

SL-IV MC-1487/1

Time: 12:01 CST 44:18:01 GMT

12/29/73

PAO Skylab Control at 18 hours 1 minute and 15 seconds. We're about a minute and 55 seconds from acquisition, but the crew has been coming up a little early, as they speak through their space suit microphones. We'll bring the line up live now, they're about 32 minutes into the space walk at this time.

CDR Two different thunder storms down there. Okay, that's on there, and we're coming up with a - coming up with a walk.

CC Skylab, we're reading you loud and clear. Carnarvon and Honeysuckle for 14 minutes.

CDR Roger, Story. Okay, that's locked.

SPT Go ahead, Bill. Read on.

SPT That's affirm.

CDR Okay, it's already stowed and attached to the temporary restraining hook.

SPT Okay, just stand by.

CDR Let me get back in the foot restraints, here.

SPT Okay, there it is in safety tethered. Very good.

PLT (Garble) getting it up for one now.

CDR Just a minute here, Bill.

CDR Got to make sure I understand the orientation here.

PLT That looks pretty good.

PLT Yeah. Okay, get a tether put away.

We'll be all set to go.

SPT How much more nighttime, Bill?

CDR Okay.

CDR A tether for that, Ed?

SPT I'll tell you what. There's no way to do it, Jer.

CDR Okay.

SPT You can't tether it. That's a fool - that's a drawback in this thing. You got to put the only tether attach point in that you have.

CDR But you put it in the other way.

SPT I tried it the other way.

SPT Okay. Alfa 1 positioned, and let me check something. Sometimes Alfa's not always in the Alfa bag. Yes, that's Alfa

CDR Okay, go ahead.

SPT Okay. What about 201? Can we get out that - get that out and plenty of plus-X?

SL-IV MC-1487/2

Time: 12:01 CST 44:18:01 GMT

12/29/73

CDR Yeah.
SPT Oh, okay.
CDR Ed - -
CDR That's right.
SPT Okay.
SPT Hey, what we do? Let's get S020 up
and running first, because that's the one we've got the
long exposures. Then we'll start working T025.
SPT Start off with frame number 5 with their
highest priority, which I believe is 5.
CDR Okay, Ed. I wonder, would it be any
help for me to get in that - those restraints, and hold you
while you fiddle with the experiments?
SPT It may well, Jer. I was just thinking
about that, because it looks as though - even though I've
grown a little, I'm still about a foot too short to make my
head over there.
CDR Uh-huh. Well I could hold you, like a
sausage, a loaf of bread under my arm, you know. You could
just kind of go where you wanted.
SPT (Laughter) All right. We'll give it a
go, let me - -
CDR All right.
SPT Let me get out of the restraints here and
get up in approximately the right position.
CDR My that blue is a pretty blue.
SPT (Garble), Bill.
CDR Okay, and we need all of our (garble)
SPT (Garble) you don't have the slide (garble)
do you?
PLT We're coming up over tip of Australia
and headed for New Zealand. We'll be over New Zealand in
10 minutes.
CDR Okay. I'm just looking at the thunder
storms, here.
SPT Notice when - one bolt one, goes off it
tends to propagate. There's a - a whole chain of them then go off?
CDR Purdy, purdy.
SPT That it is.
PLT How about an EMU check?
SPT 3.6 (garble) the lights, for EV-1.
CDR 3.7 No lights EV-2.
SPT Star that is. That's rising right there.
It's almost the same intensity as the comet, isn't it?
CDR Yeah. It's a pretty bright star.

SL-IV MC-1487/3
Time: 12:01 CST 44:18:01 GMT
12/29/73

SPT Story, there's a star right above
the horizon now. Just about where the Sun's going to be
coming up.

CDR Could that be Mercury?

SPT About 20 degrees. No, about 15 degrees
right now. Rising pretty fast, and about the same intensity
visually as the comet. If anything it might even be a tad
dimmer.

CDR Could it be Mercury?

CC We're working on the answer to that,
Skylab.

SPT I think it's only about 5 degrees up off
there now. It's only 1 finger above the airglow.

CDR Okay, there's the Sun.

SPT Okay, let's start working on S022. - -

CDR (Garble)

SPT I think I need to get my head up here.

CDR All right.

SPT How's that?

PLT MARK.

SPT I'll tell you what, I'm going to try to
sight it in coarsely, without the - without using their
sighter, just kind of - -

CDR Okay (garble)

SPT (Garble)

CDR I got you by the knee, here.

SPT Okay, Jer, now let me go back down here.

CDR All right.

SPT The trouble is, though, you got T025 right
in there, now. I can't get my head over far enough to see
the darn thing.

SPT Back now to hit D-7. I'm going to have to
loosen this up and move it up a little bit. Gal-dang it.

CDR Yeah, I see what you're doing.

SPT See D-7 that - -

CDR Yeah.

SPT That - that knob you've - happened to be
shuttering the small image.

CDR Okay. That's a little.

SPT Tighten it up again.

SPT Got it tight.

SPT Now let me - let go of my legs again.

CDR Okay.

SPT Back up in here.

PLT Story, are you looking at the outer gimbal
angle on gimbal 3?

CC Yeah, we are, Bill.

PLT Yeah, I just came out of nominal H-cage.

END OF TAPE

SL-IV MC1488/1

Time: 12:12 CST, 44:18:12 GMT

12/29/73

PLT Should I do another nominal H-cage, Story?
CC Stand by 1.
CC Stand by 1 on that cage, Bill.
CDR Easy with your head, Ed.
PLT I am standing by.
CDR Just don't rear back to admire your work.
You're liable to knock the camera off T025.
SPT Okay. Thank you.
CC We don't think we need the cage right now,
Bill.
PLT Beautiful. Thank you.
CC Hey, while I've got you, I've got a comment
on when to start that S201 maneuver.
PLT Go ahead, Story. I'm ready to copy.
CC Okay. Don't start it prior to 25 minutes
of night remaining on your next nightside pass. That'll
save us a few TACS by not exposing the vehicle to gravity
gradients any longer than we need to.
PLT Roger. (Garble) state the (garble) positive,
you want to start after 25 - -
SPT It is me. I've got her centered I think
pretty well but the trouble is, I'm afraid I'm going to do just
what Bill said.
CDR Yeah, you are. I wouldn't fool with it, Ed.
SPT Yeah, I think you're right.
PLT Did you (garble)
CC That's correct, Bill.
CDR Rog. I could see it clear back here.
SPT Okay. That damps out when it does.
SPT Okay. I guess the words are, you want the
larger, faint circle inside the square.
CDR Right.
SPT Well, that it is.
CDR Good show.
SPT And when it stablizes out, I'll give you a
number. Unfortunately, every time we get the exposure going,
we're going to have ourselves a transient for a while.
CDR That's right.
SPT Okay, Bill. Go ahead with the S020. We
got it now.
PLT All right.
SPT That's right.
CDR That's good, Ed.
SPT Yeah, okay. Would you get the timer set
and give me a start? I'll go from STORAGE to FRAME 5.
SPT Okay. Standing by for your mark.

SL-IV MC1488/2

Time: 12:12 CST, 44:18:12 GMT

12/29/73

SPT Okay, there we are. On 5.
SPT Okay, now let me - hold on. Let me give you
the numbers when it damps out here.
CDR Go ahead.
SPT Yeah.
CDR Yeah, on the next night pass right after
sunset.
CDR On a daylight pass. Okay. Okay. I'll try
to remember.
SPT Okay. I'll give you a number, Jer.
CDR You might go back to ingress there, Bill
and just write a note that says did you do the temperature
measurement? Okay.
SPT Okay, on the vertical, now bottom is on
the minus 2. And the top is on plus 4. That's a large disk.
And in left/right we're at just about - just about centered.
Looks like 3 and 3.
CDR Here comes New Zealand.
SPT 3 and 3, so we're centered pretty well
left/right and only slightly off in vertical.
CC Skylab, we're 30 seconds to LOS. About
38 minutes to Bermuda at 18:52. All your systems are looking
good.
SPT Thank you, Story.
CDR Thank you, Story.
CC And Bill, those gimbal angles you're looking
at, whenever you enable CMG control, until the attitude
becomes stable, you'll probably see some diversions like that.
PLT Okay. Thank you a lot for the information.
SPT Okay, what am I shifting up against in the
back. We'll watch it. Don't forget the DAC here? I don't
want bump into anything.
CDR That's just the boom. You're okay.
CDR You want your feet over here, Ed, or where?
SPT Yeah, I want them back. I do want to be
knowing where I'm going.
CDR Okay. I got it.
CDR Let me steer you in.
SPT Yeah.
CDR Hang on just a minute, Bill. We're busy
adjusting Ed's position here.
CDR Okay. Now if you roll left, Ed, you've
got it made.
SPT (garble) T025. Looks like I've got to
rotate this right here.
CDR Yeah. You're in good shape. All right?
SPT (garble)
CDR How's that?
SPT Well, I've got to put my - to go to my left
to get my head (garble).
SPT (garble)
CDR (garble) line 25, Bill.

SL-IV MC1488/3

Time: 12:12 CST, 44:18:12 GMT
12/29/73

PAO Skylab Control at 18 hours 19 minutes and 18 seconds Greenwich mean time. Skylab space station is now over the south island of New Zealand, having passed into daylight over Australia during this last air-to-ground through Carnarvan and Honeysuckle Creek, Australia. At the present time, Skylab crew at work on both S020 and T025 completing the final hookups of those instruments. After the S020 setup is completed and the T025 has been hooked up, the camera - both cameras will be used in operations perhaps during this daylight pass. The - Bill Pogue working inside of the Skylab space station was apparently in the process of turning control over to the control moment gyros for a data take and he did get some indications of rate variations which would be expected when that control is handed over from the TACS system to the attitude control system using the gyroscopes. Camera T025, which is the second one to be used after the two - after the S020 was set up, is being used toward this EVA to record the post-perihelion changes in the comet Kohoutek. Jerry Carr unstowed the camera and handed it to Ed Gibson who was in the process of clamping it to the ATM truss further forward than the S020 position during this last pass. Carr also unstowed 16 filters to be used on the camera. Has a 35-millimeter Nikon camera, equipped with ultraviolet lens and an occulting device. The filters - each one allowing a different wavelength band, to pass through. For today's photography, filters covering the range from ultraviolet through visible light all the way up through the red visible light will be used. Film will be exposed for various duration periods through each filter by remote control. Gibson will operate the remote control device for the assembly, changing shutter speeds after each shot and changing filters after each second or third shot. Filters, themselves, are arranged in groups of four and a strip which fits in front of the lens and behind the occulting device. Like photographers on Earth, Gibson will have to wait about 10 seconds after filter changes to allow physical vibrations within the instrument to damp out. 20 exposures are planned for the experiments starting at 18:10 Greenwich mean time, approximately they do appear to have been running a little bit behind that schedule - -

END OF TAPE