

ASTP (USA) MC511/1
Time: 12:46 CDT, 149:26 GET
Date: 7/21/75

PAO This is Apollo Control. 149:24 and we're acquisition at this time through Merritt Island Launch Area tracking station.

CC-H Apollo, Houston. We're AOS through MILA and with the ATS we should be with you in about 58 minutes.

CC-H Apollo, Houston, if you're reading through MILA we're ready to - soon as we get data locked up here pretty good - we're ready to proceed with that primary evaporator activation as we discussed earlier.

CMP Okay, Crip.

CC-H Incidentally, Vance since I heard you there, on your exercise, we would like to wait until we get locked up through the ATS there - oh about 10 more minutes before - I'm sorry about 5 more minutes before we begin exercise.

CMP Okay. And I'd like to be a little late on that. I'll get it in before the end of ATS. But right now I'm helping Deke on this vis obs Turns out to be kind of a two man task.

CC-H Okay. We copy that. Incidentally, we do not show the waste stowage vent valve opened which we need it for the purge. It's called a few minutes earlier.

CMP Say again.

CC-H The waste stowage vent valve needs to go to VENT.

CMP Okay. We purposely held off on that to clarify or make sure you wanted that done. And - so we'll - we'll get that little section done right now.

CC-H Okay. We can work it in there.

CMP Crip, I'm going to have to go off headset to these things. I'll just activate - I'll just take care of that (Garble) vent section of the flight plan there and activate the primary.

CC-H Negative - Negative on the activation - I've got - I want to do it special so I - you can do it if you let me give you the procedure.

CMP Okay.

CC-H Want to make sure that the glycol evaporator water flow is in off where it should be. Want to take the steam pressure to MANUAL and then STEAM PRESS we want to go to DECREASE for 10 seconds.

CMP Check.

CC-H And if you do that, we'll sit here and watch you for about 10 minutes before we go to AUTO on those valves.

CMP Okay. Water verify OFF. Go to MANUAL , DECREASE FOR 10 seconds.

CC-H That's affirm.

CMP Okay, Crip. Procedure on the water evaporator and the others on the vent have been taken care of.

CC-H Yeah, we're watching our data here, saw you do it, Vance.

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CC-H Did you - you got the waste stowage vent valve open
I understand.

CMP That's right.

CMP Houston, Apollo.

CC-H Go ahead Vance.

CMP Just one question about the Adriaic that's
going to come up here later this - this visual obs. I understand
which side of the Adriatic and both north and south and east and west
way.

CC-H Okay, the word were getting it's on the eastern
edge of the Adriatic and basically its the whole eastern edge along
Italy there.

CC-H I'm sorry.

CMP Eastern edge is not mentioned - -

CC-H I'm, I'm sorry, yes on the opposite side along
Yugoslavia, across through there.

CMP Okay.

DMP What specifically are we looking for?

CC-H Okay. That's just an edge of the sea that - that
is considered a high potential for sea farming.

CMP I see.

END OF TAPE

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Time: 12:56 CDT, 149:36 GET
7/21/75

ACDR Houston, Apollo. I got the doppler activated and warmed up at 149:26:00.

CC-H Copy, that. Thank you very much for that report Tom. That's - as you're aware of - the time's critical later on and we need to make sure it gets properly warmed up. Appreciate your telling us. Go ahead.

ACDR And the Earth obs guys may be interested in knowing that we've just seen some icebergs here in the Labrador Current north of Newfoundland.

CC-H I copied about seeing some icebergs and I didn't get the rest of it.

ACDR Yeah, they're in what we think is the Labrador Current north of Newfoundland.

CC-H Copy that.

ACDR Wether they're bergs or ice cakes, I guess it'd be hard put to say but they're very visible at least at this altitude.

CC-H Very good.

ACDR Hey, and Crip, the Russian people would like to know that when the 60 minutes were up, the first band had regressed from 118 to 123, so we put it right away to the freeze cycle, so it's electro-phoresing away.

CC-H Okay, real fine. Appreciate that report also.

ACDR Crip, I forgot to tell you that we did not see the oil slicks you talked about east of Key West. I think we were too far North for one thing, and secondly there was a cloud cover all over the west coast of Florida, pretty much over the state.

CC-H Okay, I was afraid that was too much of an oblique angle for you to get a shot at it. We thought, take a look at it anyhow. Pretty - reported to be a pretty good size.

ACDR Hey, Crip. On that ETE, the first band was stopped at 60 minutes. The first band went from 118 to 122 millileters. The second band from 87 to 99 millileters. The column voltage was fluctuating around 009, over.

CC-H Okay, copy.

DMP This you might also pass on to Farouk. We have not seen any red tide west of Florida, because of the cloud-cover and the same up in the Cleveland area. And, we - Cape Cod was clear and we got some good pictures there, but everything north of that of our angle, was cloud covered and - so we've seen nothing in those other sites.

CC-H Copy. Too bad.

DMP We should have some beautiful coverage of Cape Cod, however.

CC-H Rog.

DMP And also for the earth obs guys, the North Atlantic is also mostly cloud-covered. We see a lot of interesting cloud features (garble) tornado patterns, but we just don't want to waste film on that. We don't - haven't seen any oil slicks. Lots of airplane contrails, however.

CC-H Roger.

CC-H Apollo, Houston. We've been sitting here watching your evaporator. We think it's in pretty good shape right now, and we'd like to go ahead and go water flow to AUTO and steam pressure to AUTO, if somebody's got a chance to work those switches in.

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ACDR Okay, I'll get it.
CC-H Okay, Tom. I'd appreciate letting us know
when it happens and we're also assuming that when Vance gets ready
to get started on his exercise here, he's going to give us a holler so
we can go into the proper data mode.

ACDR Okay, he's working on it - getting it. This Earth obs is
nearly a two man job, I'll clue you. Okay, steam pressure coming to AUTO.
H2O flow coming AUTO; mark it. Okay. You got steam pressure AUTO, and
H2O flow AUTO.

CC-H Okay. Thank you.

DMP Okay, Crip. Are you still reading?

CC-H I'm sorry. I missed that last comment.

DMP I say, if you're still reading we just went down the
Adriatic coast there and - getting into new problems. One - what we can see is
cloud-covered and we can't see very well, on count of the oblique angle, it's
clear but it's such an oblique angle, we weren't able to tell anything.

CC-H Okay. Copy..

END OF TAPE

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CC-H Apollo, Houston. For the CP. Vance, we got about - oh about 25 more minutes here available through the ATS for your exercise and anxiously awaiting it.

ACDR Yeah. He's - he's getting some of it right now trying to get up to do it.

CC-H Okay.

CC-H Apollo, Houston. It looks like we didn't make it on that primary evap and we want to go ahead and deactivate it.

ACDR Stand by. We're in the middle of the exercises.

ACDR Just a minute. Vance is in the docking module, I'm in the middle of freezing the electrophoresis and Deke's in Earth obs. Stand by.

CC-H Understand.

CC-H When you can get to it.

DMP Well I'm afraid the old Greek gods are getting to us today on the earth obs, Crip. I'm supposed to be over the Red Sea which I'm sure we are looking for bioluminescence. But unfortunately, what wasn't factored in here is that we're still in the sunlight and I got the sunshine nice and bright right in window.

CC-H Rog.

CC-H Yeah.

DMP Hang in here until it sets and see if I can see anything. But I'm not optimistic.

CC-H Yeah. It looks to me like -

ACDR Okay, Crip. What -

CC-H Tom.

ACDR - - What switch did you want to shut down this thing ?

CC-H Okay. We want up water float OFF and that's in center position and go to increase for manual and increase for one minute, please.

ACDR Okay. That's just a standard shutdown we're doing?

CC-H That's affirm.

ACDR Okay, Crip. Wherever we are, I got a series of very bright lights down here. A pair to the right, a pair directly under the nose and a set of 3 ahead of me. Looks like they're under a bit of a cloud, but they're super bright. Must be gas fires maybe.

CC-H Probably - you're coming just about over the Suez area at this time.

ACDR I see. Okay. And it's clear off to the left and we can see forest fires off there. These probably are gas fires.

DMP Okay. Steam pressure has been increased for one minute and that does it. Anything else you want ?

CC-H No. That should do it for a while. We thought we got it cleared up there, but apparently we did not.

DMP All right.

CMP Houston, Apollo.

CC-H Go ahead, Vance.

CMP Okay. I'm on biomed on the center seat CCU. Can you pick me up?

CC-H Let's take a look at it.

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CC-H Let us get configured here for you Vance and we'll
tell you when to cut loose.

CC-H CP, Houston. We're looking at you now; proceed on
with the exercise.

CMP Okey doke.

END OF TAPE

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Time: 13:19 CDT, 150:59 GET
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CC-H CP, Houston. Vance, the data is getting pretty garbled here, and we request that, if you could, to recheck your electrodes.

CMP Okay. Any one in particular?

CC-H No. We recommend you just go ahead and try them all, right now. Just try pressing them down.

CMP Okay. Is that any better? If not, I'll try again.

CC-H Stand by one minute.

CC-H Okay. That's looking good to us, Vance. Try it once more.

CMP You say it is looking good?

CC-H That's affirmative.

CMP Okay. We'll exercise.

CMP What's the heart rate, Crip?

CC-H Well, let me ask our friends over here.

CMP Hope it didn't go down.

CC-H If it went - I don't think it did.

CC-H About 1/2 a minute ago, it was 113.

CC-H Work hard!

CMP That means work harder.

CC-H Roger.

CC-H It just went to 101. You're not complying.

CMP I'm trying, Crip. I'm trying.

CC-H I suspected you were.

CMP Funny thing - you can work a sweat up, up here, and work your muscles - but it is hard to get your heart rate up with this gadget.

CC-H Yes sir.

CC-H And while you're working away there, if the AC has some time, after he finishes up with this ETE OPS, I was going to try to do a little bit of an update. We were going to do - or we're going to request to do - to recover this data that I mentioned, that we'd earlier lost due to our tape recorder problem.

ACDR Okay, wait - Wait until E - we're in the middle of messing with the ETE. I got you.

CC-H Okay, that's fine. We'll get it there.

CMP Houston, Apollo.

CC-H Go ahead.

DMP This turns out to be a pretty fair leg exerciser. But really - the bicycle ergometer's the first class way to go - like they had on the Skylab.

CC-H Rog. For your information, we got your - saw your heart rate up to 125 at one period, there.

END OF TAPE

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DMP - - really the bicycle ergometers - first-class way to go like they had on Skylab.

CC-H Rog. For your information, we got your heart rate 125 to in a one period (garble)

CMP Okay. Also this just exercises certain muscles and I have the feeling I could probably jump tall buildings after this but possibly not walk - be - be able to walk.

CC-H (Laughter.) Roger.

CC-H You going to put a big S on your chest?

CMP No. I better not.

CMP Okay, Crip, I guess I'll clean up and get ready for lunch. How's that?

CC-H We'd like to - if you'll keep the OBS on there a little bit and just let us look at a minute or so of your recovery here, we'd appreciate it.

CMP Okay.

CC-H Is Deke tied up there right now? There was one item I wanted to mention to him sometime.

DMP Go ahead. I'm working on restowing the freezer here but I can listen.

CC-H Okay. All it was - was that we - notice in your book here you're going to check the Biostack in a few minutes and the PI was getting a bit little concerned about his battery on that particular item and when you look at it, if the light is off - we would like you to go ahead and turn it OFF at this time. If it's ON we want to leave it ON.

ACDR Deke, while I'm waiting for that sample to unfreeze I can get up and look at it. Just a minute.

ACDR Okay, on the biostack the light is ON.

CC-H Okay. we'll just leave it ON and I believe the next time you check it is when you go ahead and turn it OFF normally and that will be, oh, about 154:10. Thank you very much.

ACDR Roger.

ACDR And Crip, to those of you who are trying to stow this freezer (garble) in OG. It's really (garble).

CC-H Well, I tell you it was - it was fun enough in 1 G. I don't know what it would be like at 0 - trying to get that - get that little fold-over thing there to stay in the right position. I thought it'd be a little bit easier in 0 G.

ACDR Well, I was hoping so, too, but what happens is it keeps floating out of there of course.

CC-H Yep.

ACDR We got her.

CC-H Very good.

ACDR Houston, Apollo.

CC-H Go ahead.

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CMP Be nice if you'd remind us sometime in the future when we're to come over the Adriatic area again in the daytime, we might have a little better viewing condition.

CC-H Okay. We'll look ahead in your flight plan there and see if we can pick out a good one for you, Vance.

CMP Okay, thanks a lot.

CC-H Apollo, Houston. For the CP - Vance, we've - the R rate's all down and you look nice and comfy now and we've seen enough data. You can go ahead and take the OBS OFF.

CMP See you later. Thanks.

CC-H Okay, we're about ready to go over the hill on the ATS and the next station contact will be at Vanguard in 17 minutes. That's at 150:33. 150:33 - see you then.

CC-H And if Vanguard turns out to be a comfortable place to do it, might do a little PAD updating there to recover some data. We'll be talking about reusing that EUV pad for rev 88.

PAO This is Apollo Control. Loss of signal through ATS-6 satellite. Next station will be tracking ship Vanguard, in about 15 minutes. Flight surgeon - flight - flight surgeon group captain, Peter Wittingham at the surgeon's console is very happy with the data received during that exercise period from the command module pilot. We'll return in 14 minutes for Vanguard. This is Apollo Control at 115:18.

END OF TAPE

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PAO This is Apollo Control, 150:31 ground elapsed time. Tracking ship Vanguard in about 30 seconds. Apollo crew presently getting their noon meal - mid day meal, for them at any rate. Upcoming over the next two ATS-6 passes, they will be out of attitude a good part of the time when the helium glow scan and extreme ultraviolet experiment being run. Therefore, we won't have complete coverage from the satellite during those two passes.

CC-H We're AOS at Vanguard for 7 minutes.

ACDR Okay, Crip. I got 1 for the electrophoresis.

CC-H Okay.

ACDR Okay. On sample 2 it says sample 2 through I think about 6, it says verify that the column temperature is 10 to 12 degrees centigrade. This one has come down - you know when we first put on we put it to cool from about 27 to 14 or 15; it's just hanging there. How long do I wait before I press on? Over.

CC-H Let us take and look and we'll get right back with you.

ACDR Crip, I've got a go on this. I'll wait for your answers on electrophoresis maybe I can it down. Give me some data that - you were talking about on the EUV.

CC-H Okay. There's really no big rush on that, we can get it at acquisition here of the - of the next ATS or we can go ahead and get it now. Whatever you'd like to do.

ACDR Well, get me the answer to electrophoresis and if it's likely that we got some time to copy it on ATS so I'll try to get some chow also get the electrophoresis floresus going when you get that answer.

CC-H Okay, Tom. What we'd like you to do is to go ahead and press on with the ETE. No need to hold up for the temperature. And also on our telemetry down here, we saw an indication of an MC and W. Did you have that on board or is it something like what we thought?

ACDR Yep. We had a master caution and Deke and I looked all over and couldn't find a thing.

CC-H Okay. Copy.

DMP Yeah, we got the panel covers and checklists (garble) right now. And I caught the red light but I never saw anything on the other so I don't know what triggered it.

CC-H Okay. We'll - we'll take a look at our data down here and see if we can find - find the culprit.

DMP We normally assume it's high O2, but that can get to be a bad habit.

CC-H Yeah. I think we can be watching for that. Might tell Tom that when I see him at the next ATS pass, there or Newfoundland, I can start correcting that - that pad. And what I'm going to do is take the rev 88 pad that we used earlier, the EUV pad and - and modify it to use in rev 94.

DMP Okay.

CC-H Deke, you got a - got a moment to let me - bend your ear about another item?

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DMP Okay. Stand by just a second so I can get my hands empty.

DMP Okay.

CC-H Okay. A little bit later in the - in the flight plan, you're going to have a TV installation and it's set up - I believe to - to cover the - the fish. And on that - the - we believe that both of the cameras, both of the TV cameras in the docking module are not working properly, so what we would like to do if they're - if you currently got one in 873, you can do it like we mentioned the other day, go ahead and mark it bad and temporarily stow it in D3 if you'd like and we want to use the camera that we've got in location 606 right now and - for that setup.

ACDR We were wondering what that camera was for.

DMP Okay you want to put that up in the DM on 873?

CC-H That's affirm. Also, when you do that, you're going to have to make sure that it is put in - in master for using in there. It'll be an average master and linear like we normally operate on.

DMP Okay. I'll set it up that way right now. And I assume you want the wide angle lens on it also. It's got the long lens on it.

CC-H That's affirm. We want the wide angle lens.

DMP Okay.

DMP You said either one of those cameras are working up there, is that correct?

CC-H That's correct. They're working, but they're not working properly.

DMP Okay.

DMP Speaking of fish, a very important item, did anybody ever figure out whether in sample 6 it's supposed to be 5 or 6?

CC-H Well, it so happens that all of them were supposed to have been 6.

DMP That's amazing.

CC-H May be the little boogers are eating one another, I'm not sure.

DMP Well, as a matter of fact, I think you may be right. There's one up there, I thought I could see a fish head in but I thought no I'm seeing things. I guess that background is pretty difficult to tell.

CC-H Yeah. Also from what your question previously, Deke, can you tell us if you pulled out the second bag, the one that had the eggs in it.

DMP Yep. It's up there and I've taken one set of pictures of it per flight plan.

CC-H Okay. You noticed any - any hatchlings yet.

DMP Well, I didn't any yesterday, but I haven't looked at it today.

CC-H Okay. We're about ready to go over the hill here and we'll see you at Goldstone in 15 - 15 minutes and we'd certainly be interested in hearing there, when you take a look at it whether we

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got any.

DMP I'll check it for you.

PAO This is Apollo Control. Loss of signal at tracking ship Vanguard. Goldstone in 14 minutes. During the earth observation pass last revolution, the crew reported most of the sites were socked in by weather. They did ask for the ground to compute new opportunity for viewing the fisheries potentials in the Adriatic Sea between Italy and the Yugoslavian coast. At 150:41 ground elapsed time, returning in 12 minutes at Goldstone, this is Apollo Control.

END OF TAPE

ASTP (USA) MC517/1
Time: 14:15 CDT, 150:55 GET
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PAO This is Apollo Control. 150:53 ground elapsed time. Tracking station Goldstone in 40 seconds - with subsequent coverage through Rosman, Newfoundland, ATS-6 satellite, and the S-band station in Madrid. At 151:26. About 40 minutes from now, the spacecraft will lose lock with the ATS-6 satellite as the spacecraft maneuvers into the helium glow and extreme ultraviolet experiment attitude. And it won't - ATS-6 coverage won't resume again until 154:11.

CC-H - Houston. We're AOS through Goldstone. We have you for about 2-1/2 minutes.

DMP Okay, Crip. And another master alarm came on, as far as the light - but I didn't get anything on my headset. The whole panel is clear.

CC-H Okay. Copy. You got an MC&W. Did not notice any status lights, and no tone.

CC-H Can you give - give us an estimate of what the time was, Tom? That way, we can go back and look at the data.

DMP Oh, about 2 minutes ago, I guess. I just caught it coming out of the docking module. (Garble) and it last 30 seconds. Except the light's pretty hot - it may have been on longer than that. (Garble.)

CC-H Okay. And we were configured properly on the COMM panel as such that we would have picked up the tone. Is that right?

DMP Yeah, I'm configured right for it, Crip. But I wasn't on a headset. We're not sure whether (garble) was or not.

CC-H Okay. I was - understand Tom was on the headset. And I just wondered about him there.

DMP Yeah, but I've - I've been on here most of the time. And the last 3 times it came on, I was (garble) audio with this on. And I didn't hear it.

CC-H You did not hear it. Copy that. Okay.

CC-H Okay. And if we have got some time here - We've only got about a minute til we're going to drop you out. Newfoundland in about 8 minutes. We'll see you there.

DMP Okay.

CC-H Okay. We show you did not maneuver, or - or you're still in P20, and you didn't pick up that VERB 49 maneuver, which is called out at 150 25. We need you to go ahead and get that in, so we'll be set up for the next helium glow.

CC-H And also, so we'll get you on ATS.

DMP Roger. Do it now.

CC-H Recommend you increase your DAP to 1/2 a degree per second for this maneuver.

DMP Okay.

END OF TAPE

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CC-H Apollo, Houston. We are AOS through Newfoundland. Should get you with the ATS - about 51 minutes.

ACDR (Garble.)

CC-H Okay. I heard you call back down, but it wasn't very clear. If the COMM's not going to be too hot here, through Newfoundland, we'll - we'll wait till we get ATS lockup.

CMP Heard you loud and clear - this time, at least.

CC-H Okay. Reading you the same, now, Vance. One item I would like to go ahead and pick up and get out of the road is for the upcoming helium glow pass. I need to give you the times and a couple of deletions on that.

CC-H That's rev 92/93 in your supplement.

CMP Stand by.

CMP Go ahead, Crip.

CC-H Okay. If you're looking at it, for - we want to set the DET counting up to 151:36:36.

CMP Okay. Helium glow pad 92/93 - set the DET counting up 151:36:36.

CC-H Okay. That's a good readback. We would like to delete x-ray from this pad entirely. And we would like to use, on our EUV OPS, detector 2 vice detector 1.

CMP (Garble.)

CC-H I'm sorry. I said that backwards. We want to use detector 1 vice detector 2.

CMP Okay. I use, on EUV option, detector 1.

CC-H Okay. And that's going to be for this pad only. And we're going to drop out here, while I pick up the ATS.

CMP Roger.

CC-H Okay. We're back with you again. And the only other item is - if you haven't done it yet - being that you're in attitude now, you can go ahead and go back to 2/10 of a degree per second on your DAP.

CMP We're there.

CC-H Okay, fine. The other item I wanted to talk to you about was, as I mentioned several times, for rev 94 - instead of running the x-ray pad we've got there, we would like to take our EUV pad that we have for rev 88 and modify it somewhat, which will allow us to pick up some of the data that we lost. So if you could dig that pad back out, I would appreciate it. EUV pad, rev 88.

CMP Stand by.

CMP Okay. Go ahead.

CC-H Okay. The new time for setting the DET counting up to will be 154 :18:10.

CMP Copy.

CC-H Okay. I want to delete that entire line at 37 on the DET. That is, we do not need to do that x-ray cal as called for there.