

ASTP (USA) MC572/1
Time: 12:47 CDT, 173:27 GET
7/22/75

CC-H Apollo, Houston. We are 1 minute from LOS. Like I was - said earlier, we will not have ATS for this pass. It will not be available. We've already secured it. And we'll have you again, at Vanguard, in 45 minutes. Because we've been rather stingy with the secondary evap, there - we're making up quite a bit of water. And we would like to go ahead and open the potable inlet valve.

CMP Okay. Understand. Open the potable inlet.

PAO This is Apollo Control at 1:73:26 ground elapsed time. Loss of signal through the S-band station at Madrid. The ATS-6 satellite has been secured for the balance of this pass. Therefore, we won't be in contact with the spacecraft again until tracking ship Vanguard, in 44 minutes. Vanguard, meanwhile, is steaming westward toward Sydney, Australia, with its preparations to support the upcoming launch of a Viking spacecraft, or its trip toward Mars. The crew aboard Apollo - namely, Deke Slayton, reported being able to see some sort of red sediment or red tide off the New England coast near Booth Bay, Maine. On the next rev he'll make an attempt to see his home state of Wisconsin out the window of the spacecraft. We'll return for tracking ship Vanguard, in 43 minutes. This is Apollo Control, at 173:27.

END OF TAPE

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PAO This is Apollo Control. 174:10 ground elapsed time. Acquisition in about 20 seconds through tracking ship Vanguard. Meanwhile, here in the Mission Control Center viewing room, the wives and families of the Apollo crew are watching a 48 minute accumulated playback of videotape. And we're in acquisition through Vanguard at this time.

ACDR - - on the ETE. It said in here that the sample - the TE temperature for samples 2, (garble) sample 6 - I've been working on that, I should be between 10 and 12 degrees, it's minus 44 and it stayed that way. So we've held up until we can talk to you. Over.

CC-H Okay. We copy that. And while I'm trying to get a reading on that, I'd like to tell you that we're going to delete this X-ray CAL called out in your flight plan to be doing at this time.

ACDR Okay.

CMP Okay.

CC-H Also, I'd like to, because of the problem we had earlier with that CAL source, we're going to modify our SM experiment cue card to delete the CAL off of that also; on our normal powerdown, if you got that cue card handy we can go ahead and make those changes.

CMP Okay. It's scratched out of the flight plan and coming off the cue card now.

CC-H Okay. And just delete that first step: X-ray purge to CAL and hold 30 seconds under the powerdown, and - stand by 1. Okay. That's - that's all we need to do is to get it deleted off there; so we won't be going to CAL anymore.

CMP Okay. And - -

CC-H Go ahead.

CMP By the way, Crip, I think this raster maneuver we did, worked pretty well, but I'd guess that it uses a quite a bit of gas; the maneuver rate seemed fairly high to me at half a degree a second.

CC-H Yeah. We ran into CMS last night; we were estimating 13 pounds.

CMP Yeah. Well I think both rasters went okay.

CC-H Okay. Real good. Appreciate that report. Could we get a verification of the position of the FREE switch on the ETE?

ACDR Yeah, okay. We went back and we're checking some things. Looks like we - we had missed a step in turning a page there; we didn't have it to cool, it's cooling down right now.

CC-H Okay, real fine. Incidentally, you guys might be interested to know, we got three good looking ladies back here in the VIP room enjoying a little bit of the TV that you guys have made during this mission.

ACDR Oh, is that right? Well tell them hello for us.

CC-H Well, I think they can probably hear you right now.

ACDR Hello, there.

CMP Hello. Hi.

ACDR We've been so darn busy, we haven't had a chance to

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even think hardly about saying hello up here for a few days.

CC-H Yeah. We've had you running around pretty - at a pretty good pace.

ACDR I hope they all look relaxed and refreshed back there.

CC-H Oh. Absolutely.

CMP Ask them how - ask them how everything's going on the homefront there.

CC-H I think everything's been going good. Ah-hah. I've been informed that they aren't hearing me; I'll correct that.

CMP Are you still there, Crip?

CC-H That's affirm. We've got you about 2-1/2 minutes.

CMP Okay.

CMP Which TV are they viewing, Crip?

CC-H Well, we just saw the initial docking and right now we've got the one where Tom is standing by to open hatch 3 for the first time. I don't believe the girls heard you say hello, so how about giving it to them one more time.

CMP Okay. Hello. Hey, how you doing down there?

ACDR Hello wives is what he's trying to say. Too bad you can't answer.

CC-H Yeah. One way voice isn't too good.

ACDR That isn't too bad at some times, you know.

CC-H Ah, yes.

ACDR Too bad you said that you could at least (garble).

CC-H You are in trouble.

ACDR Okay, Crip. We're down there and we'll press on here.

CC-H Okay. Fine. Let me see if I can get you some words. We may want you to modify on that ETE.

CC-H Tom, can you verify for us that we did get that sample; it was frozen. If it is we probably need to go ahead and remove it; take it out of the cradle to let it - let it defrost.

ACDR Sample?

DMP Would you repeat that again ?

CC-H Okay. That's - did, in your opinion, did we freeze the sample that we currently got in there? The column, rather?

DMP Oh, no. No. This is what we took out of the sample; it's number - out of the freezer. It's number 6, and put it in for the 10-minute wait period and at the end of 10 minutes the temperature's supposed to be 10 to 12. We're in the processing of passing the checklist on - around here. We missed one step and that was to turn it to cool. We've started doing that - -

CC-H Okay. For the column - for the column is not frozen, is that correct?

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ACDR Positively not. It hasn't even started yet - -
CC-H Great. Okay. Going over the hill, see you at Gold-
stone in 16 minutes.

ACDR Okay.

PAO This is Apollo Control. 140 - 174:17 ground elapsed
time. Loss of signal through tracking ship Vanguard. Goldstone tracking
station in 15 minutes. Three Earth observation sites, three official
Earth observation sites coming up on this next stateside pass. Internal
waves in the Gulf of California and general coloration of the water in
that area, color oxidation zones in northern Lake Huron, near Sudbury,
Canada, tropical storms in the Pacific and Deke Slayton's home state of
Wisconsin. We'll return in 15 minutes at Goldstone. This is Apollo
Control at 174 18.

END OF TAPE

ASTP (USA) MC574/1
Time: 13:54 CDT, 174 34 GET
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PAO All stations stand by for an Apollo Control
announcement in 1 minute.

PAO This is Apollo Control at 174 hours, 32 minutes
ground elapsed time. 50 seconds away from acquisition of Apollo
spacecraft through Goldstone, California tracking station. The
National Weather Service space flight meteorology group said this
morning that good weather is forecast for the end-of-mission landing
area, which is about 480 miles northwest of the island of Hawaii.
Skies are forecast to be partly cloudy, with scattered cumulus clouds.
Surface winds from the east-northeast at 15 knots and seas at 4 feet.
Visibility should be good, and the temperature at about 79 degrees
Fahrenheit. Should be acquiring through Goldstone and we're standing
by.

CC-H Apollo, Houston. We're AOS at Goldstone. We have
you for about 3 minutes.

ACDR Roger. Through Goldstone. What are we over right
now, Crip?

CC-H Coming over Baja.

ACDR Roger. Baja.

CC-H Okay. We're a minute from LOS and we'll have you
again at Newfoundland in about 8 minutes and might remind Deke again
that this is pass over Wisconsin, coming up in about 41 after the hour.

DMP Roger. And we're right over the Rio Grande River
now. And I wish the girls could see this sight up here that we're seeing,
Crip.

CC-H Yeah. Right now we got the TV playing for them of
Vance doing those demo things over in the Soyuz.

ACDR We're right over El Paso. You can look down and
see Dick's Air Force Base and the International Airport.

CC-H Roger.

ACDR Okay, Crip. We're - Lookslike we're approaching
Amarillo, now.

END OF TAPE

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CC-H Apollo, Houston. We are AOS through Newfoundland and, with the ATS, we should have you about 50 minutes.

ACDR Roger.

CC-H Okay. And we got it rigged up where the girls are listening to you again. Incidentally, if - to help this problem we've been having with some of my interference, one of the things that - about the only thing we can come up with doing on VHF, is to go ahead and select simplex Alfa now, instead of staying in Bravo, and that'll change the freq and, Mike said, might get rid of some of it.

DMP You want to go to simplex Alfa, right now, heh?

CC-H That's affirm, Deke, if you would, please. You can go ahead and go Alfa and Bravo off.

DMP Super fast up through the midwest, there.

CC-H Came over pretty fast ?

DMP Kansas City, Madison, Milwaukee, Chicago, Detroit, the whole business.

CC-H Rog. Was it pretty clear ?

DMP See the cows down there on the farm. Yeah.

DMP Unfortunately, it was covered with clouds over Sidbury (?), Nickel (?), and certain sights that I was to get. But it is very impressive. No doubt about that.

CC-H Rog.

CC-H Incidentally, Vance, while I've got you, there - that last pass we had you guys run - ended up leaving you in 1/2 degree for your rate on your DAP. And you can go back and change that to 2/10 whenever you like.

CMP Okay. And we'll - we'll do that right away.

DMP Incidentally, we did get to see the Adriatic. And got quite a few pictures of the lower half of Italy, from the boot up to - oh, I think it's - oh, I'd say about half way up. But it - it was a cloud cover over Venice.

CC-H Copy that. Thank you very much.

ACDR Yeah, Crip. That a (garble) I wish I could -

ACDR Hey, Crip. We just had a big iceberg out here, in the north Atlantic, and it has a trailing wake behind it.

CC-H Copied - A large iceberg with a - a trailing wake, is that correct?

ACDR See, it's like a - you know, like a - a bow wave on a -

CC-H Rog. Tom, we ended up dropping out, there, on VHF, when we were trying to switch over and get ATS. And I'm back with you now on VHF. Don't think we got ATS voice locked up good, yet. But - I think you were just about to make a comment to the girls. And I don't believe they heard it.

ACDR I said I wish they could enjoy this view we're having up here today, looking down at the Earth.

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CC-H Rog. I imagine that's quite a sight.
CMP Even seen Chicago a couple times up here.
DMP Tell them we'll try and get them a new picture
so they can enjoy it.
CC-H Very good. Bring them back and we'll all be able
to have a chance to take a - take a look at that beautiful view you
guys got.
CC-H Incidentally, the flight plan calls for me to give
you an update for the mapping pass. You got on - mapping pass number 10
you've got on the next rev. And that time is nominal. We do not need
to change that. Anytime that it might be convenient for you guys, I
have a rev 138 block data pad that we can go ahead and update to you.
ACDR Rev 138 block data pad. Okay.
CC-H Yeah. We need to - need the updates book. But,
need to make sure I'm locked up good on the ATS before I give that to
you. And apparently we're not, yet.
DMP Okay. Before we go into that, Crip - We haven't
seen any icebergs in the southern ocean. Been very hard to see the
Antarctic area, due to cloud cover. Haven't seen any stray icebergs
down there. This is the first iceberg we've seen. Might just mention
that, up here in the north, it was traveling through a - looked like
a fog layer. And leaving a wake. Or else, it was stationary, and the
wind was blowing the fog a little bit and leaving a wake. No evidence
of rotation, which is one of the questions they'd asked about (garble)
here.
CC-H Okay. I'm sure that (garble) be happy to get that
data.
ACDR Okay. You got the echo.
CC-H Okay. We'll bring the VHF down and get rid of
our echo problem, here.
CC-H Okay, Tom. Did I understand you had the updates
book there?
ACDR It's in work right now.
CC-H Okay.
ACDR And you can tell the girls that we're going to
open some of Rita's little delicacies right now, for the noon meal.
CC-H Rog. Well, why don't you tell us what good things
you're eating today?
ACDR Well, every day it's a surprise.
CMP We never know til we open it.
CC-H You never know! Sometimes then you don't know,
right?
ACDR Right.
DMP Well, we got to say it's really pretty good in
general. We can't complain about it. We're all getting fatter.
CC-H All getting fat from being fed so well.

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DMP It's really funny how taste changes up here, though.
I like coffee on the ground and don't particularly like it up here,
but like tea instead.

CC-H I think we've heard comments similar to that, before.

DMP I think the problem with the food up here is getting
it ready to eat. I guess it's the same problem as we got down there.
We'll appreciate our wives more when we get home.

CC-H That's affirm. Now they could put you to work in
the kitchen, and you'd appreciate a little bit of a problem.

CMP I wish Deke hadn't said that.

CC-H Yes. Y'all are going to be in trouble when you
get back.

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CMP I'm ready for your block data there, Crip.
CC-H Okay. Coming at you, noted downfall REV 138, and coming at you with NOUN 33's. 224; 15; 20. Minus 189.2; all balls; plus 0176. 357; 336 007. 1719, 00:07, 203; 1627.6, 25749, 2554, 271.7, down range air is not applicable, 317, 057, 3304, 3552, plus 2200, minus 16283. Read back, please.
CMP Okay. This is block data for REV 138. Gee, we're getting a lot of REV's aren't we?
CC-H That's affirm.
CMP 224 - 224; 15; 20. minus 189.2; plus all zips; plus 0176. 357; 336 007. 1719, 00:07, 203; 1627.6, 25749, 2554, 271.7, the N/A, 317, 057, 3304, 3552, plus 2200, minus 16283.
CC-H Okay. That's a good readback. For remarks, CMSM SEP is yaw right to 052 degrees; number 2 - NOUN 48 trim angles - pitch trim is a minus .08, yaw trim minus .78; number 3 - CSM weight is 25311, and note 4 - this assumes that we complete the DM 1 and 2 burns following the jettison.
CMP Okay. Added notes: shift yaw right to 052 degrees, pitch trim minus .08, yaw trim minus .78, weight 25311, and this weight assumes we perform DM 1 and 2 burns.
CC-H Rog. The whole - the whole pad actually assumes that.
CMP Right.
CC-H Okay, that's a good readback. You guys can sit back and enjoy your lunch.
CMP Okay. Will do.
ACDR Rog. It's a beautiful view the way the whole ground just kind of grays down below, just like a haze or a fog.
CC-H Rog, Tom. We took the initial portion of your comment, doing a data drop but we're back with you. and we caught the bit about the beautiful view.
ACDR I'd rather (garble). It's going into night time.
CMP Crip, you still there?
CC-H That's affirm, and we got you - oh, another 25 minutes or so.
CMP Okay. The gals still there? We could talk about the view a little more here, in detail.
CC-H They are still here and still listening. And they appreciate any words you have to bestow upon us.
CMP Okay. Tom and Deke just sorted out the food here - passed it out. And, we have little trays plastered down on the NDC's, the instrument panel with the gadget with springs. We're sticking the food on, with velcro. I have meatballs with barbecue sauce, and the - something in a can here, haven't examined yet. Whoops, could that be? Oh, hey, no - the tuna is mine and Deke gets the meatballs. Okay, and a grapefruit drink, and pecan cookies, and I'm still looking for the rest.
CC-H I hope you've had a little bit better luck finding the foot lately.
CMP Yea, we did. There was a learning curve there. I think the food was packed very tightly and when we pulled the first

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few items out, why it was hard to keep everything from springing away and eventually we started collecting things and then found it.

CC-H Probably had the occasion to -

ACDR I got my kid's favorite bag here - meatballs and spaghetti. The problem is they want macaroni and cheese once (garble) and spaghetti is (garble) rehydrate. So I'm going to put it in the trash can and eat a can of salmon that flew up. Vanilla for - pudding for dessert, and - let's see here - grapefruit juice and almonds. That's about it so far.

CC-H Sounds like a delicious meal. Have you tried - have you tried rehydrating that macaroni and cheese and letting it set around awhile?

ACDR Yeah, I sure have. The problem is the water never gets up to the top inch then you have to open it. So when you open it it's like a bunch of worms crawling out of there. You know that dry stuff sort of gets to you.

CC-H Rog.

ACDR I closed it quick, and - forget it.

CC-H Yeah, you have to be on your toes up there.

ACDR Incidentally, I've lost my spoon three times, and found it shortly thereafter. And, anything floats away. You just can't afford to just leave anything unattended for more than five seconds. And quite often, things unstick themselves and float away.

CC-H Got to be on your toes - try to keep everything tied down.

ACDR Yeah, a couple of times I'll swear you could lose an elephant up here and not find in this spacecraft - you know the way it's stowed around.

CC-H Right.

ACDR Okay, let's see. I've got a strawberry drink, peach anbroasia, and cheddar cheese spread with rye bread, sliced beef with barbecue sauce, and hot potatoe soup. That's the way it should be. That's more than the normal Sego calories I usually have for lunch.

CC-H Yes, quite a bit more.

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CC-H You would not believe the shoes our friendly
INCO is wearing today. Ben Franklin's really outdone himself.
ACDR What color are they?
CC-H Well, it's kind of hard to describe. There's some
blue and some brown and a few other colors involved in it. Makes him
at least 4 inches taller.
DMP You're sure leaving us open for some comments when we were
just (garble)
CC-H Rog.
CMP Well, he wasn't always conservative, anyway.
CC-H Well, I always thought Ed was kind of a conservative
guy. I'm really surprised to see him - But he's coming out of his shell.
That's it.
ACDR He's always been rather bashful, ever since I've
known him, now.
CC-H Yeah. He's always sort of the quiet, unassuming
type.
ACDR Right.
DMP We probably never mentioned to you that we ran out
of our most important expendable.
CC-H Now what is the - I'm standing by, with bated breath,
to hear what's the most important expendable. I've got a few ideas what
I might consider that, myself.
DMP The old dry wipes.
CC-H The old dry wipes are all gone.
DMP Called Kleenex.
CC-H I assume that's due to all the liquid we've had
up there.
DMP Yeah and, unfortunately, these beta cloth towels
don't absorb very much of anything.
CC-H Yeah.
CMP Actually - just 1/2 a box left, and that's really
being rationed.
CC-H (Laughter) Okay! I was getting worried about you
guys up there for awhile.
DMP Got to get us down -
ACDR Well - You're sure it's going to be ready to come
home pretty soon - with just 1/2 a box of Kleenex left, and one change
of underwear left, and - plenty of food. But with the underwear and
the Kleenex getting short, we'll be home shortly. We won't
bring it home to have them washed - just leave them in the docking
module.
CC-H Well - You won't have - won't bring them home, huh?
CC-H Well, I'm sure the girls appreciate your leaving
them there! Too bad you don't have some of those - of those kind that
Bo was describing to you, this morning.
ACDR Yeah, that sounded real neat.
DMP (Garble) that we could use them right now.

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ACDR We ought to meet the wives right now - we both -
both need a couple of cans of deodorants, I think.
CC-H (Laughter) I imagine so.
CC-H Well, that'll put you in good shape for one of those
shipboard showers.
ACDR I hope it isn't salt water, like the Navy tradition,
there, Crip.
CC-H Oh, no. We've come a long way since those days.
CC-H If you guys could look almost straight up right
now, you're directly under the ATS.
ACDR How about that.
CC-H Can you see 22,000 miles?
ACDR It's not a - That satellite's been doing a fantastic
job for us.
CC-H It certainly has. That - it's really been super.
It would have made this mission a heck of a lot more complex and
not nearly as successful if we'd not have had it.
ACDR That's right. We're all wishing to see those TV
pictures that the wives are seeing right now, after we get back, to
see how they turned out.
CC-H Yeah, they're - they're all super. What the guys
said, here, was to take them and put them together in sort of a (garble)
of your mission, and - made a nice - nice little clip for them. And
the girls are all departing the area now, so they'll - they'll see
you when you get back here on Saturday.
CMP Okay. Tell them we'll see them shortly.
CC-H Roger.

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ACDR Okay, Crip, just to review one thing you said,
that the mapping to pass M10 was nominal for times? Over.
CC-H That is affirmative.
CC-H Apollo, Houston. I'm sorry my last to you -
apparently didn't get to Tom - yes, your time on M10 is nominal.
ACDR Yeah, I got it. We just did a recheck on it.
CC-H Okay.
CC-H How's the temp doing up there now ? Kind of
difficult to judge, sometime looking here at suit temp and cabin temp
just how comfortable you guys are.
CMP Not bad.
ACDR Seemed to me it got the warmest from late last
night and early this morning. And now it's getting better.
CC-H Rog. And we kind of thought that after you guys
had been quiet down there that it would not have gotten so warm, but -
ACDR Well, one thing, the VTR was on all last night.
CC-H Yeah that's
ACDR That's really a heat source.
ACC-H Yeah, that's what must have driven it up.
CMP That seems to be the biggest factor for some
reason.
CC-h Rog.
CMP Or the biggest factor that we can vary.
CC-H Rog. Wonder if I could talk to Deke a little bit
about his upcoming ODS exercise. We got a couple items here that
we'd like to at least review with him.
ACDR He's off his headset now, we'll get him on in just a - -
CC-H Okay, no big rush. We got about - oh, another
8 minutes or so through the ATS here and I'm going to hit you a couple
other places, too.
DMP I'm back on, Crip. What was that?
CC-H Okay, Deke. Due to some of the problems that
we've been running to on this OBS. Had have a couple of notes that
we'd like to get to you. One of those things is that we're going to
recommend, if you don't mind doing it, is to use that disc tape to go
over the electrodes. We think that that might hold them down a little
bit better when you're exercising. That, there's some of that tape
located in R13 in the med kit.
DMP Okay. That's the same kind of stuff they launched
us with right?
CC-H Yeah, that's affirm. The stuff that feels so good
when you pull it off.
DMP Yeah.
CC-H The other item was that after you get it all hooked
up we're going - we're going to - we'd like to look at you for about
5 minutes at rest before you do the exercise and then we'll work it
looking at you here from the ground. Then give you a go when to
start the exercise and so forth. That way we won't do any for naught.
DMP Okay. No problem. We need to exercise anyway. (Garble)
CC-H Rog. Understand.

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DMP I'm not optimistic, it states we'll do it, we'll do it all right. But I guess it was my feeling when we started in with this thing it was going to be very difficult to combine exercise with the biomedical data just because of the configuration of that exercsier relative to the (garble).

CC-H Yeah, we understand. And we appreciate all the cooperation you're giving us on - on trying to help get it. Also, after - after you do your exercise, they're going to want you to set there about 5 minutes of postexercise, too. And, we'd like - and we'll be telling you from time to time, probably to press against the electrodes. When you work up a good sweat, sometimes they tend to come loose a little bit.

DMP Okay.

CC-H For the DP. Deke can you help us out. We're not showing the furnace operating and it was called out for at about 174:40. Did we ever get that sample in?

DMP Yeah, we got the sample in it.

CC-H Did you ever go ahead and - -

DMP I'll check the flight plan here, quick.

I don't think we ever activated it. (Garble)

CC-H Okay, that's a problem. Appreciate it if you could get that on for us.

DMP Okay, we must have missed a block there. I'll go back and pick it up.

CC-H Thank you.

DMP Okay, I guess I got too enthused looking out the window there, and went right by it. I'll get with it.

CC-H Okay, thank you, Sir.

DMP Before we go off the air. Accomplished the data point for the guys. I did grease the plugs those last - -

CC-H I'm sorry, Deke, you were cutting out.

DMP Did you get the data point for the - -

CC-H Could you resay again?

DMP Yeah, data point for the furnace guages. I greased the plugs before I put the last sample in. They were beginning to feel pretty sticky and I was getting concerned that we might have trouble getting them out.

CC-H Okay, real fine. Appreciate that info.

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DMP - - I greased the plugs before I put the last sample
in. They were beginning to feel pretty sticky and I was getting concerned
that we might have trouble getting them out.

CC-H Okay. Real fine. Appreciate that info.

CC-H And we may lose you here in a few minutes. Our next
station contact is going to be in 15 minutes through Orroral.

DMP Roger, Crip.

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CC-H Apollo, Houston. We're AOS at Orroral and we have
you about, oh, about a minute here.

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ACDR Hello Houston, Apollo.
CC-H We're with you Tom. Through the Vanguard for 7
minutes.
ACDR Roger, I understand. Looking ahead for the EUV
xray that's scheduled at 176:30. Is that - is there gonna be any
update to that? Rev 108 EUV pad, over.
CC-H Negative - we're do do to something different, we're
going to do that one nominal.
ACDR (Laughter) How about that.
CC-H Stand by for the next one.
ACDR Okay. What about the start time? That couldn't
be nominal.
CC-H Yeah, start time in nominal also.
ACDR Absolutely unbelievable.
CC-H We figured we wanted to do one that way.
ACDR Okay.
CMP - - CM burn for that, huh?
CC-H You dropped out there, Vance. I couldn't hear you.
CMP I said we can thank FIDO,s ACM burn for that, huh?
CC-H (Laughter)
CMP For everything - - for being nominal.
CC-H Right. Right. Absolutely. He'll take any credit
he can get. Vance, there's a little mode you got coming up, that 176:20
regarding some O2 tank heater configurations changes and you've already
done those of course, you don't have to go down and mess with them again.
CMP Okay, very good.
CC-H One item I was going to talk to Deke about here,
we were looking ahead in the flight plan and we know of course we're
running a little bit behind on that ETE and we were considering that
we might be able to go ahead and get his - donning the OBS and that
exercise out of the road. Just close up earlier and then pull to get
the ETE following that, it he doesn't consider that too soon after - after
his eat period. Only restriction of course on that is that we do need to
be in ATS coverage for his OBS data.
CMP Okay, I don't know how that matches relative to eating.
We're still eating but I'll check it and (garble) - - Another conflict here,
we got a mapping pass scheduled at the same time we're doing ETE and -
and that requires the same camera so I guess we've done a quick (garble)
here and figure we can probably fit the mapping pass in between ETE
samples - the schedule we're under right now. So I'm inclined to hold
off on our next ETE until mapping pass is over.

ASTP (USA) MC581/2
Time: 15:04 CDT, 175:44 GET
7/22/75

CC-H Rog. Let us talk about that here a minute.

DMP Okay.

SPKR B - -

CC-H Apollo, Houston. Deke, regarding the camera conflicts, you mentioned there is one - if we look in the - in the pad for that or in the timeline in the book. We want to use in this case the silver camera for mapping and to delete the target that we got called out for this obs. At 2 Charlie and 2 Delta, we do not want to do both. So we want to use the silver camera for - for mapping and we go ahead and we can use the black for the ETE.

DMP I think we can do both, Crip, if they really want it. We'll try to work that in.

CC-H Okay. That - what I just called up to you was the original way we intended it to go though and, but you guys can see what's happening better than we can.

CC-H Apollo, Houston. We are 1 minute from LOS. Our next station contact in 16 minutes at Goldstone, that's at 176:05 and in case I wasn't clear on my last call regarding those vis obs sites, 2 Charlie and 2 Delta, those are visual only and we don't have to use the camera so that - that would relieve any camera conflict we had. Silver camera for mapping and the black one would be free for - for use with the ETE.

DMP Okay, we copied that.

PAO This is Apollo Control. At 175:50 ground elapsed time. Loss of signal through the westward steaming tracking ship Vanguard. Next station Goldstone in 14 minutes. And as the Apollo crew crosses the west coast of the United States, they have two visual observation - earth observation targets which will not be photographed but observed by eyeball. A California current offshore in the San Francisco area. Also the Great Salt Lake and the adjoining Great Salt Lake Desert in Wasatch Mountains in Utah. We'll return in 13 minutes at Goldstone. This is Apollo Control at 175:51.

END OF TAPE

ASTP (USA) MC582/1
Time: 15:26 CDT, 176:06 GET
7/22/75

PAO This is Apollo Control at 176:04 ground elapsed
time. We're about 10 seconds away from acquisition through Goldstone,
and standing by.

CC-H Apollo, Houston. We're AOS Goldstone, 6 minutes.

USA Roger, (garble).

CC-H Apollo, Houston. We're 1 minute from LOS. Our
next station contact through Newfoundland in 6 minutes. I want to
remind you not to configure - not to forget to configure the DSE by
going to LOW BIT RATE, and also UP TELEMETRY to RELAY, as called out in
the flight plan there, after you finish your mapping pass. Also, if
Deke can, I'd like to get an estimate of whether he'd want to try and
go ahead and get that OBS exercise in early, or is he going to go
ahead as called out in the flight plan?

END OF TAPE

ASTP (USA) MC583/1
Time: 15:36 CDT, 176:16 GET
7/22/75

CC-H Apollo, Houston. We're AOS Newfoundland. Should be with you for 50 minutes.

CC-H Apollo, Houston. Through Newfoundland. Might notice that your ATS angles here are kind of - are in your pad there. So, to lock up we need a pitch of minus 30 and a yaw of 290.

ACDR Roger, Dick. Set in.

CC-H Okay.

CC-H Apollo, Houston. Tom, just so that somebody could say that we did anything completely normal, we are going to want to cycle that x-ray instrument on and off a couple of times through this pad. If we get the ATS locked up it would probably be easier for me just to go ahead and call you when we - when we want it on and off.

ACDR All right.

CMP And Crip, you have TM of that mapping pass for only about the last minute of it or a little less, about 40 seconds.

CC-H Okay. We'd gone - we'd gone and bided - commanded high bit rate from here so we assumed we had it. You're saying we didn't have the cable hooked up, is that correct?

CMP I meant playback.

CC-H I'm sorry, Vance. You - you were cut out there and I didn't get it. I would like to verify that we are getting - going to get the ATS locked up. Are you guys in the attitude and you set the - get the angles in for us, we got about 2 more minutes here through Newfoundland.

CMP Roger. We're in the attitude of 103:70:1134;000.

CC-H That's affirmed. Then have we tried locking up yet? Pitch of minus 30 and yaw of 290.

ACDR Set in. It's all set up.

CC-H Okay. And you're getting no - no signals. Is that affirmed?

CMP We didn't - any signal strength yet.

CC-H Okay. Let me tell you quickly before we go. If you'd jot it down then that - I don't know if it's going to do it. We - we aren't going to get any data if we ain't got ATS.

CMP Okay. If we can ask the computer where it thinks ATS is.

ACDR Yes. Our computer says minus 16183, Crip.

CC-H Minus 16183. Go ahead and try that.

ACDR Okay.

USA Okay.

CC-H I knew that EMP was going to come in handy.

END OF TAPE

ASTP (USA) MC584/1
Time : 15:46 CDT, 176:24 GET
7/22/74

CC-H In the blind, we'd like to get UP TELEMETRY to RELAY on panel 230.
CMP Okay.
CC-H That didn't sound blind at all.
CMP Okay. You got it to RELAY, Crip.
CC-H Thank you.
ACDR (Garble) turned on the (garble) the flight plan.
CC-H Okay. We're back with you now, on the ATS. And Tom, it sounded like you were asking a question, and I didn't get it.
ACDR Roger. We got the - we're turning on the EUV and the helium glow right now. And the X-ray 1 - did you want that on? Or should we wait for your commands on it?
CC-H Why don't you go ahead and you can turn it on with the exception of the high voltage power, and you can hold up on that, and I'll tell you when I want it and - and right now, if you're down there, we'll also take the UP TELEMETRY switch to UP TELEMETRY once more.
ACDR Okay. Vance is there working on it.
CC-H Okay. Fine. Just as a little free warning, I'm going to - at the DET times of 1:15, 10:40, 26:35, and 34:32 is what I'm going to be requesting to get that high voltage power on the X-ray turned to number 2, and we'll be leaving it on about 2 minutes and then turning it back off.
ACDR Okay. To review. At 1:15, -
CC-H - to repeat once more, Tom, in some of these (garble) maneuvers here. At 1:15, 10:40, 26:35, 34:32. Each of those are called out DET time. We'll be turning the high voltage to number 2. We'll leave it on from between 2 to three minutes, then turn it off. And I'll call you on - as a reminder on each one of those.
ACDR Okay. And I'm marking it, too.
CC-H Okay. Fine.
CC-H And also, if I could kind of get an update as to where Deke is as far as donning the OBS, and whenever he's going to be ready to - ready for us, he can just give us a holler.
CMP Okay, he's going up there to do it right now. He'll work it now.
CC-H Okay. Fine.
ACDR And the high voltage was on on time.
CC-H Okay. Fine.
CC-H Apollo, Houston. Okay. You can go ahead and turn that high voltage OFF anytime now.
ACDR Roger. High voltage 2 OFF.

END OF TAPE

ASTP (USA) MC585/1

Time: 15:56 CDT, 176:34 GET

7/22/75

CC-H Okay. You can go ahead and give us that x-ray high voltage two again.

CMP In you got (?).

ACDR Oh, hec - Houston, Apollo.

CC-H Go ahead, Tom.

ACDR Okay. We've got a big leak here on the electrophoresis.

CC-H Copy.

ACDR As you look down at it, I just happened to notice as I turned around in the seat and looked down at it here and Deke's not here with me. I had him knock off the - we decided to knock off the ops because this thing's leaking. Can't tell whether the sample's ruined or not. The fluid is all around the right connector where it connects on, you know to the sample. Yet the tubes are on tight and the rectangular cap with the two buoys that goes down to the sample is flush, it's tight, but there's a huge blob of liquid, probably a cupful when I first started soaking it up here.

CC-H Okay. I understand that was on the righthand side of the column, is that correct? When you're facing the unit.

ACDR You got air bubbles to the line on both - got air bubbles to the line, particularly big ones on the right and a few on the left.

CC-H Copy.

ACDR Yes. Crip, Deke had a suggestion here that the next sample is a - doesn't require the liquids. Why don't we just scrub this sample - go on to that last sample.

CC-H Why don't - why don't we evaluate that. I guess we do need to go ahead and see if we can go ahead and see if we can get Deke in that OBS because this is probably going to be about the only time we're going to have to get data on that. We'd recommend that he go ahead and proceed with that, we'll try to get word with you - back to you on the other sample and for Vance, he can go ahead and turn high voltage power on x-ray to OFF now.

CMP Okay, OFF.

END OF TAPE

ASTP (USA) MC586/1
Time: 16:06 CDT, 176:43 GET
7/22/75

ACDR And, Crip I can see where it's leaking out of where the right plug goes on the sample. And that rascal is down as flush as you can push it, but you push it a little more and fluid eases out from it.

CC-H Okay. Just as a kind of an idea down here, can we tell about how long it's been running out now?

ACDR Well, the damn timer malfunctioned, and Deke's got the wrist watch and he's up in front of the dock taking exercise.

CC-H Well, never - don't worry about it.

ACDR I'll have to up there and find out.

CC-H No, Tom, Tom. That's not required. Don't - forget about it. We - we're are not set up to get - we're not getting data yet, so we hope Tom's not exercising. We're standing by to hear from him wherever - whenever he gets connected. I mean I hope Deke's not, rather.

ACDR Stand by.

CMP He looks like he's almost there on connection.

CC-H Okay.

ACDR Houston, it's been running - it's been running 15 minutes.

CC-H Okay. Thanks a lot.

ACDR Okay. Houston, I got most of the water mopped up where I can, but I see just a slight flow is slowly collecting down in the bottom again.

CC-H Okay. We understood that you had turned it off. Is that correct?

DMP That's right. We turned the power - we turned the mode selection switch to OFF.

CC-H Okay.

ACDR And it's probably not too much - just probably residual stuff that's collecting there.

ACDR Did you read me when I said 15 minutes?

CC-H Yes, sir. We did. We copied that. Thank you very much. Didn't mean to put you to all that trouble to get it.

DMP Okay. Dick, how do you read me?

CC-H Reading you loud and clear here, Deke. How me?

DMP Okay. Okay. Well, I'm all plugged into this stuff and I haven't put the tapes over the top yet because I wanted to see if everybody was happy first. I don't want to have to stick those things on and unstick them.

CC-H Well, let us take a look at it here.

CC-H Okay, Deke. We are not receiving acceptable data yet. Why don't you try pressing each of the sensors independently for us and see if we can get it - improve it.

DMP Okay. Starting with - let me see here. Okay, the left one, push it down, on. Now I'll do the left chest. And then the right, all right. And the upper chest. And the (garble).

END OF TAPE

ASTP (USA) MC587/1

Time: 16:16 CDT, 176:53 GET

7/22/75

CC-H Stand by one Deke, and let me get back to you.
DMP Okay.
CC-H Okay, Deke. We are getting good data here now and if you can do it without moving around too much, you might go ahead and put the tape covering over them.
DMP (Garble)
ACDR Crip, do you have any idea how soon we're going to get a word back on electrophoresis?
CC-H We're trying to get it to you right now. I guess what we're - would like to do is to go ahead and remove that particular column without taking off the ends and just stick it in a bag some place.
ACDR All right. That was just what Deke had suggested.
CC-H I - -
ACDR Do you want us to bring it back or throw it away?
CC-H We're trying to get a reading on that right now. And we can go ahead here coming up on 35, we can have the high voltage power turned back on the X-ray, please, in number 2.
CC-H And for Deke, as soon as you got that all squared away there, you can start your exercise there.
DMP Okay, how critical on time are you?
CC-H Pretty critical. We're about 10 minutes from LOS. We wanted to get - get some exercises and then wanted to get part of your recovered period.
DMP Well, I tell you, I'd suggest I start in without putting on all those extra takes on that because I had just lost the bag - well-put the first one on it (garble)
CC-H Okay, forget about the tape but proceed on with the exercise.
DMP Okay.
DMP Can't you guys understand how that can happen (garble)
CC-H I couldn't get all of that.
CC-H Things - things kind of drift away from you.
DMP (Garble)
DMP Okay. I believe I'm in an exercise mood if everybody is prepared.
CC-H Okay, press away. Pull those muscles. Tote that barge, lift that bale. For Vance, you can go ahead and turn off the high voltage if you would please.
CMP Okay, it's off.
CC-H Okay. And for Tom, what we're gonna do now as soon as everybody gets squared away and can press on with it, we're gonna go ahead and use the (garble) sample - the next sample that goes in the ETE.
ACDR Okay.

ASTP (USA) MC587/2
Time: 16:26 CDT, 177:03 GET
7/22/75

CC-H Main thing we just want to make sure is that you've finished to mop up all the liquid around the electrodes that you can.
ACDR Best I can with the towel since we're out of tissues.
CC-H Yeah, I understand.
CC-H Don't want to sacrifice that last box.
DMP Man, if you do that you're gonna get a (Garble) on the EKG, here.
CC-H I'm sorry, Deke, I could not read you.
ACDR Okay, Crip. What - I still got moisture down in the right electrodes. I'm trying to dry it out as much as I can.
CC-H Okay, copy that, Tom.
CC-H For the DC - Deke, we have a satisfactory amount of exercise. Now if you'd just lay back and relax a little bit and let us look at you we'd appreciate it.
DMP Okay, nobody's gonna object if I get some exercise in here when you get through with this (garble).
CC-H No, we'd love to get you - get your exercises in here between running back and forth between the ETE and the furnace and the OBS. I thought you were getting quite a bit.
DMP It's not too easy doing a lot up here.
DMP (Garble)
DMP Hey, Dick, do the sensors look all right on this one (garble) doing our exercise.
CC-H That's affirm. It looks - looked great. Body's - everybody's just happy as a lark.
DMP Okay, well it's not surprising as it does because I was just kind of checking it as I was doing it. The natural position for exercise is with your elbows right on (garble) left and right sensors. I keep working (garble).
CC-H Whatever you say.
DMP If you're all happy, I'm not gonna complain.
CC-H That's affirmative.

END OF TAPE