seeing you at Guam at 7:16.

USA Okay.

CC-H Apollo, Houston through Guam for 4 minutes. How do you read me?

USA Just fine Bo. How do you read us?

CC-H Apollo, Houston. We read you, but very weakly. Would you speak louder please?

USA Roger. Read you mighty fine, Bo.

CC-H Roger. How was your test?

USA Nothing seems to be working. We'll try her later. Right now we've diverted to the food intake mode.

CC-H Roger. Enjoy yourself.

USA Thank you.

USA And we went to heater B on urine dump. Thought you wouldn't mind it. Just in case A wasn't working.

CC-H Roger.

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CMP - - just in case A wasn't working.
CC-H Roger. And, Apollo, Houston, we don't think that's
it. Our temperatures seem to indicate the heaters are working.
CMP Okay.
CC-H Apollo, Houston. On that urine receptacle, we have
the suggestion, although you may have already done it, to take the
URA off the hose and see if there's flow, which indicates that the URA
would have a blockage.
ACDR Okay, Vance (garble).
CMP Okay, Bo, try it first opportunity.
CC-H Roger.
CC-H Apollo, Houston. There's less than a minute until
LOS. We'll see you at MILA at 7:45.
ACDR Okay, Bo.
PAO Apollo Control. Ground elapsed time 7 hours, 21 min-
utes. The crew of the Apollo settling down for their first night aboard
the spacecraft. The three office - members of the crew now are
having their evening meal, while they shake down their spacecraft,
going over minor problems which have occurred since they launched from
Cape Kennedy, at 2:50 central daylight time today. Minor problem with
heating aboard the spacecraft, the temperatures reported as high as
77, however they are now down to an acceptable 70 degrees within the
Apollo spacecraft. Other minor problem with the urine dump system.
Tom Stafford reported after the recent pass that things seem to have
worked out now, and they seem to be getting the proper flow through
the urine dump system.
PAO The crew was approaching their first sleep period
aboard the Apollo. And when in a short period they will adjust their
clocks aboard the spacecraft to synchronize with the clock aboard the
Soyuz. So, each vehicle is working on the same time line. Next acqu-
isition through Rosman, at ground elapsed time of 7 hours, 22 minutes,
This is Apollo Control.
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ASTP (USA) MC90/1
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PAO Apollo Control. Ground elapsed time 7 hours, 43 minutes. On this pass - stateside pass, the crew will update their clock to put their clock aboard the spacecraft in phase with the Soyuz at - so both clocks read ground elapsed time 15 hours and 20 minutes. This will occur in approximately - at 15:20. The ground's still looking at data concerning the problem the crew explained on the urine dump system and also the ground is watching closely the heat - the temperature within the spacecraft.

CC-H Apollo, Houston. Through MILA and (garble). We may have a keyhole here is about a minute. How do you read?

USA (Garble).

CC-H Roger. First is we'd like you to go ACCEPT.

USA Roger.

CC-H And I have a note. On the next ATS acquisition, try to acquire at the normal time but leave the antenna in MANUAL and WIDE until 15:36:30. Then go to REACT and NARROW.

USA Okay, have you had any trouble with the side bend plugging up?

CC-H Well, this is the one of two ATS passes when the moon's position may interfere with ATS acquisition and this procedure is to get around that.

USA Okay, say again the time when we go to NARROW.

CC-H 15:36:30, but of course we're gonna be updating the clock right now.

USA Roger.

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

USA Loud and clear.

CC-H Roger. Did you have a chance - have a chance to do that URA test?

USA Not yet. We're right in the middle of the eat period. When we get this all squared away, that'll be our first priority.

CC-H Roger. We won't bother you while you're eating, then. Call us when you're finished.

USA Thank you.

PAO - -did it Art at - they did it 40 - 3 minutes ago, Art. Let's see, they start at 15:20 and they did it 3 minutes ago. It's 15:23 now.

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ASTP (USA) MC91/1
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CC-H Apollo, Houston through ATS. How do you read?
ACDR Loud and clear, Bo.
CC-H Roger. We're standing by and we've got some information here. We'd like this to be our last pass of the evening so you people can get to bed.
ACDR Okay. Stand by. Let me get the flight plan out.
CC-H Negative. We don't want to interrupt your meal.
Just when you're finished, give us a call.
ACDR Okay.
CC-H Apollo, Houston. There are about 35 minutes remaining in this HAW pass.
ACDR Okay, Bo. Okay. I see you've given us the STDN uplink jet on monitor loads and all that.
CC-H Roger. They're in work.
ACDR Okay, Bo. And you want me to go ahead and close that direct O2 valve that's listed back in 740 (garble) We're running late on the (garble) because of some problems we had with the (garble)
CC-H Roger. I'll check.
CC-H Apollo, Houston. Roger. Go ahead and close it.
ACDR Direct O2 is closed.
CC-H Roger. And the cabin temperature seems to be stable now. If it's acceptable, leave the system the way it is configured. If it's too warm, you're clear to activate the secondary evaporator S118. But if you do activate it, it should be deactivated before bedtime.
ACDR Okay.
CC-H And Apollo, how is the cabin now?
ACDR It's better, but it still could be a little cooler. It's getting down some though.
CC-H Roger. Are you going to activate that evaporator, sir?
ACDR Yes. We'll go ahead and activate it for a short period of time.
CC-H Roger. We'd like to see that during this pass if you could do it.
ACDR Okay. I'm going to go ahead and fire down this (garble). check. Let's turn the GMAG off.
CC-H Roger.
ACDR BMAG 1 power's OFF.
CC-H Copy. And Apollo, Houston. We've already done one waste water dump so you don't have to do another one as called out at 19:30 in the flight plan.
ACDR Okay.
CC-H Apollo, Houston. Are you finished enough there to answer a couple of questions?
ACDR Yes. Go ahead. We're still munching and working. Go ahead.
CC-H Okay. It was about the URA test. Have you had time to accomplish that?
ACDR No we haven't. We're still just right in the middle of the eating period, Bo.
CC-H Okay. If - -
ACDR If we get the first meal squared away and all the trays

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(garble) slower than the flight plan calls for.

CC-H We're trying to figure that. You have used that filter and it can be stowed in a fecal bag in R-11.

ACDR Okay. That's the used filter, the one we used in the fecal bag in R-11.

CC-H That's right. That's for the used filter.

ACDR Understand. Thank you.

END OF TAPE

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USA Okay, that's the used (garble)
CC-H Yes, that's right, that's for the used filter.
ACDR Understand, thank you.
CC-H And Apollo, Houston. This is another discussion item.
We heard you say that the EMS read 14.1 after the trim on NCl and this indicates about a 1.1-foot-per-second over speed, not shown by the GNN, And could you tell us anything about that, or could you tell us anything about the EMS setup that may have accounted for that?
ACDR Hang on, Bo, and I'll go back and look at the data.
CC-H That was NCl and you told us on time, minus 1, plus 1, minus 1, and 14.1.
ACDR That's right, minus 14.1.
ACDR (Garble) we set the - EMS delta V was set for 54.2.
CC-H Understand 54.2.
ACDR That was before the burn, this one was set.
CC-H Understand.
USA On NCl we set the EMS up initially before the burn just per the pad to - what you said. And on the burn before that ACM, however, we set the - we set it up to 7.2 instead of what you had on the pad which was 5. something.
CC-H Roger. I understand, NCl, the EMS was set up per pad, but on the ACM it was set up for 7.2. Thank you.
USA Yeah, that was mainly because we were sort of wanting to set it up according to the GNN total delta V, and to be sure that we didn't - if we had an SCS burn that we didn't go through zero on the EMS before the burn started.
CC-H Roger.
CC-H Apollo, Houston. You can go block on the computer, and you have a go to synchronize with the clock.
USA Roger, after we get all the food trays off (garble), we'll do that.
CC-H Okay.
MCC-H You getting any TV, Bo?
CC-H (Garble).
CC-H Negative. We are receiving no TV.
USA Okay.

END OF TAPE

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Time: 23:13 CDT, 15:53 GET
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DMP Hello Houston, how do you read?
CC-H Apollo, Houston. Go ahead.
DMP Okay, Bo. We're going to start to activate that
second (garble) and then we'll go right into trouble shooting on the
urine system.
CC-H Roger.
USA Houston, that S band's coming through pretty loud
and static and we've got the secondary ON.
CC-H Roger, Apollo. We see it.
CC-H Apollo, Houston. Over.
USA Go ahead, Houston.
CC-H Roger, have you had a chance to do that URA test?

END OF TAPE

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ACDR Go ahead Houston.
CC-H Roger. Have you had a chance to do that URA test?
ACDR It's at work right now. The secondary evaporator is
activated Bo and we're at work on the urine system right now.
CC-H Okay. We saw the activation of the secondary evaporator.
We were just wondering about the urine system before we went over the hill.
We've got about three minutes until LOS.
CC-H And Apollo, Houston. If there is somebody not working
on the urine system, I've got another item or two.
ACDR Okay, Bo. Be right with you.
CC-H Okay.
CMP Houston, Apollo.
CC-H Go ahead.
CMP We took this device off the urine system and we checked
the hose and there is a very small vacuum on the hose and we think we
improved the vacuum on the hose by taking off the bleed valve on the
waste stowage outlet. And maybe it'll help if we keep the battery vent
closed, the bleed off the waste stowage and then try to use this system.
CC-H Roger. Copy.
CMP We'll proceed on and let you know.
CC-H Roger. You think it'll be acceptable to go to bed
with?
CMP Pardon?
CC-H I mean, can you people go to bed comfortably with the present
situation?
CMP We think so. We're working on it.
CC-H Okay. And we noticed the optics power is ON and we'd
like the VERB 74.
CMP Okay.
ACDR You want the VERB 74? You got the VERB 74.
CMP And optics power's OFF.
CC-H Roger. We see the VERB 74. There is one minute until
LOS and your wake-up time in the morning will be at 24:30, which is
about 40 minutes late because of STDN coverage.
ACDR Roger. At 24:30.
CC-H And Apollo, Houston. We think that allowing a little
air to flow through the urine system will help it.
CC-H Apollo, we're just about to go LOS, but we'll see you here
at Guam in about 2 minutes.
ACDR Okay. Fine.
CC-H Apollo, Houston through Guam for 2 minutes.
CC-H Apollo, Houston through Guam for just a little over
a minute.
CC-H Apollo, Houston through Guam for 1 minute. We will
have LOS and see you at Goldstone at 16:41 but we will not call. You
can call us if you wish.
CMP Okay. We'll probably send you down a presleep

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report and we'll be just about ready to sack out then, Bo.

CC-H Roger. Thank you. And -

CMP And we'll probably be able to give you a final status of the urine system up here about that time, too. It's a little more optimistic looking now. We have our optimistic and pessimistic moments up here.

CC-H (Laughter) Roger. Understand.

END OF TAPE

ASTP (USA) MISSION MC95/1
Time: 23:43 CDT, 16:23 GET
Date: 7/ /75

PAO Apollo Control ground elapsed time 16 hours 25 minutes loss of signal through Guam tracking station, as the Apollo crew Tom Stafford, Vance Brand, and Deke Slayton conclude their first days activities aboard Apollo. The three crew members fell slightly behind schedule in stowing away gear and preparing for their first full days' operation. The little problems that plagued the crew this afternoon, and this evening, the high temperature in the spacecraft, this apparently has been corrected, and the plaguing problem with the urine dump system. Flight director Neil Hutchinson has yet not given the signal for the crew to bed down for the night. We expect more conversation with the stateside pass in 16 minutes and 30 seconds. At ground elapsed time 16 hours 26 minutes, this is Apollo Control.

END OF TAPE

ASTP (USA) MC96/1
Time: 00:09 CDT, 16:50 GET
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PAO Apollo Control, ground elapsed time 16 hours, 47 minutes with acquisition coming through Goldstone. We'll bring the line up for Cap Comm Karol Bobco.

CC-H Apollo, Houston. Through MILA for 3 and a half minutes.

DMP Bo, we're in the process of taking the probe out and putting the cyro freezer in the tunnel.

CC-H Roger. I understand. And we'd like to remind you here, before you go to bed, to turn OFF the secondary evaporator. If somebody's got a pencil, I've got some new ATS angles for you.

DMP Stand by just a minute please.

CC-H Okay.

DMP Bo, go ahead.

CC-H Roger. For this next pass you normally wouldn't have any, but they are minus 1 and 257 and then just reacquire on NARROW and leave it there for the night.

DMP Okay, pitch minus 1, yaw is 257 and you say leave it that way in NARROW and leave it for the night.

CC-H Right, roger and it should be left in REACQUIRE and NARROW.

DMP Roger, REACT and NARROW.

CC-H And one last question before we leave you and that is what was the resolution on the urine system?

DMP Well, it looks like it's starting to work better now. Cause we pulled the - that waste storage - you know disconnect, that we've been using to bleed out to the cabin to enrich the O2 and that shared the vacuum line with it, and we have a better vacuum with that on.

CC-H I understand.

USA Houston, Apollo.

CC-H Go ahead.

USA Let me give you a couple of things on the presleep checklist.

CC-H Ready to copy.

USA Okay, BAT volts are 37, PYRO BAT A volts are 37 and PYRO BAT B volta are 37.

CC-H Roger, C PYRO A and PYRO B all 37.

USA Roger. And we've done all steps except the following. We have not cleaned the suit circuit return screen behind panel 382 cause we think it's a short time and we've - we're holding on the waste management overboard drain and and that sort of thing till we're all through for the evening, and we're just now putting the freezer over the tank in the tunnel. That's about it.

CC-H Roger. There's about 30 seconds until LOS.

USA Roger.

CC-H And we're gonna say good night now unless you need to talk to us again at Quito or when we get into ATS coverage.