3.0 COMMUNICATIONS

3.1 INTRODUCTION

The following is a transcript of the MA-9 flight communications derived from both the spacecraft onboard recordings and the Mercury network station recordings to form a single text. This is, therefore, a complete transcript of the air-to-ground and ground-to-air communications during station passages, and inflight comments made by the pilot while between stations. A few non-flight-related transmissions and an occasional repetitive word or partial sentence were removed by the astronauts and the editors where clarity could be improved. Instances of this type are noted by an asterisk at the start of the transmission that was altered. Where a whole transmission has been deleted due to lack of confirmation or non-flight-relationship, the asterisk will appear where the transmission was removed. The text is otherwise verbatim.

The format used for presentation is as follows: the first column, at the left, contains the capsule elapsed time (c.e.t.) from liftoff in hours, minutes, and seconds, at which each communication was initiated. The second column identifies the communicator, and the third column contains the text of the communication. The station in communication with the astronaut is designated at the initiation of communications. Where no station contact is made through a complete orbital pass the text is headed with the orbital pass number only. In addition, each page contains, below the page number, the station or stations and orbital pass number transcription contained on that page.

The c.e.t. was reduced from the recording of the spacecraft clock commutated time segments on both the onboard tape and the network station tapes. These c.e.t. times are accurate to ± 0.8 seconds. Timing of a few communications was not obtained due to either weak, noisy signals on the network tapes, or to short sampling of onboard commutated time segments caused by commutator sampling interruptions when the pilot was recording while in the VOX-record, programmed mode and paused longer than 1/2 second. When timing was not obtained for either of these reasons, the first column will contain the notation "Unreadable" for that communication.

The communicators listed in column two are identified as follows:

P - Pilot

CC - Spacecraft communicator at the range station.

SY - Systems monitor at the range station.

F - Flight director at Mercury Control Center.

R1 - Primary recovery Helicopter pilot.

R2 - Backup recovery Helicopter pilot.

Stony - Launch complex 14 blockhouse communicator.

At various times throughout the flight, the pilot or network station communicator would indicate a precise time, event, or action by the use of a significant work, such as "MARK", or "NOW". The transcript editors also selected a few significant words or events for timing. The timing of these words or events was accomplished by the same process as was used to determine the c.e.t. times for column one, and is indicated by the time enclosed in parentheses followed by the superscript T.

Within the text, a series of dots is used to designate communications, or portions of communications which could not be deciphered. A single dash indicates a pause during a communication. Information contained within unmarked parentheses indicates editorial insertions for clarity as an aid to the non-systems-oriented reader.

3.2 TRANSCRIPT

CAPE CANAVERAL

	Stony	10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0.
00 00 01	CC	Lift off.
00 00 02	P	Roger. I have a lift-off and the clock is operating.
00 00 05	CC	Roger, clock.
00 00 07	P	Sigma Seven, Faith Seven on the way.
00 00 14	P	Standing by to start the backup clock.
00 00 16	CC	Roger.
00 00 18	CC	3, 2, 1, MARK. (00 00 20)^{T}
00 00 23	P	Roger. And the backup clock is running.
00 00 25	CC	Roger. You look good here, Gordo.
00 00 27	P	Roger. Feels good buddy.
00 00 29	CC	Good Sport.
00 00 31	P	Thirty seconds, and fuel is go. Oxygen is go. Cabin pressure on the top peg. Altimeter is working.
00 00 38	CC	Roger. You're looking beautiful.
00 00 48	P	What an afterburner.
00 00 51	CC	That's a beauty. And your clock's are in sync.
00 01 01	P	One minute, and fuel is go. Oxygen is go. Cabin pressure 10 psi on schedule. All systems go.
00 01 09	CC	Roger. We have a good go here, and pitch 50 (degrees).
00 01 29	CC	Still looks go.

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00 01 30	P	Roger. 1 minute 30 seconds. Fuel is go. Oxygen is go. Cabin pressure is 6 psi.
00 01 37	CC	Roger. Pitch 32 (degrees), looks good.
00 01 41	P	Roger. The sun is coming in the window now.
00 01 46	CC	Roger. Standing by for your BECO.
00 01 50	P	Roger.
00 01 58	P	Running pretty smooth now.
00 01 59	CC	Good show.
00 02 02	P	Two minutes. Standing by on BECO.
00 02 03	CC	Roger. Time out good.
00 02 14	P	Roger. Have BECO.
00 02 15	CC	Roger. Your BECO. - Confirm staging.
		*(Undetermined transmission omitted.)
00 02 22	P	And you can feel the staging - waiting on tower.
00 02 27	CC	Very good on BECO time. SECO should be nominal.
00 02 29	P	Roger.
00 02 38	P	And there goes the tower. Does she take off!
00 02 41	CC	Roger. Confirm your tower.
00 02 43	P	Roger. Retrojettison switch to off.
00 02 45	CC	Retrojettison switch off.
00 02 55	P	*Okay. Fuel is go. Oxygen is go. Cabin pressure sealed at 5.6 (psi) and holding.
00 03 03	CC	Roger. Sealed on 5.6 (psi) and holding. Very good. Pitch -4 (degrees).
00 03 10	P	Roger. I agree on pitch.
00 03 12	CC	You look real pretty here.
00 03 14	P	She felt real pretty.
		*(Non-flight-related transmission omitted.)

00 03 24	P	All electrical is go. Pressure is go. Oxygen is go. Sigma, Faith Seven is all go.
00 03 34	CC	We have a full go here for you, Gordo.
00 03 36	P	Roger.
00 03 38	CC	This is Sigma Seven down here, buddy.
00 03 40	P	That's what I said. Sigma, Faith Seven is go.
00 03 44	CC	Roger, Faith Seven.
00 04 00	P	Four minutes, and fuel is still go. Oxygen go. Pressure holding. All systems look good.
00 04 08	CC	Roger. Your pitch indication is -4 (degrees), we concur.
00 04 11	P	Roger.
00 04 13	CC	Trajectory looks real good, Gordo. I'll give you a mark on 0.8 (V/Vr).
00 04 17	P	Roger.
00 04 32	P	Four plus 30 (seconds). All systems still go.
00 04 35	CC	Roger. We're still go here. Coming up on 0.8 (V/Vr). Standby.
00 04 38	P	Roger.
00 04 40	CC	We have 0.8 V/Vr.
00 04 42	P	Good deal.
00 04 48	CC	You have a real sweet trajectory, Gordo.
00 04 50	P	Excellent.
00 04 58	CC	Go.
00 04 59	P	Roger.
00 05 04	P	Roger. I have SECO, Sep Cap. - Going to Aux Damp.

CNV-1

00 05 09	CC	Right in there, baby.
00 05 12	P	Have Sep Cap Green. SECO. I'm on Aux Damp. - Going fly-by-wire.
00 05 24	P	Everything is green here.
00 05 30	CC	Seven, we're right smack dab in the middle of the plot.
00 05 34	P	Say again.
00 05 35	CC	Smack dab in the middle of the go plot. Beautiful.
00 05 45	CC	Seven. Your turnaround looks beautiful.
00 05 47	P	Roger. She's yawing around very nicely. What a view. Boy, oh boy!
00 05 59	P	And there's the booster.
00 06 03	CC	Real pretty.
00 06 04	P	Boy, oh boy, is it ever close, too.
00 06 08	CC	Fun, isn't it?
00 06 10	P	Yeah.
00 06 18	P	Fly-by-wire is working just like advertised.
00 06 21	CC	*We have good indications on systems here. You did a real good job of it.
00 06 44	P	Booster is still smoking. It looks silver, Wally.
00 06 48	CC	Good.
00 07 06	CC	Hello. Cape Cap Com.
00 07 17	CC	Faith Seven, Cape Cap Com. Seven, Cape Cap Com.
00 07 19	P	I'm in retroattitude or in orbit attitude.
00 07 23	CC	Faith Seven, Cape Cap Com. How do you read?
00 07 25	P	Roger, Cape Cap Com. Faith Seven reading you loud and clear.

00 07 29	CC	Roger. You're on Bermuda relay, and you're coming in real sweet and everything looks perfect here.
00 07 33	P	Roger. Looks mighty good here. Booster is really in sight.
00 07 37	CC	Very good. What color is she?
00 07 39	P	*Silver. Silvery as can be with a white frosty band right around the middle.
00 07 45	CC	Roger. Understand.
00 07 53	CC	Faith Seven, this is Cape. Your 1-Alpha (contingency recovery area retrosequence) time is nominal.
00 07 57	P	Roger. Thank you.
00 08 05	P	Yaw shows up very well.
00 08 07	CC	Roger. Are you ready to copy (recovery area) 2-1 (retrosequence) time?
00 08 10	P	Negative. Standby and let me get on auto here.
00 08 35	P	Going to auto control.
00 08 37	CC	Roger. How is she hitting in auto?
00 08 39	P	Roger. No quiver at all on the rates. I'm in auto. She seems to be holding so far.
00 08 45	CC	Very good. Let me know when you're ready for 2-1.
00 08 48	P	Roger.
00 08 51	CC	Pretty nice equipment, isn't it?
00 08 54	P	Very nice.
00 09 00	CC	Faith Seven, Cape. We had a cabin (heat exchanger) dome (temperature) of 65 (degrees) at Bermuda.
00 09 08	P	Roger. I have a cabin dome of 65 (degrees) and a suit dome of about 64 (degrees).

CNV-CYI-1

00 09 13	CC	Roger.
00 09 15	P	I'm increasing flow very slightly.
00 09 17	CC	Roger. You're increasing flow slightly.
00 09 23	CC	I'll give you your 2-1 (recovery area retrosequence) time, and you can write it later. It's 01 + 27 + 52. Over.
00 09 31	P	Roger. 01 27 52.
00 09 34	CC	Roger. And (contingency recovery area) 1-Alpha (retrosequence time) is nominal. Have a good ride, boy.
00 09 38	P	Thank you, buddy.
00 10 26	P	Roger. My T_S + 314.5 lights have gone out. Squib switch to off.
		(A dome temperature warning tone occurs at 00 11 00)T
00 12 43	P	And the booster is still following me along at 12 minutes 45 seconds. It's coming down into the bottom of the window. ASCS is working nicely. It is diverging (drifting) off, to the 11 degrees - .
00 13 06	P	*Seems to be correcting properly. I have both suit and cabin dome temps on bottom peg. I'm going back to my initial setting.

*(Non-flight-related transmission omitted.)

CANARY ISLANDS

00 14 53	CC	Faith Seven. Faith Seven, this is Canary Cap Com. We have T/M solid. We would like a temperature readout, our segment is very low. That's dome temperature, Faith Seven, suit dome.
00 15 07	P	Roger, Canary Cap Com. Faith Seven reading you loud and clear. What temperatures would you like? Over.

00 15 14	CC	I would like a readout of suit (heat exchanger) dome temperature. Over.
00 15 19	P	Roger. My suit dome temp warning light is on. I have gone back to my initial suit setting. My cabin dome was on, and I have gone back to my initial setting on it. Cabin dome temperature is nominal. About 52 degrees. Suit dome is still setting down rather low. I think it is coming back up though. Over.
00 15 45	CC	*Roger. Understand. I have a message from the Cape. (Contingency recovery) Area 1-Bravo (retrosequence time) is nominal. Your apogee is 144.6 (nautical miles). You will have no problems with nighttime. Also the Cape would like a blood pressure at this time. They missed it at Bermuda. Over.
00 16 08	P	Roger. Sending you blood pressure now.
00 18 31	P	Canary Cap Com.
00 18 35	CC	This is Canary Cap Com. Have you started your T_S + 5 second check? Over.
00 18 39	P	I'm getting ready to start it right now.
00 18 43	CC	Roger.
00 19 47	CC	This is Canary Cap Com. Would you confirm your 16 millimeter camera is off? Over.
00 19 56	P	Roger. 16 millimeter camera is off.
00 19 58	CC	Roger.
00 21 12	CC	This is Canary Cap Com. Could you give us another readout on suit dome temp. We have lost T/M on that segment. Over.
00 21 20	P	Roger. Suit dome temp is slowly coming up here. It's still reading about 40 (degrees), but it's easing back up now.
00 21 31	CC	Roger.
00 21 35	CC	We are having T/M LOS. Could you give us a reading on cabin dome. It's going back down at LOS here.

CYI-KNO-1

00 21 44	P	Roger. At 50 (degrees), cabin dome.
00 21 53	CC	Faith Seven, this is Canary Cap Com. Do you read? Over.
00 21 58	P	Roger, Canary, Faith Seven. Still reading you.
00 22 11	CC	Faith Seven, this is Canary Cap Com. Do you read? Over.

KANO

00 22 16	CC	Faith Seven, this is Kano Cap Com. We have T/M solid. We request the suit dome temperature reading. We have no reading on the ground. Over.
00 22 28	P	Roger, Kano Cap Com. I have about 42 degrees. The suit dome temp is easing back up now. Over.
00 22 36	CC	Roger. You are 42 degrees.
00 22 39	P	That is affirm.
00 22 44	CC	Kano, Roger.
00 22 49	CC	Faith Seven, this is Kano Cap Com. We have an indication that your TV is still on. Will you confirm? Over.
00 22 58	P	TV is off now.
00 23 01	CC	Kano, Roger.
00 23 09	P	Thank you.
00 23 13	CC	We request a cabin dome temperature reading. Over.
00 23 21	P	Roger. Cabin dome temp is bouncing around a little. It now reads 42 (degrees). I've decreased my setting here slightly on it.
00 23 35	CC	Kano, Roger. We're reading 40 (degrees) on the ground.

00 26 46	CC	Faith Seven. Give us another cabin dome temperature, please.
00 26 50	P	Roger. Cabin dome temperature is 54 degrees.
00 26 57	CC	Please give us suit dome.
00 26 58	P	Roger. Suit dome is 40 (degrees). I have decreased my setting a little more to ease it on up. Over.
00 27 07	CC	*Thank you. What is your present setting?
00 27 10	P	Roger. I am down below my nominal setting now.
00 27 13	CC	Roger.
00 27 43	CC	Faith Seven. We had a roll scanner ignore. Are you orienting the capsule at all. Over.
00 27 49	P	Negative.
00 27 51	CC	Roger.

ZANZIBAR

00 30 47	CC	Faith Seven, Faith Seven, this is Zanzibar Cap Com. How do you read?
00 30 54	P	Roger, Zanzibar. Reading you loud and clear. Faith Seven here.
00 30 57	CC	Faith Seven. Our telemetry on the ground looks like you have a very good capsule at this time. We would like to confirm the suit dome temperature, however.
00 31 07	P	Roger. The suit dome temperature is still down low. I'm easing up on it.
00 31 12	CC	We're reading approximately 40 degrees on the ground.
00 31 15	P	Roger. I'm indicating about 42 (degrees) here and I have decreased my setting. It should be coming up momentarily.

ZZB-1

00 31 27	CC	Could you give me auto fuel, manual fuel, and oxygen reaadings?
00 31 32	P	Roger. Auto is still 101 (percent). Manual is 102 (percent). Oxygen is 196 (percent) on primary and 100 (percent) on secondary.
00 31 44	CC	Roger.
00 32 20	CC	Faith Seven, Zanzibar Cap Com.
00 32 24	P	Go ahead, Zanzibar.
00 32 25	CC	*We just had a report from the Cape. Based on Smithsonian 2, you have approximately 20 over 25 orbits. This gives you approximately 3 times as much on more conservative estimates.
00 32 45	P	Roger. I understand I have at least 25 then. Is that affirm?
00 32 51	CC	Faith Seven. Zanzibar Cap Com.
00 32 55	P	Go ahead, Zanzibar. Faith Seven.
00 32 58	CC	Have you confirmed your $T_s + 5$ check, and that the TV is off?
00 33 03	P	That is affirm. TV is off. I have confirmed my $T_s + 5$ second check.
00 33 10	CC	Roger.
00 33 26	CC	Faith Seven, Zanzibar Cap Com.
00 33 28	P	Go ahead Zanzibar, Faith Seven.
00 33 31	CC	We've had a slight rise on both cabin and suit dome temperature.
00 33 39	P	Roger. I have a cabin (heat exchanger) dome (temperature) up to 60 (degrees). Suit (heat exchanger) dome is still about 42 (degrees). Over.
00 33 45	CC	Cabin dome 60 (degrees). Suit dome temp 42 (degrees).

00 33 48	P	That's affirm.
00 33 51	CC	Roger. You received (contigency recovery area) that 1-B (retrosequence time) was nominal. Is that correct?
00 33 52	P	Roger. Understand it is nominal.
00 33 56	CC	Okay, do you have anything else for this time for us?
00 34 02	P	Negative. Not this trip, I don't believe.
00 34 05	CC	Please repeat.
00 34 07	P	Negative. Not this time.
00 34 09	CC	Roger. We'll leave you alone then.
00 34 11	P	Roger. Thank you.
00 36 46	CC	Zanzibar Cap Com. Do you read?
00 36 48	P	Roger.
00 36 50	CC	Negative. We had a small problem on T/M on the ground. What is your ASCS bus reading?
00 36 59	P	ASCS bus reading 121 (volts).
00 37 02	CC	We confirm. We had a small T/M problem.
00 37 05	P	Roger.
00 37 06	CC	Zanzibar, out.
00 37 30	CC	Faith Seven, Zanzibar Cap Com. How about giving me a suit and dome right now. It'll be LOS time.
00 37 36	P	Roger. Suit dome is about 45 degrees. Cabin dome is about 61 degrees.
00 37 43	CC	Roger. Thank you very much. See you next time.
00 37 46	P	Roger. Will do.
00 38 35	P	Okay. I finally have my dome temps - fairly good

ZZB-1

	P (cont'd)	handle on them. I have about 62 (degrees) on the cabin dome. I have approximately 45 (degrees) on the suit dome. These temperatures have taken a setting of 2.0 (comfort control valve setting) on the suit and about 3.8 (comfort control valve setting) on the cabin. I have checked my control systems out. Manual proportional is operational. It is very sloppy compared to fly-by-wire low. - The sun is very hot coming in the window. I have the sun directly in the window. I have from fairly midway through the launch. Lost it at the top of the trajectory. And then picked it up again when I yawed back around to orbit attitude.
00 39 50	P	My cabin pressure has slowly dropped to the advertised value of 5.2 (psia) and appears to be holding. My suit dome has dropped down again now to about 42 (degrees) and seems to be oscillating about this point area. Body temperature is good, not quite as cool as I would prefer, but good. My suit inlet temperature indicates 60 degrees however, so the sun is probably the biggest factor heating me up. I have drunk some water.
00 40 56	P	Time for my short status report. My N_2 low pressures, auto is 475 (psi), manual is about 480 (psi). B-nut temperatures. Retro temp 60 degrees. Pitch down 85 (degrees), pitch up 84 (degrees). Yaw left 78 (degrees), yaw right 89 (degrees). Roll counterclockwise 90 (degrees), roll clockwise 90 (degrees).
00 41 57	P	Peroxide reserve tank temperature 68 (degrees). Peroxide manual tank temp 69 (degrees). Peroxide auto fuel tank temp - is 72 (degrees).
00 42 30	P	Isolated bus voltage is 28 (volts).
00 43 22	P	*First night side and I have a bright blue band. A thick diffused band of blue color. A bright blue band. The sun is spread out very widely. It's setting now. And there it goes. A very bright blue band all the way around the earth.

00 44 03	P	Captured another washer. That's my second one.
00 45 16	P	*I believe I have the dome temps somewhat under control now. - My face plate is open. - Cabin air is indicating 100 degrees. - Suit inlet temp is 60 degrees. - Dome temperature has stabilized pretty well. - There is a very pronounced band - a bright blue band around the earth. ASCS is holding attitude very well on this night side.
		*(Non-flight-related transmission omitted.)
00 47 14	P	Taking my pilot light out, NOW (00 47 15)T - very good.
00 47 43	P	Turning my warning lights to off - to dim.
00 47 58	P	And I have the haze layer, that Wally was talking about. I can see the stars down in it. But it is - up and around the earth - to a number of degrees. It is several degrees thick, perhaps 12 to 15 degrees thick. I can see the stars above it, I can see the stars down in it.
00 48 35	P	*I have seen several lightning flashes on the earth, now. I see them on the earth, now.
00 49 19	P	*Water squeezers are working.
00 49 53	P	Closing my face plate.
00 50 05	P	And there is Orion, Betelguese. What a beautiful night tonight.

MUCHEA

00 51 02	CC	Faith Seven, Faith Seven, Muchea Cap Com. Over.
00 51 06	P	Roger, Muchea Cap Com, Faith Seven.
00 51 10	CC	Roger. Reading you loud and clear.
00 51 11	P	Roger. Likewise here. How are things down there?
00 51 12	CC	Very fine, very fine.

MUC-1

00 51 16	P	Roger.
00 51 21	P	You appear to be having a little lightning and thunderstorms down there.
00 51 26	CC	Looks clear from here.
00 51 29	P	Roger. Back out to the west of you there are some.
00 51 33	CC	Aeromed is standing by for your blood pressure.
00 51 41	P	Roger. Blood pressure coming now.
00 52 01	CC	Faith Seven. How does your cabin dome and suit dome temp look now.
00 52 17	P	Roger. I was waiting until the blood pressure got finished there.
00 52 25	CC	How does your suit and cabin (heat exchanger) dome (temperature) look now?
00 52 26	P	*Roger. My cabin dome and suit dome have been fluctuating somewhat.
00 52 36	CC	Standby for emergency voice check.
00 52 38	P	Roger.
00 52 45	CC	This is Muchea Cap Com, transmitting on emergency voice for a short count. 1, 2, 3, 4, 5, 5, 4, 3, 2, 1. Do you copy?
00 52 58	P	Roger, Muchea Cap Com. Reading you loud and clear on emergency voice.
00 53 02	CC	Roger.
00 53 07	P	Roger. On these dome temps, I have decreased my setting again. And my cabin dome is running about 48 degrees. My suit dome is back on the bottom, 40 degrees now. I've decreased it, it should be coming back up momentarily.
00 53 25	CC	Roger. Standby for an astro alarm check.

00 53 31	P	Roger.
00 53 34	CC	Command is on the way. (Command tone occurs at 00 53 35)^{T}
00 53 36	P	Roger. I have retro reset light and the tone.
00 53 40	CC	Roger.
00 53 56	CC	Faith Seven, would you give me a reading on your cabin temperature please.
00 54 00	P	Roger. Cabin temperature is running 100 degrees.
00 54 04	CC	Roger.
00 54 12	CC	Faith Seven. Perth has their lights on tonight, you might look for them and see if they're visible.
00 54 19	P	Roger.
00 54 21	CC	They should be just slightly off to the right of your flight path.
00 54 27	P	Roger. I'll watch for them.
00 54 28	CC	Roger.
00 55 03	P	Roger. I have the lights of Perth in sight. Loud and clear.
00 55 08	CC	Roger, Faith Seven. People here will be glad to hear that.
00 55 11	P	Roger. Looks good.
00 55 23	P	Looks like the refinery down to the south is burning again too.
00 55 27	CC	*That's affirmative.
00 55 29	P	Roger. I can see that separately.
00 55 32	CC	Cape Flight would like to know how your ASCS is working now after selecting gyro slave.
00 55 37	P	Roger. ASCS appears to be operating as advertised. Over.

00 55 42	CC	Roger.
00 55 52	CC	This is Muchea Cap Com. We have about 1 minute to LOS.
00 55 56	P	Roger.
00 56 47	CC	Faith Seven, Muchea Cap Com. Could you give us your (comfort) control valve setting?
00 56 57	P	Roger. I'll give you my heat exchanger dome temps here.
00 57 00	CC	Roger.
00 57 03	P	Roger. I'm reading 52 degrees on cabin dome, and I'm reading 40 degrees on suit. I have decreased suit again, slightly. And it should be coming up again.
00 57 15	CC	Roger.
00 58 45	P	*This haze layer. I'm describing as light in color. It's a white haze, does not appear to have any color at all to it.
01 04 08	P	I now have the suit coolant valve set to 1.5, cabin valve set to launch mark, about 3.6, and cabin (dome temperature) reads 50 degrees and suit (dome temperature) is coming up slowly, now reads about 45 degrees. Suit inlet temp is about 58 degrees.
01 05 18	P	There is considerable cloud cover over the earth now. This haze layer is still up above that. I can see a dark hazy sky above the earth, and then this haze layer appears to be sitting - several degrees, it's hard to estimate the number of degrees above the earth. The stars are in the background. The stars are above this haze layer, and they're quite clear, of course, above it.
01 06 07	P	Long status report. B-nut temperature. Pitch down is 90 (degrees), pitch up is 85 (degrees). Yaw left is 82 (degrees), yaw right is 95 (degrees). Roll counterclockwise is 92 (degrees),

	P (cont'd)	roll clockwise is 92 (degrees). Cabin outlet 40 degrees. 250 inverter 110 degrees, 150 inverter 112 degrees. - Standby inverter 90 (degrees). - Cabin temperature 102 degrees. Suit temp 58 degrees. Heat exchanger dome temps, cabin is now 50 (degrees). Suit is now 46 (degrees).
01 08 04	P	I'm reading 18 amps on current. Main bus reads 24 (volts), isolated (bus) 28 (volts), number one battery 24 (volts), number two battery 24 (volts), number three battery 24 (volts), standby (battery) one 25 (volts), standby (battery) two 25 (volts), isolated (battery) 28 (volts).
01 08 36	P	I'm now opening my face plate, - to take an oral temp.

CANTON

01 10 02	CC	Faith Seven, this is Canton Cap Com. Over.
01 10 14	CC	Faith Seven, we have a valid body temp.
01 10 18	P	Roger, I'll talk to you then. Ha, ha! Faith Seven here, reading you loud and clear.
01 10 24	CC	Roger. Would you give me a readout on your cabin heat exchanger dome temp, please.
01 10 31	P	*Roger, standby one second. Roger. Cabin heat exchanger dome temperature is 50 degrees, suit heat exchanger dome temp is 45 degrees. The suit inlet temperature is 58 degrees and cabin outlet temperature is about 40 degrees.
01 11 03	CC	Understand 43.
01 11 05	P	40.
01 11 07	CC	40.
01 11 35	CC	Seven, Canton.
01 11 37	P	Go ahead Canton, Faith Seven.
01 11 41	CC	(Recovery) area 2-1 retrosequence time 14 32 03. Over.

CTN-1

01 11 49	P	14 32 03. Roger.
01 11 52	CC	Affirmative.
01 11 54	P	Roger.
01 12 25	CC	Seven, Canton. Your c.e.t. (capsule elapsed) time on the 2-1 retrosequence time is 01 27 50. Over.
01 12 39	P	Roger. 01 27 50. That's on 2-1. Is that affirm?
01 12 45	CC	Affirmative.
01 12 47	P	Roger.
01 13 02	CC	*Seven, Canton. All readouts are in the green.
01 13 06	P	Roger, they all look green here, thank you.
01 18 01	P	*I have transferred the urine from the internal suit bag to the number one bag at this time.
01 19 27	P	Alpha and Beta Centauri.
		*(Non-flight-related transmission omitted.)
01 20 52	P	Sweet little baby.
01 21 15	P	*At this time I now have 1 hour and 21 minutes and I am observing John's fireflies drifting away from me. I can observe them, appear to be departing from the spacecraft and drifting out to the rear. I then can see some of them a considerable distance out to the rear.
01 22 02	P	The sun is coming up behind me, I'm beginning to get the glow on the clouds.
01 22 22	P	*The fireflies appear to be white, very whitish, almost a green, like real fireflies.
01 23 01	P	The clouds on the earth below are changing color, are getting quite light.
01 23 54	P	*I am now on the day side, the sun is not yet quite up and I am observing stars. The earth

	P (cont'd)	is light below me, the sun is still behind me, the sky looks dark above me, and I can see stars very distinctly.
01 24 41	P	I am decreasing cabin dome (comfort control valve setting) now to about 3.4.

GUAYMAS

01 27 13	CC	Faith Seven, Guaymas Cap Com.
01 27 16	P	Roger, Guaymas Cap Com, Faith Seven here.
01 27 19	CC	Hey, Gordo, give me your heat exchanger outlet temperatures please.
01 27 24	P	Roger. I've got 50 (degrees) on the cabin and 50 (degrees) on the suit.
01 27 31	CC	Roger. Are you comfortable?
01 27 34	P	Roger. Just slightly warmer than absolutely ideal, but well within a very comfortable range. My suit inlet temperature is 58 degrees. Over.
01 27 43	CC	Very good. Everything looks good down here. We give you a go for seven more.
01 27 48	CC	We are giving you a go for seven orbits.
01 27 51	P	Roger, for 30 how many?
01 27 55	CC	As many as you want.
01 27 56	P	Ha, ha! Roger.
01 27 58	CC	And Gemini sends you their regards.
01 28 03	P	Roger. Thank you.
01 28 08	CC	Will you give me a short report?
01 28 12	P	Roger. It's great.
01 28 19	CC	That's good enough.

01 28 22	P	It's pretty hard to describe, but it really is. I've seen the haze layer that Wally talked about, and I've seen John's fireflies, saw the lights of Perth, and it's been quite a full night. Quite impressive. Everything appears very nominal on board here.
01 28 40	CC	How was the sunrise?
01 28 42	P	Quite impressive.
01 28 49	P	Everything seems very nominal on board here.
01 28 53	CC	Excellent.
01 29 11	P	How's the fishing?

CAPE CANAVERAL

01 33 50	CC	Faith Seven, Cape Cap Com.
01 33 52	P	Roger, Cape Cap Com. Faith Seven here.
01 33 55	CC	Roger. You look real good. I'm going to send you a T/M command.
01 33 59	P	Roger.
01 34 05	CC	I will wait for your TV camera.
01 34 08	P	Roger.
01 34 14	CC	Gordo, could you give me a readout on your H_2O_2 pressures, please?
01 34 20	P	Pressure?
01 34 22	CC	Pressure.
01 34 23	P	I have 475 (psi) auto and I have 490 (psi) in manual.
01 34 29	CC	Roger. You're getting kind of chinsy on this fuel up there.
01 34 32	P	Roger. FQI (fuel quantity indicator), I'm indicating 101 (percent) on auto and 102 (percent) on manual.
01 34 41	CC	You son-of-a-gun, I haven't got anything to talk about.
01 34 42	P	Ha, Ha, Ha!
01 34 46	CC	How's your H_2O separator lights working?
01 34 51	P	Fine. They're just beating their little hearts out every 10 minutes.
01 35 00	Stony	Faith Seven, this is Stony. Maybe, maybe the FQI is stuck. Why don't you try the hammer?

CNV-2

01 35 07	P	Ha, Ha! I'll save that for later. I'm thinking of using the hammer on the dome temp, however. On the dome temp light.
01 35 20	CC	We're starting to pick a picture up now. You look pretty casual.
01 35 27	P	Oh, I am.
01 35 41	CC	Do you want to do your KK experiment over us please?
01 35 45	P	Roger. Opening the KK clamp.
01 35 52	CC	Roger.
01 36 42	P	Roger. I'm getting ready to power down.
01 36 46	CC	Roger. I would like to have you open up your TV about one stop.
01 36 51	P	Roger - Is that any better? - It's already wide open.
01 37 08	CC	Roger. I still see that fly on your nose.
01 37 13	P	Ha, Ha, Ha!
01 37 17	CC	Okay, Gordo. I guess you can shut your power down.
01 37 19	P	Roger. Going to fly-by-wire low. On fly-by-wire low.
01 37 22	CC	Roger.
01 37 30	P	Going to fly-by-wire low. Going to gyros caged - and they caged just as advertised. And ASCS a-c bus off.
01 37 50	CC	Roger. Checking volts down, and amps down.
01 37 54	P	Roger.
01 38 28	P	*Apparently the heat exchanger dome temps have stabilized pretty well now.

01 38 36	CC	Roger. It takes quite a while to get a grasp on it.
01 38 38	P	Roger.
01 38 43	CC	Before LOS, don't forget your TV camera. We're still reading you very well now.
01 38 50	P	Roger.
01 39 01	CC	The other item to check is your tape recorder on program.
01 39 05	P	Roger. Tape recorder going to program.
01 39 08	CC	You are program.
01 39 10	P	Are you still receiving the TV picture?
01 39 13	CC	That's affirm.
01 39 19	P	Roger. I'll hold. Turning it off for a moment.
01 39 21	CC	Okay.
01 39 30	P	Mode select switches to off.
01 39 33	CC	Roger. Mode off.
01 39 35	P	Manual fuel is off.
01 39 38	CC	Manual off.
01 39 44	CC	Frank (Samonski) says you can stop holding your breath any time, and use some oxygen if you'd like.
01 39 49	P	Okay. - You set such a good example, I've got to equal you here.
01 40 01	CC	Yeah, you son-of-a-gun. I'm still higher and faster but I have an idea you're gonna go farther.
01 40 09	P	Al, what is my apogee height.
01 40 15	CC	It's about 146 nautical.

CNV-2

01 40 19	P	Roger.
01 40 20	CC	You can kill your TV, Gordo.
01 40 22	P	Roger. TV off.
01 40 24	CC	Roger. - And put your C-band to ground command.
01 40 31	P	Roger. C-band's on ground command. S-band's on ground command.
01 40 37	CC	Roger.
01 40 40	P	Recorder on program, I'm leaving telemetry on continous.
01 40 50	CC	All of our monitors down here are overjoyed. Everything looks beautiful.
01 40 54	P	Very good Looks mighty good up here, too.
01 41 02	CC	There's LOS on your T/M. Bermuda may have picked up, but I don't think they'll discover anything we haven't.
01 41 09	P	Roger.
01 41 43	CC	Faith Seven. This is Sigma Seven. Do you read?
01 41 46	P	Roger. Sigma Seven, Faith Seven reading you loud and clear.
01 41 49	CC	Roger. We have no messages for you. We'll let you have some quiet time. Have a good ball.
01 41 54	P	Roger. Thank you.
01 42 03	P	Might tell Bob Graham I've found a couple of those items that we were discussing. I can see the smudge layer on the window that Wally was discussing. It looks just like road grease splashed on a car. It also has spreckledy, streakedy dots on it, smudged in with it. The smudge, the added smudges run length of the window. Closing my visor now at 01 44 38.

CANARY ISLANDS

01 48 26	CC	Faith Seven, this is Canary Cap Com. We have T/M solid, all systems look green. Over
01 48 35	P	Roger, Canary Cap Com. I'm turning TV on here for you.
01 48 41	CC	Roger.
01 48 45	P	All systems are green here.
01 48 48	CC	Roger. Your (contingency recovery area) 2-Bravo (retrosequence) time is nominal.
01 48 52	P	Roger. Nominal, thank you.
01 50 19	CC	Faith Seven, this is Canary Cap Com. We're having T/M LOS. Turn off your TV. Over.
01 50 26	P	TV control to off.
01 50 28	CC	Roger.
01 50 38	P	Drifting now, I was upside down in roll attitude. Just passed over Canaries. Everything appears nominal.
01 51 09	P	I'm now receiving a Z and R Cal apparently from program.
01 52 22	P	*Coming in over the coast of Africa. It's very clear here, no clouds, no haze. I'm drifting through an ideal location here. I'll try and snap off the 16 millimeter. Just took a 16 millimeter, blurb coming over the Atlas Mountains in Africa. Coming over the coast. It's very dry, very clear over Africa. I'm drifting window down, ideal attitude. I'm now increasing my suit flow by just a hair. I'm opening my visor now. Cabin still appears drier than the suit. Apparently suit is running a little moist, although it doesn't feel it at all.

	P (cont'd)	Had six or seven large sips of water from the drinking water container. I have put a little liquid into this little experimental ball and find that the liquid adheres to the surface just near as good as it should. Try a little bit more later. on here.

KANO

01 55 02	CC	Kano, has solid T/M.
01 55 09	P	Roger, Kano, Faith Seven. Everything's nominal here.
01 55 14	CC	Faith Seven, this is Kano Cap Com. Everything looks nominal on the ground. Have a good trip.
01 55 19	P	Roger. Thank you very much.
02 00 36	P	*At two hours recording light is on, so I'll slip something on the tape. All systems appear nominal. My . . . cabin dome temp is 48 degrees, suit dome temp is about 56 degrees. Oxygen is still on the top peg on both systems. So is the fuel. Cabin temp 98 (degrees) . ... 2 hours and 3 minutes, . . . 2 hours and 4 minutes. MARK (Unreadable)T. Rate indicators are on, I am drifting at this point, I have left roll rate of about half a degree/sec. I have a pitch down rate of about one quarter of a degree/sec and a right yaw rate of about one half of a degree, and relatively constant. They're all considerably different than nominal. I don't feel that it's worth going into all the settings. I think the cabin dome temp is the important thing.

ZANZIBAR

02 05 20	CC	Faith Seven, Zanzibar Cap Com.

02 05 23	P	Roger, Zanzibar. Faith Seven reading you loud and clear.
02 05 26	CC	Reading you loud and clear, also. I have your(contingency recovery area) 2-B (retrosequence) time. It is nominal. Do you need it?
02 05 34	P	Negative, I have it. Understand nominal.
02 05 37	CC	That is affirmative. Would you give me a readout of your cabin heat exchanger dome temperature?
02 05 45	P	Roger. It is sitting on 40 (degrees). It has just gone down here, it's bobbing around, and I am decreasing my flow to it.
02 05 54	CC	Roger.
02 06 02	CC	Can you give me fuel and oxygen readouts, please?
02 06 06	P	Roger. I am still indicating 101 percent on auto, 102 percent on manual. I'm reading 196 percent on primary oxygen, and 100 percent on secondary. Over.
02 06 22	CC	Roger.
02 06 28	CC	How do you feel about this heat situation?
02 06 34	P	What, the heat exchanger?
02 06 35	CC	No, how is your comfort?
02 06 38	P	Roger. My comfort is good.
02 06 43	CC	Your comfort is good.
02 06 44	P	That's affirmative.
02 06 54	P	My cabin heat exchanger (dome temperature) is easing back up now to about 42 (degrees). Slowly coming back up.
02 07 00	CC	Roger.

ZZB-2

02 07 02	P	I have about 42 (degrees) and it's coming back up slowly now.
02 07 05	CC	Roger.
02 07 07	P	. . . dome temp.
02 07 08	CC	T/M confirms all your systems go. Your clock is in sync.
02 07 14	P	Roger.
02 07 23	CC	T/M indicates you are getting a rise in your cabin (heat exchanger) dome temperature, also.
02 07 29	P	Roger.
02 09 12	CC	Faith Seven, Zanzibar Cap Com.
02 09 14	P	Roger, Zanzibar. Go ahead.
02 09 16	CC	We've had another increase in cabin heat exchanger dome temperature. It's now 48 degrees on the ground.
02 09 23	P	Roger. I agree.
02 09 25	CC	Roger.
02 09 32	CC	What is your dome setting -- the handle setting at the present time?
02 09 42	P	Nominal. I don't feel that it's worth going into all the settings. I think the dome, the cabin (heat exchanger) dome temps are the important things.
02 09 49	CC	Roger. You're getting weak and fading. I'll sign off and see you later.
02 09 53	P	Roger.
02 14 12	P	The time is 02 14 15. People wonder if it's hard to sleep up here, I just drifted off for about 3 or 4 minutes on a quick little nap. Sleep here just like you do anywhere else. Status report. Nitrogen low pressure,

P (cont'd) auto source 49, manual 49. 24f (fuel quantity indicator) 101 (percent) on auto, 102 (percent) on manual. (illegible) 95 (degrees), pl[illegible] 82, yaw right 95 (degrees), roll counterclockwise 95 (degrees), [illegible] clockwise 95 (degrees). Reserve tank 75 (degrees), manual tank 70 (degrees), auto tank 78 (degrees). (Isolated) bus voltage 28-1/2.

02 21 41 P I am now drifting on the night side. I have the moon in sight, I'm upside down, I'm observing lightning flashes from considerable size thunder storms that are below me. These create static in the radio every time the lightning flashes down there.

MUCHEA

02 24 13 CC Faith Seven, Muchea Cap Com. Over.

02 24 18 P Roger, Muchea Cap Com. Faith Seven.

02 24 21 CC Roger. Reading you loud and clear. Aeromed requests that you give him a mark when you begin your exercise and a mark when you stop your exercise. Over.

02 24 30 P Roger. Will do.

02 24 34 CC I have (recovery) area 3-1 retrosequence time. 02 58 05. Do you copy?

02 24 46 P 02 58 05. Is that affirm?

02 24 48 CC That's affirmative.

02 24 55 P Roger. I'll be reading a blood pressure in just one second.

02 24 58 CC Roger.

02 25 43 CC Faith Seven. Eyeball reports that your suit (heat exchanger) dome temp is decreasing rather rapidly. Would you check that, please?

MUC-2

02 25 51	P	*Roger. I'll just decrease the flow on both cabin and suit here.
02 25 57	CC	Roger. We confirm here.
02 26 08	P	Roger. I'm getting the exerciser now.
02 26 28	P	Starting the exercise.
02 26 55	P	Ending the exercise now.
02 26 57	CC	Roger.
02 27 01	P	Sending blood pressure now.
02 27 03	CC	Roger.
02 27 14	CC	We're reading your cabin heat (exchanger) dome temp at 44 (degrees) now.
02 27 19	P	Roger. I concur. 44 (degrees) on cabin and about 47 (degrees) on suit.
02 27 24	CC	Roger. We concur here.
02 27 44	P	How does your Med like those blood pressures?
02 27 50	CC	Standby. - They report they look very normal.
02 28 01	P	Roger.
02 28 25	CC	Could you give me a cabin air temp reading?
02 28 28	P	Roger. Cabin air temp is 98 degrees.
02 28 31	CC	Roger. 98.
02 28 33	P	Roger.
02 29 24	CC	Do you have the Perth lights in sight?
02 29 30	P	One moment, let me get my cabin lights down.
02 29 42	P	Negative, I'm upside down. I can't see them.
02 29 45	CC	Roger.
02 30 18	CC	We have approximately 1 minute to LOS.

02 30 22	P	Roger.
02 30 25	P	Tell Warren not to get lost out in the Outback.
02 30 29	CC	We almost got lost last Sunday.
02 30 31	P	Ha, Ha!
02 30 33	?	Astro, most of the boys have joined tennis clubs here.
02 30 36	P	Roger. This is more fun than tennis.
02 34 35	P	Long status report. ..... temperature. - Let's see, first, retro 60 (degrees). Pitch down 95 (degrees), pitch up 82 (degrees). Yaw left 80 (degrees), yaw right 95 (degrees). Roll counterclockwise 92 (degrees), roll clockwise 92 (degrees). 250 inverter 102 (degrees), 150 inverter 118 (degrees), standby inverter 98 (degrees). Cabin temperature 98 (degrees). Suit inlet temperature 60 (degrees). Heat exchanger dome temperatures, cabin 50 (degrees), suit 48 (degrees). Just then decreased flow and is coming back up. Main d-c bus 24 volts, isolated (bus) 28 (volts), current 8 amps. It is 02 36 40, Milky Way is quite distinct. - Now looking at the False Cross. Upside down drifting flight at the moment.
02 39 38	P	*And I have the constellation of Sagittarius in sight. Nunki right there. There's the moon directly in the top of my window.

CANTON

02 43 39	CC	Faith Seven, Canton Cap Com. All systems look green on the ground. We're standing by..
02 43 45	P	Roger, Canton. All systems look green here, thank you.
02 47 39	CC	Faith Seven, Canton.

CIN-HAW-2

02 47 41	P	. . . Canton, Faith Seven.
02 47 47	CC	Seven, (contingency recovery area) 3-Alpha (retrosequence time) is nominal.
02 47 50	P	Roger, (contingency recovery area) 3-Alpha (retrosequence time is) nominal, thank you.
02 48 33	P	The time is 02 48 35 NOW (02 48 36)T. Regulated pressure source on fuel, 475 (psi) auto, 490 (psi) on manual. Fuel, FQ: 101 percent on auto, 102 percent on manual. Cabin dome temp 50 (degrees), suit dome temp 50 (degrees), cabin temp 95 (degrees), suit inlet temp 60 (degrees), cabin pressure holding at 5 psi. - Main bus 24-1/2 (volts). I'm using 8 amps current.
02 49 53	P	Sunrise - and the sun is in behind me, moving to the rear of me. With Saturn along by it. - And I'm getting John's fireflies again, coming off the spacecraft. And you could almost align yaw by the fireflies. They drift away to the rear of the spacecraft along to the rearward of the flight path.
02 50 32	P	Sunrise is coming in.
02 51 38	P	There's a coating of frost on the next to outside layer of window, - which I believe seems to be burning off as the sun hits the window.

HAWAII

02 51 44	CC	Faith Seven, Faith Seven, Hawaii Cap Com. How do you read?
02 51 48	P	Roger, Hawaii Cap Com. Reading you loud and clear.
02 51 52	CC	Roger. Everything looks good on the ground. Your suit (heat exchanger) dome (temperature) is 54 degrees. Aloha from Hawaii.

02 52 00	P	Roger. Aloha to you, too. Everything appears to be normal here.
02 52 04	CC	Roger. We're standing by.
02 52 07	P	Roger. Thank you.
02 53 37	P	And after having entered the day side, I've drifted around where I'm looking towards the black sky. I have seen a star again, and I've been observing the fireflies drifting away.
02 58 01	P	I'm in bright daylight now, at 2 hours 58 minutes - I'm upside down, I still have, oh, about 1/2 degree per second roll rate, - very, very, very light, almost 1/2 degree yaw, and pitch is oscillating between 1/4 and 1/2 (degrees), close to the rate of roll.

CALIFORNIA

02 59 55	CC	Faith Seven, Faith Seven, this is California Cap Com.
03 00 00	P	. . .
03 00 01	CC	Faith Seven, Faith Seven. All systems here are green. You look real good here on the ground. Over.
03 00 21	P	. . .
03 00 48	CC	Faith Seven, Faith Seven. This is California, gotcha here, and you look real good all over on the board. The medics give you a clean bill of health. They would like to know if you just feel comfortable. Over.
03 01 01	P	Roger. I do feel comfortable, very comfortable. In fact, I had a little nap.
03 01 06	CC	Roger. We have a little news here from an old friend of yours, like Major Dick Shankle. Would you like to say hello?

CAL-2

03 01 14	P	Hello, Dick.
03 01 18	CC	I'll pass that on, Gordo.
03 01 20	P	Roger.
03 01 56	CC	Faith Seven, we see you have powered up your ASCS, and also, I believe you are scheduled for tape recorder continuous.
03 02 06	P	Roger.
03 02 22	P	Roger. Tape recorder is on continuous.
03 02 25	CC	Roger. Your clocks look real good here, in sync. No problems that we see.
03 02 27	P	I'm on fly-by-wire low.
03 02 30	CC	We see.
03 02 31	P	Roger.
03 02 32	CC	California standing by.
03 02 34	P	Roger. I'm aligning the spacecraft, very slowly, to go to auto. Coming in over the coastline now, it's very clear, looks like very good weather down there with clouds standing off shore.
03 02 54	CC	Ha, Ha! Roger.
03 02 55	P	I see the islands off shore.
03 03 44	CC	Attitudes look really good on the ground. You must have her aligned real good.
03 03 48	P	Roger.
03 04 00	CC	Oh, wait a minute. Your gyros are still caged, aren't they?
03 04 03	P	That's affirm.
03 04 11	SY	Cabin heat exchanger outlet temperature.

03 04 13	CC	Systems requests a cabin outlet heat exchanger temperature.
03 04 19	P	Roger, cabin heat exchanger outlet is about 48 degrees. I've decreased the flow very slightly a few minutes ago and it should be easing on up.
03 04 25	CC	Roger. 48 (degrees) and you've decreased the setting.
03 05 54	P	Okay. I'm just about in attitude here, getting ready to uncage the gyros.
03 07 19	P	I am on auto orbit.

CAPE CANAVERAL

03 07 32	CC	Faith Seven, Cape Cap Com.
03 07 35	P	Roger, Cape Cap Com, Faith Seven.
03 07 38	CC	Roger. Read you loud and a little garbled.
03 07 42	P	Roger.
03 07 44	CC	Like to send you a T/M command, Gordo.
03 07 46	P	Roger. Go ahead.
03 07 54	CC	I have about 3 requests from you, cabin temperature?
03 07 59	P	Roger. Cabin temp is 92 degrees.
03 08 03	CC	Read 92.
03 08 05	P	Roger.
03 08 07	CC	Have you had any results on your KK clamp release?
03 08 11	P	Negative. I could not see any flow at all on it, so I clamped it off as planned.
03 08 18	CC	Roger, would you give us a readout of your cabin dome?
03 08 21	P	Roger. Cabin dome (temperature) is about 46 (degrees). I have increased the flow slightly on it. Suit is 50 (degrees).
03 08 30	CC	Roger.
03 08 33	P	I mean I have decreased the flow on cabin.
03 08 41	CC	I'd like to give you a time hack, if you will.
03 08 43	P	Roger.
03 08 45	CC	Give you an elapsed time first at 50 seconds,

	CC (Con't)	that will be 3 hours, 8 minutes, 50. 2, 1, MARK. (03 08 52)T
03 08 53	P	Roger. I'm one second fast.
03 09 02	CC	Roger, 1 second fast.
03 09 03	P	I am on auto orbit.
03 09 06	CC	Roger. Getting into attitude. Your attitude looks good here.
03 09 14	P	*Roger. I've got my gyros aligned very easily and went on auto, and the auto appears to be a little bit slow to move it into the smaller gates but it's working very nicely.
03 09 30	CC	Good.
03 09 34	P	TV camera coming on now.
03 09 39	CC	I'll give you a G.M.t. back in a few seconds.
03 09 42	P	Roger.
03 09 43	CC	16 hours and 14 minutes. 2, 1, MARK. (03 09 48)T
03 09 54	P	Roger. What was that, 14 minutes?
03 09 56	CC	That's 16 hours, 14 minutes, 00 seconds.
03 09 59	P	Roger. On my standby clock I am about 10 seconds slow on that.
03 10 11	CC	Is this your G.m.t. clock?
03 10 15	P	Roger. Both of them - no on the wrist watches - both of my wrist watches are together, however, they are a little slow. I have 14 30 NOW. (03 10 31)T
03 10 34	CC	Say again Faith Seven.
03 10 35	P	Never mind I'll catch you later.

CNV-3

03 10 38	CC	Okay.
03 11 01	CC	Faith Seven, Cap Com.
03 11 04	P	Go ahead Cap Com, Faith Seven.
03 11 05	CC	I have (Recovery area) 3-2 (retrosequence) time if you're ready to copy.
03 11 09	P	All right, just a moment.
03 11 27	P	Go.
03 11 32	CC	Faith Seven this is Cape Cap Com. We have had four R and Z Cals. Request you turn your R and Z Cal switch off.
03 11 39	P	Roger.
03 11 49	P	Go ahead on the 3-2 (recovery area retro-sequence) time.
03 11 59	P	Cape Cap Com. Faith Seven ready to copy 3-2 time.
03 12 29	CC	Faith Seven, Cape Cap Com.
03 12 33	P	Roger Cape, go ahead.
03 12 34	CC	Did you copy my 3-2, I did not read you.
03 12 37	P	Negative, I didn't copy it.
03 12 39	CC	Roger. It's 04 hours + 08 minutes + 10 seconds.
03 12 46	P	Roger. 04 08 10.
03 12 50	CC	That's correct.
03 13 15	CC	Faith Seven. Your scanners and attitudes agree very nicely. Over.
03 13 27	CC	Faith Seven, Cape Cap Com, you can turn T7 off.

03 13 32	PC	Roger. I already have it off.
03 13 43	CC	Faith Seven, Cape Cap Com.
03 13 47	P	Go ahead Cape, Faith Seven.
03 13 49	CC	Are your tower sep lights and cap sep lights out?
03 13 52	P	Affirm.
03 13 54	CC	Roger.
03 13 56	P	They went out at 314.5.
03 14 00	CC	Roger. They should have been. We just had a T/M, and we wondered why.
03 14 02	P	Roger.
03 14 03	CC	No problem on these at all.
03 25 06	P	*I am on fly-by wire, have armed the squib, pitching up very, very slowly, and will deploy the flashing light at the -20 degree point. - Flashing light is deployed. I'm marking the tape. Deploy light off. Squib is off. - Gyros are caged, free to caged - Roger - and ASCS a-c bus off. NOW. (03 26 28)^{T} Stick is now cold.
03 27 01	CC	. . . Cape Cap Com. Do you read? Over. . . . - Do you read? Over. -
Unreadable	CC	Faith Seven . . . on relay. Do you read? Over.
Unreadable	CC	Faith Seven . . . do you read?
03 28 15	P	*ASCS inverter 110 (degrees), when I powered it down. - Sitting at 90 degrees yaw right now, it is easy to determine that the angle is very large, so far as telling to a high degree of accuracy, in a short time, but I am yawing around to observe the flashing light on the night side - is very easy to

	P (con'd)	determine that, it is about 90 degrees yaw, now. I'm getting directly away from the sun now, observing the night side coming on. With the window head on, I can see the demarcation line between the sun and the light side and the dark side. Light blue above the earth, and a band of blue above the earth that fades in the dark side. Observing fireflys, taking off now. And there's a very, very distinct demarcation now.
03 37 17	P	At this point I have no way of knowing what my yaw is. Left cabin light only, with the red filter . . .
03 51 29	P	*I still have not observed the flashing light. I have Sagittarius right in the middle of the window. It is directly on my 80 degree yaw . . .

MUCHEA

03 58 33	CC	Faith Seven, Muchea Cap Com.
03 58 37	P	Go ahead, Muchea, Faith Seven.
03 58 39	CC	Roger. Will you confirm that your squib switch is off?
03 58 49	P	Affirm. Squib switch is off.
03 58 52	CC	Roger. (Contingency recovery) Area 4-A retrosequence time is nominal.
03 59 00	P	Roger. Thank you.
03 59 05	CC	Aeromeds are standing by for your blood pressure.
03 59 08	P	Roger. Sending it now.
03 59 13	CC	Roger.

03 59 16	CC	Did the beacon deploy?
03 59 20	P	Affirmative. I'm still trying to find it out here in the dark.
03 59 25	CC	You haven't seen the light. Is this true?
03 59 28	P	Negative. I still haven't found it. - Still looking, though.
03 59 37	CC	Roger.
04 00 34	P	Everything is nominal on this trip Muchea. I don't believe anything went wrong at all.
04 00 38	CC	Roger. Understand. - T/M reports you green here.
04 00 46	P	Roger.
04 00 49	CC	Aeromed the same.
04 00 52	P	Roger. Thank you.
04 01 17	CC	Faith Seven. How do you know that the beacon has deployed?
04 01 22	P	I felt it deploy.
04 01 24	CC	Roger.
04 01 27	P	I don't know which deployed the fastest, me or it.
04 01 28	CC	Ha, Ha, Ha! Roger.
04 01 51	P	I am directly on my 180 (degree) yaw, and with the moon in the upper left hand corner of the window.
04 02 00	CC	Say again Faith Seven.
04 02 02	P	. . . 180 degrees, and still haven't seen it.
04 02 05	CC	Would you say again your attitudes.

MUC-HAW-3

04 02 07	P	Roger. I'm zero roll, about -34 degree pitch, and yaw at 180 degrees. Small end forward.
04 02 17	CC	Roger, and you still haven't found the light?
04 02 20	P	Negative, still haven't found it.
04 04 08	CC	Faith Seven, Muchea Cap Com. We're approaching LOS. You found the light yet?
04 04 14	P	Negative. Not yet.
04 05 49	P	I am now yawed 180 degrees, 0 (degrees) roll, I have a very slight roll attitude into the right. The moon is in the upper left hand corner of the window - the - directly on my 180 degree path I'm not able to see the flashing light. I am observing the haze layer again that Wally described. - At this time I am still looking for the light. I'm observing lightning flashes on the ground, down on earth that is. Considerable cloud cover. - Venus and Jupiter in the left hand part of the window.
04 15 00	P	I should still be right on track, on the 180 degree yaw. Still no flashing light. - And I'm beginning to get the brilliant blue of sun rising in the East. Bright blue band, underneath all this haze layer. I can see the haze layer. And the bright band of light demarcation coming underneath it. Quite distinctive. - There's a faint greenish tint to it where there are clouds apparently.

HAWAII

Unreadable	CC	Faith Seven, Faith Seven, this is Hawaii.
04 16 39	P	Roger, Hawaii. Faith Seven reading you

	P (con'd)	loud and clear. Roger. Understand.
Unreadable	CC	Roger. Is your C-Band beacon in a continuous position?
Unreadable	P	Negative. I have it on ground command. I'll bring it to continuous, now.
Unreadable	CC	Roger. On my mark will you switch your TV control switch to T/M, and readout your fuel and O_2 quantities?
Unreadable	P	Roger. Will do.
04 17 28	P	Roger. I am just small end forward. 180 degree yaw, approaching sunrise. Over.
Unreadable	CC (CNV)	Faith, Faith Seven, this is Cape Cap Com on Hawaii transfer for check. How do you read me, over.
Unreadable	P	Roger. Reading you loud and clear, Cape Cap Com.
Unreadable	CC (CNC)	Roger, Gordo. Pretty long talk-line here.
Unreadable	P	Your're right.
Unreadable	CC	Stanby for my mark. MARK 04 23 35. Switch your TV control switch to T/M.
Unreadable	P	. . . now going over TV transmitter.
Unreadable	CC	Roger.
Unreadable	P	Roger. These small particles drift away from you, small end forward. In this light they appear brilliant white, without green at all in them. They appear to move on out, and around back toward the flight path.
Unreadable	CC	We're standing by for your readout of fuel and O_2.

HAW-CAL-3

Unreadable	P	Roger. My auto fuel I have 96 percent, on manual I have 102 percent. On oxygen I have 90 percent on primary, and 100 percent on secondary.
Unreadable	CC	Roger. We understand. We also have a message from the Cape, It's possible that you only felt the squib blow and not the beacon deploy. Is there any way that you might check this?
04 24 31	P	Not from in here, I don't think.
04 24 34	CC	Roger, you haven't seen the Beacon at this time.
04 24 37	P	Negative. I still haven't seen the Beacon.
04 24 40	CC	Check.
04 24 46	P	There was considerable noise, though, as if something were departing.
04 24 50	CC	Say again, Seven.
04 24 52	P	*There was considerable noise, which sounded like those doors blowing open so I assume the Beacon has departed.
04 24 58	CC	Roger. Understand.
04 24 06	CC	T/M looks real good on the ground.
04 25 08	P	Roger.

CALIFORNIA

04 33 15	CC	Faith Seven, this is California Cap Com. Over.
04 33 18	P	Roger, California. Faith Seven.
04 33 21	CC	Roger, Faith Seven. Systems and Medics are go here.

04 33 26	P	Roger. My date (flight plan) put my telemack to normal (switch position) . . .
04 33 35	CC	Roger. Just, just standby a second until systems finish marking the meters.
04 33 45	P	. . .
Unreadable	CC	All right, at my mark then would you switch. I'll start a countdown then. - 9, 8, 7, 6, 5, 4, 3, 2, 1, MARK.
Unreadable	P	Roger. . . .
Unreadable	CC	Okay. You confirm TV control switch to off?
Unreadable	P	Roger. TV control is off.
04 34 33	CC	We had a slight decrease in the two links on d-c current. Would you give us a readout?
04 34 41	P	Roger. D-c current, the main bus is 24 (volts), isolated (bus) 28-1/2 (volts).
04 34 50	CC	Roger.
04 35 32	CC	California standing by.
04 35 35	P	Roger.
Unreadable	P	. . . can see all up and down the California coast, here . . . very clear.
04 36 29	CC	Roger.
04 36 43	CC	I seem to have a little discrepancy between c.e.t. and g.e.t. Your're two seconds fast according to my clock.
04 36 59	P	. . . I'll give you a mark . . . 4 37.
Unreadable	CC	Roger.
Unreadable	P	2, 1, MARK (Unreadable)^{T}

04 37 04	CC	Right. The ground shows that your readout there is confirmed with ground. However, it is two seconds fast from our g.e.t.
Unreadable	P	Roger.

CAPE CANAVERAL

04 40 04	CC	Faith Seven, Cape Cap Com.
04 40 08	P	Roger, Cape Cap Com. Faith Seven.
04 40 24	P	Roger, Cape Cap Com. Faith Seven here.
04 40 27	CC	Faith Seven. Cape Cap Com. Would you turn on your TV immediately?
04 40 32	P	Roger. Will do.
04 40 38	P	Faith Seven passing just about over Houston now.
04 40 45	CC	And would you program R and Z Cal to auto.
04 40 53	P	Roger. TV coming on now. R and Z Cal programmer coming to auto.
04 41 01	CC	Understand TV on, R and Z Cal to auto.
04 41 13	CC	Seven, from Cape. Could you give us your best coolant valve settings, please.
04 41 22	P	Roger. Standby one minute.
04 41 42	P	Roger. I'm below the nominal on the suit, I'm using about the 1-3/4 on suit.
04 41 54	CC	That's 1-3/4 on suit.
04 41 55	P	Roger, and using about 3.0 on the cabin.
04 42 01	CC	Understand 3.2 on the cabin.
04 42 06	CC	Give you (recovery area) 4-1 retro time. 05 43 41.

04 42 14	P	Roger, 43 41.
04 42 16	CC	Roger.
04 42 22	CC	Have you consumed any water, up to this point?
04 42 26	P	Roger. - I'm also giving the doctors their first space sample. For the Electro-Chancellor System, that is.
04 42 43	CC	Roger. We understand. We may send up another one, we understand you're full.
04 42 49	P	Roger, who are you sending up with it?
04 42 59	CC	Seven, Cap Com. We'd like a cabin temp, cabin heat exchange outlet temp, and 3 H_2O_2 tank temps.
04 43 14	P	Roger. Cabin outlet is 42 degrees.
04 43 22	CC	Roger.
04 43 24	P	Peroxide auto tank is 80 degrees. Manual tank is 70 degrees. Reserve tank is 75 degrees. What else do you want?
04 43 40	CC	Like to know about the cabin air.
04 43 44	P	Roger. Cabin air temp is 90 degrees.
04 43 48	CC	Understand, 90 degrees.
04 43 52	CC	Gordo, this is Wally. Did you have anything to eat?
04 43 54	P	Negative, not yet. - I'm planning to shortly, here, though.
04 44 02	CC	Roger. For your information, systems' last computations on fuel at Hawaii give 88 (percent) auto, 98 (percent) manual, which is somewhat better than you're indicating on board.

CNV-4

04 44 17	P	Roger. On board I'm indicating 96 and 102.
04 44 38	P	Oh boy, what a beautiful shot of Florida.
04 44 44	CC	Roger. Looks good from here once in awhile too.
04 44 46	P	*Roger. The whole state is clear. I can see just about all of it. Its been a beautiful view coming over Florida.
04 44 55	P	. . . looks very good.
04 45 01	CC	Roger.
04 45 05	P	. . .
04 45 12	CC	Roger, Faith Seven.
04 45 34	CC	Faith Seven, this is Cape Cap Com. We are very impressed with the work you're doing.
04 45 42	P	Thank you.
04 45 47	CC	We lay a pat on the back from Walt Williams.
04 45 52	P	Thank you.
05 05 03	P	Now on 180 (degrees) yaw - I got here on manual proportional control. I'm at, last daylight, going into dark. Have been looking for the flashing Beacon. 05 05 18 NOW, (05 05 17)^{T} 28, I'm sorry, not 18. - This light in sight, it is below me. It is quite a brownish, reddish brown and considerable altitude above the ground. Every time I fire a pitch down thruster, I get a shower of these little fireflies. The light is flashing now. It is the light. It's quite bright, quite discernable . . . 1, 2, 3, 4, 5, 6, 7, rate. It appears to be about, it appears to be about 10 to 12 miles away. I'm keeping it directly in the window. About the order of a second magnitude star, NOW. (05 11 34)^{T} - Light is still in sight, directly in the center of the window. In the background I can

	P (con'd)	make out a lot of - cumulcus activitie faced of course to the easterly direction, at 180 degrees yaw.
05 13 40	P	*The Milky Way is quite distinct. I can see, it out the window. The Milky Way is quite distinctive. It's right in the center of the window. Quite noticeable. 05 16 35 NOW. (05 16 35)^{T} Light is still in sight. Moved off from it and then moved back using it for visual, to see if I could pick it up. I am able to pick it up. . . . thunderstorms all in under it at the moment. It is quite distinctive. 05 18 05 NOW. (05 18 05)^{T} Status report. Retro temperature 62 (degrees). Pitch down is 82 (degrees), pitch up is 72 (degrees). Yaw left 75 (degrees), yaw right 90 (degrees). Roll counterclockwise 92 (degrees), clockwise 90 (degrees). Main inverter temp 98 (degrees), fans inverter temp 120 (degrees), standby inverter 98 (degrees). The squeezers are working again as advertised. Okay, the cabin and suit temperature. The cabin air is 90 (degrees), suit inlet temp is 61 (degrees). Heat exchange dome temperatures, cabin 56 (degrees), suit 56 (degrees). D-c bus 24 (volts), isolated bus 28 (volts), and reading 7 amps, current.
05 34 58	P	*5 hours and 34 minutes, now it's 35 minutes MARK. (05 35 10)^{T} - Am drifting now. Do have the light in sight at the moment, apparently right on track. I see Antares on up ahead of me, which indicates that I am on the 180 degree drift point. See Corona Australis and, saw Sagittarius with Nunki apparently. - 5 hours 39 minutes 30 seconds, MARK. (05 39 31)^{T}
05 39 36	P	Have the little flashing light, still in sight, out ahead of me. About the order of a first magnitude star, now. It's not very discernable . . . due to the flashes. However, it can be picked up. It appears like it's at around 13, 13 to 14 miles.

HAWAII

05 41 38	?	(Unintelligible foreign, garbled transmission recorded here.)
05 51 15	P	. . . there.
05 51 44	CC	Hello, this is Hawaii transmitting on air to ground relay. Do you read?
05 58 35	CC	Faith Seven, Faith Seven, Hawaii Cap Com. Over.
05 58 52	P	Roger, Hawaii Cap Com. Faith Seven, here. Over.
05 58 56	CC	Roger, Faith Seven. May we have an oral temperature, at this time and also a readout of fuel and O_2 quantities.
05 59 03	P	Roger. . . .
05 59 06	CC	Roger. It looks good down here. Reading 100 (degrees).
05 59 11	P	Roger.
05 59 19	CC	Standing by for a fuel and O_2 quantity.
05 59 24	P	Roger. Auto fuel 94 percent, manual fuel 102 percent. Oxygen primary about 89 percent, secondary 100 percent.
05 59 43	CC	Roger. Are you, are you in drifting flight?
05 59 47	P	That's affirm. I'm in drifting flight.
05 59 50	CC	Roger. Retrosequence time for (contingency) recovery) area 5-A is nominal.
05 59 55	P	Roger. 5-A is nominal. Thank you.
06 00 17	CC	Seven. Cape has just advised you have enough time for 92 orbits.
06 00 27	CC	Hawaii standing by.

06 00 30	P	Roger.
06 00 50	CC	Seven, this is Hawaii. Have you seen the beacon yet?
06 00 54	P	Affirm. I was with the little rascal all night, last night.
06 00 58	CC	Roger. Very good.
06 01 01	P	I tracked it the first part of the night, and then went into drifting flight and then picked it up the last part of the night again. Over.
06 01 07	CC	Very good.

CALIFORNIA

06 05 55	CC	Faith Seven, this is California Cap Com.
06 05 59	P	Roger, California Cap Com. Faith Seven here.
06 06 02	CC	Roger. Systems and Aeromedics give you a go here, and I'd like to check position on your C-Band switch.
06 06 24	P	Roger. C-Band is on continuous. Over.
06 06 28	CC	Read you. That's continuous?
06 06 29	P	That's affirmative.
06 06 39	CC	Would you please change your S, C-Band beacon switch to ground command.
06 06 43	P	Roger. Going to ground command.
06 06 48	CC	On your schedule, for a B.P. (blood pressure) over this station.
06 06 52	P	Roger. You ready?
06 06 55	CC	We are. Roger.

06 08 31	CC	Aeromeds said they received the B.P. and would you turn it off.
06 08 35	P	Roger will do.
06 08 37	CC	Would you give me a reading on your cabin PO_2 pressure?
06 08 42	P	Roger. Partial pressure of oxygen is about 4.4 (psi).
06 08 46	CC	Roger. Thank you.
06 09 35	CC	Five Baker, Five Charlie, and five . . . (Contingency recovery area retrosequence times) are nominal.
06 09 40	P	Roger, thank you.
06 10 14	CC	. . .
06 10 19	P	Roger.
06 10 26	P	Roger. Go ahead
06 10 30	CC	- +17 + 09.
06 10 35	P	Roger. 07 17 09.
06 10 38	CC	Affirm.

CAPE CANAVERAL

06 14 40	CC	Faith Seven, Cape Cap Com. Do you read, over.
06 14 45	P	Roger, Cape Cap Com. Faith Seven, here.
06 14 53	CC	Faith Seven, Cape Cap Com. Over.
06 14 56	P	Roger, Cape Cap Com. Faith Seven, here.
06 15 01	CC	Faith Seven, Cape Cap Com. Over.
06 15 05	P	Roger, Cape Cap Com. Faith Seven reading you loud and clear.

06 15 09	CC	Faith Seven, Cape Cap Com. Over.
06 15 17	P	Roger, Cape. Faith Seven is reading you loud and clear. How me? Over.
06 15 21	CC	Roger, Gordo. Read you same. Assume you have TV on. Are you looking out the window?
06 15 25	P	Affirmative.
06 15 28	CC	Can just see horizon line, sort of interesting.
06 15 38	CC	Gordo, how did the manual control check work out?
06 15 45	P	Worked out fine.
06 15 46	CC	Very good. You're looking beautiful on fuel.
06 15 49	P	Roger.
06 15 50	CC	Environment tells us that you are using about 4 percent oxygen per hour, indicated. Over.
06 15 59	P	Roger. It looks that way here.
06 16 04	CC	Well this is a computation that will show later on. This is as much as you're using. This is 4 percent of your 200 percent.
06 16 10	P	Roger.
06 16 12	CC	We'd like to have a brief rundown on the acquisition of the beacon if you acquired. And an idea of about what distance away, you would guess that it was.
06 16 22	P	Roger. When last I saw it, in the last orbit, looked like it was about 12 to 13 miles away. I first thought that it looked like it was about 8 or 10 miles away. And at the last it was getting.

	P (con'd)	fairly dim, about the order of a 4th or 5th magnitude star.
06 16 43	CC	Roger.
06 16 46	P	When I first . . . looked like a magnitude star.
06 16 51	P	There's Florida, should . . .
06 16 54	CC	Roger. We're getting a pretty good picture on this, this time.
06 16 56	P	Roger.
06 16 58	CC	I'd say your f stop is ideal.
06 17 09	CC	Gordo, how did you initially acquire the beacon? Did it just come in your field of view?
06 17 14	P	Roger . . .
06 17 21	CC	Roger, understand.
06 17 23	P	There it was.
06 17 27	CC	That was during the night side of this last orbit. Is that correct?
06 17 37	CC	Faith Seven, Cape Cap Com.
06 17 40	P	Go ahead Cape.
06 17 41	CC	You acquired it during the night side of this past orbit. Was that correct?
06 17 44	P	It's affirmative. Just at night.
06 17 47	CC	You can see it only at night.
06 17 49	P	I acquired it just as it got dark, right.
06 17 52	CC	Very good.
06 17 53	P	It was just getting dark when I acquired it. It was shining, there was still sunlight

	P (con'd)	and I could see it shining before I could see it flash, so apparently it had some light reflected off of it.
06 18 04	CC	Roger. Understand.
06 18 30	P	Roger. Turning off (TV) camera now.
06 18 39	P	Go ahead Cape.
06 18 43	P	Go ahead Cape, Faith Seven.
06 18 52	P	Roger, Cape. Faith Seven reading you loud and clear.
06 25 40	P	At 6 hours and 22 minutes I turned off the cabin coolant and the cabin fan. Now I'm preparing to eat a little bite. The sandwiches that I am looking at here are pretty crumbly, lot of crumbs floating all over in the bag that they're in. I may not open them.
06 32 23	P	*I just had 2 pieces of Brownie and nut, small cakes and just now eating bacon. Will drink some water following this.
06 35 15	P	I have just drunk 6 or 7 large sips of water from the McDonnell drinky drink.
06 54 31	P	*And it's 6 hours, 54 minutes, 37 seconds NOW. (06 54 38)T I have the flashing light in sight again. Extremely weak, very, very weak. Actually, just barely discernable. I would estimate it to be somewhere in order of 18 to 20 miles away. The moon is out, and the water is very, very bright, below. It's quite a lovely moonlight night.
07 03 39	P	Right on the flight plan, there's our old friend Delphinus. I am drinking water at 07 08 00, very fine. Took 7 or 8 large swallows from the McDonnell tank.
Unreadable	CC	. . .

CNV-5

07 18 09	P	*I was just called by CSQ and informed that Cape desired to leave C-Band beacon off.
Unreadable	CC	. . .
Unreadable	P	Short report. Nitrogen low pressure auto. 475 (psi) manual 4 . . . B-nut. Pitch down is 80 (degrees), pitch up 70 (degrees). Yaw left is 72 (degrees), yaw right is 75 (degrees). Roll counterclockwise is 78 (degrees), roll clockwise is 75 (degrees). And auto tank temp 79 (degrees), manual tank 71 (degrees), reserve tank 75 (degrees). - Isolated bus voltage 28.

HAWAII

Unreadable	CC	Hello Faith Seven. Faith Seven, Hawaii Cap Com. Do you read?
Unreadable	P	Roger, Hawaii Cap Com. Loud and clear.
07 31 50	CC	Roger. Faith Seven, this is Hawaii Cap Com. For your information, - all your experiments should be on time, you have two tenths cloud coverage for the light experiment. Your electrical power usage has been below expected. (contingency recovery) Area 6-A (retrosequence time) is nominal. Standby to copy (recovery area) 6-1 (retrosequence) time, 08 50 17. Did you copy?
07 32 08	P	08 50 17, for 6-1.
07 32 13	CC	Roger, and 6-Bravo is also nominal. Will you turn your beacons to ground command at this time and give me a readout on your fuel and oxygen quantities, also your peroxide reducer (regulated) pressure, auto and manual. Over.
07 32 34	P	Roger. Say again on the beacon. What do you want on them?
07 32 39	CC	Roger. Will you put your beacons to ground command at this time?
07 32 43	P	Roger. Beacons are on ground command. Peroxide regulated pressure 475 (psi) on auto, 490 (psi) on manual, . . . O_2 percent on manual, oxygen is 191 percent on primary, and 100 (percent on secondary).
07 33 12	CC	Roger, give me your fuel again please, Gordo.
07 33 15	P	Fuel is auto 90 (percent), manual 102 (percent).
07 33 24	CC	Roger. We've copied all. Did you turn your T/M on for CSQ? Over.
07 33 39	P	. . .

HAW-5

07 33 42	CC	Say again, Gordo.
07 33 44	P	Negative, I did not turn my T/M on for CSQ.
07 33 48	CC	Roger. They did report getting a short burst. Will you please leave T/M off for all periods, greater than 30 minutes, no contact with ground stations.
07 33 52	P	Roger.
07 34 15	CC	Faith Seven, Hawaii Cap Com. Do you read?
07 34 17	P	Roger, Hawaii.
07 34 19	CC	Roger. I have (recovery area) 7-1 and 8-1 (retrosequence) times. Do you read?
07 34 23	P	Roger. Go.
07 34 25	CC	7-1 is 10 23 33. 8-1 time is 11 56 24. Did you copy?
07 34 37	P	Roger. 7-1 is 10 23 33, 8-1 is 11 56 and what was the second?
07 34 46	CC	24.
07 34 48	P	24, Roger.
07 34 49	CC	Roger. You're looking fine on the ground, Gordo.
07 34 53	P	Roger. Thank you. I saw the flashing beacon again last night.
07 34 58	CC	Roger. I understand you saw it throughout?
07 35 00	P	I saw the flashing beacon again last night.
07 35 04	CC	Roger. Understand.
07 40 22	P	*In auto orbit. I'm pumping the condensate tank out. And will open the KK clamp. Two strokes, both syringes full. - third full syringe full. Four syringes full. Five syringes full.

CALIFORNIA

07 40 52	CC	Faith Seven, this is California Cap Com.
07 40 55	P	Roger California. Faith Seven here.
07 40 58	CC	Roger. Faith Seven. Schedule for B.P., exercise, and a B.P.'s. (Blood pressures).
07 41 03	P	Okay, you ready?
07 41 04	CC	Roger.
07 41 06	P	Understand.
07 41 09	CC	Same exercise as Muchea is requested by the Medics.
07 41 13	P	Roger.
07 41 59	P	Here comes the exercise.
07 42 12	P	Starting exercise now.

GUAYMAS

07 42 28	CC	Faith Seven, Guaymas Cap Com.
07 42 29	P	Roger Guaymas.
07 42 32	CC	Roger Gordo. Have a little information to pass on to you.
07 42 36	P	Roger. Let me get my exerciser stored back in here.
07 42 39	CC	Roger. You through?
07 42 40	P	Blood pressure coming now, CAL.
07 42 53	P	Roger. I'm through with this.
07 42 56	CC	Roger. We would like to remind you to - pump out your condensate and turn on your water wick at about 8 hours.

07 43 04	P	Roger.
07 43 06	CC	And would you give us oral temperature over CSQ. Start taking your temperature at about, elapsed time of at about 08 45.
07 43 18	P	Roger. Over CSQ. Is that affirm?
07 43 20	CC	Roger. We want to get one over CSQ.
07 43 25	P	Roger.
07 43 26	CC	And the Cape would like to remind you to keep your T/M turned off when you're out of contact with stations. They're trying to - keep a close track of the power you've used.
07 43 35	P	Roger.
07 43 39	CC	And you can turn off your blood pressure now.
07 43 51	CC	Did you read that, Gordo?
07 43 53	P	Roger.
07 43 58	P	You said turn off the blood pressure. Right?
07 44 00	CC	Roger. And you can power up your ASCS bus anytime.
07 44 03	P	Roger. Standby.
07 44 14	P	Roger. Powered up. 120 volts.
07 44 19	CC	Roger, we can - you're okay down here.
07 44 26	P	Okay.
07 45 51	CC	Gordo, have you cut anything off? We get, just got a drop in current.
07 45 57	P	Negative.
07 45 58	CC	Roger.
07 46 03	P	I have ASCS a-c bus powered up. It draws more current when it starts, I suppose.
07 46 09	CC	Roger, I guess that's it.

PASS 6

07 59 04	P	*Scanners are not working very rapidly. Spacecraft is yawed to the left very, very, except in yaw is, all right I mean. Correction, is rolled to the left about 10 degrees and the gyros read okay. Here comes some correction in now. They're beginning to correct. And this syringe full is about full. There is a lot of air in it, this is the last one I'll take out.
08 00 47	P	I'll add it on to all the others, I believe that's 5-1/2. Took 10 large swallows of water. And I am now opening the Kenney Kleinknecht clamp.
08 16 09	P	*Peroxide reserve tank is 72 degrees. Peroxide manual tank 70 degrees, peroxide auto is 78 degrees. Cabin outlet is 66 (degrees). 250 inverter is 105 (degrees), 150 inverter is 120 (degrees), standby inverter is 95 (degrees). Oxygen, 90 and 100 (percent). Fuel, 86 and 102 (percent) . . . Here I have the light in sight, in the top portion of my window. Extinctometer reading I got was - not any good there, blocking out by the top part of the window. . . . I did observe the ground light, it's quite bright.
08 23 25	P	Very recognizable in the little town, a little horseshoe shaped town was quite distinctive, it was right beside it.
Unreadable	P	*Now in auto reentry. Gyros going to slave. I got there in fly-by-wire low, to 0, 0, 0 (degrees), selected auto reentry and have now, put the gyros to slave.
08 26 15	P	*Manual pitch plane precession was a little too great, as the gyros are torquing a little bit of negative pitch in here now, to correct for the pitch torquing . . . overage. The damn desk is unusable, it's too far down on the lap. And it will not lock down. My legs are in the way at zero g. Can not bring it down to lock down.

08 35 35	P	*There seems to be some difficulty with the number two urine collection bag. It's very difficult to pump more than the 1-1/2 syringe fulls that I got into it. And I hear a hissing back behind me, so I suspect there is too much pressure on it, and I am going to cease on this one.
08 44 29	P	Auto reentry. I see when each one of the thrusters fires, the little fireflies come out of the thrusters and drift away to the rear. Some of them impinging on the spacecraft but depart later. - The auto reentry (ASCS reentry attitude mode) portion of the auto mode is holding within plus or minus, within a 11-1/2 degree band. That is, it appears to be slightly more sloppy than ASCS, orbit. However, this may not be true, ASCS orbit is not very fine control either. But it is controlling it, fairly well.

COASTAL SENTRY QUEBEC

08 52 13	P	. . .
08 52 16	CC	Roger. We're not getting T/M very good here, do you have T/M on? Over.
08 52 21	P	Roger.
08 52 22	CC	Roger. He has T/M on.
08 52 26	CC	Do you have TV on, Gordo? Over.
08 52 28	P	Negative.
08 52 30	CC	Roger.
08 52 31	P	TV coming on now.
08 52 33	CC	Roger.
08 52 37	CC	Are you ready to copy retro times? Over.
08 52 39	P	Roger. Go.

08 52 41	CC	Roger. (Contingency recovery area) 7-A (retrosequence time) is 09 + 11 + 42 and 7-B is 09 + 40 + 19. Over.
08 52 56	P	Roger. . . .
08 53 06	CC	This is CSQ. I didn't get your read-back on that. Over.
08 53 30	CC	Faith Seven, CSQ. Cape wants a cabin air temp readout, please. Over.
08 54 00	CC	This is CSQ, Faith Seven. We're reading you very weak, barely readable. Repeat cabin air temp please. Over.
09 00 20	P	Now I am getting ready to release the balloon. I have tape on continuous, I'm on fly-by-wire low, going to 3 zeros. - Camera is in place in the mount, and really is in the way of the yaw indicators. And I am on 3 zeros, squib switch to arm, 16 millimeter camera on, going to extend, hold for 5 seconds, 1, 2, 3, 4, 5, off.
09 01 26	P	Squib off. Pitching slowly down, very, very slowly, going down - very slowly. I did not hear the balloon deploy. Perhaps you cannot hear it deploy, I don't know. - Easing down ever so slowly. - And I don't see the balloon anywhere yet. - And I'm doing a rather sloppy job of flying now, trying to look for the balloon

HAWAII

09 04 21	CC	Hello Faith, Faith Seven. Hawaii Cap Com. Do you read?
09 04 23	P	Roger. Faith Seven here.
09 04 26	CC	Roger. Gordo, reading you 3 by 3. We need a fuel, and oxygen and cabin air temperature readouts please.

09 04 34	P	Roger. Cabin air 90 (degrees). Fuel is 86 percent (auto), 102 percent (manual). Oxygen is 190 and 100 (percent).
09 04 46	CC	Roger, copied. Are you ready to begin your balloon experiment at this time? Over.
09 04 52	P	I have already tried to deploy the balloon at 9 hours. The balloon did not deploy.
09 05 01	CC	Roger. Understand you tried to deploy the balloon at 9 hours elapsed, and it did not deploy. Is that correct?
09 05 08	P	This is affirm.
09 05 11	CC	Roger. Have you had any food and water yet?
09 05 14	P	Roger. I have had food and water.
09 05 16	CC	Roger. Would you care to comment on the ground light experiment?
09 05 20	P	Roger. I saw the ground light experiment.
09 05 24	P	*Would you ask Cape if they would like me to try deploying this balloon again? Over.
09 05 30	CC	Roger. They are monitoring you, you will get an answer from them shortly. What's your control mode, your gyro switch position, and your status?
09 05 40	P	Roger. My status is go, my control mode is fly-by-wire low, gyros are on slave.
09 05 51	CC	And your gyro switch position please?
09 05 54	P	Gyro switch position is slave. Over.
09 06 01	CC	Roger.
09 06 05	CC	*Faith Seven, Hawaii Cap Com. Cape advises that you try to deploy the balloon again, and would yougive us a mark when you throw the switch. Over.

09 06 08	P	Roger.
09 06 17	P	Roger.
09 06 27	P	Roger, 16 mm camera is on.
09 06 33	CC	Roger, Gordo. Is your squib switch on?
09 06 35	P	Not yet. It will be before I try again, though.
09 06 38	CC	Roger. Just give us a countdown.
09 06 41	P	Roger. Squib is coming on NOW. (09 06 44)^{T}
09 06 45	CC	*Roger. Understand squib switch is on now.
09 06 56	P	5, 4, 3, 2, 1 (09 07 09)^{T} - No joy.
09 07 06	CC	Roger. Understand the balloon still does not deploy.
09 07 13	P	Squib switch is off.
09 07 16	CC	Roger. Understand squib switch is off. Hawaii standing by.
09 07 57	CC	Faith Seven. Hawaii Cap Com.
09 07 58	P	Go ahead, Hawaii.
09 07 59	CC	Roger. What's your status with respect to cabin temp and suit temp? Do you feel hot?
09 08 06	P	Roger. Cabin temp is 90 (degrees), suit temp is 61 (degrees).
09 08 11	CC	Okay. And you feel okay, not too hot?
09 08 12	P	Roger. Feel fine.
09 08 15	CC	Sounds fine, you look fine. Have a good flight.
09 08 17	P	Roger, thank you.
09 10 04	P	*The balloon did not deploy, felt no shock, hear nothing on it. I will go continuous this portion where the balloon normally would have

	P (cont'd)	been used, in auto reentry. I will go around in auto orbit mode. Perhaps I can snap a few pictures for the ground people.
09 11 18	P	*. . . Bingo - I shifted into auto, orbit mode. I got no thrusters on the shift. - And scanners seem to be holding it relatively close.
09 18 40	P	*What do you know? The Kenney Kleinknecht experiment is putting water in the exhaust tube. So maybe it is working here.
09 21 31	P	Short status report. . . . air outlet 68 degrees. 250 inverter 120 (degrees), 150 inverter 128 (degrees), standby inverter 102 (degrees). Reserve peroxide tank 71 (degrees), manual peroxide tank 69 (degrees), auto peroxide tank 78 (degrees). (Retropack) is 61 (degrees). Pitch down 52 (degrees), pitch up 55 (degrees). Yaw left 68 (degrees), yaw right 68 (degrees). Roll counterclockwise 85 (degrees), roll clockwise 82 (degrees). Regulated low nitrogen pressure 475 (psi) auto, 490 (psi) manual. Isolated bus 28 volts.
09 27 08	P	. . . going to pump the rest of that urine into the number 2 tank. First . . . sample. I believe it is pumping correctly. The thing about this pumping under zero g is not good, tends to stand in the pipes, and you have to actually forceably force it through.
09 40 20	P	Radiation experiment on at 09 39.
09 50 25	P	Radiation experiment coming off, NOW (09 50 29)^{T}.

ZANZIBAR

10 00 09	P	- O_2 primary is 79 percent.
10 00 18	CC	Reconfirm that please?
10 00 19	P	Roger. Just a hair short of 80 percent. Over.
10 00 24	CC	O_2 primary?

10 00 27	P	O_2 primary. That's coming in at 180 percent. Over.
10 00 33	CC	Affirmative.
10 00 35	P	It's that Frank Samonski gage. And the secondary is 100 percent.
10 00 41	CC	Affirmative.
10 00 47	CC	Faith Seven this is Zanzibar Cap Com. At this time, you are go for 17 (passes). You are go for 17.
10 01 00	P	Roger. Thank you, Zanzibar.
10 01 04	CC	MCC advises that they do not want you to jettison your balloon. They are working on an alternate method for releasing the balloon.
10 01 17	P	Roger. Understand. I will not jettison.
10 01 20	CC	Roger.
10 01 29	CC	Faith Seven. Zanzibar Cap Com.
10 01 30	P	Go ahead.
10 01 31	CC	I have new (retrosequence) times for (recovery area) 7-1. Are you ready to copy?
10 01 35	P	Roger. Go.
10 01 37	CC	Your G.m.t. or C. -, do you want G.m or C.?
10 01 42	P	C.e.t.
10 01 47	CC	C.e.t. is 10 23 37 C.e.t. Do you read?
10 02 01	P	Roger. 10 23 37. Understand.
10 02 05	CC	That takes into account the 5 seconds error in your clock.
10 02 09	P	Roger. Thank you.
10 02 16	CC	Faith Seven, Zanzibar Cap Com. Check your cabin (heat exchanger) dome temperature.

CONFIDENTIAL

10 02 23	P	Roger. Cabin dome temperature is 70 degrees.
10 02 28	CC	We confirm on the ground.
10 02 29	P	Roger.
10 02 39	CC	Can you give us a PO_2 cabin?
10 02 42	P	Roger. PO_2 cabin is about 4.4 psi.
10 02 51	CC	4.4?
10 02 54	P	Roger.
10 03 31	CC	Faith Seven, Zanzibar Cap Com.
10 03 34	P	Roger. Go.
10 03 37	CC	Everything looks good here.
10 03 39	P	Roger. Thank you very much. Everything looks good here.
10 03 42	CC	Okay, Zanzibar out.
10 03 44	P	Roger.
10 04 07	P	*Putting my visor back now. I've had to keep increasing the suit flow, from a (comfort control valve) setting of 1.5 that I have right now to a setting of about 2.7. Dome is about 58 degrees. Inlet temp is 58 degrees. - This increase in the suit water flow is probably required by the cabin going on up. The heat load in the cabin is gradually going on up, using powered up, and having a cabin fan and cabin coolant turned off.
10 18 23	P	At a (comfort control valve) setting of 3 on the heat exchanger.

COASTAL SENTRY QUEBEC

10 24 57	CC	Hello Faith Seven, CSQ Cap Com. Over.
10 25 01	P	Roger, John. Faith Seven here.
10 25 03	CC	Faith Seven, CSQ. Cape advises you could go ahead and power down here, over our site if you like. Over.
10 25 11	P	Roger. Will do. You have any kind of a re-production device down there?
10 25 16	CC	No, we're not, Gordo. We're not getting a dog-gone thing on that, don't know what's wrong with it. You are transmitting, is that affirm?
10 25 23	P	Roger.
10 25 25	CC	Nope. We're not getting any TV at the moment.
10 25 28	P	Okay. . . .
10 25 39	CC	Negative. The boys here tell me we're not getting any carrier on it at the moment.
10 25 47	P	Roger.
10 25 59	CC	This is CSQ Cap Com, Gordo. You're going ahead and powering down, is that affirmative?
10 26 07	P	That is affirm. I'm going to fly-by-wire now . . .
10 26 10	CC	Roger.
10 26 21	P	Roger. Auto is off.
10 26 24	CC	Roger. Auto off.
10 26 32	P	Gyros are caged.
10 26 34	CC	Roger. Gyros caged.
10 26 40	P	ASCS a-c bus off.
10 26 43	CC	Roger.

10 26 54	P	The highest my 250 inverter got up to was 130 degrees.
10 26 59	CC	Roger. Understand 250 only got up to 130, is that affirm?
10 27 03	P	Roger.
10 27 30	CC	Roger. We're dropping you.
10 27 40	CC	Gordo, the Surgeon wants to know if you're sweating any at the moment. Over.
10 27 46	P	Very lightly, not very much.
10 27 49	CC	Roger.
Unreadable	P	*. . . At roughly 10 hours and 27 minutes, brought auto ASCS control to select. Lights are off. Caged the gyros. Have ASCS a-c bus. At the time the 250 inverter was reading 130 degrees the highest it had been. The cabin was 96 degrees, the highest it has been. The cabin already is coming down, it's 91 degrees, already.

HAWAII

10 37 27	CC	Hello Faith Seven, Hawaii Cap Com. Do you read?
10 37 45	CC	Faith Seven, Hawaii Cap Com. How do you read?
10 37 52	P	. . .
10 37 55	CC	Roger, Faith Seven. Reading you 3 by 4. Will you turn your tape recorder to program at this time.
10 38 05	P	Roger. It is on program. Over.
10 38 08	CC	Roger. R and Z Cal to auto.
10 38 12	P	R and Z Cal is in auto.

10 38 13	CC	And C-Band beacon to ground command now.
10 38 17	P	C-Band to ground command now.
10 38 19	CC	Roger. We're standing by for a blood pressure and a fuel and oxygen readout.
10 38 24	P	Roger. Fuel 81 (percent) auto, 101 (percent) manual. Oxygen is 175 percent primary, 100 percent.secondary. Cabin temp 90 degrees. Here comes blood pressure.
10 38 44	CC	Roger. Understand blood pressure is on the air. Say again cabin temp.
10 38 48	P	Cabin temp is 90 degrees.
10 38 51	CC	Roger. Read 90.
10 39 12	CC	Faith Seven, Hawaii Cap Com. Turn your C-band beacon on at this time. Over.
10 39 18	P	Roger. Coming on now.
Unreadable	CC	Roger, your (contingency recovery area) 8-Alpha and 8-Bravo (retrosequence) times are nominal.
10 39 25	P	Roger. 8-Alpha and Bravo are nominal.
10 39 30	CC	T/M is commanded. Standby.
Unreadable	CC	Roger, Faith Seven, Hawaii Cap Com. Commanding T/M on at this time.
10 39 56	P	I have it on continuous. You want it on ground command?
10 39 59	CC	Negative, that's fine.
10 40 05	P	Okay.
10 40 18	CC	Faith Seven, Hawaii Cap Com. Turn your T/M to ground command.
10 40 23	P	Roger. Going to ground command now.
10 40 29	P	On ground command.

10 40 35	CC	Roger.
10 41 03	?	. . . Cooper, can you come in on emergency frequency. Come up on 11176. Hickam out.
10 41 35	CC	Faith Seven, Hawaii Cap Com. Your mode, and gyro switch position please.
10 41 40	P	Roger. Roger. ASCS control on select. Mode select off. Fly-by-wire thrust select low. Pitch torquing on. Gyros to cage, and pitch attitude on orbit.
10 41 53	CC	Hawaii. Roger.
10 42 29	CC	T/M commanded on this time. Faith Seven.
10 42 33	P	Roger.
10 43 14	CC	Faith Seven, Hawaii Cap Com. We're receiving R Cal at this time. Will you make sure you have your C-Band beacon to ground command before AOS. Over.
10 43 24	P	Roger, will do.
10 43 41	P	C-Band beacon coming to ground command now.
10 43 44	CC	Roger. Understand C-Band, ground command now.
10 49 34	P	Took some pictures out of the window with the remainder of the first roll of film on the 16 mm. The color film camera in the bracket.
10 50 18	P	*Low nitrogen pressure in 475 (psi) auto, 490 (psi) manual. B-nut temps. Pitch down 86 (degrees), pitch up 65 (degrees). Yaw left 66 (degrees), yaw right 70 (degrees). Roll counterclockwise 98 (degrees), roll clockwise 92 (degrees). - Auto peroxide tank 82 (degrees), manual peroxide tank 68 (degrees), reserve peroxide tank 76 (degrees).
10 51 18	P	Isolated bus 28 volts. And I am pulling 6 amps, right now.

11 16 18	P	Tape (and radiation) experiment is now on. I'm eating a pot roast of beef. I've had considerable difficulty getting the water in it from this water device on the McDonnell water tank. I spilled water all over my hands, and all over the cockpit here trying to get some in it. I have succeeded in getting about half of it dampened and am proceeding to eat.
11 19 20	P	I am washing my face with a damp cloth now. Certainly feels good.
11 22 30	P	(Forcing grunt) This is ridiculous. Come out of that damned ditty bag - Pandora's locker.
11 28 31	P	Radiation experiment is off. Tape recorder to program.
11 31 00	P	*It is rather a strange feeling to be able to place objects out into the cabin and let go of them and they'll stay in relatively their same position. This is worrisome as well as an odd sensation. Handy sometime.

ZANZIBAR

11 33 07	CC	Faith Seven, Zanzibar Cap Com. I'd like to get a G.e.t. time hack in about 30 seconds.
11 33 15	P	Roger. - We have 11 34 30 on my mark. 5, 4, 3, 2, 1, MARK. (11 33 31)^{T}
11 33 36	P	That's 11 33 30.
11 33 38	CC	Roger.
11 33 49	CC	Faith Seven, Zanzibar Cap Com.
11 33 53	P	Go ahead.
11 33 54	CC	Your clock is now 7 seconds fast, plus 7 seconds.

ZZB-8

11 34 01	P	Roger. Understand. Plus 7 seconds.
11 34 06	CC	(Recovery area) 9-1 (retrosequence) time is 13 19 20. 13 19 20.
11 34 21	P	Roger. 13 19 20.
11 34 25	CC	If you have to set your clock you'll have to add 7 seconds to that.
11 34 30	P	Roger. Understand.
11 34 40	CC	Your T/M looks good on the ground, Faith Seven. Your T/M looks good.
11 34 45	P	Roger. Thank you.
11 34 49	CC	We'd like to have a TRF clock readout from the capsule also, please.
11 34 54	P	Roger. - Time to retrograde will be 22 23 20 on my mark. MARK. (11 35 07)T Retrograde time 33 58 26.
11 35 15	CC	We concur.
11 35 17	P	Roger.
11 35 57	CC	Faith Seven, Zanzibar Cap Com.
11 36 01	P	Go ahead.
11 36 03	CC	Everything looks real good on the ground. Cape says they have nothing else for you at this time. We'll see you next time around.
11 36 09	P	Roger, Zanzibar. Thank you.
11 49 58	P	*All right on number 2 (photograph), I've just taken (a picture, number 3) over India. And I'm just coming in over China very shortly. This is on the general purpose film in the Hasselblad.
11 51 21	P	*Photo three with the general purpose film. Here come the Himalayas. Number 4 (photograph) of the Himalayas. First three at 1/250, f/11. These are two . . . . That last one was 1/250 f/16.

COASTAL SENTRY QUEBEC

Unreadable	CC	Faith Seven.
Unreadable	CC	Hello Faith Seven, CSQ Cap Com. Over.
11 55 57	P	Roger. Faith Seven here.
11 55 58	CC	Roger. Reading you loud and clear, Gordo. Is the TV on?
Unreadable	P	Negative. I'll bring it on now. I didn't think it would work.
Unreadable	CC	Roger. Good head we didn't pick it up before here. I got your (contingency recovery area) 9-Able and Baker (retro-sequence) times for you if you're ready for them.
11 56 13	P	Roger, standby 1. - Roger. Go.
11 56 39	CC	Roger. 9-A is 12 +18 +24 and 9-B is 12 +43 +05. Over
Unreadable	P	Roger 12 18 24. 12 43 05.
Unreadable	CC	That's affirmative and Cape requests at the end of this pass you can turn your R and Z Cal switch off so it will be off for the rest period. Over.
Unreadable	P	Roger.
11 56 57	CC	There we go. We're getting a little picture on you here now, if we can get the thing adjusted a little better.
11 57 07	P	Roger. How's that?
11 57 10	CC	We're receiving a carrier on you here but we're not getting very good modulation. Just big light spots going on and off. Over.
11 57 18	P	Roger. Probably not getting too much light. Just one second, I should be getting enough earth shine off of it here to help.

11 57 25	CC	Okay, good. You upside down?
11 57 27	P	Roger.
11 57 37	CC	Is it on you?
11 57 39	P	Roger.
11 57 46	CC	Can you open the lens up a little bit on that. It's not getting enough light here.
11 57 50	P	Okay it's wide open now.
11 57 51	CC	Roger.
11 58 49	CC	You on fly-by-wire, Gordo?
11 58 52	P	Negative. I have everything powered down now.
11 58 56	CC	Roger. Just drifting. Affirm?
11 58 57	P	Roger.
11 58 58	CC	Roger.
11 59 04	P	Full drift with ASCS a-c powered down.
11 59 07	CC	Roger.
11 59 38	CC	You're sure looking good. Everything couldn't be finer on this pass.
11 59 43	P	Roger. Everything looks good here, John.
12 00 09	CC	How's cloud cover, do you have a pretty good view?
12 00 14	P	Quite a bit of cloud cover right over you here. A little bit earlier there was a pretty good open area.
12 00 23	CC	It should be interesting to look at.
12 00 26	P	Roger.
12 01 07	CC	For your info, Gordo, we're getting good reports from the monitor aircraft for later on, for retro too.

12 01 13	P	Roger. Thank you.
12 01 30	CC	Surgeon would like to know what your cabin temp is now.
12 01 33	P	Roger. Cabin temp is about 87 degrees.
12 01 37	CC	Roger, very good. You're looking fine.
12 05 58	P	*An interesting aspect of this little liquid experiment that I have along, is that the liquid remains on it in globules, hanging along the side in round globule form, and the air is trapped within it in globules, and does not separate from it.

HAWAII

12 11 40	CC	Faith Seven, Hawaii. Do you read?
12 11 46	P	Roger, Hawaii. Faith Seven reading you loud and clear.
12 11 48	CC	Roger. Reading you loud and clear. Standing by for blood pressure, fuel and oxygen.
12 11 52	P	Roger.
12 12 01	P	Blood pressure coming now.
12 12 03	CC	Roger.
12 12 09	P	Fuel is 81 percent auto, 101 percent manual. Oxygen is just about 170 percent primary, and 100 percent secondary.
12 12 30	CC	Roger, Faith Seven. Say again oxygen secondary.
12 12 33	P	100 percent.
12 12 35	CC	100, Roger. Blood pressure off at this time, please. And did you say 101 manual fuel.
12 12 46	P	That's affirmative. 101 manual and about 81 automatic.

12 12 51	CC	Roger. That's all we need. You look good on the ground, you're doing a great job.
12 12 57	P	Roger, thank you Buddy.
12 13 24	CC	Faith Seven, Hawaii. Your clock is holding 7 second error.
12 13 28	P	Roger. Thank you.
12 14 08	P	The eighth picture was shot over Hawaii to the south.
12 14 17	CC	Faith Seven, Hawaii. Could you give me suit (heat exchanger) dome temp, please.
12 14 21	P	*Roger. Suit dome temp is about 45 degrees. I increased flow. Got it down a little low, and I'm easing it back now.
12 14 31	CC	Roger. Understand, understand suit dome 45.
12 14 35	P	*That's right.
12 14 48	CC	Faith Seven, Hawaii. What about O_2 partial pressure.
12 14 53	P	Roger. O_2 partial pressure is about 4.2 (psi), cabin.
12 14 57	CC	4.2. Roger.
12 14 58	P	Roger.
12 15 18	P	Roger. - Now back to the scribe mark on the suit temperature selector of about 2.7 with the power down.
12 15 31	CC	Faith Seven, Hawaii. Our T/M shows suit dome of about, 38 degrees.
12 15 41	P	Roger. I just decreased the setting, just a minute ago, again.
12 15 45	CC	Roger.
12 17 33	P	*Suit dome temp's down to about - slightly below 40 degrees. Decreased the setting of the flow twice, and it's on its, should be on its way back up any moment.

12 21 36	P	*Short status report: Hydrogen peroxide and low nitrogen pressure 475 (psi) auto, 490 (psi) manual. B-nut temps. Pitch down 85 (degrees), pitch up 60 (degrees). Yaw left 55 (degrees), yaw right 70 (degrees). Roll counterclockwise 85 (degrees), clockwise 92 (degrees). . . . auto tank 85 (percent), manual tank 68 (percent), reserve tank 98 (percent). Isolated bus voltage 28 (volts), pumping from the condensate tank to the reserve tank, I have a syringe full. Suit circuit seems to be getting varying amounts of water, probably from the condensate tank, or tin can. Coolant water flow seems to vary considerabley. I have it clear back down to a setting of 1. Still haven't gotten the heat exchanger dome temperature out of the warning light area. It is now about 45 degrees. Never have been able to put water in these containers, that have water, due to the leaking of this valve in the back of it. I'm unable to put it into the water, into the plastic neck of the container and get water into it without leaking water all over the cockpit.

ROSE KNOT VICTOR

12 26 00	CC	Faith Seven, RKV Cap Com.
12 26 05	P	Hello RKV.
12 26 07	CC	We have Aeromed and systems go here.
12 26 18	P	Roger. Say again RKV.
12 26 21	CC	We have Aeromed go here, and systems go.
12 26 25	P	Roger. Very good. I'll take the temperature probe out now, then.
12 26 30	CC	We've got a long list of capsule readouts that the Cape requires before you go into the rest period.
12 26 42	P	Roger. Go.

12 26 43	CC	Okay, 24 volts main. Just rotate the switch through, Gordo. All positions on your d-c volts.
12 26 53	P	Roger, d-c volts. Main (bus) 24-½ (volts), isolated (bus) 28 (volts), main (battery) one is 25 (volts), main (battery) two is 25 (volts), main (battery) three is 25 (volts), standby (battery) one is 25 (volts), standby (battery) two is 25 (volts), isolated (battery) 28-½ (volts).
12 27 11	CC	Roger, understand. 150 va (inverter) volts?
12 27 17	P	Roger, 150 va is 121 (volts), fan 121 (volts).
12 27 24	CC	Fans bus 121 (volts)?
12 27 26	P	Roger.
12 27 27	CC	Suit coolant and cabin coolant control valve settings.
12 27 33	P	Roger. I'm back on 2.5 on the suit. Cabin is still shut down.
12 27 41	CC	Roger. Partial CO_2 and partial O_2.
12 27 45	P	Roger. Partial O_2 cabin is about 4.2 (psi), and suit CO_2 is on the bottom peg, zero.
12 27 55	CC	Roger. Auto and manual fuel pressure?
12 27 59	P	Roger. Auto fuel pressure 475 (psi), manual fuel pressure 490 (psi).
12 28 04	CC	Roger. Okay temperatures, just rotated through Pitch, and all the way through.
12 28 13	P	Roger. Retro 62 (degrees). Pitch down 75 (degrees), pitch up 60 (degrees). - Yaw left 55 (degrees), yaw right 70 (degrees). Roll counterclockwise 95 (degrees), roll clockwise 93 (degrees).
12 28 37	CC	Roger. H_2O_2 reserve, manual and auto.

12 28 41	F	Roger. Auto peroxide tank is 85 (degrees), manual is 68 (degrees) and reserve is 78 (degrees).
12 28 52	CC	Roger. Cabin heat exchanger outlet temperature.
12 28 55	P	Cabin heat exchanger outlet 72 (degrees), 250 inverter 112 (volts), 150 inverter about 1 er, just a second I'll get a light on, I'm getting in the dark, 125 (volts).
12 29 13	CC	Roger.
12 29 14	P	Fans inverter about 110 (volts).
12 29 17	CC	Roger.
12 29 23	CC	Okay, that settles this. Can you give me some indication of your tape remaining?
12 29 29	P	Roger. Just a moment. - Roger. I have about 75 percent remaining.
12 29 44	CC	Roger. Can you give us a blood pressure.
12 29 50	P	Roger. Coming now.
12 29 56	CC	Okay, the Cape advises that if you desire to turn your T/M to continuous, we'll cut down on the unnecessary communications for the rest of the rest period.
12 30 11	P	Roger.
12 30 31	CC	C.e.t. is showing plus 7, +7.
12 31 35	P	Roger. +7.
12 31 12	CC	Seven, RKV. Do you intend to go on a rest period from this site?
12 31 17	P	Roger.
12 31 46	CC	Seven, RKV. Are you sweating any?
12 31 50	P	Negative.
12 31 52	CC	No sweat.

RKV-8, PASS 9, CSQ-9

12 32 08	CC	We have you all go on Aeromedical and systems. Looks like you can settle down for a long rest.
12 32 14	P	Roger. Thank you.
12 32 36	CC	Seven, RKV. We have LOS.

PASS 9

13 17 17	P	Photo number 8 being made over Africa, to the north.
		*(Non-flight-related transmission omitted.)
13 18 47	P	Another being made over Africa.
13 20 32	P	I can see roads, and rivers, and some small towns, down here on the ground. Small villages are pronounced. Can almost make out the individual houses.
13 23 30	P	*Now we're in the next series of 12. Over . . . Africa. The first series were started over Africa, and across on orbit 9, on across Arabia, through India, and that last series of 3 or 4 pictures were made right over the Himalayas, and in the India, India - China area.
13 28 39	P	Checking fly-by-wire thrusters, they all work. Fly-by-wire lows, manual proportional, and checking manual thrusters now. Checking yaw, - and yaw works, pitch down works, pitch up works, roll left works, roll right works. Manual handle off.

COASTAL SENTRY QUEBEC

13 32 41	P	CSQ Cap Com. Faith Seven.
13 33 18	CC	Hello Faith Seven, CSQ. Roger. Received you, go ahead with your message.

13 33 24	P	Roger. Just passing over. Everything's nominal here I haven't really started my rest period yet. I had a little tussle with the heat exchanger, with the suit, and I finally got it adjusted.
13 33 38	CC	Roger. Understand, heat exchanger is adjusted now, for suit. We are still trying to pick up your TV here. We're not getting a very good picture on it. Over.
13 33 46	P	Roger.
13 33 48	CC	Roger. We had a message out around the range here to keep quiet that you were asleep and we thought it looked like a typical asleep type pass on your biosensors here.
13 33 59	P	Roger.
13 34 02	P	Roger. I was busy here just before the pass.
13 34 04	CC	Roger.
13 34 10	CC	Did you say you were asleep just before the pass. Over.
13 34 13	P	Negative. I was busy looking out the window and fiddling with this suit dome temp.
13 34 20	CC	Roger.
13 34 28	P	I've checked my manual and fly-by-wire thrusters and am ready to start my rest period now.
13 34 35	CC	Roger. Understand checked manual fly-by-wire. Ready to start rest period now.
13 34 39	P	Roger.
13 34 42	CC	All right. You will tell everyone to go away and leave you alone now. Okay?
13 34 48	P	Roger.

13 34 52	CC	You're looking real good, Gordo. Everything is going real fine, boy.
13 34 55	P	Roger. Thank you, John.
Unreadable	P	*. . . fourth picture on that second series was made just, out from CSQ. Number 6 of second series, taken, over at 13 56. Went to sleep at about 13 50. Slept 'til 14 46. Quite soundly, slept quite heavily, awoke not realizing where I was. Completely, soundly asleep. Picture 8 of second series in the Burma - India area at 14 58 30. Took number 9, over the Himalayas.

PASS 10

15 11 35	P	*Standby inverter 102, 150 inverter 110 (degrees), 250 inverter 102 (degrees), H_2O_2 auto tank 85 (degrees), manual fuel tank 70 (degrees). Roll counterclockwise 78 (degrees), roll clockwise 82 (degrees). Yaw right 65 (degrees), yaw left 64 (degrees). Pitch up 58 (degrees), pitch down 70 (degrees). Retro 67 (degrees). I put the window cover on 15 14 15 for a period of time, and now have awakened.

PASS 11

16 28 51	P	*Short status report. Peroxide low pressure regulated 475 (psi) auto, 490 (psi) manual, clockwise thruster 72 (degrees), counter-clockwise thruster 78 (degrees). Yaw right at 61 (degrees), yaw left at 60 (degrees). Pitch up is 52 (degrees), pitch down is 58 (degrees). Retro is 55, auto 85, manual is 70, . . . reserve is 70. Photo series at 16 hours and 40 minutes. Having the problem with the suit exchanger dome temp, . . . down to the freezing mark with a (comfort control valve) setting of about 1-½, take a setting of 1 to 1-½ and then takes almost turning it off to get it back. It seems to be very inconsistent, in the settings that will take to hold an even heat exchanger dome temperature. Went asleep again and am

P (cont'd) awake now. Suit temperature is . . . 5.

PASS 12

18 04 20 P Photo sequence number 3 made on the Indian coast line, at 18 hours and 4 minutes. Next photo made at 18 hours and 5 minutes.

18 14 01 P *The time is now 18 hours and 14 minutes. Short status report. Nitrogen low pressures, 475 (psi) auto, 490 (psi) manual. Retro pack 71 (degrees). Pitch down thruster 58 (degrees), pitch up 50 (degrees). Yaw left 58 (degrees), yaw right 52 (degrees). Roll counterclockwise 72 (degrees), (roll) clockwise 70 (degrees). H_2O_2 auto tank 82 (degrees), peroxide manual tank 72 (degrees), peroxide reserve . . . , . . . main bus is 25-½ (volts), isolated bus voltage is 28-½ (volts). (Battery number 1) 25 (volts), number 2 is 25 (volts), number 3 is 25 (volts), standby 1 is 25 (volts), standby 2 is 25 (volts), isolated is 28-½ (volts), back to main. Reading 121 volts on the fans. Everything is proceeding along very well. Everything is nominal, except for this bothersome heat exchanger dome temp, and I just can't seem to keep it either from being on the freezing mark or going on over. I vary.the settings between . . . and completely off.

PASS 13

19 38 39 P *Went to sleep again, slept very souddly. And it's time for a short status report. Nitrogen regulated pressure, . . . auto 475 (psi), manual 490 (psi). -B-nut temps. First, retro temp 75 degrees. Pitch down thruster 55 (degrees), pitch up thruster 50 (degrees). Yaw left 56 (degrees), yaw right 50 (degrees). Roll counterclockwise 72 (degrees), roll clockwise 70 (degrees). -Peroxide auto tank 82 (degrees), manual tank 72 (degrees), reserve tank 75 (degrees). Isolated bus voltage 28.

19 42 15	P	*One comment on these various sleep periods that I've had, nearly everytime that I have awakened, I found that I have been so soundly asleep I don't even know where I am when I awake.
20 23 37	P	*Have a note to be added in for head-shrinkers. Enjoy the full drifting flights most of all, where you have really the feeling of freedom, and you aren't worried about the systems fouling up. You have everything turned off, and just drifting along lazily. However, I haven't encountered any of this so called split-off phenomena. Still, note that I am thinking very much about returning to earth at the proper time and safely. Over.

PASS 14

21 00 35	P	Time for another short status report. Auto regulated pressure 475 (psi), manual 490 (psi). Retropack temp 75 (degrees), pitch down thruster 51 (degrees). Pitch up 49 (degrees). Yaw left 55 (degrees), yaw right 50 (degrees). Roll counterclockwise 72 (degrees), roll clockwise 70 (degrees). Peroxide auto tank 80 (degrees), manual tank 74 (degrees), reserve tank 74 (degrees).
21 02 39	P	Darned suit heat exchanger (comfort control valve) again. Setting is down to 1-½. 1-½ held it for awhile. And now it's gone down to 40 (degrees) on the dome temp. Inlet temp 62 degrees.
21 05 16	P	Number 7, sequence 3 was made looking back at Arabia. At 21 05, cabin temp is now 82 degrees, 250 inverter is 95 (degrees), 150 inverter is 115 (degrees), standby inverter is 95 (degrees).

MUCHEA

(Extended garbled transmission here. Sounds like Spanish)

21 22 34	P	Hello, Muchea Cap Com. Faith Seven here. Over.
21 22 39	CC	Go ahead, Faith Seven. This is Muchea Cap.
21 22 43	CC	Go ahead, Faith Seven. This is Muchea Cap Com.
21 22 46	P	Roger, Muchea Cap Com. Faith Seven. I'm awake now. Just thought I'd check in with you.
21 22 50	CC	Roger. How was your sleep?
21 22 54	CC	How was your sleep?
21 22 56	P	Very good.
21 22 58	CC	Do you like your coffee white or black?
21 23 02	P	I'll have tea, thank you.
21 23 04	CC	*Roger.
21 23 10	P	In fact, hot black tea would go very well right now.
21 23 14	CC	Roger.
21 23 18	CC	When you get a chance, will you give us your spacecraft status, and your status?
21 23 24	P	Roger. Everything is nominal here. I've had some difficulty with the suit heat exchanger dome temp and it's been running with the light on most of the time, but I have it well under control and the suit inlet temp has been running very comfortably.
21 23 45	CC	Very good.
21 23 47	P	My status is excellent.
21 23 50	CC	Roger. Will you give me an auto and manual fuel reading?
21 23 55	P	Roger. Let me get some more lights on here, since I'm in the dark.

21 24 00	P	*Roger. Auto fuel is reading 69 percent and manual 95 percent.
21 24 10	CC	Say again last.
21 24 11	P	Oxygen 150 percent on primary, 100 percent on secondary. The manual fuel is 95 percent.
21 24 23	CC	Roger. I didn't copy your manual fuel.
21 24 25	P	Roger. Manual fuel is 95 percent.
21 24 28	CC	I copied auto at 79.
21 24 32	P	Roger. It's 69, 69.
21 24 35	CC	Roger.
21 24 37	P	Cabin temp is 84 degrees.
21 24 41	CC	Roger.
21 24 55	CC	Standby, Faith Seven.
21 24 57	P	Roger.
21 25 13	CC	I have (recovery) area 15-1 retrosequence time. Please prepare to copy.
21 25 21	P	Roger. Go.
21 25 24	CC	22 02 13.
21 25 28	P	Roger. 22 02 13.
21 25 31	CC	That's affirmative. Area 15-1.
21 25 43	P	Roger. Got it.
21 25 45	CC	What's your present control mode?
21 25 49	P	I'm in full drift.
21 25 51	CC	Roger.
21 25 59	CC	We have about 1 minute to LOS.
21 26 02	P	Roger.

21 26 39	CC	Hello, Faith Seven, Muchea Cap Com. Do you have anything further to report?
21 26 44	P	Negative. I guess not. Everything's fine here.
21 26 47	CC	Roger. Systems report you go here and Aeromed, also.
21 26 51	P	Roger. Thank you.
21 26 53	CC	Roger.
21 36 40	P	*It is 21 36 46 NOW. (21 36 46)^{T}. I am observing lights of several small cities and scattered areas on the ground. Apparently over the east coast of Australia.
21 46 18	P	*I am viewing to the east now, and I can see very clearly as I mentioned before, a band of haze layer above the earth's horizon, through which the stars can be seen. Although they're quite faint here and then clear below it. It goes around the earth, approximately the same distance around, just a Corona type thing around the earth's surface.
21 49 38	P	*I would like to take this time to say a little prayer for all the people, including myself, involved in this launch and this operation. Father, thank You, for the success we have had in flying this flight. Thank You for the privilege of being able to be in this position, to be up in this wondrous place, seeing all these many startling, wondrous things that You've created. Help guide and direct all of us, that we may shape our lives to be good, that we may be much better Christians, learn to help one another, to work with one another, rather than to fight. Help us to complete this mission successfully. Help us in our future space endeavors, that we may show the world that a democracy really can compete, and still are able to do things in a big way, are able to do research, development, and can conduct various scientific, very technical programs in a completely peaceful environment. Be with all our families. Give them guidance and encouragement, and let them know that everything will be okay. We ask in Thy name. Amen.

CNV-15

CAPE CANAVERAL

22 03 39	P	Hello, Cape Cap Com. Faith Seven here.
22 03 47	P	Roger, shoot.
22 03 55	CC	The regulated low pressure scores.
22 04 00	P	Roger. I'm reading 475 (psi) auto and 490 (psi) manual.
22 04 10	CC	Could we have an H_2O_2 reading?
22 04 16	P	Roger. That's - say again.
22 04 21	CC	. . .
22 04 28	P	Just a minute on the . . .
Unreadable	P	Roger.
Unreadable	CC	Faith, can I have you on H_2O_2 tank temperature?
Unreadable	P	Auto tank is 81 degrees, manual tank is 74 degrees, reserve tank is 74 degrees.
22 06 05	CC	Faith Seven, Cape Cap Com. Over.
22 06 07	P	Cape, Faith Seven.
22 06 09	CC	Roger. Did you use any auto fuel during the sleep period?
22 06 15	P	Negative.
22 06 19	CC	Would you put your R and Z Cal to auto?
22 06 22	P	Roger.
22 06 26	CC	We reckoned your fuel to the 69 and 89 (percents). Over.
22 06 32	P	Roger. I read you 69 and 95.
22 06 38	CC	Roger.
22 06 42	CC	Is your tape recorder on schedule?

1. Pilot answer referred to current rest period only.

22 06 57	CC	We are getting a good picture of you on TV now. Over.
22 07 01	P	Roger. Understand.
22 07 04	CC	Did you transfer any water or urine? Over.
22 07 10	P	Boy, did I ever!
22 07 17	CC	Do you have any air wick observation?
22 07 27	P	Roger. They seem to separate water all right.
22 07 39	CC	Faith Seven, did you make any air wick observation? Over.
22 07 43	P	Affirmative. It does separate water. Over.
Unreadable	P	Did you read me, Cape?
Unreadable	CC	Roger. I read you now. Did you make an air wick observation?
22 08 00	P	Affirmative. It works.
22 08 04	CC	Roger. How is your comfort and humidity level in the suit?
22 08 11	P	Fine.
22 08 12	CC	Very good.
22 08 15	CC	Our surgeon has some goodies. Did you have any dreams?
22 08 20	P	Negative. I slept too soundly to dream.
22 08 24	CC	Roger. We thought you might have had one onetime when your suit dome light may have come on.
22 08 33	P	My suit dome light was on a good portion of the time.
22 08 36	CC	Roger. We understand that.
22 08 40	CC	We'd like you to give a body temperature to Canary on your next pass over them coming up. Would you set your oral probe on for that? Over.
22 08 50	P	Roger.

CNV-15

22 08 53	CC	Pass time at Canary is nominal, so about 2 or 3 minutes before would help.
22 09 00	P	Roger.
22 09 09	CC	Would you give us a reading on your coolant control valve settings and what they are now?
22 09 16	P	Roger. Right at the moment I'm reading about 1.8 on suit temp and the cabin is still turned off.
22 09 27	CC	Roger. We concur.
22 09 45	CC	Faith Seven. R and Z Cal program switch to off.
22 09 54	P	Roger. Off.
22 09 56	CC	And you can secure TV. We had a pretty fair picture.
22 10 00	P	Roger.
22 10 08	CC	We can see you were drifting and dreaming, can't we?
22 10 11	P	Roger.
22 10 30	CC	Faith Seven, Cape Cap Com.
22 10 32	P	Come in Cape Com, Faith Seven.
22 10 34	CC	I've been asked to relay a message to you from the president of the Republic of El Salvador. I will read. In the name of the Salvadorian government and people, and in my own right, it gives me pleasure to send you cordial greetings and sincere congratulations on the occasion of your valiant exploit, which constitutes an historic truimph for the free world. Julio Adalberto Rivera, President, El Salvador.
22 11 06	P	Very good, very good.
22 11 07	CC	Roger.
22 12 00	CC	Faith Seven, Cape Cap Com.
22 12 02	P	Go ahead, Cape.

22 12 06	CC	I'll give you C.e.t. hack at 50 mark.
22 12 08	P	Roger.
22 12 09	CC	That was 22 11 50.
22 12 13	P	Roger.
22 12 16	CC	MARK 12 minutes.
22 12 18	P	Roger.
22 12 24	P	. . .
22 12 36	CC	Faith Seven, you're cutting out, it's about LOS. See you next time around boy-san.
22 12 41	P	Roger.

CANARY ISLANDS

22 18 26	CC	Faith Seven, this is Canary Cap Com. You need not acknowledge this transmission, requesting you turn on your TV and your S-band beacon if you have not already done so.
22 18 40	P	Roger. TV's on.
22 18 49	CC	This is Canary Cap Com. Did you - put your - wait a minute, we're getting the body temperature now.
22 19 17	CC	This is Canary Cap Com. Surgeon requests that you hold your body temp probe in your mouth for about one more minute.
22 20 01	CC	This is Canary Cap Com. You may take the body temperature probe from your mouth now. Over.
22 20 09	P	Roger. Thank you.
22 20 14	CC	Your (contingency recovery area) 15-Bravo (retrosequence) time is nominal, and request a partial O_2 readout, please.
22 20 26	P	Roger. My 15-Bravo is nominal. Cabin partial pressure O_2 is about 4.2 (psi).

22 20 34	CC	Roger. Understand 4.2. I'd like to try to get a C.e.t. clock error here, so I'm going to give you a time hack. I'd like for you to give me the difference in the clocks. On my mark the time will be 22 20 40. MARK. (22 20 57)T
22 20 58	P	. . .
22 21 01	CC	Understand 15 seconds.
22 21 05	CC	Roger. . . .
22 21 07	P	Roger. Understand.
22 21 29	CC	Astro confirms 15. Over.
22 21 35	?	Roger.
22 22 15	CC	This is Canary Cap Com. Could you give me a cabin pressure readout, please?
22 22 20	P	Roger. Cabin pressure 5.2 (psi).
22 22 23	CC	Roger.
22 23 37	CC	We're getting pretty close to LOS here. Request you turn TV off, and the S-band beacon to ground command. Over.
22 23 44	P	Roger. TV off and S-band beacon to ground command.
22 23 47	CC	Roger.

KANO

22 27 16	CC	Faith Seven, this is Kano Cap Com. We have T/M solid. We would like a cabin (heat exchanger) dome temperature. That is the only high reading. Over.
22 27 24	P	. . .
22 27 34	CC	Say again.

Unreadable	P	. . .
22 27 44	CC	Roger.
22 27 49	CC	Astro, have you eaten? Over
22 27 58	CC	Astro, this is Kano Cap Com. Have you eaten? Over.
22 28 03	P	. . . Cabin dome is 72 degrees.
Unreadable	CC	Roger. Have you eaten? Over.

ZANZIBAR

22 36 27	CC	Faith Seven, Zanzibar Cap Com.
22 36 29	P	Roger, Zanzibar, Faith Seven.
22 36 32	CC	T/M looks good on the ground here. We have no big problems. Like to have fuel and oxygen readings.
22 36 39	P	Roger. . . . fuel, auto . . . , manual 95 percent. Oxygen 150 percent primary, and 100 percent secondary.
22 36 53	CC	Please repeat primary oxygen.
22 36 56	P	150 percent.
22 36 58	CC	Roger. Your (recovery area) 16-1 (retrosequence) time, 23 31 03. 23 31 03.
22 37 12	P	23 31 03.
22 37 16	CC	That is affirmative. That is g.e.t. and does not include your clock error.
22 37 20	P	Roger.
22 37 26	CC	Faith Seven. Have you eaten this morning?
22 37 30	P	Negative. Not yet this morning.
22 37 33	CC	Roger.

22 37 53	CC	Faith Seven, Zanzibar Cap Com. The Surgeon would like to know what, how you feel this morning?
22 37 58	P	Fine. - Excellent.
22 38 04	CC	Very good.
22 49 25	P	And here comes the short status report again. Nitrogen regulated low pressure, auto 475 (psi), manual 490 (psi). B-nut temperature. Pitch down 50 (degrees), pitch up 49 (degrees). Yaw left 55 (degrees), yaw right 51 (degrees). Roll counterclockwise 78 (degrees), roll clockwise 78 (degrees). Auto peroxide tank 80 (degrees), manual tank 72 (degrees), reserve tank 73 (degrees). Isolated bus voltage 28.

MUCHEA

22 53 25	CC	Faith Seven, Muchea Cap Com.
22 53 27	P	Roger, Muchea Cap Com. Faith Seven.
22 53 30	CC	Are you checking your high thrusters?
22 53 40	CC	Are you checking your high thrusters?
22 53 54	CC	Faith Seven, Muchea Cap Com. Do you copy?
22 53 56	P	Roger, Muchea Cap Com. I am not . . . my thrusters. Over.
22 54 01	CC	Say again last.
22 54 02	P	I am not checking my thrusters. Over.
22 54 05	CC	Roger. We had a partial T/M dropout.
22 54 10	P	Roger.
22 54 16	CC	Have you made any checks on thrusters?
22 54 19	P	Roger. I made a couple of them, 3 different ones of them. I'm going to bring up my rate indicators shortly and check the rest of them.

22 54 29	CC	Roger.
22 55 03	CC	Systems report T/M looks good and Aeromeds report you look good.
22 55 07	P	Roger.
22 55 33	CC	Are you changing the control valve setting on your suit heat exchanger?
22 55 38	P	Roger. - Suit dome is on its way down very slowly.
22 55 45	CC	Roger. We concur.
22 55 52	CC	Have you had your breakfast?
22 55 54	P	Negative.
22 57 00	CC	Faith Seven. Could you give me a report on that thruster check? Which thrusters are okay?
22 57 06	P	Roger. I've checked my yaw thrusters both auto and manual. I'm going to ASCS bus and then turn my rate gyros on, and in first-light then check the remainder of my thrusters.
22 57 24	CC	Roger.
22 57 26	P	While aligning the spacecraft.
22 57 28	CC	Say again.
22 57 30	P	I will check thrusters while aligning spacecraft, while uncaging gyros.
22 57 34	CC	Roger.
22 59 38	CC	We have approximately 1 minute to LOS.
22 59 42	P	Roger.
23 06 51	P	*Just brought the rate indicators to manual on position, and they're indicating about a half of a degree right roll rate, half a degree pitch up rate, and 1 degree left yaw rate. I have now checked my manual proportional thrusters, and they all function correctly, and C-band beacon on continuous.

GUAYMAS

23 31 02	CC	Faith Seven, Guaymas Cap Com.
23 31 07	P	Go ahead, Guaymas Cap Com, Faith Seven.
23 31 09	CC	You sound good, Gordo. Are you going to have time for the ASCS?
23 31 14	P	Roger. The ASCS is powered up. I powered it up about 1 minute ago. Right now, my rate indicators are powered up.
23 31 27	CC	Roger. Tape recorder continuous.
23 31 30	P	Roger. Tape recorder continuous.
23 31 32	CC	How about the C-band?
23 31 35	P	Roger. . . .
23 31 36	CC	Roger. - Are you going to check your thrusters over here?
23 31 44	P	Roger. I've already checked my manual thrusters and I've checked about half of my fly-by-wires. I'm going to wait 'til daylight and I'll get the rest of my fly-by-wires while I align the spacecraft.
23 31 59	CC	Roger. You say you're waiting for daylight.
23 32 01	P	Roger. I'm going to align the spacecraft with the thrusters while getting a check on the rest of them.
23 32 08	CC	Roger.
23 32 21	P	I'll check my fly-by-wires now and align my spacecraft manually on the manual proportional.
Unreadable	CC	Roger.
23 32 29	P	Checking fly-by-wires now. - Man, do those ever throw out the fire at night.
23 32 48	CC	Say again, Gordo. I didn't read that.

23 32 49	P	You can really see the sparks from the thrusters at night.
23 32 53	CC	Ha, ha! Roger.
23 33 13	P	Roger. All fly-by-wire low thrusters work correctly.
23 33 18	CC	Roger.
23 33 29	CC	Could you give me your fuel readings, Gordo?
23 33 33	P	Roger. I have 65 percent auto and 95 percent manual.
23 33 38	CC	Roger.

CAPE CANAVERAL

23 36 44	CC	Faith Seven, Cape Cap Com. Do you read? Over.
23 36 46	P	Roger, Cape Cap Com, Faith Seven.
23 36 49	CC	Roger. Welcome back, Gordo.
23 36 52	P	Roger. Thank you.
23 36 53	CC	I have a roll angle for you, for your dim light study. Over.
23 36 59	P	Roger. Go ahead.
23 37 01	CC	Your angle is 34 degrees, at sunset. That is, roll right, 34 degrees.
23 37 08	P	34 degrees. Understand.
23 37 10	CC	Could you give me a reading of your cabin air?
23 37 13	P	Roger. Cabin air temp's about 86 degrees.
23 37 17	CC	Roger, 86. Have you had a good meal today?
23 37 22	P	Fairly good.
23 37 25	CC	Roger.

23 37 27	P	I'm aligning the spacecraft now.
23 37 33	CC	Roger. Your attitudes look like you're almost in.
23 37 39	P	It would, because the gyros are still caged.
23 37 42	CC	That's interesting.
23 37 44	P	I say they would, because the gyros are still caged.
23 37 47	CC	Good deal. You've got real good attitudes on the caged gyros.
23 37 50	P	Roger.
23 37 52	CC	Did you read that I said roll right 34 degrees?
23 37 55	P	Roll right 34 degrees. Roger.
23 38 09	CC	Would you give us some TV, Gordo?
23 38 27	CC	Hello dahr.
23 38 28	P	Hello dahr.
23 39 32	CC	Faith Seven, Cape Cap Com. Would you give us a yell if you get an auto fuel light? Over.
23 39 37	P	Roger.
23 40 57	P	*Caged gyros coming to slave.
23 41 02	CC	Roger.
23 41 20	CC	Our scanners are checking out quite closely, Gordo.
23 41 24	P	Roger.
23 42 36	P	Going to auto.
23 42 46	P	Foiled it again.
23 43 10	CC	Faith Seven, Cape Cap Com.
23 43 12	P	Go ahead, Cape Cap Com, Faith Seven.
23 43 15	CC	Roger. You can kill your TV. Your scanners and attitudes match perfectly at LOS.

23 43 21	P	Roger. Thank you.
23 43 26	P	I'm on auto control.
23 43 28	CC	Roger. Understand on auto control.
23 43 30	P	Roger.

*(Unconfirmed transmissions omitted.)

CANARY ISLANDS

23 51 41	CC	Faith Seven, this is Canary Cap Com. We have T/M, solid. All systems are green. Do you confirm TV on? Over.
23 51 53	P	Roger. TV is on.
23 53 34	CC	This is Canary Cap Com. Could you send us a blood pressure now, if you please?
23 53 39	P	Roger.
23 53 46	CC	We are receiving blood pressure now.
23 56 22	CC	Faith Seven, would you take a deep breath and hold it, please?
23 56 26	P	Roger.
23 56 31	CC	Okay, exhale. - Exhale.
23 57 03	CC	Faith Seven, inhale, please.
23 57 50	CC	This is Canary Cap Com, we are coming up on LOS. You may turn off your TV camera, please.
23 57 54	P	Roger.

KANO

23 58 01	CC	Faith Seven, Kano has T/M solid.
23 58 04	P	Roger, Kano. All systems green here.

CONFIDENTIAL

KNO-ZZB-16

23 58 07	CC	I'll give you a check in a minute. Thank you.
23 58 10	P	Roger.
23 58 12	CC	They are all green on the ground.
23 58 14	P	Roger.
23 59 36	CC	Faith Seven, this is Kano Cap Com.
23 59 40	P	Go ahead, Kano.
23 59 41	CC	I thought I'd tell you that (contingency recovery) Area 16-B (retrosequence time) is nominal.
23 59 45	P	16-B is nominal. Roger. Thank you.
24 05 20	CC	Site of Kano will have LOS at 13 08 56.

ZANZIBAR

24 06 39	P	Hello, Zanzibar, Faith Seven here.
24 06 42	CC	Faith Seven, Zanzibar Cap Com. Go ahead.
24 06 45	P	Roger. I have a message for you.
24 06 47	CC	Roger.
24 06 51	P	Hello, Africa. This is Astronaut Gordon Cooper, speaking from Faith Seven. I am right now over 100 miles above Africa, speaking to the Zanzibar station. Just a few minutes ago, I passed Addis Ababa. I want to wish success to your leaders there. Good luck to all of you in Africa.
24 07 12	P	Are you ready for a consumable readout now?
24 07 14	CC	Go ahead.
24 07 16	P	Roger. Auto fuel 93 (percent), manual 93 (percent). Oxygen primary 95 (percent), secondary 100 (percent).
24 07 29	CC	Confirmed. E/M looks good on the ground here.
24 07 36	P	Roger.

CONFIDENTIAL

24 07 45	CC	How does it feel on the second day, Gordo?
24 07 48	P	Fine. I may get used to this thing, yet.
24 07 52	CC	Roger.
24 09 17	CC	Faith Seven. Zanzibar Cap Com.
24 09 18	P	Go ahead, Zanzibar.
24 09 20	CC	The Surgeon would like to know how deep is your breathing at the present time.
24 09 26	P	Roger. Not very deep.
24 09 28	CC	Roger. Thank you.
24 09 30	P	Here is a full breath.
24 09 34	CC	Please repeat.
24 09 35	P	All right. Now I have a full breath in.
24 09 39	CC	You are taking full breaths. Very good. That's what our recording on the ground shows.
24 09 43	P	Roger.
24 10 18	P	I am now in auto control. Set up for the dim light experiment. As soon as the sun approaches the horizon, I will align with the sun. Fly-by-wire. Cage and put gyros free. Roll 34 degrees right, cage, gyros free. Back on auto. And start taking the pictures.
24 11 03	CC	Faith Seven. Zanzibar Cap Com.
24 11 06	P	Go ahead, Zanzibar.
24 11 08	CC	How much tape do you have remaining on your recorder?
24 11 12	P	About 70 percent.
24 11 14	CC	Roger. Cape advises that you can go onto continuous tape recording.
24 11 20	P	Roger.

ZZB-16

24 13 50	CC	Faith Seven. Zanzibar Cap Com.
24 13 52	P	Go ahead, Zanzibar.
24 13 54	CC	Clock readout now shows a +16 seconds. I will give you a mark at 24 13 50.
24 14 02	P	Roger.
24 14 06	CC	1. MARK. (24 14 07)^{T}
24 14 10	P	Roger. I was reading 24 14 07 at the time. - That's about right. 16 seconds.
24 14 22	CC	Roger.
24 14 23	P	Yeah. I was reading just 6, going to 7. That would be right.
24 17 54	P	Okay. The sun is almost to the horizon. I'm going to fly-by-wire low. - Yawing over to the left just a little to get to the sun.
24 19 04	P	I'm perfectly aligned. Caging the gyros. Bang, bang. Gyros to free. I'm going to have to get them again. Quite aligned in yaw.
24 19 50	P	Boy! This is going to be a doozy. Right into the sun.
24 20 55	P	Okay, gyros caged. To free. 34 degrees right.
24 21 52	P	Gyros caged. Gyros free. Auto orbit mode. Lights off, warning lights off.
24 22 31	P	Here comes 1. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. - 1,001. Number 2 exposure. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Third exposure. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Fourth exposure. Trip. 1,001. Release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Trip. 1, 2, 3, release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Trip. 2, 3, release. 1,001. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Number 3. 1, 2, 3, release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Number 4. 1, 2, 3, release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

P (cont'd) 11, 12, 13, 14, 15. 10 second series. Trip. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Trip. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, release. - 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Trip. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. Trip. 2, 3, 4, 5, 6, 7, 8, 9, 10, release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. 30 second exposures. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30,release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, trip. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. 1, 2, 3. Go ahead, Muchea. 5, 6, 7, 8, 9, 10, 11, 12.

MUCHEA

24 27 57	P	Roger. Status is green.
24 28 00	CC	Roger. We have it.
24 28 02	P	Dad burn it 21, 22, 23, 24. Roger. Thank you. - Roger, I'm busy taking all these picture sequences, counting 1, 2, buckle my shoe, type thing.
24 28 23	CC	Roger.
24 28 26	P	Ha, Ha!, I'm up to 5,244 now. Ha! Ha!
24 28 43	P	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, release. 1, 2, 3, 4, 5, 6, 7, 8, 9.
24 29 10	CC	. . . Minus . . . pitch attitude and about a -14 on your horizon scanner pitch output. Would you check this?
24 29 19	P	Roger. I am on gyros free, auto control, gyros free, pitch plane torquing on.
24 29 27	CC	Roger.
24 29 28	P	I am pitching around the plane of the ecliptic to take these pictures.
24 29 31	CC	Understand.
24 29 43	P	12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, release. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. Identifier pictures, 2 of them. Oops, tripped 2 accidently. I'm on slave.
24 30 46	P	Faith Seven is now gone to slave and will let the scanners precess the spacecraft back around slowly.
24 30 51	CC	Roger. We concur here.

24 31 07	P	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78.
24 31 59	CC	Pitch attitude and horizon scanners.
24 32 01	P	80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, just a minute, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20.
24 32 33	P	Roger. My gyros, it looks like I'm fairly closely on. I can see the actual horizon. And of course, my gyros are being precessed by the scanners back slowly because they were off quite a bit being gyros free and pitch plane precession on.
24 32 50	CC	Roger. . . . You are coming in here now, too.
24 32 54	P	Roger. I wasn't sure the spacecraft would fly this way, but it seems to be doing all right.
24 33 01	CC	Roger.
24 33 07	P	Now for the 30 second exposures. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. Roger. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. (223 second break here)
24 37 44	P	13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20. 30 second one coming. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22,

	P (cont'd)	23, 24, 25, 26, 27, 28, 29, 30. 10 second exposure. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, off.
24 40 54	P	Okay. Third series. - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20.
24 42 29	P	30 second exposure. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. 10 second exposure. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. 10 second exposure over. I don't believe the camera tripped right. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
24 44 56	P	Okay, starting the next series. MARK (24 45 01)T, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14,15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74. Go ahead, Canton.

CANTON

24 45 59	CC	Roger. Your (recovery) area 17-1 (retrosequence) time is 25 04 12. Over.
24 46 08	P	25 04 02?
24 46 12	CC	Negative. 25 04 12.
24 46 16	P	Roger. 25 04 12.
24 46 20	CC	Affirmative.

24 46 28	P	That just about gets it. Thirty second one. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. Ten second exposure. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
24 48 51	P	Radiation experiment went on 1 minute ago.
24 49 38	P	Okay, one more series here for you. Starting NOW (24 49 45)^{T} 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, exposure off. Thirty second exposure. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. Ten second exposure. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, off.
24 56 06	P	The last series. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, . . . 30, 31, (etc.) 40, (etc.) 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, . . . 2, 3, . . . 14, 15, 16, . . . 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60. There is the two minute one off. Thirty second one started. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. Ten second one on. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and a big fat hen and that one's off.
24 58 24	P	And my fuel quantity light came on at 61 percent at 24 58 25.
25 00 25	P	Here comes the sunrise pictures. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16,

	P (cont'd)	17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30. The one second one taken and off.
25 01 50	P	The second set of 30 and one. 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, the one second one, and off. And that winds up the zodiacal lights (photography). May they rest in peace.

*(Unconfirmed transmission omitted.)

GUAYMAS

25 03 22	CC	Faith Seven, Guaymas Cap Com.
25 03 25	P	Roger, Guaymas go ahead.
25 03 26	CC	Have you started your photos yet?
25 03 29	P	Man, that's all I have been doing all night long.
25 03 32	CC	Roger, Hasselblad?
25 03 34	P	Roger, I'm just getting them out right now.
25 03 37	CC	Okay, you going to power down first or after?
25 03 40	P	No, I'll power down after I take the first two shots on it. Actually, I'm not going to power down until I finish those shots. I'm going to leave the gyros up to do the shots with.
25 03 49	CC	Okay. Do you want to give me a mark when you take them so I can get your times?
25 03 53	P	Roger.
25 04 18	P	I'm having a little trouble getting things out of Pandora's Locker here.
25 04 22	CC	Roger.
25 04 38	P	Oh yeah, you might pass on to the Cape too, my fuel quantity warning light came on at 24 58. Twenty-four hours and fifty-eight minutes.

25 04 50	CC	Roger.
25 04 58	P	At 61 percent.
25 05 04	CC	Roger, Gordo.
25 05 49	P	Okay. I'm getting the first two shots right now.
25 05 53	CC	Roger.
25 06 31	P	Okay, that's the first two shots.
25 06 36	CC	Okay, Gordo.
25 06 52	P	Now, I'm going to fly-by-wire.
25 07 11	P	Yawing around to the 90 degrees point on the gyro.
25 07 17	CC	Roger, we read you.
25 08 54	P	Okay, snapping two more pics.
25 09 20	P	Caging the gyros.
25 09 27	P	Get down in proper attitude first here.
25 09 31	CC	Okay.
25 10 19	P	Now it's back to free.
25 11 49	P	Two more pics.

CAPE CANAVERAL

25 12 15	CC	Helloooo up there.
25 12 18	P	Hello down dere.
25 12 22	P	Man, all I do is take pictures, pictures, pictures.
25 12 26	CC	All I do is clean, clean, clean.
25 12 30	P	Ha, Ha. Roger.

25 12 38	P	I got all the zodiacal light pics and now I am busily engaged yawing around on the M.I.T. jobbies.
25 12 46	CC	Roger. You have my sympathy.
25 12 51	P	I'm not complaining, Ha, Ha.
25 12 57	P	I'm at the 270 point now getting the last two pictures in the thirty seconds.
25 13 02	CC	I have 17-Bravo (contingency recovery area retrosequence time) correction, if you can take it.
25 13 07	P	Roger, better hang on just a minute, I'm right - snapping pictures - right at the second.
25 13 13	CC	Okay, standing by.
25 14 12	P	Okay. I can take it now.
25 14 16	CC	Roger. 17-Bravo, 26 14 48.
25 14 25	P	26 14 48.
25 14 28	CC	That is affirmative. We'd like a little sun gun time if you want to flip it on.
25 14 37	P	Say again.
25 14 39	CC	TV on for a couple of minutes please?
25 14 44	P	Roger, TV coming on.
25 14 56	CC	Gordo, for information only, if you care to use the 6 inch outside, recommending a minimum f stop 16 or 22 with the filter. It's not necessary to do this if you do use it outside, we recommend going this way.
25 15 15	P	At 22 with the filter, is that affirm?
25 15 18	CC	Say again, please.
25 15 21	P	22 with filter.
25 15 24	CC	16, f 16 with filter.

25 15 28	P	Roger.
25 16 05	P	Okay, I'm caging my gyros.
25 16 10	CC	Roger.
25 16 13	P	And they caged correctly.
25 16 17	CC	Good show, it works.
25 16 18	P	Yeah, just like advertised.
25 16 22	CC	How about that.
25 16 28	P	Powering down my ASCS bus.
25 16 37	CC	Roger. Understand ASCS bus is off. You sure are a miser on the control fuel.
25 16 47	P	You say I'm noisy on the controls.
25 16 51	CC	I say you're miser on the controls.
25 16 57	P	Roger.
25 17 51	CC	. . . 1, 2, 3, 4, 5, do you read?
25 17 54	P	Roger, you are coming in very broken. Over.
25 17 56	CC	. . .

CANARY ISLANDS

25 26 01	CC	Faith Seven, this is Canary Cap Com. All systems are green. Do you confirm TV is on? Over.
25 26 11	P	Negative. TV is not on, Canary. I'm busy snapping some pictures.
25 26 24	P	TV coming on now.
25 26 26	CC	Roger.
25 28 46	SY	Faith Seven, Canary Systems.

CYI-KNO-17

25 28 48	P	Go ahead Canary, Faith Seven.
25 28 51	SY	You're looking real good here, systems-wise. This is our last pass at you. We'll see you back in, back in Houston. Keep up the good work.
25 28 59	P	Roger, will do. Thanks a lot.
25 29 35	CC	This is Canary Cap Com, could you give us a cabin O_2 partial pressure readout, please.
25 29 42	P	Roger. Cabin O_2 partial pressure is about 3.9 (psi).
25 29 47	CC	Roger.
25 29 58	CC	Was that 3.9 or 3.5? Over.
25 30 02	P	About 3.9.
25 30 05	P	Just a tad under 4. I'm going back on my suit. I've had my visor open for a while here.
25 30 11	CC	Roger.
25 30 21	CC	We're having T/M LOS here. Suggest you turn off your TV camera. Over.
25 30 26	P	Roger.

KANO

25 32 00	CC	Faith Seven, this is Kano Cap Com. We have T/M solid, and all systems are go.
25 32 06	P	Roger, Kano. Thank you.
25 35 28	CC	Faith Seven, this is Kano Cap Com. Your systems are still all green. Goodbye and good luck. Out.
25 35 34	P	Roger. Thank you Kano.

ZANZIBAR

25 41 50	CC	Faith Seven, Zanzibar Cap Com.
25 41 56	P	Go ahead, Zanzibar. Faith Seven.
25 41 58	CC	Faith Seven, Zanzibar Cap Com. Your systems look good on the ground.
25 42 05	P	Roger, Zanzibar. They look good up here, too.
25 42 08	CC	Okay. Could I have consumable readouts, please?
25 42 12	P	Roger. Auto fuel 60 percent, manual fuel 91 percent. Oxygen primary 145 percent, secondary 100 percent.
25 42 28	CC	Faith Seven, I read you. You are fading.
25 42 34	P	Roger.
25 42 56	CC	Faith Seven, Zanzibar Cap Com. Good luck on your pass.
25 43 01	P	Roger. Thank you.
25 49 33	P	Okay. Short status report. Nitrogen low pressure, auto 470 (psi), manual 490 (psi). B-nut temperatures. Pitch down 75 (degrees), pitch up 58 (degrees). Yaw left 70 (degrees), yaw right 70 (degrees). Roll counterclockwise 96 (degrees), roll clockwise 95 (degrees), Peroxide auto tank . . . 2 (degrees), peroxide manual tank 70 (degrees), peroxide reserve tank 76 (degrees). 250 inverter 116 (degrees), 150 inverter 128 (degrees), standby inverter 108 (degrees).

*(Non-flight-related transmission omitted.)

MUCHEA

26 00 54	CC	Faith Seven, Muchea Cap Com.
26 00 57	P	Howdy, Muchea Cap Com. Faith Seven.
26 01 00	CC	We have a systems go, and Aeromed go.

26 01 04	P	Very good.
26 01 09	CC	Aeromeds are standing by for blood pressure.
26 01 12	P	Roger, coming now. Does he know how to read it?
26 01 20	CC	Roger. They got it now.
26 01 33	CC	I have (recovery) area 18-1 retrosequence time. Prepared to copy?
26 01 40	P	Roger. Standby just a second.
26 01 41	CC	Roger.
26 01 47	P	Roger. Go.
26 01 48	CC	Area 18-1 (retrosequence time), 26 34 48.
26 01 56	P	Roger. 26 34 48.
26 01 59	CC	That's affirmative, (contingency recovery area) 18-A (retrosequence time) is 26 58 50.
26 02 10	P	That was (contingency recovery area) 18-A.
26 02 12	CC	Affirmative.
26 02 16	P	*I didn't get the rest of that, 26 what?
26 02 24	CC	26 58 50.
26 02 28	P	Roger. 26 58 50. Roger.
26 02 31	CC	And I have (recovery area) 18-2 (retrosequence time). 27 43 48.
26 02 38	P	Roger. 27 43 48.
26 02 42	CC	Roger. And these times does, do not include the clock error.
26 02 47	P	Roger. Understand.
26 02 49	CC	That first blood pressure was no good. Would you send another one? It was cut off early.

26 03 03	CC	Roger. We are getting your second blood pressure.
26 03 29	CC	That was a good blood pressure.
26 03 32	P	Roger.
26 03 35	CC	Systems report that your suit dome temp is decreasing slowly.
26 03 41	P	Roger. I'm running it down fairly low. I got it a little bit high.
26 03 45	CC	Roger.
26 03 48	P	It's been running consistently fairly low.
26 03 51	CC	Understand.
26 04 57	CC	Faith Seven. We have a message for you.
26 04 59	P	Roger.
26 05 02	CC	From the Australian Minister of Supply, the Honorable Alan Fairhall. - All Australia following your progress with lively interest. Muchea and Red Lake tracking station staffs, and Department of Supply are proud to be associated with this great NASA effort. Happy landings. End message.
26 05 20	P	Roger. Thank you very much.
26 06 55	CC	We have approximately one minute to LOS.
26 06 58	P	Roger.
26 07 21	CC	Could you give me a read on your partial O_2?
26 07 26	P	Roger. Cabin partial O_2 is about 3.9 (psi).
26 07 30	CC	3.9 (psi).
26 07 32	P	Roger.

CANTON

26 20 17	CC	Faith Seven, this is Canton Cap Com. Standing by.
26 20 22	P	Roger, Canton. I'm all green here.

HAWAII

26 27 00	CC	Faith Seven, Hawaii. Do you read?
26 27 04	P	Roger, Hawaii. Faith Seven.
26 27 06	CC	Faith Seven. All systems are green. We are standing by.
26 27 11	P	Roger. Thank you.
26 31 35	P	*And, we are approaching 26 31. We are between Hawaii and California. Very, very low rates. Turning on, my manual proportional control. Low rates.
26 32 33	P	I believe it's better to leave it as it is.
26 32 43	P	Now to get the camera out.
26 34 06	P	*And I made the first picture just then between, just off the west coast of the United States. Almost on the west coast.
26 34 49	P	Second one is coming in on the coast line. There are quite a bit of clouds, all different types and patterns. I took one getting in part of the coast line in under the clouds. That's number 2.
26 35 12	P	Snapping all these pics at f 5.6 and 1/125th.

CALIFORNIA

26 36 29	CC	Faith Seven, this is California Cap - .

26 36 32	P	Roger, California. Faith Seven.
26 36 45	CC	Faith Seven, this is California. We have you all green here on the ground.
26 36 51	P	Roger. Thank you. I'm all green here.
26 36 54	CC	Roger. When you take your photographs, will you turn your tape recorder to continuous?
26 37 00	P	Roger. I have the tape recorder on continuous.
26 37 48	P	Both of those pictures were made looking to, slightly to the south.
26 39 55	P	Looking back to the due west, inland on the desert area. In fact, there's the Salton Sea.
26 40 16	P	*There's the Gulf, and Baja California. Next one. There's El Centro area. I can make out individual fields. Smoke from the smoke-stack down there. There's some roads, houses. - A little airstrip. - There's a dry lake.

CAPE CANAVERAL

*

26 43 28	P	Faith Seven passing over Dallas.
26 45 56	CC	Faith Seven, this is Cape. Everything is go here. We are standing by.
26 46 01	P	Roger, Cape. Everything go here.
26 46 15	CC	Faith Seven. Would you like a G.m.t. hack? Over.
26 46 21	P	Roger. I would.
26 46 23	CC	All right. On my mark, G.m.t. will be 15 50 30. Standby, MARK. 15 50 30. (26 46 35)T

CNV-18

26 46 40	P	Roger. My G.m.t. clock is ten seconds fast.
26 46 47	CC	Understand the capsule clock.
26 46 53	P	That's the capsule clock.
26 46 55	CC	Roger.
26 46 59	CC	I have a correction to Diamond Head, retro-sequence time. Delta T, 4 minutes, 08 seconds for Diamond Head. Over.
26 47 11	P	10 minutes, 08 seconds.
26 47 15	CC	. . . 08.
26 47 16	P	4 minutes, 08 seconds.
26 47 21	CC	That is correct.
26 47 23	P	Roger.
26 47 28	CC	And if you should be inclined to, use the extra black and white 16 millimeter magazine outside, for general photography. Recommending f/16.0 since you have no filter.
Unreadable	P	Roger.
26 47 51	CC	We have no specific requirements for it, however.
26 47 56	P	Roger.
26 53 13	P	Radiation experiment coming on, NOW. (26 53 17)T. I'm at about, -10 degrees on pitch, roll right about 10 degrees, facing back to the west. Slowly oscillating in a left yaw rate.
26 56 08	P	I'm opening the KK clamp - And we'll see what happens here now.
26 57 51	P	*And it appears to be flowing, -, water out of the tin can.
26 59 00	P	Radiation experiment off.

27 02 26	P	The heat exchange dome temp immediately went down to the freezing point. Closing off KK clamp. - I'll have to continue on the original suit circuit.
27 09 15	P	Starting on the second series of the M.I.T. film, just short of Africa. Coast line should be coming in momentarily. - Took a shot out over the water of unusual, of good sized cloud buildups.
27 11 25	P	*Now the suit heat exchanger dome temp's starting back up. About thawed out.
27 16 38	P	Okay, short status. Roll clockwise 85 (degrees), roll counterclockwise 90 (degrees). Yaw right 68 (degrees), yaw left 75 (degrees). Pitch up 62 (degrees), pitch down 74 (degrees). Retro temp 75 (degrees). 250 inverter 108 (degrees), 150 inverter 124 (degrees), stand-by inverter 108 (degrees). Cabin outlet 72 (degrees). Auto peroxide tank 72 (degrees), manual peroxide tank 72 (degrees), reserve peroxide tank 75 (degrees). Correction on that, that auto peroxide tank is 82 (degrees). Isolated bus voltage 28 volts. - Camera going up in the - glove box.
27 26 08	P	(Yawn) Man, I dropped off to sleep again for a few minutes there.
27 29 50	P	Now, looks like the 1.5 (comfort control valve) setting is holding the - suit heat exchange dome temp for the moment. Almost down to the bottom, about 42 degrees.
27 30 47	P	Yo ho ho ho ho ho. (He is singing.)
27 31 51	P	Boy, what a beautiful view from up here. - Surprises you every orbit.

MUCHEA

27 33 39	CC	Faith Seven, Muchea Cap Com. Over.

MUC-18

27 33 42	P	Roger, Muchea. Faith Seven reading you loud and clear.
27 33 46	CC	Roger. Same. Would you place your telemetry switch in the continuous position please?
27 33 50	P	Roger. Coming continuous NOW.
27 34 15	CC	Roger. We have T/M.
27 34 19	P	Roger.
27 35 11	CC	I have some retrosequence times when you're ready to copy.
27 35 18	P	Roger. Go.
27 35 21	CC	Area 19-A (contingency recovery area) nominal.
27 35 28	P	Roger.
27 35 29	CC	19-B, 28 31 24. - Area 19-C, nominal.
27 35 45	P	Roger.
27 35 51	CC	Would you read back Area 19-B time?
27 35 53	P	Roger. 28 31 24.
27 35 57	CC	Roger.
27 36 34	CC	Systems here are go and Aeromed is go.
27 36 40	P	Roger. Thank you, I'm go from here.
27 37 03	P	Tell Warren to be careful and not get stuck.
27 37 06	CC	Ha, Ha. He knows about that.
27 37 12	P	Roger.
27 37 23	CC	Stuck on what?
27 37 26	P	On the outback.
27 37 28	CC	Roger. Acknowledge.
27 37 31	P	Roger.

27 37 57	CC	By the way, we have all joined tennis clubs.
27 38 02	P	Excellent. That's the best thing to do.
27 38 05	CC	Roger.
27 39 57	CC	Faith Seven, Muchea Cap Com. We read a very low suit dome temp.
27 40 02	P	Roger. I'm running it very low. I'm working it back up now.
27 40 17	CC	Say again, Faith Seven.
27 40 19	P	*Roger. I've already made a decrease in setting. It should be coming back up shortly.
27 41 51	P	*The suit dome temp is still acting up. Suit inlet temp is back up to about 68 degrees. The suit dome temp has gone down to about 38 degrees. Have suit coolant almost off now.
27 43 52	P	All right, suit coolant is shut completely off. Now it should come up.
27 50 10	?	. . . read you loud and clear.
27 50 45	P	Some of this fine plumbing they put in this thing. This sad thing on the needle, - on the diaphragm fitting has come out so I can't change the needle to any other fitting. - I'll have to leave the Kenny Kleinknecht clamp closed. - Meantime, I can't pump any more. - That container is full, and so is the other one.
27 52 24	P	I wish some of you guys who tried to stick in some of this plumbing and - connected here and there, and use it here and there would sit in here awhile and try and use the stuff.
27 55 33	P	Wow! - Look at that bright sunshine. Oeee weee!

HAWAII

28 00 28	CC	Faith Seven, Hawaii. Do you read? Over.
28 00 32	P	Roger, Hawaii. Faith Seven reading you loud and clear.
28 00 35	CC	Read you loud and clear. All systems are green. Standing by for fuel and O_2 readout.
28 00 40	P	Roger. Fuel 60/90 (percent). Oxygen 140/100 (percent).
28 00 55	CC	Say again, O_2 primary, please.
28 00 57	P	140 (percent), one four zero.
28 01 01	CC	Roger. Understand everything is green.
28 01 04	P	Roger. Thank you.
28 01 56	CC	Faith Seven, Hawaii.
28 02 00	P	Go ahead, Hawaii. Faith Seven.
28 02 02	CC	C-band in the continuous position?
28 02 05	P	Roger. It is.
28 02 06	CC	All right.

CALIFORNIA

28 08 07	CC	Faith Seven, this is California Cap Com.
28 08 11	P	Roger, California. Faith Seven.
28 08 13	CC	Roger. We have you green clear across the board, here.
28 08 18	P	Roger. Good.
28 08 19	CC	California standing by.
28 08 23	P	Roger.
28 13 10	P	Faith Seven passing over Baja California now. - See entire Baja California.
28 13 25	CC	Faith Seven. Were you calling California?
28 13 27	P	Negative. I was just commenting that I could see all of Baja California. It's all clear, all up and down.
28 13 38	P	Disregard.
28 13 40	CC	Roger, Faith Seven.
28 16 39	P	Faith Seven passing over Houston, Texas. Have it in sight loud and clear.

CAPE CANAVERAL

28 16 56	CC	Roger, Seven. We read that at the Cape.
28 16 59	P	Roger.
28 17 07	CC	Faith Seven, this is Cape. - We would like to see your TV returns, over.
28 17 12	P	Roger. I've got her on.
28 17 40	CC	Faith Seven, this is Cape.

28 17 43	P	Go ahead, Cape.
28 17 45	CC	I have you ATC (Air Traffic Control) clearance. Are you ready to copy?
28 17 49	P	Roger.
28 17 51	CC	Please pass to Major Cooper, in flight, from Air Force Secretary Zuckert and Chief of Staff General LeMay. It is with great pride and enthusiasm that the entire United States Air Force is following the progress of your historic flight. A dramatic contribution to aerospace exploration. Good luck, and God speed. Over.
28 18 21	P	Roger. Thank you.
28 18 24	CC	That's all right, Colonel.
28 18 37	CC	Faith Seven from Cape. Could you give me a comment on your general comfort, please?
28 18 44	P	*Roger. My general comfort is good, now. I've had a continuing battle with the plumbing in here. I was not able to open the KK clamp, due to the fact that, that system is full of water. One of the needles broke off, or the little insert into it broke, and I am unable to transfer any more water out of the condensate tank.
28 19 09	CC	Roger. I gather you are not bothered by it.
28 19 13	P	Negative. I am plenty comfortable. I've had trouble with the suit heat exchanger, keep having to run it up and down, and chase it, but it's doing fine.
28 19 23	CC	Looks like you are doing a real good job on that, apparently you are keeping yourself very comfortable.
28 19 28	P	Roger.

28 19 30	CC	I assume since you've had trouble with this clamp, that it is now in the, rather, since you've had trouble with the condensate transfer, that the clamp is now in the closed position.
28 19 41	P	That's affirmative.
28 19 44	CC	Roger. Good show.
28 19 53	P	Are you getting any TV yet?
28 19 57	CC	I think the light is low inside there, Gordo.
28 20 01	P	I'm outside.
28 20 09	CC	Are you in the sun?
28 20 10	P	Negative.
28 20 12	CC	I recommend you turn it off.
28 20 14	P	Roger.
28 20 18	CC	Also, how about the little squeezers, have they been beating their hearts out every ten minutes?
28 20 24	P	Roger. Faithfully every ten minutes, throughout the whole day and night, every time.
28 20 31	CC	A couple of beady yellow eyes, huh?
28 20 42	P	Ha, Ha, - Roger. I'm directly over Miami. I'm looking right down on Miami Beach.
28 20 48	CC	. . .
28 21 39	CC	Faith Seven, this is Cape. Would you give us a blood pressure now, please?
28 21 43	P	Roger.
28 31 44	P	Okay, you guys will have had it now . . . another measure . . .

CNV-HAW-19

28 41 31	P	Drink some water.
28 55 34	P	Okay. Radiation experiment coming on now.
28 55 48	P	I'm in full drifting flight, so I'll have random attitudes for it.
28 59 51	P	At 28 59, my 0.05g telelight came on after I turned my warning lights off and back on to dim. Have turned my 0.05g, and emergency 0.05g switch fuse, off.
29 02 38	P	Radiation measurement is off.
29 24 19	P	For my short status report. Peroxide regulated pressure, auto 470 (psi), manual 490 (psi). - 75 (degrees) pitch down, 60 (degrees) pitch up. Yaw left is 80 (degrees), yaw right is 65 (degrees). Roll counterclockwise is 78 (degrees), roll clockwise is 75 (degrees). - Auto peroxide outlet 72 (degrees), manual is 72 (degrees), reserve 75 (degrees).

HAWAII

29 28 15	CC	Faith Seven, Hawaii on air-to-ground relay, do you read? Over.
29 28 19	P	Roger, Hawaii. Faith Seven reading you loud and clear.
29 28 29	P	Roger. Faith - Faith Seven is reading you loud and clear, Hawaii.
29 34 07	P	Hawaii Cap Com, Faith Seven.
29 34 09	CC	Go ahead, Seven, this is Hawaii. Read you loud and clear.
29 34 13	P	Roger. Wonder if you would relay to the Cape - a little situation I had happen and see what they think on it. While turning my warning lights off and back on to dim, my 0.05g telelight came on in my telelight panel. Now the action that I have taken is, to turn off my

	P (cont'd)	0.05g switch fuse and my emergency 0.05g switch fuse. Would you relay to them, and get their idea on it? Over.
29 34 44	CC	Understand your 0.05g light came on and you turned your 0.05g fuse switch and emergency 0.05g fuse switch off.
29 34 56	P	That's affirmative.
29 34 59	CC	Is that affirmative?
29 35 01	P	Affirmative.
29 35 02	CC	Can we have T/M on?
29 35 06	P	Roger. T/M is on now, have it on ground command.
29 35 10	CC	I have retrosequence time for (contingency recovery) area 20-Alpha, is nominal.
29 35 18	P	Roger. 20-Alpha is nominal. Thank you.
29 35 22	CC	We also, pass on to you, turn C-band beacon on, a G.e.t. of 30 58 00.
29 35 33	P	30 58 00.
29 35 37	CC	Roger. Turn off at 31 08 00.
29 35 56	CC	Did you copy, Seven?
29 35 57	P	Negative. I got 30 58 00 on.
29 36 02	CC	Roger. Turn it off 10 minutes later.
29 36 05	P	Roger. Will do.
29 36	CC	Seven, this is Hawaii. Was that a red or a green telelight?
29 36 38	CC	Faith Seven, Hawaii. Do you read? Over.
29 36 40	P	Roger. Go ahead, Hawaii. Faith Seven.

29 36 42	CC	Roger. Was your 0.05g light red or green?
29 36 46	P	It was green. Over.
29 36 50	CC	Consumable readout please.
29 36 52	P	Roger. Fuel, 58 (percent) auto, 90 (percent) manual. Oxygen, 140 (percent) primary, 100 (percent) secondary.
29 37 02	CC	Roger. Understand.
29 37 28	CC	Seven, this is Hawaii Cap Com.
29 37 31	P	Go ahead, Hawaii. Seven.
29 37 37	CC	Faith Seven, Hawaii. Over.
29 37 39	P	Go ahead, Hawaii. Faith Seven.

CALIFORNIA

29 41 32	CC	Faith Seven, Faith Seven. This is California Cap Com.
29 41 35	P	Roger, California Cap Com. Faith Seven here.
29 41 39	CC	Roger, Faith Seven. Our panel looks good. Telemetry does not indicate 0.05g.
29 41 52	P	Roger. It must be a - . I just threw a glitch into the light when I was turning my warning lights off and on, then, probably.
29 42 02	CC	There is a little diode in your light test, that failed could cause that light to come on.
29 42 08	P	Roger. - Does MCC recommend that I go ahead and put my 0.05 and emergency 0.05g switch fuses back on?

29 42 21	CC	Faith Seven. Leave them off.
29 42 25	P	Roger.

GUAYMAS

29 44 07	P	Go ahead, Guaymas. Faith Seven.
29 44 09	CC	I have some retrosequence times for you, for (recovery area) area 20-1.
29 44 16	P	Roger.
29 44 17	CC	30 53 01.
29 44 22	P	Well, just a minute. Which one is that?
29 44 25	CC	Area 20-1.
29 44 28	P	Roger. 30 - .
29 44 30	CC	53 01.
29 44 33	P	53 01. Roger.
29 44 34	CC	Roger. And (contingency recovery) areas 20-B, C, and D are nominal.
29 44 42	P	Roger. Understand. Thank you.
29 44 45	CC	Roger. And 20-1 doesn't take in your clock error.
29 44 49	P	Roger. Understand.
29 48 38	CC	Faith Seven. Guaymas Cap Com.
29 48 40	P	Go ahead, Guaymas. Faith Seven.
29 48 42	CC	*Would you go ahead and power up your ASCS bus? We would like to know if you have your Amp Cal programmer.
29 48 50	CC	. . . gyros caged now?

29 48 51	P	Gyros are caged. Fly-by-wire, ASCS coming on normal now.
29 49 25	P	Guaymas, are you still reading me?
29 49 29	CC	Go ahead, Faith Seven.
29 49 32	P	Roger. You still have me on telemetry?
29 49 35	CC	Roger. You look good.
29 49 37	P	Roger. I am supposed to do this HF antenna test, now.
29 49 43	CC	Roger.
29 49 49	P	I will be on HF for a couple of minutes and then back on UHF.
29 50 13	P	This is Faith Seven on high frequency. Capsule elapsed time 29 50 20. Now for HF antenna test. My attitudes are zero (degrees) in roll. Am rolling 90 degrees and repeating.
29 51 37	P	This is Faith Seven on the second portion of the HF antenna test. C.e.t. 29 51 45. Now I am rolled 90 degrees. HF out.
Unreadable	P	Faith Seven is back on UHF.

CAPE CANAVERAL

29 52 26	CC	Faith Seven. This is Cape. How do you read? Over.
29 52 29	P	Roger, Cape. Faith Seven reading you loud and clear.
29 52 32	CC	Roger, Gordo. On this 0.05g business, we are interested in whether or not the Amp Cal has switched to 0.05g logic. Do you follow?
29 52 43	P	Roger.

29 52 44	CC	*We figured the best way to do it, after gyros have warmed up, is to uncage, initiate a slow rate in any axis, and see if you have attitudes. If you do have attitudes, we feel that the Amp Cal has not latched at 0.05g. Over.
29 53 01	P	Roger. Assume a slow rate in any axis and see if the attitudes follow. Right?
29 53 09	CC	Right. When you uncage the gyros, you'll have to set up a very slow rate and see if you have attitude indications.
29 53 16	P	Roger.
29 54 04	CC	Seven, from Cape. We may have LOS before you are able to do this. Once you have done it, report to us through some other station, and then power down the ASCS after your test is complete.
29 54 18	P	Roger.
29 55 07	CC	Seven from Cape. Have you uncaged gyros yet?
29 55 10	P	Negative. Not yet.
29 55 14	CC	All right. We may lose you. Advise the next station.
29 55 19	P	Roger.
29 55 21	CC	Try to advise us even if we've had LOS.
29 55 29	P	Roger.
29 57 41	P	Cape. Faith Seven here.
29 58 13	P	Cape Cap Com. This is Faith Seven on high frequency. How do you read on this? Over.
Unreadable	CC	. . .
29 58 28	P	Cape Cap Com. Faith Seven on high frequency.
Unreadable	CC	. . .

CONFIDENTIAL

CNV-CSQ-20

29 59 09	P	Hello, Cape. Faith Seven on high frequency. Over.
Unreadable	CC	. . .

COASTAL SENTRY QUEBEC

30 48 03	CC	Hello, Faith Seven . . .
30 48 13	P	Roger, Faith Seven here. Go ahead.
30 48 16	CC	. . .
30 48 48	P	Faith Seven, here. Go ahead, John, just barely read you.
30 49 02	?	. . .
30 50 36	CC	Hello, Faith Seven. Hello, Faith Seven, this is CSQ Cap Com calling early. If you read me, Gordo, answer on HF. Over.
30 50 58	P	Roger, John. This is Faith Seven. Reading you about 4 by 4. How me?
30 51 05	CC	Hello, Faith Seven. CSQ Cap Com reads you very weak and unreadable. If you can read, give me status of your ASCS check, please. Over.
30 51 17	P	Roger. My Amp Cal is latched up 0.05g. I do not have ASCS. Over.
30 51 25	CC	Understand you do not have ASCS. Is that affirm?
30 51 29	P	That is affirm.
30 51 37	CC	Faith Seven, this is CSQ. Can you say again, trouble with your Amp Cal? I did not receive that part of your transmission. Over.
30 51 45	P	Roger. My 0.05g portion of the logic is latched in on the Amp Cal, so I do not have attitude indications through the auto pilot anymore.

30 52 01	CC	Roger . . . Amp Cal . . . Gordo, understand the Amp Cal is not working and the ASCS is inoperative, was your gyro in the slaved position when you overturned? Over.
30 52 11	P	Say again.
30 52 58	P	This is Faith Seven on UHF. How do you read, CSQ?
30 53 33	CC	Faith Seven, CSQ Cap Com. Do you still receive me? Over.
30 53 37	P	Roger, CSQ. Faith Seven on UHF. How do you read? Over.
30 53 41	CC	Roger. Still reading you, Gordo. Did you have any of your gyros switched to slave during the ASCS check? Over.
30 53 47	P	*Roger. I had them caged and then I went to slave, and in moving my rates, I did not get any attitudes. Over.
30 53 59	CC	Roger. Understand. No attitudes. Did you go into roll at all? Over.
30 54 03	P	Roger. I tried roll, pitch, and yaw. Over.
30 54 07	CC	Roger. You did not go into automatic roll. Is that affirmative?
30 54 11	P	*I did not power up the ASCS. All I did was turn my ASCS on, powered up my ASCS a-c bus. And when it was warmed up, then uncaged my gyros to the slave position, which should give me attitude.
30 54 30	P	And if - .
30 54 32	CC	Repeat that please. We don't have much time. Over.
30 54 34	P	Roger. I do not have attitudes when I go to slave on my gyros. When I uncage my gyros, I do not have attitude indications, with the ASCS a-c powered up.

30 54 48	CC	Understand you did not go into actual ASCS. Is that affirmative?
30 54 51	P	Negative. I did not.
30 55 39	CC	Faith Seven, . . .
30 55 41	P	Roger. Reading you loud and clear.
30 55 44	CC	Roger. I am reading you rather weak. You did not go on ASCS. You powered up, and went to the slave position, got no gyro indication. Is that affirmative?
30 55 58	P	That is affirm, affirm.
30 56 05	CC	Hello, Faith Seven. Be sure your T/M transmitter is on, and C-band beacon is on, for Range Tracker pass. I repeat, make sure C-band beacon is on the T/M is on for the Range Tracker pass.
30 56 21	P	Roger. It's on.
30 56 32	CC	Hello, Faith Seven. - this is CSQ Cap Com. . . . on. Acknowledge please. Over.
30 56 44	P	Roger. They are on. Affirm, John.

HAWAII

31 00 30	CC (CNV)	Faith Seven, this is Cape Cap Com. Over. (Loud squeal)
31 00 33	P	Roger. Go ahead, Cape Cap Com. Faith Seven.
31 00 49	CC (CNV)	Faith Seven, this is Cape Cap Com. Over. (Loud squeal)
31 00 53	P	Roger. Cape Cap Com, Faith Seven here. Go ahead.

31 00 57	CC (CNV)	Roger Gordo. . . . your Amp Cal is probably locked up on 0.05g. We are interested in just how much of your Amp Cal is working.
31 01 08	P	You're not coming through at all, Al.
31 01 11	CC (CNV)	. . .
31 01 14	P	Negative, I'm not reading you.
31 01 17	CC (CNV)	. . .
31 01 23	P	Al, I can't read you. My Amp Cal is locked up on 0.05g. I do not have attitude indicators. Over.
31 01 33	CC (CNV)	Roger. Roger. Can you read me now?
31 01 37	P	Just barely.
31 01 39	CC (CNV)	Roger. Standby a few minutes.
31 02 00	CC (CNV)	Hello Faith Seven. How do you read me now?
31 02 06	P	A little bit better.
31 02 09	CC (CNV)	Faith Seven, I do understand that you do not have attitude indications? . . . do you read?
31 02 20	P	Negative. I'm not able to understand you yet. Over.
31 02 29	CC (CNV)	Okay. Standby.
31 02 50	CC (CNV)	Seven, from Cape. How do you read?
31 02 51	P	Roger. Reading you better now.
31 03 14	CC (CNV)	Seven, from Cape. How do you read now?

HAW-20

31 03 17	P	Roger. Reading you loud and clear now.
31 03 25	P	Roger, Cape. Reading you loud and clear now.
31 03 28	CC (CNV)	Roger. We're interested in how much of your Amp Cal is still available to you.
31 03 42	CC (CNV)	Seven, we would like you to do a how-de-doody test over Hawaii, to find out how much of your Amp Cal is still available.
31 03 52	P	Roger. Do you say you want me to power up my ASCS?
31 04 12	P	Cape Cap Com, say again. You were cut out on that. Over.
31 04 30	CC	Faith Seven, Hawaii Cap Com. Do you read?
31 04 33	P	A little bit, Scott.
31 05 01	CC	Seven, Faith Seven, Hawaii Cap Com.
31 05 04	P	Roger, Hawaii. Faith Seven.
Unreadable	CC	Go ahead Cape.
31 05 06	F	*We want to use the transfer to your circuit and let Cape Cap Com talk with him this pass.
31 05 14	CC	Roger. You are relaying at this time.
31 05 17	F	Roger. Would you also make sure that your people are prepared to watch for the T/M signal also, after this pass, we would appreciate if you'd play your last pass over again, to make sure that you understand what we want in regards to what happened to the 0.05g light between the time you got acquisition of the . . .
31 05 47	CC	Roger, I copied.
Unreadable	SY	Hawaii command carrier on.

31 07 01	P	Hello, Hawaii. Are you reading Faith Seven now? Over.
31 07 24	CC (CNV)	Faith Seven, this is Cape. Over.
31 07 27	P	Roger, Cape. Faith Seven here.
31 07 37	P	Roger, Cape. Faith Seven here.
31 07 40	P	Roger, Cape. Faith Seven here. Go ahead.
31 07 43	CC (CNV)	. . .
31 07 53	P	You're cutting in and out, I understand you want to find out how much of my Amp Cal is gone.
31 08 00	CC (CNV)	Affirmative. We would like to have you first switch your ASCS 0.05g fuse switch on, and check the 0.05g light?
31 08 11	P	Roger. I'll do that now.
31 08 20	P	Roger. When I have put my ASCS 0.05g switch fuse on, my light comes green. Over.
31 08 28	CC (CNV)	Roger. Turn that fuse switch off and put your emergency 0.05g fuse switch on and check the light please.
31 08 35	P	Roger.
31 08 40	P	With the ASCS 0.05g switch fuse off, and emergency 0.05g switch fuse on, the light is not green. Over.
31 08 50	CC (CNV)	Roger. In the meantime Hawaii will check T/M. Do not forget that we would like . . . fly-by-wire . . .
31 09 27	P	You were cutting in and out. I didn't get any of that, over.
31 09 31	CC (CNV)	Okay. We will try it one more time . . . Over.

31 09 57	P	Roger. To go into auto and check for what?
31 10 00	CC (CNV)	. . . 0.05g.
31 10 08	P	You were cut out.
31 10 11	CC (CNV)	Roger. We would like to have you check for the roll rate which occurs after 0.05g.
31 10 18	P	Roger. Understand.
31 10 21	CC (CNV)	If you get this rate - .
31 15 22	P	Retro temp is 80 (degrees). Pitch down is 70 (degrees), pitch up is 65 (degrees). Yaw left 80 (degrees), yaw right 62 (degrees). Roll counterclockwise 72 (degrees), roll clockwise 68 (degrees). Auto peroxide tank 80 (degrees), manual 70 (degrees), reserve 72 (degrees). 250 inverter 101 (degrees), 150 inverter 121 (degrees), standby inverter 98 (degrees).

CALIFORNIA

31 16 44	CC	Faith Seven, Faith Seven, California Cap Com.
31 16 47	P	Roger, California, Faith Seven. Loud and clear.
31 16 51	CC	Be sure when you check for roll rate that the ASCS 0.05g fuse switch is in the on position.
31 16 59	P	Roger.
31 17 03	CC	. . .
31 17 08	P	*I have both fuse switches in the on position. My ASCS a-c bus is powered. I'm going to gyros slave. Now I understand I'm to go on, to auto. Is that affirm?

31 17 26	CC	Say again, Faith Seven.
31 17 28	P	Roger. I have ASCS bus powered. Gyros are slaved, and now I understand that they want me to go into auto and see if I get the roll rate. Over.
31 17 39	CC	This is affirmative, Faith Seven.
31 17 42	P	Roger. Then do I come right back off with it if I get the roll rate? Over.
31 17 46	CC	*This is true. You can stop the capsule with the fly-by-wire.
31 17 50	P	Roger. Going into auto, NOW. (31 17 52)^{T}
31 17 58	P	Roger. I do have the roll rate.

GUAYMAS

31 18 25	CC	Guaymas Cap Com.
31 18 26	P	Go ahead, Guaymas. Faith Seven.
31 18 29	CC (CAL)	You can turn off the ASCS now.
Unreadable	CC	And turn the 0.05g ASCS fuse switch off and the - .
31 18 39	P	Roger. I have my ASCS 0.05g switch fuse off, and I'm powering down the ASCS. Is that affirmative?
31 18 49	CC	Power down your ASCS.
31 18 53	P	Roger. Powering down ASCS.
31 18 56	CC	Cage your gyros.
31 18 57	P	Roger. They are already caged.
31 19 01	CC	Gyros caged. ASCS bus, turned off.
31 19 04	P	Roger.

31 19 13	P	*Would you ask the Cape, what do I have left now. I have Aux Damp, fly-by-wire and manual proportional, is that affirm, for retrofire?
31 19 46	CC (CAL)	. . . Com.
31 19 51	P	Go ahead, Guaymas.
31 19 53	CC (CAL)	. . .
31 20 05	P	Roger. What are they recommending? Do you know?
31 20 11	P	Roger.
31 20 17	CC (CAL)	. . .
31 20 21	P	Roger.
31 20 27	CC (CAL)	. . .
31 20 31	P	Roger. No problem.
31 21 10	CC (CAL)	Gordo. This is your last pass over us.
31 21 15	P	Roger. I'll see you in a couple of days.
31 21 18	CC (CAL)	Roger. You're doing an outstanding job. I'm proud of you.
31 21 19	P	Roger. Thank you, Gus.
31 21 23	CC (CAL)	Your friends in Mexico say adios.
31 21 25	P	Roger. Muchas gracias. - Muchas gracias. - That's French for thank you.
31 21 37	CC (CAL)	The same.

31 54 25	P	*Okay. Here I am at 31 54 28, now. Slow drift again in the nighttime. Still having trouble with the cabin, with the suit heat exchanger dome temp, got control of if here, pretty close. Will fool around with it for about another 2 hours and some odd minutes.
31 55 18	P	Everything looks good. I have 53 percent auto (fuel) and about 79 percent manual (fuel).
31 58 20	P	Okay.
32 20 55	P	I'm observing some cities, through the clouds at 32 20, 32 21.
32 21 17	P	Seeing out over Laos.

COASTAL SENTRY QUEBEC

32 22 02	P	Roger, CSQ Cap Com. Faith Seven here.
Unreadable	CC	. . .
32 22 18	P	Roger, CSQ Cap Com. Faith Seven reading you.
32 22 23	P	Roger. I read you, John.
32 22 38	CC	Faith Seven, this is CSQ Cap Com. Answer if you read me on HF. Over.
32 23 01	P	Roger, CSQ Cap Com. Faith Seven reading you.
32 23 07	CC	CSQ Cap Com, Roger. We're going to change your clock Gordo, to keep you from doing it. We have a list to copy here on this retro procedure. Are you ready for clock command? Over.
32 23 16	P	Roger. Go ahead.
32 23 19	CC	Command on. What we're doing is backing your clock off one hour. You'll still be able to use minutes and seconds okay for retro. Over.

CSQ-21

32 23 27	P	Okay.
32 23 29	CC	Okay. Here is the list to copy. Over.
32 23 37	P	Roger. Go ahead.
32 23 39	CC	Roger. Also, before we start this, make sure C-band is on for Range Tracker and also T/M. Over.
32 23 46	P	Roger. C-band and T/M are on.
32 23 55	CC	Roger. Okay, are you ready to copy?
32 23 58	P	Roger. Go.
32 24 00	CC	Roger, number one is attitude permission by-pass.
32 24 09	P	Go.
32 24 11	CC	Attitude permission by-pass is number one. Do you acknowledge?
32 24 14	P	Roger. I got that. Go ahead.
32 24 16	CC	Roger. Retrorocket arm switch, manual.
32 24 21	P	Roger. Got that.
32 24 24	CC	Roger. Fly-by-wire thrust select switch, high and low.
32 24 32	P	Roger. Got it.
32 24 33	CC	Roger. Retrosequence fuse switch, number 2.
32 24 40	P	Roger. Got it.
32 24 43	CC	Roger. Retromanual fuse switch, number 2.
32 24 49	P	Roger.
32 24 51	CC	Roger. ASCS a-c bus switch, on.
32 24 54	P	Roger.

32 24 56	CC	ASCS 0.05g fuse switch, number 1.
32 25 04	P	Roger.
32 25 06	CC	ASCS control switch, select.
32 25 16	P	Roger.
32 25 18	CC	Mode select switch, off.
32 25 25	P	Roger.
32 25 27	CC	Manual handle, push on.
32 25 34	P	Roger.
32 25 37	CC	Roger. That will put you on manual. If you want to go fly-by-wire all you'd have to do is pull the manual handle off and your mode select to fly-by-wire. Roger.
32 25 45	P	That's affirm.
32 25 46	CC	Roger, okay. Squib arm will come on at retrofire minus 5 seconds.
32 25 57	P	Roger.
32 25 59	CC	Roger. And I will count down to retrofire with the Cape so you can hear. Over.
32 26 04	P	Roger, and I'll manually use fire retro then. Is that affirmed?
32 26 09	CC	Roger. The next step is to depress fire retro override, in other words push the fire button. Over.
32 26 14	P	Roger. Understand.
32 26 16	CC	Roger. Now, if you have no retros, you can use as a backup, the following. If there are no retros the next procedure would be used as a back up.
32 26 26	P	Okay.

32 26 29	CC	Hold just a second. What does your clock read now? Over.
32 26 34	P	Time to retrograde 01 31 50 now.
32 26 40	CC	Say, your clock setting should read 34 59 52. Over.
32 26 47	P	Negative. It does not.
32 26 50	CC	Roger. Did you copy 34 59 52? Over.
32 26 58	P	Roger. 34 59 52.
32 27 01	CC	Roger. You can set it yourself after leaving station here. I think we should get the rest of this procedure now. Over.
32 27 06	P	Roger.
32 27 09	CC	Roger. If you have no retros, use, if you get no retros, use as backup the following. Number 1, retro delay to instant.
32 27 21	P	Roger.
32 27 22	CC	Press retrosequence button.
32 27 24	P	Roger.
32 27 26	CC	Okay. Some additional precautions. The retrojettison will have to be done manually.
32 27 31	P	Roger.
32 27 32	CC	Be sure that you do not arm the retrojettison switch until after the rockets have fired. Over.
32 27 38	P	Roger. Don't worry.
32 27 39	CC	Yeah, I'm with you. You'll probably not get a fire retro telelight, but we should get them okay here on the ground. Over.

32 27 47	P	Roger.
32 27 48	CC	Okay. Hold your retroattitude until jettison retro, keep rates as low as possible, maintaining visual reference as aid for low rates and at your nominal 0.05g time, select reentry mode.
32 28 03	P	Roger.
32 28 04	CC	That reentry mode of selection should be at about 34 09 19.
32 28 11	P	Roger.
32 28 14	CC	Okay. You'll come up on ASCS, go on auto with ASCS continuous, switch for your 0.05g and then your reentry. Over.
32 28 26	P	Roger.
32 28 27	CC	Okay. That's the whole works now, also go cabin fan normal now and your cabin control valve to 3.0. Over.
32 28 35	P	Roger. I already have it on.
32 28 40	P	What's wrong with reentering on Aux Damp on the reentry portion.
32 28 46	CC	Say again, Gordo.
32 28 48	P	Never mind, I'm losing you. Let's go UHF.
32 28 51	CC	Roger. Okay, see if you can get that 34 59 52 set up before you leave our telemetry. Over.
32 28 59	P	Roger, will do.
32 29 31	P	Roger. 34 59 52.
32 29 40	CC	Roger, Faith Seven. I have you at 34 + 59 + 52. Over.
32 29 45	P	That's affirmative.
32 30 09	CC	Faith Seven. CSQ. If you receive, switch to HF. Over.
32 30 20	P	Roger. Reading you loud and clear now, John.

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32 30 23	CC	You came back in loud and clear then. We have your clock setting 34 59 52, that's correct.
32 30 29	P	That is affirmative.
32 30 32	P	That's one hour off, right?
32 30 34	CC	Say again, Faith Seven.
32 30 36	P	That's one hour beyond, right?
32 30 37	CC	That's correct. When we count down, we'll use minutes and seconds only. Over.
32 30 42	P	Okay.
32 30 45	CC	They'll check you on this, on later in this pass. Over. We should be ready next time around.
32 30 50	P	Roger.
32 31 04	P	Is that next time around or the time after that?
32 31 09	CC	Say again.
32 31 10	P	Roger. That is the next time around, is it not?
32 31 13	CC	That is correct, next time around when we see you, I will be firing.
32 31 17	P	Roger.
32 31 23	CC	What is your attitude? Are you in drift now, Gordo?
32 31 26	P	That's affirmative.

HAWAII

32 40 42	CC	Hello Faith Seven, Faith Seven, Hawaii Cap Com. Do you read?

32 40 46	P	Roger, Hawaii Cap Com, Faith Seven. Loud and and clear.
32 40 49	CC	Roger, Faith Seven, Hawaii Cap Com recommend take a green as for go now and go over your stowage check list now . . . did you copy?
32 41 03	P	Roger. I'm practically all stowed right now.
32 41 09	CC	Say again, Faith Seven.
32 41 11	P	I'm practically completed with my stowage check-list now.
32 41 15	CC	Roger. You understand to take green for go, at this time?
32 41 19	P	To take what?
32 41 21	CC	Green for go. Take green for go at this time.
32 41 25	P	Roger, I understand. A green for go, will do.
32 41 31	CC	Roger. Zanzibar will go over this checklist that you copied from John and John will help you with the retrofire time. Also do you understand that the time in your clock now is retrofire time + 1 hour? You should read at retrofire 01 00 00.
32 41 55	P	Roger. Understand.
32 41 58	CC	Roger. What's your PCO_2 reading please?
32 42 02	P	* Roger, PCO_2 is about 2-1/2 (millimeters of mercury) now.
32 42 19	CC	PCO_2 is 2.5. Is that right?
32 42 21	P	That's affirmative.
32 42 48	CC	Faith Seven, Hawaii Cap Com.
32 42 52	P	Go ahead, Hawaii.
32 42 56	CC	We want the retrofire check list completed over the Atlantic with the exception of your squib switch which you can get at retrofire -5 sec.

32 43 07	P	Roger, I intend to have it completed before then.
32 43 23	CC	Seven, Hawaii Cap Com. I'm sure you're familiar with the star pattern you'll be using during the retrofire.
32 43 32	P	Roger.
32 44 21	CC	Faith Seven. Hawaii Cap Com. Everything looks good on the ground. You might keep your eye on the PCO_2. What is your visor position?
32 44 29	P	Roger. My visor is open and I'm breathing off the cabin.
32 44 32	CC	Roger.
32 44 34	P	I'm going to emergency rate on my oxygen for a moment just to see if it's the gauge, or if it actually is building up a little.
32 44 42	CC	Roger. Understand emergency flow rate at this time? (Tone noted)
32 45 03	P	Roger. It does not seem to be decreasing on the gauge, so it must be the gauge error.
32 45 10	CC	Roger. We're reading an increase on the ground as well.
32 45 23	P	I'm back on normal oxygen rate.
32 45 27	CC	Understand back on normal.
32 45 30	P	Roger, fans are running.
		(standby a-c auto warning tone occurs at 33 03 09)T
33 05 43	P	Well, things are beginning to stack up a little. ASCS inverter is acting up. And my CO_2 is building up in the suit. Partial pressure of O_2 is decreasing in the cabin. Standby inverter won't come on the line. Other than that things are fine.
	P	All right, I've checked that.

ZANZIBAR

33 33 14	CC	Faith Seven, this is Zanzibar Cap Com. How do you read?
33 33 18	P	Roger, Zanzibar, Faith Seven reading you loud and clear.
33 33 21	CC	Faith Seven, Zanzibar Cap Com, let's start your checklist here.
33 33 28	P	Roger, go ahead.
33 33 29	CC	One item has been added. Verify visor is closed.
33 33 36	P	*Negative, visor is not closed at the moment, I have a high CO_2 rate in suit.
33 33 47	CC	Item number 1 on the checklist now reads, cage gyro and remain caged throughout reentry.
33 33 58	P	Roger. I have an item for you. My ASCS a-c inverter has failed, so I will be making a manual reentry.
33 34 09	CC	ASCS inverter has failed?
33 34 12	P	That is affirmative.
33 34 14	CC	Roger. Let's continue this checklist now. Attitude permission bypass, bypass position.
33 34 21	P	*Roger. Bypass.
33 34 23	CC	Retrorocket arm switch manual?
33 34 26	P	Roger, on manual.
33 34 28	CC	*Fly-by-wire thrust selector switch high-low.
33 34 34	P	Roger on high and low.
33 34 36	CC	Retrosequence fuse switch number 2.
33 34 39	P	Number 2.

33 34 42	CC	Retromanual fuse switch number 2.
33 34 46	P	Number 2.
33 34 47	CC	ASCS bus switch on.
33 34 51	P	ASCS a-c bus is off.
33 34 53	CC	Roger. ASCS 0.05g fuse switch to number 1 position.
33 34 59	P	On number 1.
33 35 01	CC	ASCS control switch select.
33 35 04	P	On select.
33 35 07	CC	Mode select switch off.
33 35 08	P	Mode select off.
33 35 11	CC	Manual handle push on.
33 35 14	P	Manual handle is on.
33 35 16	CC	*Right. Squib arm at retro minus 5 seconds.
33 35 27	P	Roger.
33 35 28	CC	And that will occur in approximately 25 minutes.
33 35 31	P	Roger, I understand.
33 35 35	CC	Have you tried the standby inverter on ASCS bus?
33 35 38	P	Roger, the standby inverter will not start.
33 35 41	CC	The standby inverter will not start.
33 35 43	P	That is affirmative.
33 35 45	CC	Roger. - Cape Flight advises you believe your CO_2 partial gauge in the capsule, as this was confirmed over Hawaii.
33 36 05	P	Cape advises what?

33 36 09	CC	We will advise you at this time, you have sufficient oxygen in to continue on emergency rate from now through reentry if required.
33 36 17	P	Ah, Roger. I understand.
33 36 22	CC	Shall we go over the retro backup?
33 36 26	P	Negative. I have that straight, I'll just go to retrofire to instantaneous and punch retrosequence.
33 36 35	CC	That is correct. You have the other additional precautions.
33 36 47	P	Negative. What's that?
33 36 48	CC	Retrojettison must be done manually.
33 36 52	P	Oh, Roger, Roger. I have those.
33 36 53	CC	Retrojettison switch to arm, after rockets fired.
33 36 58	P	Roger. I have that.
33 37 03	CC	You will probably not get a fire retro telelight.
33 37 06	P	Roger.
33 37 08	CC	Ground should be able to confirm, though.
33 37 11	P	Roger.
33 37 31	CC	Faith Seven, Zanzibar Cap Com.
33 37 34	P	Go ahead Zanzibar, Faith Seven.
33 37 36	CC	*We've had about 3 percent rise on the CO_2 partial. Do you think it is advisable to purge again at this time?
33 37 47	P	Negative. It seems to be holding pretty steady, over what it has been.
33 37 51	CC	Roger. We're getting very poor air-ground communications at this time.

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33 37 56	P	Roger.
33 38 09	CC	. . . Faith Seven. Zanzibar Cap Com.
33 38 12	P	Go ahead Zanzibar. Faith Seven.
33 38 14	CC	We would advise the visor be closed prior to retrofire.
33 38 20	P	Roger, it will be.
33 38 35	CC	Faith Seven. Zanzibar Cap Com.
33 38 38	P	Go ahead.
33 38 39	CC	Cape advises closing visor.
33 38 42	P	Roger.
33 38 44	CC	Do you confirm.
33 38 46	P	Roger. Will close visor. Visor is closed and locked.
33 39 02	CC	Roger, visor is closed and locked. Continue to watch that PCO_2 meter and if it rises, go on emergency rate.
33 39 10	P	Roger.

COASTAL SENTRY QUEBEC

33 56 25	P	CSQ Cap Com, Faith Seven. Over.
33 57 03	CC	Hello Faith Seven, CSQ Cap Com. Over.
33 57 06	P	Roger, CSQ Cap Com. Faith Seven in retroattitude. Checklist complete.
33 57 16	P	Roger, CSQ Cap Com, Faith Seven.
33 57 19	CC	Faith Seven, CSQ Cap Com. Roger. You're sounding good. How's that check test? All complete?
33 57 24	P	Roger. All complete except for squib.

33 57 26	CC	Roger. How's the window attitude? Check okay?
33 57 30	P	Roger. Right on the old gazoo.
33 57 32	CC	That's the way, boy.
33 57 34	CC	*Okay. Our procedure, Gordo. - I'll give you the 1 minute hack before retrofire and then I'll give you a 10 second countdown to what would normally be retrosequence. This time there will just be a countdown to a 30 second point and then a 10 second countdown to retrofire and at the 5 point tell you to arm squib.
33 57 53	P	Roger. That's fine.
33 57 54	CC	Roger.
33 57 59	CC	How's your PCO_2 doing?
33 58 02	P	Oh, its coming on up. And my ASCS inverter has failed, few other little odds and ends.
33 58 09	CC	Okay. Roger.
33 58 11	P	*I'll shoot the retros on manual, and I'll reenter on fly-by-wire.
33 58 18	CC	Roger. Okay.
33 58 20	P	I'm looking for a lot of experience on this flight.
33 58 23	CC	You're going to get it.
33 58 26	CC	Okay, we've got the beginning of the 1 minute period and about 25 seconds here.
33 58 31	P	Roger.
33 58 48	CC	Okay. One minute to go on my mark. Standby.
33 58 54	CC	MARK. (33 58 54)^{T}
33 59 00	CC	Did you get that?

33 59 03	P	Roger. I got it.
33 59 04	CC	Roger. I'll give you a 10 second count here down to the 30 second point.
33 59 08	P	Roger.
33 59 14	CC	10, 9, 8, 7, 6, 5, 4, 3, 2, 1. Thirty (33 59 24)T seconds.
33 59 30	CC	Okay. The next 10 second count will be a count-down to your manual retro. Over.
33 59 35	P	Roger.
33 59 44	CC	10, 9, 8, 7, 6, squib arm. 4, 3, 2, 1, fire (33 59 53)T. Roger. A green one here.
34 00 13	P	Roger. I think I got all three.
34 00 16	CC	Roger. How did your attitude hold, Gordo?
34 00 18	P	Well, pretty fine.
34 00 20	CC	Good show boy, real fine. Looks like they came off right on the money on time.
34 00 25	P	Roger, I think so.
34 00 28	CC	*Roger. Very good. On the next mark at 60 seconds from that retro you should jettison retros, and you'll do that one manually, right?
34 00 37	P	Roger.
34 00 40	CC	Got any estimate on your attitude hold, in any axis how far you drifted off on retro. Over.
34 00 45	P	No, I sure don't. I held it relatively close, John, but I couldn't guess.
34 00 52	CC	That's the way to do it. Just too close, to tell any error. Good head.
34 00 55	P	Ha, ha. No, I wouldn't say that.

34 00 59	CC	Roger. You can go ahead and jettison retros and time.
34 01 01	P	Roger. Jettisoning retros.
34 01 09	P	And off they came.
34 01 14	CC	We have your signal.
34 01 17	P	Roger.
34 01 18	CC	*Okay. Dealers choice on reentry here fly-by-wire or manual, I think you said, you're coming back in fly-by-wire?
34 01 28	P	Roger. I think I'll come back in fly-by-wire.
34 01 31	CC	Roger, okay. You can hold retroattitude now for a while here. If you wanted to hold your attitude more close by holding retro-attitude until you get a little closer to 0.05g.
34 01 43	CC	Your 0.05g is 34 09 19. Just before you get to that you can come up to your zero reentry attitude. Over.
34 01 51	P	Roger.
34 01 53	CC	And you can establish roll at that time also.
34 01 56	P	Roger.
34 02 01	P	*What was the time on establishing that?
34 02 06	CC	*34 09 19. That is your 0.05g time.
34 02 11	P	Roger.
34 02 14	CC	Just a little bit before that you could come on up to zero zero.
34 02 20	P	Roger.
34 02 31	CC	Roger. Keep your rates down, keep your rates as near zero as you can.

34 02 36	P	Roger. Will do.
34 02 49	CC	*It's been a real fine flight, Gordo. Real beautiful all the way. Have a cool reentry, will you?
34 02 55	P	Roger, John. Thank you.
34 03 24	CC	Faith Seven, CSQ.
34 03 27	P	Roger, CSQ.
34 03 28	CC	ASCS 0.05g switch fuse to the off position. Over.
34 03 33	P	Roger. 0.05g switch fuse to the off position.
34 03 37	CC	Roger.
34 03 42	P	Roger.

RANGE TRACKING SHIP

34 08 21	CC	Faith Seven, Faith Seven, Faith Seven, this is RTK M and O (Maintenance and Operations). How copy?
34 08 27	P	Roger, Faith Seven. Reading you loud and clear.
34 08 30	CC	*Roger. RTK here. I have landing area weather for you. Ready to copy?
34 08 34	P	Roger.

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34 13 07	CC	Faith Seven, Faith Seven, Hawaii Cap Com. Do you read?
34 13 11	P	Roger.
34 13 13	CC	Faith Seven. What is your status?
34 13 16	P	Roger. Doing fine.

34 13 21	CC	Faith Seven, Hawaii Cap Com. Say your status. Over.
34 13 25	P	Roger. Faith Seven is doing fine. Reentering.
34 13 29	CC	Roger. Is your altimeter off the peg yet? Over.
34 13 33	P	Roger.
34 13 36	CC	Say your altitude, say your altitude.
34 13 38	P	Roger, 95,000 (feet).
34 13 43	CC	Roger. Understand 85. Are you standing by for the Drogue at 40,000 (feet)?
34 13 49	P	Roger.
34 13 50	CC	We have tops of cloud in recovery area at about 36,000 feet.
34 13 58	CC	There is a 0.5 cloud coverage at 1500 feet. 5 to 6 foot waves. Surface wind 15 knots from 085 degrees. Standby for your recovery time. Did you copy?
34 14 15	P	Roger, you'll have to wait a minute, I'm just hanging on here now.
34 14 21	CC	Roger, Faith Seven. Say again your last.
34 14 31	P	I got a Drogue.
34 14 34	CC	Understand. Drogue is out.
34 14 35	P	Roger.
34 14 42	CC	*Think I got a, an oral report of Drogue out. Standby.
34 14 52	CC	Faith Seven, Hawaii Cap Com. Is your Drogue out at this time?
34 14 55	P	Roger. Drogue is out.

34 14 59	CC	Checklist follows. Snorkel ring at 20,000 feet. Landing bag switch to auto. Recovery arm switch manual. Fuel jettison fuse switch, number 1. Fuel cross feed handle, push on. Roll, yaw, pitch, T handles push on. Position the T/M switch, your option. ASCS select switch should be off. And give me the status on your fuel dump. Over.
34 15 47	P	Fuel is dumped.[1]
34 15 50	CC	Understand fuel is dumped. Pressure regulator handle should be pulled.
34 16 03	P	Roger. I have a good main.
34 16 07	CC	Say again, Faith Seven.
34 16 09	P	Roger, I have a good main chute.
34 16 11	CC	Good main chute, good show.
34 16 14	P	Roger, landing bag is down and green.
34 16 15	CC	Repeat, please?
34 16 16	P	Landing bag is down and green.
34 16 17	CC	Understand the landing bag is green. What is your rate of descent?
34 16 28	P	About 34 feet per second.
34 16 31	CC	Everything looks good, preparation for impact. Urine transfer shutoff valve, closed. Transfer hose, disconnect. Blood pressure hose, disconnect. Aeromed connector, disconnect. Helmet outlet hose, disconnect.

1 Pilot subsequently informed editor that he meant to say "fuel dump is armed". The rapidity of events at this moment precluded his rendition of a corrective statement to Cap Com.

34 16 59	CC	Faith, are you staying with me, Gordo?
34 17 02	P	Roger, I've got my list right here, Scott.
34 17 06	CC	Say again, Gordo.
34 17 11	CC	Roger, helmet should be unlocked and opened.
34 17 19	CC	Temperature probe should be disconnected.
34 17 24	CC	Unfasten your helmet neck ring seal.
34 17 31	CC	Tighten your straps.
34 17 36	CC	Lock the shoulder reel harness.
34 17 41	CC	Standby for impact.
34 17 45	P	Roger.
34 17 47	CC	Are there any recovery aircraft on air-to-ground now?
34 17 52	P	Negative.
34 17 56	CC	This is Hawaii Cap Com. Understand you are in communication with recovery aircraft, is that correct?
34 18 02	P	Negative. Negative, I am not. Over.
34 18 09	CC	We'll stay with you, then.
34 18 19	CC	Seven, Hawaii Cap Com. (USS) Kearsarge has visual contact with you at this time, over.
34 18 25	P	Roger, thank you. That sounds good.
34 18 29	CC	Good show, pal.
34 18 43	CC	Faith Seven, Hawaii Cap Com. Say your altitude.
34 18 47	P	Roger. 4,000 feet.
34 18 49	CC	4,000, your pre-impact check is complete, is that correct?
34 18 53	P	Roger.

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34 18 55	CC	Understand pre-impact checklist is complete.
34 19 00	P	Roger. Fuel is jettisoned and all T handles are in.

RECOVERY

34 19 04	R1	Hello Astro. This is 1 Indian Gal. Over.
34 19 07	P	Roger, this is Astro, go ahead.
34 19 10	R1	Roger, 1 Indian Gal. We are circling you at about 500 feet you're coming down very nicely. Sea state is about 5 to 8 foot waves, a few white caps. Wind is just perfect for a Helo (Helicopter) operation. The carrier (USS Kearsarge) is about five miles away.
34 19 31	P	Roger.
34 19 42	R1	Astro, you are swaying just a little bit, looks like about a 50 or rather, correction a 30 foot sway. You're coming down very nicely. You are presently about 1,000 feet. The wind is from the southwest at about 12 knots, perhaps 15.
34 20 06	P	Roger, understand.
34 20 14	R1	Astro, 1 Indian Gal. How do you feel? Over.
34 20 17	P	Roger, I'm in fine shape. Excellent.
34 20 22	R1	Thank you Astro, this is Indian Gal. We still are circling you very nicely. You're now steadying up quite nicely, about 400 feet. You are passing my starboard side.
34 20 35	P	Roger.
34 20 36	R1	Have 3 Helos right around you. Got the swimmers with me. They'll be out just about the time you're setting down on the water.

34 20 44	P	Roger.
34 20 47	R1	The carrier is only about 3 miles away. Couldn't be a nicer shot.
34 20 50	P	But I missed that third elevator.
34 20 53	R1	Now you are in the water in good shape.
34 20 57	R1	Your parachute is still with you. Chute has spilled and is in the water.
34 21 09	R1	Collar in the water.
34 21 15	P	Roger.
34 21 23	R1	Your dye markers out now, Astro. Looks nicely. I'm coming in now for the swimmers.
34 21 39	R1	Astro, your capsule is on the side. The capsule, parachute did not deploy.
34 21 46	P	Roger.
34 21 49	R1	Now your capsule is coming up nicely. It's sitting at about a 30 degree angle on the water.
34 21 55	P	Okay.
34 21 56	R1	You look pretty good.
34 22 02	R1	I'm on top over you, directly overhead. Your capsule is now erected nicely. You're bouncing on the sea. I notice now that the parachute has released. I'm now going to drop the swimmers.
34 22 14	P	Roger. Hold them clear a minute and I'll get the HF antenna up.
34 22 38	K	Astro, from Begonia on Kearsarge. How do you read me? Over.
34 22 43	P	Roger, Begonia, Faith Seven. Read you loud and clear. Over.

34 22 47	K	Roger, how you feeling? Over.
34 22 50	P	Fine, couldn't be better.
34 22 52	R1	Astro, all the swimmers are out, the first one is on your capsule now, he's pounding. Do you hear him? Over.
34 22 57	P	Roger, good shape. (Shouting to swimmers).
34 23 13	P	Hello dahr, how are you? (Shouting to swimmers).
34 23 17	K	Gordon, this is Begonia. We estimate approximately 45 minutes to have you on deck on Kearsarge. Please advise your wishes and any info this subject. Over.
34 23 33	P	I'm okay. I'll wait on the boat. (Shouting to swimmers).
34 23 37	P	I'm in good shape.
		*(Non-flight-related transmission omitted.)
34 23 45	R1	Astro, this is 1 Indian Gal. Do you hear the swimmers? Over.
34 23 52	P	I just had my helmet off talking to the swimmers.
34 23 54	R1	Roger. I see you don't have smoke. Apparently, you are all right. What is, Begonia desires to know, what your desires about being picked up. Over.
34 24 02	P	Roger. I'd like to come aboard the carrier if they will grant me permission for an Air Force troop.
34 24 06	R1	*Roger. Begonia, this is 1 Indian Gal. Gordon Cooper desires to come on board the carrier if they will let an Air Force Officer aboard. Over.
34 24 18	K	Roger. Permission granted, of course, and I don't know whether he heard me before or not. Estimate about 45 minutes to have him on deck. Over.

34 24 30	R1	*Major, Begonia estimates 45 minutes for your on-deck time. What are your desires? Over.
34 24 37	P	Roger. I'll wait to go on board. Over.
34 24 40	R1	Roger, understand that you desire pickup by Wildcat . . .
34 24 44	P	Thank you sir. No, negative. I'll wait and go onboard the carrier. Begonia did you read? Over.
34 24 47	R1	Roger. I understand you will be hoisted by the carrier. Begonia did you read? Over.
34 24 53	K	This is Begonia. I copy. Out.
34 25 00	K	Indian Gal 1, Begonia. What status on collar? Over.
34 25 05	R1	Roger, collar is about half way around. The swimmers are in the water nicely. The capsule is working well.
34 25 12	K	Roger.
34 25 14	R1	The parachute was a little delayed in deploying. It is now riding very nicely in the water.
34 25 26	?	Roger Wildcat, Tea Kettle 222. Go . . .
34 25 31	R1	*They attached the collar just about all the way around. The sea state is the same as the ship.
34 25 39	R1	The collar, the capsule looks like it's riding at about a 20 degree angle. Quite steady in the water.
34 26 13	R2	One from two.
34 26 15	R1	One. Over.
34 26 16	R2	*Roger. Swimmers desire to save chute. Shall I deploy swimmers? Over.

34 26 20	R1	*This is one. Don't deploy swimmers at this time. The boat looks like it will pick up the chute. It is close enough.
34 26 29	R2	Roger.
34 26 30	R1	Wildcat, the collar now looks like it is all the way around the capsule, its just about to be inflated.
34 26 37	R1	The swimmers are still with it. The chute is still floating next to the capsule. They don't look like they are having any difficulty. Looks like a normal operation.
34 26 49	K	This is Begonia. Roger, out.
34 26 52	R1	*The collar is now inflated fully.
34 26 56	R1	It has picked the capsule up nicely. It is now erect, and the swimmers are making final adjustments.
34 27 06	K	Begonia. Roger, out.
34 27 08	P	Sorry, I missed that third elevator, Begonia.
34 27 12	R1	Begonia, Gordon Cooper says he's sorry he missed the third elevator.
34 27 18	K	I think it's a quite acceptable shot, Major.
34 27 25	P	Thank you.
34 27 33	R1	Begonia, the swimmers are now hanging on to the collar. It is fully inflated, the capsule is upright. The capsule looks like it's riding very nicely in the water, just going up and down slightly on the 5 to 8 foot waves. There is a few white caps around but they are not breaking over the tower.
34 27 57	R1	Looks like a normal operation and they are just waiting for him.
34 28 07	K	*This is Begonia. Gordon, are you in communication with the swimmers at this time? Over.

34 28 14	P	I can yell to them through the hatch here.
34 28 18	K	I understand that you can hear them through the hatch. Is that correct?
34 28 21	P	Roger, we can communicate by yelling back and forth, I believe.
34 28 26	K	Roger. Out.
34 28 42	K	Major Cooper from the USS Kearsarge. Welcome to the Pacific. Goód landing.
34 29 01	R1	*Major, the Kearsarge is now making a down base leg. They are going to make a normal 180 approach to you. They are about 2 miles away coming down wind. They will start their turn into your position in about 10 minutes.
34 29 17	P	Roger. Very fine.
34 29 19	P	Hello. How are you doing? I'm fine. Okay. How are you? (Shouting to swimmers).
34 29 36	K	Major, they estimate your miss at 3,900 yards. Looks like a record.
34 29 43	P	Say again, sir. Say again, I was talking to the swimmers.
34 29 47	K	Roger. You missed by 3,900 yards, very acceptable.
34 29 51	P	Thank you.
34 29 54	P	What? I'll wait on the carrier. What? (To swimmers).
34 30 05	R1	Two, this is One. Looks like the parachute is sunk now, I don't see it anymore. There is a small Drogue chute still . . . upwind of the green dye.
34 30 15	K	Delighted to have you back in the Pacific and congratulations on a wonderful, wonderful ride.

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34 30 23	P	What? Yeah, I'll wait on the carrier. (To swimmers).
34 30 32	K	Gordon, this is Begonia. John Graham will be on this line and be stationed down near the hangar, near the elevator, about the time that we pick you up. Thought I would alert you that he will be on the line to talk to you just before you get out. Over.
34 30 52	P	Roger. Fine.
34 31 00	K	Is there anything we can do in preparation -.