

ASTP (USA) MC166/2
Time: 03:35 CDT, 44:15 GET
7/17/75

curves on those things if you just wanted to take a look at that.

ACDR Okay. Good.

PAO We're now live air to ground.

CC-H AC, Houston. Tom, can you give me an idea what -
how you're configuring the vehicle as far as listening now? Am I keeping
everybody awake talking to you or -

ACDR No. Look after that no sweat, Crip. Vance has
already shaved and Deke is shaving and I'm starting to prepare breakfast
while keeping the comm here in the left seat, so after that ISS sub light
nobody's going back to sleep.

CC-H Okay.

ACDR I'm the only one that's on the headset right now.

CC-H Okay. Understand that. I guess when Deke gets
all squared away I think yesterday they talked a little bit about
the problem we were having on the furnace. They had to go back there
and check the helium a couple times. The thing is acting like it's leaking
helium out. Consequently we're going to have to end up deleting that
one sample that we were going to do today before we do the joint sample
with the Soviets and then, I'm going to have to modify the timeline a little
bit and I'd like to talk to him about that when he gets a chance.

ACDR Okay. I'll talk to him as soon as he gets the
headset on.

CC-H Okay. No rush. We got plenty of time here.

ACDR Okay, Crip. You say they're leaking helium from
what? The helium source or from the furnace, over.

CC-H Well, from the furnace itself. What it looks like
is that when you inject helium into the furnace it starts coming down
at the predicted rate that it should, but after it stays in there
awhile it acts as though the helium must be leaking out of the furnace
because the cooldown rate goes back to that that we normally get
with the vacuum.

ACDR Understand.

CC-H AC, Houston. Tom, would help us out a little
bit maybe on the trying to see if we can find corelation if maybe you
would select minimum impulse and give us a minus pitch command.

ACDR All right. I'll go to min-impulse on SCS. Give
you a minus pitch command. Okay, here we go. We're minus pitch. Mark
it

CC-H Okay. We're looking at it. It didn't seem to
generate one for us.

END OF TAPE

ASTP (USA) MC167/1
Time: 03:45 CDT, 44:25 GET
7/17/75

ACDR (GARBLE)
CC-H I'm sorry, would you say again please?
ACDR I just inadvertently (?) hit the hand controller. Now
I got it locked up.
CC-H Okey-doke.
CC-H Apollo, Houston. Tom, we would appreciate it since
you're up and can watch things for us, if you would go - go ahead and
go back to CMC control. That'll allow us to see what the attitude errors
are and correlate it with - with our jet firings(?), if you don't think
that'll be a problem.
ACDR Okay, I'll go back to CMC. Mark. Got in CMC.
ACDR Crip, you still with us?
CC-H Yes sir.
ACDR Okay, I bet you guys like to have the old daily
status report.
CC-H I'll tell you what, we're just coming up on where
we're gonna have LOS here, and we're gonna see you again at Hawaii in
about 15 minutes. Possibly, if we can it from you there and we'll
also talk to you about the - the furnace procedure that we want - want
to use. It calls for you about there to shut down the furnace. We do
not want you to shut down the furnace and we're gonna - gonna tell you
what you - we want you to do so you can hold up on any activities
regarding that till we get with you.
ACDR Okay, great. Thank you.
CC-H Okay, fine- -
ACDR We'll see you shortly.
CC-H We are getting ready to lose you here and again,
we'll see you at Hawaii in 15 minutes.

END OF TAPE

ASTP (USA) MISSION MCL68/1
Time: 03:54 CDT, 44:34 GET
Date: 7/17/75

PAO LOS ATS. Flight control team here in mission control not altogether certain that the CAUTION and WARNING alarms, were not transients. Apparently, no telemetry that the team has access to show anything out of nominal. We'll have an update on that if the people here in mission control can decide whether or not there's anything to be concerned about over those CAUTION and WARNING signals. At any rate the Apollo crew members are now all three up very much awake, just about 40 minutes early. No real problem with their sleep time. The Apollo is presently rapidly closing on Soyuz. Both of them now over eastern most portions of the Soviet Union. Flight surgeon Dr. Jerry Hordinski - just handing us a crew health report from yesterday. The crew will have this morning's health report with Dr. Hordinski later on, following their breakfast. No health problems were identified by the flight surgeon yesterday. None of the electrocardiograph data obtained from any three crewman showed anything but absolutely nominal performance by the crewman. Our next acquisition is ten minutes away. That'll be through Hawaii. At 44 hours, 37 minutes ground elapsed time, this is Apollo Control.

CC-H Apollo, Houston. How do you read?
ACDR Okay, Crip, we read you.
CC-H Okay, I understand you're reading me, I'm - still getting you very weak. Got several items I need to run down here primarily regarding the furnace - Is the AC listening? Comm comm out item to you first.

ACDR Go ahead Crip.
CC-H Okay, I had you to terminate the jet on monitor while a go, and the flight plan calls out about - coming up now that we also wanted you to zero the NOUN 26's. And that's it (garble) the VERB 21 NOUN 26. Just enter it and put in all balls.

ACDR Okay.
CC-H Okay, - and I've got Deke with me. I can talk to him about furnace operations.

ACDR Okay, go ahead.
DMP Go ahead Crip.
CC-H Okay, fine. I guess - before I start into that that - if - if Tom has got time, he can go ahead and initiate that VERB 49 that we've got called out at 45 hours on the next page of the flight plan, - that - and we can take a look at it here while your doing your maneuvering. That's just to set you up for the next ATS pass.

DMP Okay.
CC-H Okay - Deke I don't know whether you heard me talking to Tom earlier about the furnaces, but that helium cooldown procedures, doesn't seem to be - seem to have some kind of a problem with it. What we'd like to do, if you've got time to go up there now, and take a look, we'd like to get a pressure reading please. And also we'd like to verify that the ISO(?) in on the vent valves for the furnace are closed good.

ASTP (USA) MISSION MC168/2
Time: 03:54 CDT, 44:34 GET
Date: 7/17/75

DMP Okay, standby. I'll go give it a whirl.
USA (garble)
CC-H Just getting a lot of squeal there - we're with you.
DMP Okay, I'm reading - (garble)
CC-H I'm sorry, Deke you're completely unreadable due to that box - through the box due to feed back. I'll tell you what if you will just note the thing down, and before you - if you're reading me, before you go down in the command module to come back, wWhat we would like to do is to inject air into the furnace. And if you've got the docking module checklist handy, all we want to need to do is to make sure that - the valves on 880 are closed, like we just talked about the ISO valve, and the vent valve, and then we need you on the helium supply box to open the two furnace valves and open the PRDM DM atmosphere valve for ten seconds and then close it again, and then close the two furnace valves. That's just to put air into the - the furnace, and allow us to cool down with it more rapidly.

DMP Hey, Crip, did you give (garble)
CC-H I'm sorry Deke, I can't read you at all through that - through that box. We're one minute from LOS now, and our next station contact will be through the ATS, at 45:18.

CC-H Okay, with that attitude the, ATS angles that you've got in your flight plan will be okay, to pick us up there and we do not want you to do any furnace prep operations for the SA001, we'll talk about that later.

ACDR I read you, what page in the checklist did you want Deke to go to?

PAO Okay, it's the furnace setdown procedures, on the docking the module checklist 7-6, and we want him to perform steps 2, and 3. Steps 2 and 3.

USA Okay, steps 2 and 3 on page 7-6.

PAO That's affirmed.

END OF TAPE

ASTP (USA) MC169/1

Time: 04:13 CDT, 44:53 GET

7/17/75

PAO Loss of signal from Hawaii. At about 44:06 or roughly 50 minutes ago we had 7 minutes worth of recorded air to ground which took place while the spacecraft was over Asia and in acquisition of ATS. We've received an indication that when we played the record at 7 minutes back that our line from here to Moscow did not get that signal. So we're preparing to replay that recorded section. We'll specifically identify that it's recorded air-to-ground from earlier this morning. Next acquisition will be about 23 minutes from now. That'll be through the ATS satellite. At 44:54 ground elapsed time this is Apollo Control.

PAO The first time we played the recorded portion of the air-to-ground we had some line problems between here and the press center in Moscow. We're replaying that for the benefit of the people in Moscow. Acquisition now about 4 minutes away through the ATS satellite and we're just going to leave the line up for this.

PAO This is Apollo Control at 45 hours, 18 minutes ground elapsed time. We should be into ATS acquisition now. Spacecraft Apollo presently over Tierra del Fuego, South America.

CC-H Apollo, Houston. Talking at you through the ATS, got you for about 46 minutes. How do you read?

ACDR Read you loud and clear, Bob.

CC-H Okay, fine. I - due to the problem we were having talking to Deke through the squawk box - I guess I got several items I need to run down with him on the furnace still and then we can pick up the morning status report.

ACDR Okay. He's just coming on the headset now.

CC-H Okay. No rush.

DMP Okay, Crip. I went ahead with that procedure per checklist.

CC-H Okay. Understand you did do that procedure on injecting air as we talked about.

DMP That's affirmative.

CC-H Okay. And did you pick that up just about that time. about LOS at Hawaii?

DMP Yes. And I recycled the valves.

CC-H Okay. Good deal. What we're gonna do now is if you can - have got your flight plan and your your docking module handy, I'm going to just have you make some notations there about how we're planning on handling the furnace op at least for the rest of the day.

DMP Okay. We got them in the middle of breakfast here and we're don't have the DM checklist. We do have the flight plan.

CC-H Okay. Well, the ones on the DM checklist are kind of minor. I can give them to you now or if you want to hold up until you finish breakfast we can do that.

DMP Okay. Stand by. Vance is going to get the spare here.

END OF TAPE

ASTP (USA) MC170/1
Time: 04:42 CDT, 45:21 GET
7/17/75

DMP (GARBLE) get our spare here.
ACDR Okay, Crip. We got it.
CC-H Okay. Before we get started then, basically what we're going to do is to eliminate this sample, SA001, and we're gonna delay taking out the - the sample you got current - is currently in there. If you look - we already talked about deleting the prep you had at 44:55 and we want to delete the prep - or the op at 45:40, 45:40.
ACDR Okay, Crip. We're gonna delete the sample 001, right?
CC-H That's affirm.
ACDR Okay.
CC-H Okay, fine. and there is a - over at 47:20, you have a end - end of manual heat soak and perform helium injection. What we would like you to do is to add a furnace shutdown, page D7-6, and that will be for MA041, which you currently got in there. I would like to warn you that the thing - the handle where you grab it - the end of the sample, is going to be down where it's certainly cool enough to touch, but the other end is going to be hotter than normal. However, we still want to go ahead and get it out so it wont interfere with any of your joint operations today. It shouldn't be any problem, just warn you, don't touch the - the end of the sample, only grab the end that's sticking out of the furnace.
ACDR Okay, I understand, and what you're saying is we're gonna take those samples out now instead of waiting until we're into the joint activities with the Russians. Is that correct?
CC-H We're gonna take the samples you've got in there out at 47:20, that period of time just before you close out the docking module.
ACDR Okay. Roger, I got that. The furnace shutdown 40 - for 041 at 47:20.
CC-H Okay. That's - that's fine. And if you'll note over at 52:40 in the flight plan, we call out a helium injection there. Now that was just deleted because we haven't got anything in the - in the furnace at that time.
ACDR Roger, I see that.
CC-H Okay. Also, at 56.
ACDR Okay. Do you want us to go ahead and do that helium inject or not?
CC-H No, we want you to delete it at that time, because there's nothing in there and no reason to do it.
ACDR Roger.
CC-H Okay, at 56:50, we have a furnace shutdown that we want you to delete again because there's nothing in there.
ACDR Okay, I got the deletion at 56:50.
CC-H Okay, fine. Since we're talking at you through the ATS and we're getting ready to dump our tape recorder, we're gonna have to change our modes on it. I'm gonna drop out here for about 30 seconds. I'll give you a call when we've got comm reestablished.

ASTP (USA) MC170/2
Time: 04:42 CDT, 45:21 GET
7/17/75

CC-H Apollo, Houston. How do you read now?
ACDR Loud and clear, Bob.
CC-H Okay, fine. Those last two entries that I gave you, the ones at 52:40 and 56:50, are the ones that end up occurring in your docking module checklist. And they're just repeated in there and all I was going to do was have you delete them out. I guess, just as a point here, normally when - when you're taking and getting ready to put in the sample from Valeriy, Deke, it's - well, you normally have to pull out a sample. Of course, this situation is - there's not going to be a sample in there.
ACDR Okay, copy that.
CC-H Okay, I guess the only other item I didn't get off of - Deke earlier if he had a chance to read the pressure in the furnace before he went ahead and made the - the air inject. We would be interested in hearing what that voltage indication was.
ACDR Voltage is 0.
CC-H Roger, I understand it was reading zero at that time. Deke, I guess one other question that we had hanging fire here - and normally we wouldn't go into this kind of thing but - since things were getting moved around quite a bit yesterday and we need to make sure it was off can we verify that the biostack was turned off yesterday morning per schedule? The reason for that, it's got a limited battery life on it and so if it was left on, we wouldn't be getting to use the post - end up - the post joint data.
DMP Well, none of us can answer your question seems like.
Stand by 1.
DMP Crip, do you read?
CC-H Yes sir.
DMP Yeah, it got turned off.
CC-H Okay.
DMP It's logged in the flight plan.
CC-H Okay, that's all we need to know.
CC-H Okay, then I guess whenever you guys get around to it we'll be glad to take your morning status report.
DMP Okay, I'll give it to you right now. Okay, ready to copy, Crip?
CC-H Ready to copy.
DMP Okay, on the commander menu, everything eaten at breakfast, lunch, just applesauce - couldn't find it. And evening meal, missed the stewed tomatoes, couldn't find them, and add an orange pineapple, a couple of them. Are you ready to go on?
CC-H Roger, I understand on that last that the orange and pineapple was an addition?
DMP That's affirm. Okay, then going over to the medical log. Day 2 PRD, 11, 001, sleep, 4 good hours and 2 fair. No medication and he is full of water. Carrying a full tank. Okay, and ready with the DP whenever you are.

ASTP (USA) MC170/3
Time: 04:42 CDT, 45:21 GET
7/17/75

CC-H Press on.
DMP Okay, breakfast and lunch were standard. Dinner,
no cranberry sauce, couldn't find that and add an extra strawberries
drink. Stand by for the medical log here. Okay his PRD is 48062. Had
about 4 good hours sleep of and 1 fair, no medication.

END OF TAPE

ASTP (USA) MC171/1
Time: 04:50 CDT, 45:31 GET
7/17/75

DMP - - had about 4 good hours sleep there, no medication and, incidentally, about 75 seconds on the water gun. Okay, go to the DP whenever you're ready.

CC-H Press on, we're with you.

DMP Okay, breakfast, standard; lunch - no salmon or rye bread, couldn't find either one of them. Oh yea, we found the salmon later in the day. It's still around here somewhere. Okay, in the evening, a couple of problems there. Couldn't find the vanilla pudding, scratch that. And the macaroni and cheese, I couldn't rehydrate it and I was going to try to eat it dry and as soon as I opened the package all those little quivers started flying around the cabin, so we stashed that one quickly. And the same happened with the chocolate nut cake, that was all crumbs and a total disaster so we stashed that one before it got out of control. I had two pineapple and oranges. Okay go to the medical: PRD, 61 002. And on the sleep, had 2 to 3 hours of super sleep and a couple, fair to poor. I think we should comment on all of our sleeps, we had a master alarm here about 4 hours after we went to sleep and then we had another one later and we all got up for that one. And been up since as you're aware of. And I slept in the DM last night and it's pretty cold in there. I think that's one reason I didn't sleep too well. Vance slept in the tunnel and that seemed to be perfect. As for as water I had 15 gulps and I've calibrated and I think about a 5-second flow per gulp for whatever that's worth. And then at the end of the old status report (garble).

CC-H Okay, real good. We got all that and appreciate the calibration in there. Hey, one item apparently you didn't ask about dosimeters yesterday and to clarify to make sure we're talking about the same one. You were asking about returning and we believe you were asking about the passive dosimeters that are sewed into your CWG's. Is that affirmative?

DMP We're talking about the ones that are on the launch underwear, yea.

CC-H Okay, fine. What we're supposed to do there is your other CWG's for entry are stowed in A1 and we are supposed to end up bringing back your used CWG's with the passive dosimeters in them, in A1. So, they are to be saved and returned.

DMP Well, okay, we removed them from the underwear and we got those that are a little pockets because we assumed we were going to throw that underwear away.

CC-H Okay, you can just put them so that we can find them in A1 somewhere and that will be fine.

DMP Okay.

CC-H Yea, Deke and apparently you guys are having what sounded like quite a bit of problems finding certain food items. Anything you think we can do to, to help you out on some of those? Are they just not stored where you think they're supposed to be?

DMP Well, we ended up I think, with, with things strung together and pull them out of sequence and that seems to be working fine.

ASTP (USA) MCI71/2
Time: 04:50 CDT, 45:31 GET
7/17/75

I think what's happened here is that there's some extra items on some of these meals that are stowed separately and those are the ones we haven't located properly.

CC-H Okay, we - we'll check into it and see if we can't give you a little bit of help there so you won't be missing so many of those items. On that rehydration problem you had on the macaroni, was it just that you couldn't get the water inserted or what?

DMP Oh, we could get the water in all right, but it was pretty dead stuff and there's no way in zero G to get it to mix - -

CC-H To get it mixed up good? Okay, understand the problem.

DMP Yea. Right. And what we started to do this morning we pulled out the menu and looked at it because we weren't doing that before, you know we weren't sure we missed something and all until we went to log it and discovered, hey! I was supposed to have that and we didn't have it. So we'll try to look at the menu here if we get a chance.

CC-H Okay. I'm with you. One other item I guess I'll mention here and let you do with it as you see time for this morning. Of course, when we scrubbed out that height measurement DTO that was scheduled yesterday because we got so far behind. If you gents feel like you've got time enough to-to get it in sometime this morning that will be fine and if you don't, well use your own discretion. If time is short, our priority would be to get Vance since we've already got a preliminary reading on him and our intent is to get a curve of how the change occurs so if you could only get one, he would be the prime man we'd be after.

DMP Okay, (garble) time and do the best we can with it.

CC-H Okay and we do not need a waste water dump as scheduled this morning; we do not want to dump it.

DMP Roger. Understand and when we chlorinated last night, we again opened the potable and to perform the chlorination and we didn't close it, I presume you don't mind if we leave it open now or would you prefer to have it closed?

CC-H We would like to go ahead and close it if we could.

DMP Okay. Are we coming up on Africa, here?

CC-H That's affirmative.

DMP And we're looking at some fantastic scenery here; we weren't sure where we were.

DMP We can see fires, grass fires and that sort of thing, burning down here just like you can from 40 thousand feet up.

CC-H Roger.

DMP They're all over the place.

CC-H Deke, one item I mentioned, might mention to you on that air injection you did, I guess we want you to understand that procedure because we're probably going to be asking you to use it several times so it might be worth making a note on your docking module checklist someplace, with what you do when, when you inject air; but basically it just those steps, those two steps in the shutdown procedure.

DMP Roger. Copy. Thank you.

ASTP (USA) MCL171/3
Time: 04:50 CDT, 45:31 GET
7/17/75

CC-H Okay, the only other item was we had that little problem with the hatch on the heat shroud for the furnace. And we would prefer here, even though I guess it was on, that we would figure out a way of closing that. Our recommendation is that you take one of your little sticky pieces of Velcro and put a patch on the furnace shroud, itself, and the other side on that strap on the hatch that's normally used to retain it to the bulkhead, so that you can just Velcro the hatch closed.

DMP Well, I tell you, Vance came in there to help me after a while, he's stronger than I am I guess. He gave it a try and finally got it closed.

CC-H Okay, understand that, that he was getting the normal connector to go ahead and close then.

DMP That's affirmed, but it binds pretty good and I think your suggestion is still a good one.

CC-H Okay.

CMP Looks like perhaps you could trim some of that rubber sealing material right near the hinge, that might help to let it close. It takes about all the strength a guy's got.

CC-H Okay, I guess you might still look at going ahead and doing that Velcro because we think it would be adequate to go ahead and just Velcro it closed.

CC-H Deke, just to make sure we understood, - while ago when you cycled those valves on the furnace for us, the ones that vent overboard, before you cycled them, are you pretty positive that --

END OF TAPE

ASTP (USA) MC172/1

Time: 05:00 CDT, 45:41 GET

7/17/75

CC-H While ago when you cycled those valves on the
furnace for us, the ones that vent overboard. Before you cycled them
were you pretty positive that they were in the closed position?

ACDR He thinks so.

CC-H Okay. Fine.

END OF TAPE

ASTP (USA) MISSION MC173/1
Time: 05:10 CDT, 45:51 GET
Date: 7/17/75

CC-H Apollo, Houston. I don't know how busy you are there, but if you are interested, I could give you a little bit of the local morning news. Other wise we can hold it up and Bo can repeat his performance of last night and give you some this evening.

USA Okay, that sounds great Crip. The morning and evening news both.

CC-H You haven't heard me read the news yet, so I don't know whether you're going to think it's so great or not. But I'll be glad to give you what I got. Little bit on your - -

USA You have a reputation as being a great newsman from Skylab.

CC-H Oh, yes, I got several reputations from that mission. I have an item regarding your cohorts up there. Don't we look like the Jack of Diamonds, joked the Soviet cosmonaut as his partner drifted upside down beside him in their Soviet spaceship. We're proud of you cause your doing everything so well, the Soviet ground controller replied as the space duo readied for today's linkup with the 3 American astronauts. Lieutenant Colonel Alexey A Leonov and his civilian partner Valeriy Kubasov were so busy with space chores Wednesday, they didn't have time to stow away their blastoff and helmets. But the 2 cosmonauts promised television viewers to have their tiny cabin tidied up in time to receive our guests. So it sounds like they're looking forward to seeing you. One of the tasks taking up so much of their time was repairing a bulky television camera that had prevented viewers from Earth from watching their activities in space. Leonov and Kubasov got up an hour earlier than planned, to work on the camera which was finally fixed under the direction of experts at their control center. The picture of Leonov with Kubasov floating by upside down highlighted the first day of cabin telecast to millions of Soviet viewers back on Earth. And we even have a - have an item for the commander, there, from his state. From Hugo, Oklahoma - Searchers, Wednesday, flew over the brush in airplanes and tramped on foot and horseback, hoping for a sign of 2 baby elephants. To Dixie Loader it was like pounding the neighborhood, looking for a missing pup. They are like pets, he said. They mean something to us other than just working elephants. You know how you have a pet dog or cat - it has a sentimental value. Apparently, she was driving a truck loaded with 5 elephants from Michigan to Mexico, and stopped to rest in that winter quarters of Carson Barnes(?) Circus, Saturday. Eastor(?) and Lilly, the smallest of the 5, at 4-1/2 feet and 1000 pounds to 1500 pounds each were spooked and bolted into the countryside. So it looks like we got some new wildlife in Oklahoma. An item regarding some weather. We're getting information from San Juan, Puerto Rico, that a cloud of sand, from the African Sahara, is hanging over the Caribbean Wednesday - inhibiting, for the second time this month, the chances of rain to ease the wide-spread drought. Jose Cohen, the weather bureau regional director, said the sand cloud, which has blown thousands of miles across the Atlantic, was at a height of about 8,000 to 10,000 feet. Cohen said the sand was reducing the amount of the sun's radiation reaching

ASTP (USA) MC173/2
Time: 05:10 CDT, 45:51 GET
7/17/75

the Earth and, so, diminishing the chances of rainfall. The Caribbean region has been suffering from a serious drought during most of 1975, reducing agricultural production - and in the case of Haiti, leaving about 350,000 rural peasants on the brink of starvation. Have in contrast with that another round of rain showers that splattered the east coast Wednesday, dumping up to 6 inches of rain on parts of Georgia. The rain threatened to worsen conditions in flood-torn New Jersey, while state officials pleaded for disaster aid. Flash flood watches were posted from Virginia through Maryland and Delaware at - and for an area including northern New Jersey and southeastern New York, including Long Island. So when you guys work your way over there a little bit later today, you might see quite a bit of clouds, apparently. To show you it's getting tough all over - City Hall employees in San Francisco have been advised to bring their own towels if they plan to use the washroom. It's a budgetary problem. The washrooms are without paper towels, because the buildings and ground maintenance department ran out of money at the end of the fiscal. However, city officials promise that the towels have now been ordered and should be in the washrooms in 2 weeks. It's a tough life.

USA Yeah.
ACDR Okay, Crip. We noted all that with pleasure.
CC-H Yeah. Not very exciting news, I'm afraid, I've got to give you. But apparently all of it's fairly reasonable.
ACDR I heard you used to read the funnies, too.
CC-H I can't read the funnies, because I keep getting choked up. You can't talk while you're laughing.
ACDR Okay.
CC-H They used to tell me that, when I read the news, that was the funnies.
ACDR Could be, yeah. That's great, Crip. And this morning we had more time to listen to that sort of thing, than yesterday morning.
CC-H Yeah. A little bit more relaxed today. I guess - mainly, it's because you poor guys had to get up so cotton pickin' early, and tend to your little problem there. I guess - you know, let - let me give you a little bit of information. We're still looking into that. And I guess we haven't had a repeat of that ISS alarm. We've noted that we had something almost identical back on John Young's flight, on 16, which we ended up attributing to a diode problem in the ICPU's failure detection logic. And that really wasn't any of a problem, other than giving nuisance alarms. We're still looking into it. And any more information we can get - give to you - we'll get back with you.
ACDR Okay, real good. We haven't had it for quite a while. Do you think it could in any way be associated with the EMP we had running last night?

ASTP (USA) MCI73/3

Time: 05:10 CDT, 45:51 GET

7/17/75

CC-H Well - we'd kind of thought of that. But we ended up - getting - I believe, I answer. We did terminate it.

ACDR Okay.

CC-H Apollo, Houston. We don't need it now but, before you terminate it, I'm afraid we're going to have to ask you for another battery charger current voltage. The reason is - for it - is that we're dumping data, which we hadn't planned on doing right now, covering up the dump line. We had planned on a data dump but, unfortunately, it's covering up our battery charge. And to help us keep a status of how much juice we've got in those, we need that information.

DMP Okay, Crip. I'm reading about 39.2 volts and about 1.1 on the amps.

CC-H Okay, Deke. Thank you very much.

CC-H And, if you'd like, you can go ahead and terminate that charge at this time.

END OF TAPE

ASTP (USA) MC174/1
Time: 05:21 CDT, 46:00 GMT
7/17/75

DMP Okay, Crip. I'm reading about 39.2 volts and about
1.1 on the amps.
CC-H Okay, Deke. Thank you very much. And if you'd
like you can go ahead and terminate that charge at this time.
DMP Okay.
CC-H Apollo, Houston. We're coming up on LOS through the
ATS. The next station contact will be through Hawaii in 16 minutes.
That's at 46:21. 46:21.
USA Okay, Crip.
CC-H As we go over the hill we're seeing the C&W.
USA (Garble) master alarms and (garble).
CC-H Can you tell us what it is?
PAO This is Apollo Control. Loss of signal from Apollo
through the ATS-6 satellite relay. Tracking ship Vanguard in 12 minutes.
Before loss of signal over eastern Siberia, the people on the ground
noticed another caution and warning alarm in the navigation system, apparently
the same one that awakened the crew earlier today. The general consensus
is that it's a transient type alarm. They're attempting to sort out what's
causing it at this time, which further adds to a day that was going to be
rather busy anyway. At 46:09, returning in 11 minutes, this is Apollo Control.

END OF TAPE

ASTP (USA) MCL75/1
Time: 05 46 CDT, 46:25 GET
7/17/75

PAO This is Apollo Control at 46:25 ground elapsed time. 3 minutes away from tracking ship Vanguard, however in - over Hawaii with an extremely low elevation angle pass we have some tape that was accumulated over the Hawaii pass we'll play back at this time and go live across Vanguard.

CC-H Apollo, Houston. We're talking at you through Hawaii. Got you for about 2 minutes here.

ACDR Okay. (Garble)

ACDR Crip, I've got a question.

CC-H Go ahead.

ACDR For the GNC, if we don't get this thing fixed during rendezvous, and if we're in then programs sequenced like 3345, #4, and 5, and this comes up, is that going to stop the sequence on us?

CC-H Okay. We have checked that all the way through and it will not interfere with anything as long as the alarms are false which is - that's the indication that we have - that they are now.

ACDR Okay.

CC-H For the DP. Deke, would you like to make those minor modifications to your docking module checklist regarding that furnace? Or you understand it well enough such as when you come to them and that you will just delete?

DMP Well I think I understand it, Dick, but I'd just as soon make them anyway, just so I got them.

CC-H Okay. If you got that checklist handy I can tell you where they are and you can go ahead and scrub them.

DMP Okay. Stand by a sec. Go ahead.

CC-H Okay. First one is on docking module checklist page 2-4.

DMP Okay. 2-4.

CC-H Okay. And step 7 down there at the bottom - left - hand side of the page last three lines - we can just delete those out regarding the heating injection.

DMP Roger.

CC-H Okay. And then on page I'm - I'm -

CC-H I'm sorry, on 2-22.

DMP Okay.

CC-H Okay. Right below the photo there it has doing - a perform furnace shutdown procedure. You can delete that since we've already got it shut down.

DMP Okay.

CC-H Okay. One thing you should probably note, there. If you've done the shutdown procedure we've called for earlier, you probably got the - the little caps installed in the furnace and the hatch closed, and of course you will have to open the hatch and remove the caps so you can install MA150.

DMP Right.

CC-H Other than that - that's - that's all we got. I'm going to go ahead and tell you good morning here and next station contact is going to be through Vanguard in 7 minutes and I'll be turning you over to Richard and he'll be talking at you there.

ACDR Okay. Thank you Crip. We appreciate it all.

CC-H Okay. Have a good morning and a good day and a good rendezvous. Next station contact again Vanguard at 46:30 - 46:30.

ASTP (USA) MC175/2
Time: 05:46 CDT, 46:25 GET
7/17/75

ACDR See you later, Crip.
CC-H Roger.
CMP Roger. Thank you, Crip.
CC-H Got you for 5 minutes.
DMP Hello there, how you doing this morning, Dick?
CC-H Hi, Deke. Good morning to you. We'd like to have accept if we could. We're going to get you a new CSM and Soyuz state vector and when somebody can copy, I've got an NC2 preliminary pad in the rendezvous book, page 1-12.
DMP Okay. Stand by. You're way ahead of us. We haven't even got that book out yet.
CC-H Well there's no - there's no big hurry there's plenty of time for it Deke. When you get ready to copy, I'll read it to you.
DMP Okay.
DMP Okay. Go ahead.
USA (Garble)
CC-H Okay. Starting with NOUN 28: 048, 31, 4 balls, minus 0244, plus 4 balls, plus 4 balls, 340, 047, 359, 0114, 0001. Weight, 32178. Trims, plus 069, minus 052. Star check, star 14, 1786, 132. And the TPI TIG time, 050:53:00:00. Go ahead.
ACDR Okay. Read it back here. Deke and I both copied it. 048, 31, four balls, minus 0244, plus all balls, plus all balls, 340, 047, 359, 0114, 0001. Weight, 32178. Pitch trim, plus 069. Yaw trim, minus 052. Star check, 14, 1786, 132. And TPI TIG 050:53:00:00. Over.
CC-H Okay, Tom. You got it right. That's a good read back. The vectors are in. You can go back to block. We're about 30 seconds from LOS and I'll be talking you again when we get on the ATS and I'll tell you about the rendezvous but I can tell you in a short word today that it's just about as close to - we're set up to be just about as close to nominal as we could be. I'll have a few more words for you to tell you what you can expect, but there's no problem.
ACDR Sounds great. Sounds great.
CC-H Super. And good morning to you Tom, we'll see you at the ATS.
ACDR Roger.
PAO This is Apollo Control. We've had loss of signal through tracking ship Vanguard. 15 minutes away from acquisition at ATS-6 satellite as the spacecraft crosses the southern most tip of continent of South America. The early portions of the next ATS-6 pass will be taped for delayed playback inasmuch as the change of shift briefing will begin around 6:05 central time in the main auditorium with off going flight director Don Puddy. This is Apollo Control at 46:35 ground elapsed time.

END OF TAPE

ASTP (USA) MC176/1
Time: 06:47 CDT, 47:27 GET
7/17/75

PAO This is Apollo Control at the conclusion of the change of shift briefing. We now join the current pass, spacecraft over central Asia. We're getting live TV from the spacecraft and we'll try to play back the first portion of this pass at LOS between ATS loss of signal and Vanguard.

ACDR Okay. Houston, Apollo. We've got hatch 1 closed (garble), pressure equalization valve closed.

CC-H Okay, Tom. Thank you for letting us know. Back to that TV camera in panel 11 the - it's got a real dark picture. We'd like to check f-stop full open and then average.

ACDR Houston, are we over Russia now?

CC-H That's affirm. As a matter of fact, when we were - while you were messing with the hatch, we were - you just passed over the launch site. We saw a view of the Aral Sea and the coast line there reminded me of that airplane flight we took and that - now you're just about at the - about 52 degrees right at the highest point in latitude and west of the launch site over there by several hundred miles.

ACDR Okay. They got a forest fire on top of a mountain out here that you can sure see at this point.

CMP See some contrails too.

CMP It looks like pretty rugged country - this part of the world right here - a lot of mountainous country.

CC-H Roger.

ACDR Dick, now that - you're watching the TV out the window then.

CC-H Yeah. We had shifted to the out the window TV because the inside television was - the picture was so bad we weren't getting any thing and - and EENCO was just shifting back and forth while you were doing something else.

ACDR All right, you have a pretty good picture on it out the window?

CC-H We did on the out the window. We've - he's getting ready to get back to me here so we can adjust the inside one. Incidentally, I was telling you about the green light and I - I dropped out there. It turns out that the green light is on when the camera is selected and the power is on at the CM 1 or 2 station which are - what - whichever one is appropriate. But, it's - it's that - it could be on when we were not downlinking TV which was confusing me. So, so the CAP COMM will just be extra diligent in letting you know when we are downlinking.

ACDR All right.

ACDR Okay. How's your picture now?

CMP Okay. Hou - -

CC-H I'm sorry. You all said something at the same time.

CMP On the average, how does it look now? And we're giving you all the light we can at f-stop (garble).

CC-H Okay. Stand by just a second please.

CC-H Apollo, Houston. Without window shades I think this is going to be about as good as we can get it. We can see a lot of light

ASTP (USA) MC176/2
Time: 06:47 CDT, 47:27 GET
7/17/75

from the - from those two windows which is making the view pretty poor but just for your information in this position the - that camera should always be in average with f-stop full open. Maybe if you could tilt it down just a little bit maybe and get the two windows out of field of view.

CC-H Yeah. That's much better when you get one of them
out the - Tom, your window is still in the field of view a little bit.
ACDR Okay.

END OF TAPE

ASTP (USA) MC177/1
Time: 06:57, GET 47:37
7/17/75

CC-H Apollo, Houston. We're 2 minutes from LOS ATS. Vanguard at 47, well right at 48 hours. We'll see you down there.

DMP Okay, Crip. Or - whoever you are down there.

CC-H Roger, whoever you are up there, Deke.

DMP Good comeback.

ACDR We're in the middle of Constellation Orion, here. We were so impressed we forgot what was going on.

CC-H Roger.

PAO This is Apollo Control. We've had loss of signal through ATS-6 satellite. We're some 19 minutes away from reacquisition through the tracking ship Vanguard. However, because of the change of shift briefing, earlier in this pass, almost coinciding with the acquisition of ATS-6, we've accumulated some 14 minutes of air-to-ground communications with Apollo, which is on tape and we'll play back the first part and the last. Roll it.

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

ACDR Read you loud and clear, Dick.

CC-H Okay, Tom. Whenever you have a second I've got a couple of very minor things in the rendezvous book and I thought I'd give you a couple of words about the rendezvous today.

ACDR All right. Go ahead.

CC-H Okay. If we could, why don't we do the book first. The first comment is on page 1-10.

ACDR Okay. We're there.

CC-H Okay. Crip called this up to you later - earlier in the flight plan. I just wanted to clean up the book. AT 47-20 on the left hand side you ought to delete than entry that says in manual heat soak and perform helium injection.

ACDR Okay. We got that. Deke's got it, also, I think, in the docking module checklist.

CC-H Yes. Okay. Yeah, I was here while Crip was talking to you about that. I just wanted to make sure you had a clean book to start this morning. And, also, on the right hand side of the page, on the TV checklist. We need to add a step on panel 400, that's the VTR, to get the power enter lever and power telemetry switches, 2 of them, to on.

ACDR Okay. We've got everything. We have three off now. You want the power to enter lever on, right?

CC-H That's right. The enter lever and the TM power switches need to go on. The VTR, naturally, can stay off, until it has to come on per the flight plan. Incidentally, while I'm talking about that I'm not sure what your hose configuration is. But - what we desire is to go ahead and activate that VTR cooling activation on page 1-47 of the systems book, and then we can stop fiddling with these extra two switches.

ACDR Okay.

CC-H Okay. Next thing, Tom, if you'll turn the page back to - over to page 1-12, I'll give you some high gain angles.

ACDR All right.

CC-H Okay. Over there on the left side, pitch minus 24,

ASTP (USA) MCL77/2
Time: 06:57 CDT, 47:37 GET
7/17/75

yaw 149.

ACDR Roger. Pitch minus 24 and yaw 149, that's - 48:20.

CC-H That's - that's right, that's correct Tom.

Okay. Let me just say a couple words about the rendezvous. After doing the little out of plane correction yesterday, we're set up right on center line, looking real fine. The way the trajectory tracking is going, it does turn out that the NC2 burn is going to be just a little bit smaller than you've usually seen it in the - in the SIMS but - that's no problem. NC2 through TPI TICKS are nominal and be very close to where you've been seeing them before. Because of the slightly smaller NC2 burn, when we get to NSR it will have a little more of a radial component than you have normally been seeing, but that's no problem either. All angles will be very close to nominal, all the way in. One comment on the NSR burn. The - it could go either way, but - it may be as small or at least as small enough such - like - a burn we did the other day, when we had to load a different EMS number other than 13.0. We never really got to talk about that again, but in any case, there's the numbers that we pass to you to load in the EMS, even though they're lower than 7, are okay to load in there and the numbers to trim to will be accurate. So I don't think there should be any problem in the rendezvous this morning.

ACDR Okay. Good.

CC-H Also, as you know, we've got a new team on here. We've been looking at what's been happening about the false alarms on the ISS during the evening. I've read this report - as - to John Young's flight on Apollo 16 and ah - I don't think we're missing any of the same indications, at least, that he had and that turned out to be false alarms and as Crip told you awhile ago, assuming that they are false alarms, you won't get any interruption of programs you're doing.

ACDR Okay. That's good.

CC-H Okay. I guess that was about it on the rendezvous. On switch configurations there's one thing we'd like to get done. We've got the secondary loop deactivated. There's one valve we would just to get us in a nominal configurational, on panel 377 we see - we'd like the glycol to radiator secondary valve to bypass and this will put us in a completely known configuration.

ACDR Okay. On 377 to bypass.

CC-H That affirm, Tom.

CMP Then we have the VTR cooling implemented.

CC-H Okay. Real fine, Vance. Thank you for letting us know. Did you do the P52. Can I get that data?

CMP Roger. Tom has it here.

CC-H Okay. I'm in no hurry, but whenever you get a chance.

DMP Okay. Okay That's star 33, at 42, all balls, minus 156, minus 147, plus 60. Purged at 46:36:15.

CC-H Okay, Deke. Thank you very much. Appreciate it.

ASTP (USA) MCL77/3
Time: 06:57 CDT, 47:37 GET
7/17/75

DMP Sure.
ACDR Okay, Crip. Panel 377 is in bypass.
CC-H Okay, fine. Tom, thanks much.
CC-H And Apollo, Houston. We notice you're still
in free. Need to go back and make - reestablish attitude. Go CMC auto.

END OF TAPE

ASTP (USA) MCL78/1
Time: 07:06 CDT, 47:46 GET
7/17/75

CC-H - - reestablished attitude. Go, CMC auto.
ACDR You're there.
CC-H Okay.
ACDR Crip, have you got TV on there?
CC-H Tom, I don't - negative. We haven't started down-
linking it yet. I'll let you know when we do.
ACDR Okay. We had a green light on, the one on panel 11.
Yeah, we probably need to adjust the a - the Polaroid on that, too - as of your
directions.
CC-H Okay. Soon as we get a picture and I can talk into
it, we'll do it.
ACDR Got both 181 and 808 GO.
CC-H You were kind of garbled. Say again, please.
CC-H Apollo, Houston. While we were in free there, we
drifted a little out of pitch a little bit. We'd recommend going back to
the previous nominal attitude that's in the flight plan at 45 hours
and probably it's still loaded so you can pro through the VERB 49 - the
attitude if you don't have it is 232 04 - correction; 232 034 and 000.
ACDR Okay. I got it and we'll go back.
CC-H Okay. That's good because this one is going - is
okay now for comm but it's going to be bad in a little while. Also, Tom,
in about 5 minutes per the flight plan, we'll be turned on the downlink
TV and I'll let you know before we do that and GNC has run the drift
numbers from your P52 and just another confidence factor, the drift in
IMU are so small they can hardly see them.
ACDR Sounds great.
CC-H Okay.
CC-H Apollo, Houston. In about 30 seconds we're going to
be turning on the TV downlink and incidentally, Tom, I've got an explanation
on the green light.
ACDR Okay. Go ahead.
CC-H Okay. I guess, I'll have to admit that I was a little
bit confused on it, but the green light on a particular camera is on when
two conditions are present. Number 1 is that that is the last camera or
camera that's been presently or last selected by the INCO, and number 2
is that the appropriate CN1 or 2 - -
CC-H Apollo, Houston. How do you read?
CC-H Apollo, Houston. How do you read?
CC-H Apollo, Houston.
CC-H Apollo, Houston.
CC-H Apollo, Houston. How do you read?
ACDR Loud and clear.
CC-H Okay, Tom. What happened there was when we switched
over to television we did not - we had a weak signal strength and also
the audio was not on the TV side of the downlink. What we'd like you to
do is verify that only one camera is in MASTER and the others are in

ASTP (USA) MC178/2
Time: 07:06 CDT, 47:46 GMT
7/17/75

SLAVE and also verify the - that the interleaver and telemetry power switches on panel 400 are ON.

ACDR Hey, Dick, before I head for the DM, which one do we want in MASTER? Both of them are in SLAVE here in the CSM.

CC-H Okay. We want the one plugged in to CML as MASTER.

CC-H Apollo, Houston. The noise changed on the downlink, I just want to do a radio check with you.

CT-(MAD) Madrid, Comm tech Houston. Net 1; voice check. How do you copy?

CT-(MAD) Goddard voice, Houston Comm tech; GOS conference.

How do you copy?

CT-(MAD) Goddard voice, Houston Comm tech; 629.

USA Yeah. 5 by.

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

USA (Garble)

USA (Garble)

USA (Garble)

USA Okay, go ahead.

USA (Garble)

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

CC-H Apollo, Houston.

ACDR Go ahead.

CC-H Tom, we dropped out there because for a minute we lost one of our voice lines. Could you verify that the - you've checked the two panel 400 switches and also that the 1 camera is now in MASTER and other, SLAVE.

ACDR Roger. Panel 400 is squared away and the one on CML that's in the tunnel here is on MASTER, all others on SLAVE and the DM closeout is in - taking place now.

CC-H Okay. Real fine, Tom. We're going to be switching back to the TV downlink mode and try that again; I'll be dropping out for about 30 seconds or so. I'll call you back.

ACDR All righty.

CC-H And Apollo, Houston. I'm told I'm GO for voice again and I - we are getting a TV picture and we probably can correct the Polaroid filter when you have time.

ACDR All right.

CC-H Okay, Tom. Right now it's a very dark picture.

CMP Okay. We'll rotate it Dick and let us know.

CC-H Okay. Why don't you give it a turn and let us just look at it here for a second.

CC-H Apollo, Houston. I guess that direct - that direction on the Polaroid filter was okay, but we need you to turn it some more.

ACDR Hang on, Dick. We're trying to get hatch 1 back up in the tunnel. We'll be jiggling the TV camera.

CC-H Okay, Tom. Understand you are messing with hatch 1.

ASTP (USA) MCl78/3
Time: 07:06 CDT, 47:46 GMT
7/17/75

CC-H When you get back to that TV camera in panel 11, you
might check if the f-stop full OPEN and that you're in AVERAGE. Because
it is real dark.

END OF TAPE