

MAC CONTROL  
NUMBER C-115269

(Title Unclassified)

GEMINI VI VOICE COMMUNICATIONS

(AIR-TO-GROUND, GROUND-TO-AIR AND ON-BOARD TRANSCRIPTION)

(MAT MASTERS, PAGES 1 - 128)

OK

O.K.  
WTS/

CC 10, 9, 8, 7, 6, 5, 4, 3, 2, 1,  
CC Ignition!

00:00:01 CC Lift-Off! Lift-off 13:37:26! Lift-off 13:37:26!

00:00:05 C6 Oh, the clock is started. It's a real one!

00:00:19 C6 Roll commence on time.

00:00:22 C6 Roll complete.

00:00:24 C6 Pitch is tracking.

00:00:29 P6 Cabin pressure relieving.

00:00:39 C6 Our altitude's building up a little bit.

00:00:49 C6 It's only 1 g.

00:00:50 CC MARK. 50 seconds.

00:00:51 P6 Yes.

00:00:53 P6 Cabin pressure sealed at 5.5.

00:00:54 CC Roger.

00:01:03 CC What's cabin pressure, Gemini VI?

00:01:05 C6 Air pressure looks good.

00:01:15 C6 Roger. Tracking real good.

00:01:17 CC Roger.

00:01:24 C6 There was a slight yaw correction. Looks good.

00:01:26 CC Roger, Wally.

00:01:41 CC MARK. 1 plus 40.

00:01:41 C6 Roger. Mode 2.

00:01:43 CC Roger. Mode 2.

00:01:46 P6 There's the DCS update.

00:01:49 CC Roger. Update.

00:01:51 C6 That's about 2-1/4 g's.

00:01:58 CC Trajectory is looking real good.

00:02:00 C6 Very good. I've got a good second stage.

00:02:05 CC Roger.

00:02:27 P6 DCS update.

00:02:30 CC Roger. Update.

00:02:39 C6 Staging.

00:02:41 CC Roger. Staging.

00:02:43 C6 Switching to high rate.

00:02:53 C6 Guidance Initiate must be in. It's real slim.

00:02:56 CC Roger. Guidance Initiate.

00:03:08 CC Steering looks good from here, Gemini VI

00:03:10 C6 Roger. She looks like a dream.

00:03:15 C6 I saw some flash in that stage.

00:03:18 CC Roger.

00:03:22 P6 Attitude errors are all zero.


00:03:23 CC Roger.

00:03:24 C6 How about that! Did you read that area, Elliot?  
Attitude errors are zero!

00:03:28 CC Roger.

00:03:49 CC You're right down the line, Gemini VI.

00:03:51 C6 Very good.

00:03:53 

00:04:00 C6 Well. Right on the mark (horizon on 8-ba.1).

00:04:14 C6 She'll start winding up now.

00:04:15 C6 Yes, it's only about 2.

00:04:19 C6 [REDACTED] - -

00:04:22 CC You're GO from here, Gemini VI.

00:04:24 C6 Roger. You got a big fat GO from us. It looks great!

00:04:27 CC Roger, Wally.

00:04:34 P6 Attitude errors are still zero.

00:04:36 C6 Good show.

00:04:38 CC Didn't copy that, Tom.

00:04:46 P6 [REDACTED] ...

00:04:48 C6 Yes.

00:04:55 C6 Yes. Now she's winding up a little bit - about 4 g.

00:05:09 CC Stand by for Point 8.

00:05:10 C6 Roger.

00:05:13 CC MARK. Point 8. V over VR.

00:05:15 C6 Roger. Point 8. Mode 3.

00:05:31 C6 Thirty 1, 2, 3, 4, 5, 6, 7, 8, 9.

00:05:40 P6 [REDACTED]

00:05:41 P6 [REDACTED] -

00:05:42 CC [REDACTED]

00:05:42 C6 [REDACTED]

00:05:43 P6 ... for Attitude on, Wally. Standing by to separate spacecraft.

00:05:48 C6 Okay.

00:05:51 C6 We started at 39. We'll burn at 59. She looks real stable here.

00:05:55 P6 Beautiful!

00:05:56 C6 ... separation.

00:05:57 CC Gemini VI. You are GO.

00:05:58 P6 Good velocity. 25,710.


00:06:00 C6 Separating.

00:06:03 P6 Okay sep. That's good. ... command.

00:06:05 C6 Very good.

00:06:06 P6 And jett fairings, Wally.

00:06:07 C6 Okay.

00:06:08 P6 

00:06:09 C6 Fairings are gone.

00:06:12 C6 Am I in Rate Command?

00:06:14 P6 You're in Rate Command.

00:06:15 C6 Okay.

00:06:17 C6 Okay. We're here.

## BERMUDA

00:06:19 P6 Attitude is 72. 25,730.

00:06:29 CC Gemini VI, your 1-Alpha time is 17 plus 02 and I copy your insertion.

00:06:36 C6 Roger. 17:02. Everything looks great here.

00:06:41 P6 It's great!

00:06:42 CC Standing by for IVI's.

00:06:43 C6 Okay. How about caging me up?

00:06:46 P6 Okay. Roger. Going to CAGE SEF.

00:06:48 C6 Okay.

00:06:51 P6 CAGE SEF.

00:06:55 C6 Okay. I'll give you the IVI's. They're 11 forward, 2 right, 2 down.

00:07:03 CC Copy. 11 forward, 2 right, 2 down.

00:07:06 C6 That's affirmative.

00:07:10 P6 Okay ...

00:07:12 C6 [REDACTED]

00:07:13 P6 [REDACTED]

00:07:15 C6 [REDACTED]

00:07:16 P6 [REDACTED]

00:07:19 C6 [REDACTED] Okay, let's go on SE? again.

00:07:26 CC Roger.

00:07:27 P6 Okay.

00:07:31 P6 Oh, what a beautiful insertion!

00:07:34 P6 Positive gamma too, Wally?

00:07:35 C6 Say again.

00:07:40 CC Gemini VI, your orbit is 87 by 141. More tracking coming.

00:07:48 C6 That's great! Very good!

00:07:51 C6 Okay, we also see some little white stuff that is around us. They're little white specks.

00:07:58 CC Roger.

00:08:03 C6 Let me get the squibs off and we're all set.

00:08:05 C6 Let's put this in Plat Mode and regroup. Okay?

00:08:07 P6 That sounds like a good idea.

00:08:10 P6 Good. I'll give him a call on these addresses. We'll finish things up.

00:08:15 C6 Okay.

00:08:17 P6 Houston, Gemini VI. Ready to copy addresses?

00:08:20 CC Go ahead.

00:08:22 P6 Roger. Address 72, 25729; Address 94, 00025; Address 97, 00011; Address 52, Minus 00000; Address 73, 03015. Everything looks real nominal.

00:08:49 CC Roger, Tom. Copied them all.

00:08:51 P6 Post-insertion check list. Going to get the ...

00:08:55 CC Gemini VI. Check your voice recorder off.

00:08:58 P6 Batteries are up.

00:08:59 P6 Roger. It's off, Elliot. We're minding DCS platform mode primary scanner. All my squibs are off.

00:09:07 CC Roger. And did you get his interfering?

00:09:11 P6 Sure didn't. They left us with not much choice once we pressed that button.

00:09:15 CC Roger.

00:09:59 P6 Elliot ... there's no doubt about lift-off.

00:10:03 CC Roger, Gemini VI.

00:10:08 P6 ... more comfortable now.

00:10:12 CC Roger.

00:10:17 C6 Things are looking very good at primary. We'll check secondary probably after LOS.

00:10:22 CC Roger.

00:10:24 C6 All control modes are very good.

00:10:28 CC Roger, Tom. Roger, Wally.

00:10:30 C6 Okay. I do have a little smoke at my window. I hope there's not any danger in the ...

00:10:37 CC Roger.

00:10:45 CC Gemini VI, your GMT LO is 13:37:26.

00:11:12 C6 For the record, the acceleration g for entrance into orbit is 6.8 g's.

#### CANARY ISLANDS

00:16:04 CC Gemini VI, Canary CAP COM. How do you read? Over.

00:16:10 P6 Gemini VI. Loud and clear. How me?

00:16:12 CC Roger. Read you loud and clear.

00:16:16 CC We have a Bermuda vector for you. You're 87 by 140, requiring an Out-of-Plane Maneuver and a Height Adjustment.

00:16:29 C6 Roger. Understand 87 by 140, which will require and Out-of-Plane and Height Adjustment.

00:16:36 C6 What sort of out-of-plane velocity did we have at ignition?

00:16:41 CC Stand by.

00:16:42 C6 Okay.

00:16:49 C6 ... You ready to copy, Canary?

00:16:51 CC Go ahead.



00:16:52 C6 We are reading now 60 per second forward, 22 left and 4 down.

00:17:00 CC Roger. Copy.

00:17:01 P6 ... Change communication. We may have had an out-of-plane.

00:17:06 CC Okay.

00:17:16 CC Calculated out-of-plane approximately 31 feet per second.

00:17:20 C6 Okay. Thank you.

00:17:21 CC Roger. All systems are GO on the ground.

00:17:24 C6 Roger. We are the same shape here.

00:17:28 C6 That was a beautiful launch we had and we're ticking right along.

00:17:32 CC Good to hear that.

00:17:33 C6 How are the VII boys up here?

00:17:35 CC Say again.

00:17:36 C6 How are the VII boys doing? Did they go over awhile ago?

00:17:39 CC They sure did. They're about 5 minutes ahead of you.

00:17:42 C6 Roger. Tell them ...

00:17:46 CC Okay.

KANO

00:19:11 CC Whenever you're ready, VI, we'll check communications.

00:19:16 P6 Go ahead.

00:19:25 C6 Roger. Give me a call on the adapter UHF Set Number 1. Do you read?

00:19:29 CC Roger. Read you loud and clear. How me?

00:19:31 C6 Read the same.

00:19:32 CC Roger.

00:19:54 CC Gemini VI, Canary. You read on UHF 1?

00:19:57 P6 That's affirmative. We're now on secondary scanner ... due to pump it HF shortly.

00:20:03 CC Roger.

## HOUSTON

00:22:24 CC Gemini VI, Houston. How do you read?

00:22:56 CC Gemini VI, Houston CAP COM. How do you read?

00:23:05 C6 This is Gemini VI. ...

00:23:06 CC Roger. Read you loud and clear. Sounds like we've got good communication.

00:23:11 C6 Roger. ... where ... UHF ...

00:23:21 CC Roger, VI.

## TANANARIVE

00:34:24 C6 Returning to primary scanner at 34 minutes. Warming up time about 30 seconds. We'll give it 2 minutes for a good chance.

00:35:07 CC Gemini VI, Gemini VI, Houston. How do you read?

00:35:20 P6 ... Elliot, I read you loud and clear. How me?

00:35:23 CC Roger. You're weak but very clear. It's getting better. Would you confirm radiator to FLOW,

adapter C-Band to CONTINUOUS and reentry C-Band to COMMAND?

00:35:36 C6 Roger. Your radiator is now FLOW. Stand by. A C-Band OFF. ... still max flow - still a little warm in here ... We have C - reentry to COMMAND; adapter beacon to CONTINUOUS. Over.

00:35:57 CC Roger, Gemini VI.

00:36:02 C6 ... VII.

00:36:11 CC Did not copy your last transmission, VI.

00:36:58 C6 ... Gemini VI.

00:37:01 CC Go ahead, VI.

00:37:02 C6 Roger. Both heaters checked out normal ...

00:37:08 CC Say again, VI. You're weak and a little bit garbled.

00:37:12 C6 Roger. Both primary and secondary scanners are looking very well.

00:37:19 CC Understand both primary and secondary scanners are looking good.

00:37:35 C6 Out suit temperature has gone down about 1 degree.

00:37:39 CC Roger. Suit temperature has gone down 1 degree.

#### CARNARVON

00:52:19 C6 Carnarvon CAP COM, Gemini VI. Do you read? Over.

00:52:22 CC Gemini VI, Carnarvon CAP COM. Read you loud and clear.

00:52:25 C6 Roger. The ... fire six and nine ... Mark.

00:52:33 CC Roger. Copy.

00:52:37 C6 Looks like you've got some pretty heavy thunderstorms down that way.

00:52:39 CC That's affirmative, VI. We have you GO on your radiator.

00:52:43 C6 Roger.

00:52:45 CC Turn your secondary pumps off and Operator switch to NORMAL.

00:53:07 C6 Carnarvon, do you have any estimate of our out-of-plane burn?

00:53:11 CC Roger. We have an update for you. We'd also like to get your GO, NO-GO readings at this time, please.

00:53:18 C6 Okay. Stand by.

00:53:27 C6 Okay. We're ready for you.

00:53:29 CC Okay. Go ahead.

00:53:45 CC We're standing by for your readings, Gemini VI.

00:53:53 C6 You must have something we don't have. You want us to give you quantities for GO.

00:53:57 CC Roger. I need your Adapter Batteries 1, 2, and 3 readings, please - voltage and current.

00:54:08 C6 Roger. Adapter Battery 1 is 24.5 volts. 1A is 7.0 amps. Adapter Battery D is 24 and 6.8 amps. Number 1C is 24 and 6.9. 2A is 24 and 8.5 amps. 2B, 24 and 8.3. 2C is 24 and 9.0. Over.

00:54:56 CC Roger. We copy.

00:55:03 CC Gemini VI. We give you a GO for 17-1. Also, I have an update for you on your maneuvers. Are you ready to copy?

00:55:12 C6 Roger on the GO for 17-1 and ready to copy on the ...

00:55:16 CC GET B: 01:34:03; Delta-V, 13.5. Height-Adjust: 02:18:02; Delta-V, 59.5. Phase-Adjust: 02:42:18; Delta-V, 31.3. Plane-Change towards the south: 03:47:36; Delta-V, 44.3. Co-elliptical: 05:16:33; Delta-V, 33.7. Terminal Phase initiate: 05:48:40; Delta-V, 42.5. Terminal Phase final. Did you copy?

00:56:27 C6 Roger. We have those. We have the general ballpark. The main one we want now is the first one. Can you read that back to the Height-Adjust over the States?

00:56:44 CC We'll update you on the final Height-Adjust over Hawaii. Also, we'd like you to check on your X axis ... It's slightly out of tolerance. So don't press the START COMP until late for your Height-Adjust. We'll get a better hack on it over the States.

00:57:00 C6 Roger. Understand we have a slight ... blast here. Will not push the START COMP for this until just prior to the burn.

00:57:07 CC That's affirmed.

00:57:10 C6 We can see the IVI's counting up.

00:57:12 CC Roger. Would you like a time hack?

00:57:15 C6 That's affirmative. We'd like a GET time hack.

00:57:19 CC All right. I'll give you a time hack. It's 57 minutes, 30 seconds.

00:57:31 CC MARK. 57:30.

00:57:34 C6 Roger. We have that. At this point, we've ... and getting intermittent noise. ... We don't see one either. Okay.

00:57:49 CC Roger. Can you place your Cryo Quantity switch to the ECS O2 position, please?

00:57:53 C6 Roger.

00:58:05 CC Gemini VI, Carnarvon. You can turn your Cryo switch to the OFF position.

00:58:10 C6 Roger. Turning off. Our PQI is 98.0 percent.

00:58:18 CC Roger on that.

00:59:36 P6 We have a night airglow passing right through the moon at this time, SEF. The time was at 59 minutes,

10 seconds GET. Estimate the layer at approximately 1/2 degree. It was approximately the same thickness as the moon.

01:15:50 C6 [REDACTED]

01:15:57 P6 [REDACTED]

01:16:05 C6 I think, at this point, you could notice that we were cleaning up the cockpit, worried about suit temp. Got it down finally at this time where we're convinced it's all right.

01:16:17 C6 [REDACTED]?

01:16:21 P6 [REDACTED]

01:16:24 C6 Okay, we'll fold on that. Recorder off.

#### HAWAII

01:16:39 CC Gemini VI, Hawaii CAP COM.

01:16:42 C6 Go ahead, Hawaii.

01:16:44 CC How are you doing up there this morning?

01:16:45 C6 Very good. Nice to be up here.

01:16:47 CC Good to have you up there. We're slowing you GO here on the ground, and what's your status?

01:16:53 C6 We have completed GO. The suit temperature has come under control very nicely. I'll give you a reading.

01:16:59 CC Go ahead.

01:17:01 C6 It's now about 67 degrees and we're comfortable. Just a minute.

01:17:06 CC Okay. Will you turn your secondary pumps off?  
Over.

01:17:10 C6 Secondaries off.

01:17:13 CC Okay. We've got that. Stand by. What is your  
cabin temperature?

01:17:21 C6 ... cabin temperature is 90 degrees.

01:17:25 CC Roger, 90. I've got your Height-Adjust informa-  
tion. Are you ready to copy?

01:17:29 C6 Ready to copy.

01:17:31 CC GET B: 01:34:02; Delta-V, 14.0; your burn time,  
0 plus 24; yaw 180, pitch 0; Core 25, 00140;  
Cores 26 and 27 are all zeros. Your forward  
thrusters for maneuver will be posigrade. This is  
your Height-Adjust.

01:18:20 C6 Roger. For the Height-Adjust: that's GET, 01  
plus 34 plus 02; Delta-V, 14.0; duration, 0 plus  
24; yaw 180 degrees, pitch 0; Core 25, 00140; 26  
and 27, all zeros; forward-firing thrusters,  
posigrade maneuvers.

01:18:51 CC Okay. You got all that right.

01:20:27 CC VI, Hawaii.

01:20:31 C6 VI, go.

01:20:32 CC Okay. We'll be standing by if you need anything  
else. Can we help you now?

01:20:36 C6 Positive. Apparently all the sunrises are going  
to be on Tom's side but you can't fix that.

01:20:41 CC Okay. Say that again. I couldn't read you too  
well.

01:20:43 C6 Roger. Apparently all the sunrises are going to  
be on Tom Stafford's side but you can't - you can't  
fix that.

01:20:49 CC Okay. Very good. They'll update your bias after  
you complete your burn over the States.

01:20:53 C6 Very good. We'll start easing it off ... shortly.  
 01:20:59 CC Roger. Understand. Will be standing by.  
 01:21:01 C6 Roger. Thank you. Out.  
 01:24:21 P6 [REDACTED]  
 01:24:26 C6 [REDACTED]  
 01:24:31 P6 [REDACTED]  
 01:24:33 P6 Okay, recorder off.

## CALIFORNIA

01:26:34 CC Gemini VI, Houston. How do you read?  
 01:26:43 CC Gemini VI, Houston. How do you read?  
 01:26:56 CC Gemini VI, Gemini VI, Houston CAP COM. How do you read?  
 01:27:00 P6 ...  
 01:27:06 CC Gemini VI. You are fading in and out. Try again.  
 01:27:12 P6 Roger, Houston. You're ... You're coming in clearer now. How do you read me?  
 01:27:17 CC Roger. Read you clear now. We're standing by for your burn. Advise this is a UHF 6 pass.  
 01:27:35 P6 Roger, Elliot. We are ... first burn in ... mode ... adjust alining ... certainly looks beautiful.  
 01:27:46 CC Roger. We're standing by for your burn, VI.

## GUAYMAS

01:28:03 P6 Guaymas. This is VI ... bias on this burn. ... just before burn time.



01:28:13 CC Roger. And after your burn - when you are completed with it - we plan to update your accelerometer bias. We'll contact you after the burn.

01:28:23 P6 Okay.

## TEXAS

01:31:15 C6 Houston CAP COM, Gemini VI. Is VII talking to you? We can hear something down here, very normal.

01:31:21 CC Negative. They are not talking to us at the present time.

01:31:25 C6 I'm sure reading someone's transmission, and it's very normal.

01:31:28 CC Roger.

01:32:58 CC Gemini VI, Houston. You're coming up on 1 minute to the burn.

01:33:03 CC MARK.

01:33:05 C6 Roger. We're right with you.

01:33:21 C6 This is Gemini VI, coming up on the first Height-Adjust burn, recording. Over. Burn will be at 1 hour, 34 minutes and 2 seconds. 14 feet per second aft.

01:33:38 C6 And the Gulf Coast is socked in.

01:33:57 C6 See that? (IVI's)

01:33:58 P6 What?

01:34:00 C6 Switched.

01:34:01 P6 Okay.

01:34:02 P6 It's on.

01:34:03 C6 Stand by.

01:34:04 C6 ... MARK. Burning.

01:34:27 C6 MARK. Burn complete.

01:34:28 P6 Okay.

01:34:31 C6 Okay.

01:34:33 P6 82.

01:34:38 P6 Down 2, Wally. Okay.

01:34:39 C6 Okay.

01:34:43 P6 [REDACTED]

01:34:49 P6 [REDACTED].

01:34:51 C6 [REDACTED]

01:34:52 P6 That's one ... Let me try 81.

01:34:53 C6 Okay.

01:35:00 P6 ... 80:00 04. Okay. Back a little more.

01:35:21 P6 Okay. Forward.

01:35:28 P6 Blip it just a little more.

01:35:38 P6 That's got it.

01:35:43 C6 Our residuals are zero. Propellant quantity remaining is 87.5.

01:35:55 CC Understand 87.5. Is that correct?

01:35:58 C6 That is for quantity reading. Correct.

01:36:00 CC Roger. Ready for you to go computer PRELAUNCH now so we can update your accelerometer bias.

01:36:06 C6 Roger. Thank you. All systems are ...

01:36:19 CC Say again your last transmission, VI

01:36:22 C6 I say all systems are performing beautifully.

01:36:26 CC Roger. Your UHF transmissions are slightly garbled, Wally. You might try adjusting your mike.

01:37:04 C6 Have a red object that was trailing us. Just after the Height-Adjust burn. Apparently drifting aft. Definitely has red color to it. It's not a foreign object. It's obviously part of the spacecraft.

01:37:16 P6 Hey, there's the moon again!

01:37:19 C6 Dropping off record at 37 minutes, 25 seconds.

01:37:26 C6 MARK.

01:37:29 CC Gemini VI, did you receive that update?

01:37:33 C6 That's affirmative.

01:37:37 CC Roger.

01:37:40 C6 We're having a lot of trouble with ... burn.

01:37:43 CC Gemini VI. Whatever you did to your mike, do something different. You're worse now.

01:37:57 C6 How do you read me now, Elliot?

01:37:59 CC That's much better.

01:38:00 C6 Okay. What I said is ... to keep me straight but the Gulf Coast is off-line.

01:38:09 CC Roger.

01:38:29 CC Gemini VI, Houston, We're complete with your accelerometer bias update. You can go back to PRELAUNCH and - correction - back to CATCH-UP and we suggest you rerun your accelerometer bias check yourself.

01:38:43 P6 Gemini VI. Okay.

01:38:45 CC I have a node update when you're ready to copy.

01:38:47 P6 Go ahead.

01:38:49 CC Node: 01:12:08; Rev 1; 179 degrees west; 08 hours,

28 minutes, 42 seconds, right ascension. Do you copy?

01:39:13 P6 Roger. ... that is 01:12:08; Rev 1; 179 degrees west; 08:28:42, right ascension. Do you have the time of our next burn?

01:39:33 CC It hasn't changed from the summary maneuver that Carnarvon gave you, Tom. Do you have that, or do you want me to give you that again?

01:39:40 P6 You speak rather fast. I'm not sure yet.

01:39:43 CC Okay. It is 2:18:02 for Catch-up.

01:39:50 P6 Roger. 2 plus 18 plus 02.

01:39:54 CC Roger. And that will be a Delta-V of 59.5. We'll update you on it.

01:39:59 P6 Roger on the Delta-V update. Thank you.

01:40:29 CC Gemini VI, Houston.

01:40:33 C6 Go ahead, Houston.

01:40:35 CC We'd like you to go to START COMP at this time so we can check your accelerometers while you are still in contact here.

01:40:41 C6 Roger.

01:40:56 C6 START COMP.

01:41:00 CC Roger.

01:42:03 CC Gemini VI, Houston.

01:42:05 C6 Go, Houston.

01:42:07 CC We have lost a multiplexer and we are unable to read out several temperatures here on the ground. Like to advise you of that. These are cabin temperature, left suit tap, right suit tap, and log range rate - and that's all.

01:42:32 C6 Okay. We're going right now to SEP and we're

starting to get all our camera gear out.

01:42:45 CC Roger.

01:44:06 CC Gemini VI. Do you still read Houston?

01:44:09 P6 Roger, Houston. Gemini VI reads you loud and clear.

01:44:13 CC Roger. I have an update on your Catch-up burn.

01:44:22 P6 Gemini VI. Go ahead.

01:44:24 CC GET of the burn: 2:17:59; Delta-V, 63.4; burn time, 1 plus 20; yaw 0, pitch 0; Core 25, 00634; Cores 26 and 27, all zeros; aft thrusters, maneuver, Posigrade. Do you copy?

01:44:59 P6 Roger, Houston. For the Height-Adjust, the GET is now 2 plus 17 plus 59; Delta-V, 63.4; duration, 1 plus 20; yaw 0, pitch 0; Core 25, 00634; 26 is 0; 27 is 0; aft thrusters, Posigrade Maneuver.

01:45:26 CC Roger. And that's your Catch-up Maneuver.

#### ASCENSION

01:54:24 CC Gemini VI, Houston CAP COM. How do you read?

01:54:26 P6 ...

01:54:29 CC Roger. I have a slight change in your Catch-up Maneuver update when you are ready to copy.

01:54:36 P6 Go ahead.

01:54:38 CC Okay. GET of the burn: 2:18:00; Delta-V, 60.8; duration, 1 plus 17; Core 25, 00608; everything else the same. Do you copy?

01:55:15 P6 GET is 2 plus 20 plus 00; the Delta-V is 60.8; ... duration is 1 plus 17; Core 25 is 00608.

01:55:28 CC Roger. I don't believe you got the GET of the burn right. It is 2:18:00. Do you copy?

01:55:38 P6 2 plus 18 plus 00.  
01:55:40 CC That is affirmative.  
01:55:54 CC Gemini VI, for your information, the accelerometer bias check we made here was very good.  
01:56:05 P6 ... Roger.

## TANANARIVE

02:09:23 P6 Houston CAP COM, Gemini VI. We read you loud and clear through all those transmissions.  
02:09:27 CC Roger, Gemini VI. Very good.  
02:09:28 C6 We heard them give one reading which was the fuel quantity of 16 percent and that was the last we heard.  
02:09:41 CC Roger. Very good, VI.  
02:09:52 C6 I've got something in sight at 12 o'clock. It is a star.  
02:09:57 P6 I've got it. Okay, Wally, the next thing - -  
02:10:00 CC Gemini VI, Houston. Were you copying Gemini VII's answers?  
02:10:06 C6 Only one answer; that was the first answer of 16 percent fuel quantity.  
02:10:13 CC Roger. We plan for that to get better.  
02:10:17 C6 Roger.  
02:13:03 CC Gemini VI, Houston. If you read, we're standing by for your burn and counting down. We have 4 minutes and 52 seconds.  
02:13:10 C6 Roger. Standing by.  
02:14:43 C6 ... Houston. We have our ... in view.

02:14:49 CC Say again, VI. You have what in view?

02:14:52 C6 Our pressure suit patch in view.

02:15:07 CC Gemini VI, we did not understand that last transmission.

02:15:12 C6 Roger. We have Gemini VI emblem patch in view.

02:15:23 CC Roger. We copy.

02:17:25 CC MARK.

02:17:27 CC One minute to burn.

02:17:31 P6 Continuous intercom. Push START COMF at 2:17:30. Sipler to catch up burn.

02:17:35 C6 What about OAMS?

02:17:38 P6 That's what we got just from platform. I checked all the addresses.

02:17:40 C6 Okay.

02:17:43 C6 Want to take them out?

02:17:45 P6 They're slowly working in and out; we'll just have to wait till the end.

02:17:47 P6 Let's see if we can hear these dudes.

02:17:50 C6 Okay.

02:17:59 C6 3, 2, 1.


02:18:02 C6 MARK.

02:18:03 P6 Burn.

02:18:04 C6 And we're moving.

02:18:05 P6 I can feel that acceleration.

02:18:07 C6 I can feel acceleration.

02:18:09 C6 

02:18:52 P6 50 seconds gone.

02:18:53 C6 Roger.

02:19:02 P6 MARK. 1 minute gone.

02:19:03 C6 Roger.

02:19:11 C6 Stand by for stop burn.

02:19:14 C6 3, 2, 1.

02:19:17 C6 MARK.

02:19:19 P6 Roger. 1 minute and 16 seconds. Stand by to trim them out.

02:19:21 C6 We have some big down and some big left.

02:19:22 P6 Yes.

02:19:23 P6 Okay. Go down about 3.

02:19:28 C6 3.

02:19:38 P6 A little more down, Wally. That's fine.

02:19:45 P6 Okay. Let me check it again.

02:19:47 P6 That's great. 0 on 82. 81.

02:19:52 C6 To the right?

02:19:55 P6 1.9 right.

02:19:57 C6 You want to take that?

02:20:07 P6 A little more right. Seven-tenths.

02:20:11 P6 Six-tenths. A little more right.

02:20:16 C6 Isn't that cute?

02:20:17 P6 I didn't see it.

02:20:19 P6 Okay, that should have it. We're crossed over. That's one-tenth.



02:20:21 C6 Take out aft?

02:20:22 P6 Aft. Okay, I'll tell you how much. 80. Aft 2.5.

02:20:35 P6 Keep coming. Hold it. 09. Should have it.

02:20:45 P6 Let me check again.

02:20:47 P6 Just a foot back.

02:20:50 C6 There you go.

02:20:55 P6 That's it. 01.

02:20:57 C6 [REDACTED]

02:21:02 P6 [REDACTED]

02:21:04 C6 Propellant quantity remaining with the zero residuals on 80, 81, 82 is 79 percent.

02:21:16 C6 Okay. We ought to dig out that world chart [REDACTED].

02:21:21 P6 Yes, I've got that.

02:21:22 C6 You have got that?

02:21:23 P6 You've got that over on your side.

02:21:26 C6 I'm sorry.

02:21:27 P6 Okay. The next one is the Plane-Change.

02:21:28 C6 Yes.

02:21:38 C6 Okay. What were the numbers for this thing? (Orbital Path Display).

02:21:45 P6 Okay.

02:21:52 P6 Okay. Rev 1; 179 degrees west.

02:21:57 C6 179 west.

02:21:59 P6 Yes ...

02:22:02 C6 Stand by.

02:22:04 C6 Okay.

02:22:05 P6 Okay. It's Rev 1 and a GET of 01:12. That's close enough. We don't need the seconds.

02:22:14 C6 01.

02:22:16 P6 12. 1 hour and 12 minutes.

02:22:19 C6 Okay. I got it.

02:22:21 P6 Okay. The other one was --

02:22:23 C6 I don't need that yet.

02:22:26 P6 Yes.

02:22:27 C6 The star, you mean?

02:22:28 P6 8 hours and 29 minutes for all practical purposes. Right.

02:22:39 C6 We should have taped this.

02:22:41 P6 Yes.

02:22:43 C6 That's beautiful.

02:22:45 C6 Okay. Now at 1 hour and 32 minutes. Are we 1 hour or --?

02:22:52 P6 Oh yes. Yes.

02:22:53 P6 2 hours. Okay.

02:22:57 P6 We're about 1 hour and 10 minutes past that.

02:22:59 C6 1 hour and 10 minutes?

02:23:00 P6 Yes.

02:23:02 C6 Okay.

02:23:04 P6 So look 1 hour and 10 minutes further on there. That's about right - down about in here.

02:23:07 C6 Right here.

02:23:08 P6 There we go. Coming up to Carnarvon shortly.

02:23:11 C6 12 minutes we'll be in Carnarvon.

02:23:21 P6 Minute plus 22.

02:23:47 P6 The cabin pressure's 4.9. Still looks good.

02:23:49 C6 Oh.

02:23:52 P6 How's our suit temp here, Wally?

02:23:57 C6 About 67, 68. [REDACTED]

02:24:02 P6 [REDACTED]

02:24:03 C6 Okay. Let's leave them on (Two pumps). Say, we need some velcro on this, if you get a chance.

02:24:07 P6 All right.

02:24:16 CC Gemini VI, Carnarvon CAP COM.

02:24:19 C6 Hello, Carnarvon. Gemini VI here.

02:24:22 CC Roger. Do you have any information to report to us from the Phasing Maneuver?

02:24:27 C6 Roger. Good burn. No residuals. Propellant quantity remaining is about 79 percent.

02:24:35 CC Roger. Copy you burnt all residual; propellant quantity remaining 79 percent.

02:24:42 C6 That's affirmative.

02:24:43 CC Roger. There will be another Height-Adjust Maneuver which will take place over the States on this next pass. You will be updated over Hawaii.

02:24:52 C6 Roger. Understand. Update over Hawaii. (Height-Adjust.)

02:24:54 P6 Ask him - -

02:24:55 CC Roger. I have your Plane-Change information, if you are ready to copy.

02:24:59 C6 Roger. Send this one up a little slower this time.

02:25:04 C6 You ready?

02:25:05 P6 You want to hold that for me?

02:25:09 P6 Carnarvon, Gemini VI. Ready to copy.

02:25:11 CC Roger.

02:25:49 CC ... 0317; thrusters, aft; maneuver, south. Do you copy?

02:25:59 P6 Roger, Carnarvon. For the Plane-Change. At a GET of the burn: 02 plus 42 plus 07; Delta-V, 31.7; duration, 0 plus 40 seconds; yaw, right 90 degrees, pitch 00; Core 25, 26, 0; Core 27, 90317; aft thrusters, maneuver south.

02:26:38 CC Roger. And would you check to make sure that your T/M switch is in REAL-TIME ACQ-AID?

02:26:43 P6 Roger. REAL-TIME and ACQ.

02:26:50 P6 Oh, here comes the moon. A bright orange.

02:26:52 C6 Oh.

02:26:57 C6 Okay, I'm taking care of this problem over here.

02:26:59 P6 Okay. This is a 2:42, Wally.

02:27:02 C6 What's the time?

02:27:04 P6 02:42:07.

02:27:06 C6 Say it again. 02?

02:27:08 P6 02:42:07.

02:27:09 C6 What is that?

02:27:14 P6 That's our Plane-Change. 31.7 feet per second.

02:28:14 CC Gemina VI, Carnarvon CAP COM.

02:28:16 C6 Go, Carnarvon.

02:28:18 CC Roger. Would you leave your T/M switch in the REAL-TIME ACQ-AID position until the completion of rendezvous please?

02:28:25 P6 Roger. Leave it to REAL-TIME and ACQ until completing the rendezvous. It must have inadvertently gotten knocked off.


02:28:31 CC Roger.


02:35:40 C6 Noise in one can at 2 hours and 35 minutes. You mean we have 7 minutes yet?


02:35:45 P6 Yes.


02:35:57 C6 Do you hear something?


02:35:58 P6 No, not a thing. Try HF here.

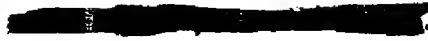
02:36:33 P6 


02:36:37 C6 

02:36:38 P6 

02:36:39 C6 

02:36:40 P6 

02:36:41 C6 

02:36:42 P6 

02:37:11 P6 Okay, Wally. We've got 37.

02:37:16 C6 Yes.

02:37:18 P6 42:07.

02:37:22 C6 Okay. Let's go around.

02:37:23 P6 Orb rate.

02:37:26 P6 Pulse. I'll go ahead and catch up. I'll have to start computer after we get there.

02:38:02 P6 [REDACTED]

02:38:04 C6 [REDACTED]

02:38:05 P6 [REDACTED]

02:38:15 P6 Hello there, Alpha and Beta Centauri and the Southern Cross.

02:38:18 P6 Yes.

02:38:32 P6 Look at that lightning! I've got really lots of it down here.

02:38:39 P6 Okay.

02:38:47 C6 See those stars?

02:38:50 P6 Yes. I have - right there we go zero yaw. We're going to have Alpha and Beta Centauri right on the nose!

02:38:54 C6 Yes.

02:39:21 P6 Okay. Again let me recheck it and then we'll reset it.

02:40:16 P6 Okay. There's 40. Now reset.

02:41:04 P6 There's 41.





02:41:09 C6 Okay. 42 right?

02:41:10 P6 42:07, Wally.

02:41:11 C6 Okay.

02:41:21 P6 We are in Continuous Record. Going to catch up at 41:30.

02:41:35 C6 Just want to warm it up a little better here.

02:41:37 P6 Okay, we have about 30 seconds to go on this.  
02:41:41 P6 40.  
02:41:47 P6 Okay. Start comp.  
02:41:48 C6 Okay.  
02:41:52 P6 Rate Command.  
02:41:54 P6 Standing by to time burn. At 42:07.  
02:41:59 P6 42:07 is the time.  
02:42:06 P6 Stand by.  
02:42:08 P6 MARK.  
02:42:09 C6   
02:42:16 P6   
02:42:36 P6 30 seconds gone.  
02:42:47 C6 Burn complete.  
02:42:50 P6 Right on 40 seconds.  
02:42:51 C6 Beautiful!  
02:42:52 P6 Okay. 82.  
02:43:02 P6 Okay. Down just a little bit.  
02:43:11 P6 That brings it up to two-tenths. That's good  
enough, I'd say, for now. Get it one more down.  
02:43:21 P6 Good. One-tenth on 82. 81.  
02:43:33 P6 Two-tenths to the left.  
02:43:40 P6 Good. That's down to one. 80.  
02:43:50 P6   
02:43:57 P6 

02:44:02 P6 Good. 80 is zero.

02:44:04 C6 Roger. Zero.

02:44:11 P6 Residuals on the burn were 80 - were all zeros. 81 at one-tenth and 82 at one-tenth, almost.

02:44:18 C6 Fuel remaining is 74 percent.

02:44:21 C6 Good.

02:44:22 P6 We had 79 to start.

02:44:26 C6 Roger.

02:44:33 C6 Boy, that rate command's a delight!

02:44:34 P6 Okay. Record off.

02:46:11 C6 SEF aline. SEF aline at 2 hours, 46 minutes and we completed the Plane-Change burn.

02:46:26 C6 What's our next event?

02:46:27 P6 Our next event is co-elliptical.

02:46:30 C6 What time is that?

02:46:31 P6 Okay. He gave us an early one at 3 plus 47, so it's nearly an hour.

02:46:38 C6 Okay.

02:46:39 P6 This is the time to get our final gear squared away.

02:46:40 C6 Yes. I'll go to plat mode. That's what I was getting at.

02:46:42 P6 Right. Okay. Boy that's nice to wait till the transition's over and - -

02:46:50 C6 Well, we're still going to have some fuel left.

02:46:52 P6 Yes.

02:48:06 P6 Our source pressure's still real good. GAMS source - I'll record that.



02:48:11 C6 [REDACTED]  
02:48:14 P6 [REDACTED]  
02:48:16 C6 [REDACTED]  
02:48:18 P6 [REDACTED]  
02:48:24 C6 [REDACTED]  
02:48:25 P6 [REDACTED]  
02:48:28 P6 [REDACTED]

## HAWAII

02:48:41 CC Gemini VI, Hawaii CAP COM.  
02:48:44 C6 Hawaii, Gemini VI. Go.  
02:48:46 CC How are you doing up there?  
02:48:48 C6 Very good. Completed the Plane-Change burn. No residuals. The fuel remaining is 75 percent.  
02:48:56 CC Okay. You burned out all residuals and the fuel remaining is 75 percent.  
02:49:00 C6 That's affirm. We are now back to SEF a line.  
02:49:04 CC Okay. If you get too warm, you can turn on your secondary loop if you like.  
02:49:07 P6 Want to do that?  
02:49:10 C6 Roger. We're back to one fan. I think we will turn on the secondary loop.  
02:49:11 CC Okay. Will you turn your ECS O<sub>2</sub> heater off?  
02:49:13 P6 Okay.  
02:49:14 C6 Roger.

02:49:16 CC You've got enough heat to maintain pressure. And I've got this Height-Adjust here if you would like to copy it. It's a tweak burn.

02:49:18 P6 Secondary loop.

02:49:21 C6 Roger.

02:49:23 P6 Secondary loop on and - -

02:49:27 C6 Roger. We'll give it a tweak.

02:49:29 CC Okay. We copy your pump is on. The GET B: 03:03:19; Delta-V, 0.8; your burn time, zero plus 01; yaw and pitch are zero; Core 25, 00008; Cores 26 and 27 are zeros; use your aft thrusters; the maneuver is Posigrade.

02:50:29 P6 Roger. Copied for the Height-Adjust: GET of burn, 03 plus 03 plus 19; Delta-V, 0.8; duration, 0 plus 01; yaw 00, pitch 00; Core 25, 00008; 26 and 27, all zeros; aft thrusters, Posigrade Maneuver.

02:51:05 CC You got that all right. We're in good shape.

02:51:09 P6 We'll send them.

02:51:10 C6 [REDACTED]

02:51:11 P6 [REDACTED].

02:51:16 C6 [REDACTED]

02:51:17 P6 [REDACTED]

02:51:21 C6 You have your filter down there if you want it.

02:51:23 P6 I think I'll just put on the sun glasses.

02:51:28 C6 [REDACTED]

02:51:30 C6 [REDACTED]

02:51:33 P6 [REDACTED]

02:51:35 C6 Yes.

02:51:38 C6 I'm going into HORIZ SCAN.

02:51:39 P6 Okay.

02:51:59 CC VI, Hawaii. Do you need anything else?

02:52:04 C6 VI, negative. We're just watching the sun come up.

02:52:07 CC Roger. Your cohort is doing real fine also.

02:52:11 C6 Very good. We haven't heard him since - quite a long time ago.

02:52:14 CC Okay.

02:52:17 C6 Have they heard us yet?

02:52:19 CC I'll give them a call. Stand by.

02:52:53 CC VI, Hawaii.

02:52:56 C6 No joy. Could not read them.

02:52:58 CC Okay. The next time around you'll probably be reading them loud and clear.

02:53:00 C6 Very good.

02:53:03 CC We'll be standing by if you need anything.

02:53:05 C6 Tell him to stay right where he's going.

02:53:07 CC Say again.

02:53:08 C6 Just tell him to keep going where he's going.

02:53:11 CC He'll be there when you get there.

02:53:12 C6 Roger.

## CALIFORNIA

02:59:52 CC Gemini VI, Gemini VI, Houston. Standing by for your burn.

02:59:57 C6 Roger. About 3 minutes to go now.

03:00:01 CC Roger.

03:00:06 C6 ... how about giving me a GET hack just to see how this clock is holding up?

03:00:11 CC Did you say GET or GMT?

03:00:14 C6 GET.

03:00:16 CC GET. Roger. We have 3 plus 00.

03:00:21 CC MARK, 20 seconds.

03:00:24 C6 Okay and then a Greenwich Mean Time.

03:00:29 CC Roger. Coming up on 16:37: - correction - 16:38:00.

03:00:36 CC MARK.

03:00:45 CC Did you copy, VI?

03:00:47 C6 Roger. We got that.

03:00:57 C6 Give me a Mark on 39 there, will you?

03:01:01 CC Roger.

03:01:02 C6 And we're sinking the GMT to the test in 40 seconds.

03:01:05 CC Roger.

03:01:31 CC Coming up on 16:39:00.

03:01:35 CC MARK.

03:01:37 P6 Roger.

03:01:44 C6 The timer gained 40 seconds so we reset it.

03:01:48 CC Roger, VI.

03:02:15 P6 Going to Continuous Record. GET: 3 hours, 2 minutes and 15 seconds.

03:02:16 CC Coming up on 1 minute to burn.

03:02:20 CC MARK.

03:02:22 C6 Roger.

03:02:23 P6 At ...

03:02:25 P6 We're in catch-up mode.

03:02:26 C6 You can throw it in.

03:02:28 P6 Yes. Okay.

03:02:29 C6 Oh, okay.

03:02:30 P6 I'll push the button. Since it's only eight-tenths, I don't want it to build up. I'll push it at 03, which will give us 19 seconds.

03:03:02 C6 Okay.


03:03:04 C6 Getting a 19. Right?

03:03:06 P6 Right.

03:03:09 C6 Forward.

03:03:16 C6 Stand by for burn.

03:03:21 C6 MARK.

03:03:23 C6 

03:03:24 P6 MARK. One-tenth, one-tenth.

03:03:27 CC Nice tweak.

03:03:30 C6 Giving a residual of one-tenth.

03:03:33 P6 Good guess.

03:03:37 C6 Okay. Let's go to Horizon Scan. Orbit late.

03:03:45 P6 Roger.

03:03:47 C6 We're in Orb Rate, Horizon Scan.

03:03:51 CC Roger.

03:03:52 P6 [REDACTED]

03:03:57 C6 [REDACTED]

03:04:01 C6 [REDACTED]

03:04:04 P6 [REDACTED]

## TEXAS

03:04:05 CC We have a flight plan update when you're ready to copy, VI.

03:04:09 C6 Go ahead, Elliot.

03:04:11 C6 Stand by.

03:04:13 CC Test rendezvous. You will obtain Spacecraft VII acquisition at 03:05:00; yaw 0, pitch 5.5 degrees up; time of 248 nautical miles, 03:15:00. Do you copy?

03:04:52 P6 Roger. For the test rendezvous with Spacecraft VII at 03:05:00: yaw 0, pitch 5.5; 248 nautical miles; 03 plus 15 plus 00.

03:05:12 CC Roger. And of course that's pitch up. Also have a node update. Node at 05:39:41: Rev 4; 112.2 degrees east; 08:22:57, right ascension. Spacecraft VII sunrise 05:49:21. Do you copy?

03:05:15 C6 Radar go on yet?

03:05:52 P6 Roger. Give me the times for the Revolution 4 there, the start of it.

03:05:57 CC The time for Rev 4 - the node update - the time is 05:39:41.

03:06:07 P6 Roger. That's 05 plus 39 plus 41; Rev 4; 112.2 degrees east; 08:22 plus 57, right ascension; and the sunrise at 05:12.

03:06:24 CC That's 05:49:21.

03:06:30 P6 I'm sorry. 05:49 plus 21.

03:06:33 CC Roger.

03:06:35 P6 Well, we should be going ahead and getting this radar on then.

03:06:36 C6 I have it on.

03:06:37 P6 You have it on? I have to get the breaker on, then.

03:06:39 C6 Okay. ...

03:06:42 P6 Okay.

03:06:49 CC Gemini VI, your accelerometer bias still looks very good.

03:06:54 C6 Gemini VI. Roger.

03:06:55 C6 Very good. ...

03:06:56 P6 Radar on at 05.

03:06:59 C6 [REDACTED].

03:07:06 P6 [REDACTED]

03:07:07 C6 [REDACTED]

03:07:18 C6 What time is NSR?

03:07:19 P6 Okay. About 47. About 40 minutes to go.

03:07:33 C6 Okay.

03:07:35 P6 [REDACTED]

03:07:37 C6 [REDACTED]

03:07:45 CC Gemini VI, going over to VII for a few minutes. We'll be back to you with - probably have an update here for you shortly.

03:07:49 C6 Roger. Standing by.

03:08:01 CC We should have a lock in 15 minutes?

03:08:04 P6 Yes. That's when I should be able to read out the range on the MDIU.

03:08:08 P6 Okay, we're all set. Want to go to OPERATE on radar and see what we have?

03:08:12 C6 Would sorta like to!

03:08:16 P6 Me too.

03:08:21 C6 It blinked a couple times.

03:08:25 C6 See it.

03:08:33 P6 [REDACTED]

03:08:40 P6 [REDACTED]

03:08:42 C6 [REDACTED]

03:08:45 P6 Better give them a call on it. We should have a lock-on right away.

03:08:47 C6 What?

03:08:48 P6 We should have a lock-on right away.

03:08:49 C6 Leave it alone.

03:09:06 C6 It's cycling now.

03:09:10 P6 Radar and attitude.

03:09:13 C6 What?

03:09:14 P6 Radar and attitude.

03:09:16 C6 We have to have lock light.

03:09:21 P6 Okay.

03:09:24 P6 I get it out at the max range, 248.66.

03:09:35 C6 What?

03:09:36 P6 [REDACTED]



03:09:40 P6 [REDACTED]

03:09:47 C6 [REDACTED]

03:09:48 P6 Pointed up about a couple of degrees. (Radar elevation needle.)

03:09:52 C6 Yes.

03:09:54 C6 Haven't had a lock-on yet, Tom.

03:09:55 P6 Yes, I know it.

03:10:01 P6 Why don't we call them and tell them? We should be locked on by now plenty good.

03:10:23 C6 When's the co-elliptic burn?

03:10:24 P6 3 plus 47. That's a ballpark. He will have an update for us on it.

03:10:47 C6 Bring it back to STANDBY for a while.

03:10:48 P6 Okay.

03:10:49 C6 Well, I don't know - -

03:10:51 P6 Why don't we give them a call?

03:10:59 C6 There are the islands.

03:11:01 P6 Yes. Yes, I got - -

03:11:09 C6 Houston, is Gemini VII up on the transponder at this point?

03:11:11 C6 Is VII up on the transponder at this point?

03:11:13 C6 Does Gemini VII have their transponder on?

03:11:17 CC Say again, VI.

03:11:18 C6 And they are BEF. Is that correct?

03:11:19 C6 Does Gemini VII have their transponder on?

03:11:24 CC That's affirmative.

03:11:25 C6 And they ought to be up. Is that correct?

03:11:28 C7 Roger.

03:11:29 CC Did you copy them?

03:11:30 C6 I heard a Roger, I believe.

03:11:31 C6 Only the Roger, I believe.

03:11:32 CC That's right. He said Roger.

03:11:33 C6 ...

03:11:34 P6 There goes our recorder. (Two-minute warning light.)

03:11:35 C6 Okay, we don't have a lock yet. Plan for me to get one shortly.

03:11:39 CC Roger.

03:11:42 C6 Stabilized.

03:11:43 C6 Recorder just run out?

03:11:45 P6 Yes.

03:11:52 CC Gemini VI, Houston. We wonder if your suit temperature has improved since we went to the secondary coolant?

03:11:59 C6 Affirm. It's down to about 62 now.

03:12:03 CC Roger.

03:13:57 C6 Houston, we're getting lights on the radar but no lock in yet.

03:18:23 CC Gemini VI, Houston. Have your NSR update if you're ready to copy.

03:18:29 C6 Stand by.

03:18:48 P6 Gemini VI. Ready to copy.

03:18:50 CC Roger. GET of the burn: 3:47:37; Delta-V, 42.9; burn time, 54 seconds; yaw 0, pitch-down 3 degrees; Core 25, 00429; Core 26, 00023; Core 27, zeros; thrusters, aft; maneuvers, Posigrade down. Do you copy?

03:19:44 P6 Roger. For the NSR maneuver: GET of burn, 03 plus 47 plus 37; Delta-VT, 42.9; duration, 54 seconds; yaw 0, pitch-down 3 degrees; Core 25, 00429; 26, 00023; 27, all zeros; thruster, aft; maneuver, Posigrade down.

03:20:25 CC That's affirmative, Gemini VI.

## ASCENSION

03:26:38 CC Gemini VI, Houston. How do you read?

03:26:41 P6 Gemini VI. Go.

03:26:44 CC Have a slight update on your last maneuver. Are you ready to copy?

03:26:48 P6 Go ahead.

03:26:53 CC The Delta-V is 42.5; duration, 53 seconds; yaw - correction - pitch is down 2 degrees; Core 25 is 00425; Core 26, 00011. Everything else the same. Do you copy?

03:27:21 P6 Roger. For the ... of Delta-V, it's 42.5; pitch-down is now 2 degrees; Core 25 is 00425; 26 is 00011. We do have what looks like a policy drop-off load. Radar rate is decreasing as was described in the rendezvous node ...

03:27:49 CC Roger, Gemini VI. Understand radar lock-on and rendezvous test is going good. The duration is 53 seconds. Do you copy?

03:28:01 P6 Roger. The duration is 53 seconds. And, again, to verify, the plan is 03 plus 47 plus 37.

03:28:11 CC That is correct.

03:28:14 P6 Roger.

03:28:22 C7 Gemini VI, how do you read Gemini VII now?

03:28:25 C6 Loud and clear, fellows. We're looking at you.

03:28:27 C7 Very good. We hear you loud and clear also.

03:28:30 C6 ... hang on, we'll be up there shortly.

03:28:33 C7 Roger.

03:28:39 CC Gemini VI, Houston. Copy your looking at them but I assume this means radar. You do not have visual. Can you confirm that?

03:28:49 C6 ...  
03:28:53 CC Roger.

## TANANARIVE

03:43:00 P6 Houston, this is Gemini VI. Out radar appears to be valid. Over.  
03:43:04 CC Roger. Copy. Radar test is valid. Standing by for your burn.  
03:44:08 P6 Roger.  
03:45:34 CC Gemini VI, Houston. Coming up on NSR burn. Mark, one minute.  
03:45:40 C6 Roger.  
03:45:47 P6 We'll stand by with 44 percent propellant quantity.  
03:45:52 CC Roger.  
03:46:37 C6 Stand by to burn. Burning.  
03:47:30 C6 We're spending 16 percent to charge. The main is off.  
03:47:33 P6 Continuous Record. Will burn at 03:47:37. Standing by to burn.  
03:47:36 C6 Stand by to burn.  
03:47:37 CC Did not copy, VI.  
03:47:40 C6 Burning.  
03:47:45 C6 ... either.  
03:47:48 CC Roger.  
03:47:56 C6 Burn has been completed, no residuals.  
03:48:01 CC Roger. Burn complete, no residuals.  
03:48:06 P6 Burn-down?

03:48:07 C6 I have a burn-down to about 3 and then steer it up.  
Okay?

03:48:01 CC Do you have your OAMS quantity?

03:48:10 C6 Affirmative. It is 68 percent.

03:48:11 P6 Okay.

03:48:13 C6 That sound good?

03:48:15 P6 Yes.

03:48:16 CC Understand 68 percent. Is that correct?


03:48:28 C6 Okay. Correct.


03:48:30 P6 Okay.

03:48:32 C6 We're stopping 3 feet per second short to burn-off.

03:48:40 P6 82. Okay. Go ahead.

03:48:42 P6 2.7. Bring her down.

03:48:43 C6 

03:48:44 P6 

03:48:45 C6 Roger. We have a slight correction we're making  
now. No problem.

03:48:47 P6 Keep burning. Hold it. That's got it.

03:48:56 P6 Beautiful! Okay, forward to take that out.

03:48:57 C6 Forward?

03:48:58 P6 Let me get 81.

03:49:01 P6 Right.

03:49:02 C6 Right?

03:49:03 P6 Right.

03:49:13 C6 Okay. How's that?

03:49:14 P6 Okay. That's good. We're down to four-tenths.  
That's good.

03:49:18 C6 Let's get the forward now.

03:49:19 P6 Okay.

## CARNARVON

03:58:28 CC Gemini VI, Carnarvon.

03:58:30 C6 Go. Carnarvon.

03:58:32 CC Roger. I would also like to verify that your HF  
whip is retracted.

03:58:41 C6 We have our ... will retract.

03:58:45 CC Roger. Also, we'd like an OAMS propellant quan-  
tity, please.

03:58:51 C6 Roger. 68 percent.

03:58:53 CC Roger. Copy 68 percent.

03:58:56 C6 There were no residuals.

03:58:58 CC Roger. Copy.

03:59:03 C6 We've had no joy with clock lights or ACQ lights at  
this point.

03:59:09 CC Roger. Copy.

03:59:56 C6 Gemini VI. We're still about 154 miles out. Have  
a GET of 3 - 4 hours, 0 minutes, 0 seconds; our  
range is 154.52; new tape recorder cartridge in-  
stalled; data points at 27:20; Theta, 5 degrees;  
R, 31.23; Delta-R is 2.59; Delta-Delta-R is minus  
0.01.

03:59:59 C6 Gemini VI. We're still about 154 miles out.

04:00:03 CC Roger.

04:04:06 C6 Gemini VI ... 15 minutes 40 seconds after NSR, 712.

HAWAII

04:19:09 P6 At 30:40 Theta was 5.4; range, 123.42; Delta-Delta-R was zero.

04:19:15 P6 Ah.

04:23:26 P6 Hawaii ... Standing by.

04:23:30 CC Say again.

04:23:31 C6 ... data point.

04:23:33 CC Whom am I talking to?

04:23:35 P6 Gemini VI.

04:23:36 CC Okay, go ahead, VI.

04:23:42 CC Gemini VI, Hawaii CAP COM.

04:23:43 P6 VI. Stand by ...

04:24:06 C6 Hawaii, this is Gemini VI at 35 point 40 - 35.40. We have the data point: Theta, 6.4 degrees; range, 115.58; Delta-V total, 523; Delta-V, 924.8. Total block looks completely normal.

04:24:08 P6 Hawaii, this is Gemini VI. At 35:40 we have a data point: Theta, 6.4 degrees; range, 115.58; Delta-V total, 523; Delta-VI 24.8. Data plot looks completely nominal.

04:24:32 CC - - nominal and say again the range.

04:24:37 P6 Range was 115.58.

04:24:40 CC Okay, I've copied all that. We show you GO here on the ground. How are you doing?

04:24:44 C6 Very good here.

04:24:46 CC Okay, we'll be standing by.

04:24:51 P6 Okay. Next data point. Here's another one.

04:25:01 C6 Just call me what you have, not what you're deriving. Right?

04:25:03 C6 Tom?

04:25:08 P6 Yes.

04:25:09 C6 Don't call out your arithmetic; just call out your addresses, that's all.

04:25:13 P6 Yes. That's good.

04:25:23 CC VI, Hawaii. How do you read?

04:25:25 C6 Loud and clear.

04:25:27 CC Okay.

04:25:34 C6 Another point. Want to give it another try or not?

04:25:36 C6 We'll wait for a minute.

04:25:56 C6 [REDACTED]

04:25:57 P6 [REDACTED]

04:25:59 C6 [REDACTED]

04:26:02 P6 [REDACTED]

04:26:05 P6 [REDACTED]

04:26:09 C6 [REDACTED]

04:26:11 P6 [REDACTED]

04:26:14 C6 [REDACTED]

04:26:15 P6 Next one is 30 minutes.

04:26:19 C6 Hawaii, Gemini VI. We didn't give data point ... and would like to know what kind of out-of-plane velocity do we have?

04:26:22 C6 Hawaii, Gemini VI. We have your data points and,



in exchange, we'd like to know what kind of out-of-plane velocity we have.

04:26:25 CC Okay, stand by one.

04:26:27 C6 Roger. We'll call you.

04:26:30 C6 Roger. We'll call you.

04:26:35 CC They claim VI is still showing 2-feet-per-second - 2-feet-per-second.

04:26:46 P6 Next data point should be at 39?

04:26:48 C6 Right. We're coming.

04:27:05 P6 Hawaii, Gemini VI. New data point: 6.4 degrees; 110.41 nautical miles; Delta-V total, 486.

04:27:06 C6 Hawaii, Gemini VI. New data point: 6.4 degrees, 110.41 nautical miles; Delta-V total, 46.

04:27:18 CC Roger. Copy.

04:27:20 C6 That was NSR plus 39 - 39 minutes, 0 seconds.

04:27:36 CC I got all that.

04:28:08 P6 Yes.

04:28:15 C6 Hawaii, did you get an answer on the out-of-plane yet?

04:28:22 CC Outstanding! We're GO down here.

04:28:23 C6 It's all up to us from now on.

04:28:27 P6 40:40. Right, Wally?

04:28:28 C6 Good show down there. It's all up to us from now on.

04:28:36 CC How about it?

04:29:13 C6 New data point, Hawaii. Theta, 6.9; range, 107.82.

04:29:15 C6 New data point, Hawaii. Theta, 6.9; range, 107.82.

04:29:21 CC I copy that.

04:29:37 C6 Suit temps are coming down nicely.

04:29:39 P6 Good.

04:29:42 C6 Hawaii, our suit temp's about 59 degrees now. Looks real fine.

04:29:43 P6 ... about 59 now. Working it real fine.

04:29:44 CC Very good.

04:30:01 P6 Okay ...

04:30:06 C6 You put it on and you got a point ...

04:30:09 P6 Okay.

04:30:27 P6 Mark.

04:30:29 C6 Looks like it's occluded out there. Coming back on.

04:30:44 P6 Yes, we're real close on these data positions, Wally.

04:30:47 C6 Good.

04:33:08 P6 That Delta-Delta-R certainly is coming right down the pike.

04:33:09 C6 Very good.

04:33:27 P6 That'll be at 44 minutes. Right?

04:33:29 C6 Right.

P6 ...

04:33:56 P6 45:40 GET: Theta, 7.5; range, 1000.01; Delta-V total was 430; Delta-VI is 202.1; the angular variation decreased markedly at approximately - at a GET of 450.0 seconds or a total phase time of 1 hour and 2 minutes.

## GUAYMAS

04:37:23 P6 Gemini VI transmitting data point at 49 minutes:  
Theta, 8.0; R, 94.82; Delta-V total, 396; Delta-VI,  
185.6.

04:37:39 CC Roger VI.

04:37:42 P6 How's that clockwork look to you? All right?

04:37:46 CC Your clock is looking real good. We concur with  
your points.

04:37:49 P6 Roger. We jarred it a little bit.

04:37:59 C6 ... the radar needles are a little bit spongier  
than on ... 1 or 2 degrees.

04:38:07 CC Roger.

## TEXAS

04:38:21 P6 At this point we have so much sunlight is our eyes,  
we couldn't possibly see ... outside.

04:38:43 CC Roger, VI.

04:38:47 P6 Both of our windows are quite badly clouded.

04:38:50 CC Roger.

04:39:02 P6 New data point 50.40: Theta, 7.9; R, 92.22; Delta-V  
total, 376; Delta-VI, 175.1. Looks like the Control  
switch is working good.

04:39:20 CC Roger, Tom.

04:40:39 CC I have a Terminal Phase Back-up Maneuver when you're  
ready to copy.

04:40:42 P6 Stand by ...

04:40:49 P6 Ready to copy.

04:40:50 CC Terminal phase elapsed time: 1 plus 29 plus 17; GET of the burn, 5 plus 16 plus 54; Delta-V, 33.0; duration, 41 seconds; Core 25, 00301; Core 26, 90135; Core 27, 00016; Delta-V, 32.9, 1.5, 1.5; burn time, 40 forward, 04 down, 04 left; yaw zero, pitch 26.8; range 139; range rate, 32.69. Do you copy?

04:41:20 P6 Roger. Terminal phase elapsed time initiate: 1 plus 29 plus 17; GET, 5 plus 16 plus 54; Delta-VT, 33.0; duration, 41 seconds; Core 25, 00301; 26, 90135; 27, 00016. Stand by - stand by and I'll call the rest of them in just a second.

04:41:53 CC Roger, Tom.

04:42:15 P6 Okay - continuing on now - okay, ... 32.9; burn time, 40 seconds forward 1.5; 04 seconds up and down; Address 81, 1.5 04 seconds to the left; yaw zero, pitch 26.8 degrees; range 139; range rate 32.69. On the range and range rate, I understand that's in yards.

04:42:53 P6 Range should only be about 33 miles.

04:43:06 CC Gemini VI, we've got it just backwards here. It's range 32.69 and range rate 139; and the up-down burn is down.

04:43:22 P6 Roger. Up-down burn is down.

04:43:25 CC Roger.

04:44:02 P6 At this one time, it would not be practical for us to either roll over or move in almost any direction to avoid sunlight where we have a bright lighted sky underneath us, bright sunlight to our right.

04:44:16 CC Roger, VI.

04:50:20 C6 Approximately a range of ...

04:50:21 P6 ...

04:50:25 C6 Theta: 59 minutes plus 10.0 degrees; range, 79.25; Delta-V total was 300.

04:50:48 C6 22 1 Mark ...

04:51:15 C6 Stand by.

04:51:23 C6 New data point: Theta, 10.7; range, 76.66.

04:51:31 CC Roger, VI.

04:52:17 C6 Approximately a range of ...

04:52:34 P6 Data point: Theta, 11.1 degrees; range, 71.48 miles.

04:52:39 CC Roger, VI.

04:53:56 P6 Theta, 11.8; range 68.90; Delta-V total is 232; Delta-VI is 101.1; data point was 05:40. Data point at 09 minutes: 12.5 Theta; 63.75 in range; Delta-V total, 199; Delta-VI, 84.2. Data point 10:40: ... 13.5 Theta; 61.19 range; Delta-V total is 181; Delta-VI, 74.8. 12:20: Theta is 13.7; R, 58.63; Delta-V total is 169; Delta-VI is 69.5; Mark at 15:40: Theta is 15.5; range is 53.55; Delta-V total is 136. ... Theta, 15.5; range, 53.55.

## ROSE KNOT VICTOR

05:02:17 CC Gemini VI, RKV CAP COM.

05:02:20 P6 Go, RKV.

05:02:22 CC Roger. On your TPI, based on the States data, you'll be about 2 minutes late.

05:02:27 P6 Roger.

05:02:46 P6 At 14 minutes, Theta with 15.0; R, 56.09.

05:03:03 P6 ... elected to aline the platform for the first 5-minute period.

05:04:00 P6 Theta, 15.5; range, 53.55.

05:04:32 C6 I see something at 12 o'clock.

05:04:34 P6 I've got so much sun I can't see a thing.

05:04:39 P6 I'm wiped out.  
05:04:50 C6 This is Gemini VI. I have a lighted target at about 12 o'clock. It may be a star and it may be VII. We'll check her out.  
05:04:52 P6 Gemini VI ...  
05:04:53 C6 Theta, 17.0; range, 51.00.  
05:04:57 CC Roger, VI.  
05:05:00 C6 It's right in the sun.

## ASCENSION

05:05:05 P6 Hey, I think I got it! That's VII, Wally!  
05:05:08 CC Negative.  
05:05:10 C6 Yes.  
05:05:11 P6 It's either Sirius or VII.  
05:05:12 C6 ...  
05:05:13 C6 Mark on a target at a GET of 05:05:50  
05:05:17 C6 RKV, we either have Sirius or VII in sight! It's right in the middle of the reticle. Radar is locked on.  
05:05:44 P6 47.1 is Delta-VI; Theta, 17.0; range, 51.00.  
05:05:49 C6 Okay.  
05:07:03 P6 19 minutes: range, 48.5 miles; either Sirius or Spacecraft VII is in bright view; 109 Delta-V total, 48.50; Theta is 17.7.  
05:07:27 C6 I do have a star in sight. It seems to be left of the object I have in sight and 10 degrees down. It looks like another bright star.  
05:07:36 C6 This is Gemini VI. Do you have an update on where -  
... to the target?

05:07:48 CC Gemini VI, Houston. I did not copy.

05:07:50 P6 An update on where the star ...

05:07:58 CC Stand by, we'll check.

05:08:00 C6 Roger.

05:09:22 P6 Theta, 18.4; range, 46.00.

05:09:32 C6 At this time the rays of the sun are bouncing off the nose of the spacecraft, eliminating every area of it. Some bright stars are visible to the left and below. I now see the Belt of Orion. So Sirius is below our nose considerably. This is not a star I recognize.

05:09:49 P6 At 20:20: 19.2; range, 43.52; 85 Delta-V total.

05:10:29 C6 That is correct. 85.

05:10:34 P6 71. It's 30.6. That's 30.6; it's 30.6 ... Now we go a little beyond that and come back till we're right there.

05:10:43 C6 Is that Alpha?

05:10:46 P6 No, not yet ...

05:10:48 C6 ...

05:10:56 C6 Now ... a target is in line through the center of Orion's Belt. Approximately the geometric center of Orion.

05:11:03 P6 Right. ... point out.

05:11:04 P6 This may be Point Alpha.

05:11:05 C6 Right on it.

05:11:08 P6 Okay. This will be at 24. Right?

05:11:13 C6 Check. Coming on.

05:11:15 P6 We have no - may have been a point off.

04:11:21 C6 We have time. Yes.

05:11:35 P6 Oh, oh. That other one may have been Point Alpha.

05:11:37 P6 We'll take this one as Alpha.

05:11:39 P6 I want to take this one as Alpha.

05:11:41 C6 You do?

05:11:42 P6 I do. Stand by. Right on it.

05:11:45 C6 Right on it.

05:11:46 P6 MARK.

05:11:51 P6 Point ... on it ...

05:11:53 C6 Good. Is that Alpha?

05:11:54 P6 20.8. Right?

05:11:57 C6 Good point.

05:12:00 P6 ... good show.

05:12:01 P6 Point Alpha. 41:06. And that was it - -

05:12:09 P6 24.

05:12:12 P6 24 minutes. 20.8 at 41:06.

05:12:20 C6 The target right on the pitch of the reticle and a half-degree to the right, so the radar needles are nulled one-half degree. Better than the simulator, right?

05:12:34 P6 Yes.

05:12:39 C6 And he's moving and Orion isn't, so that's the target. [REDACTED]

05:12:41 P6 [REDACTED]

05:12:51 C6 We got you, Frank.

05:12:54 P6 Okay.



05:12:56 P6 Right on that dude, Wally! Point Bravo. Here we go!

05:13:16 P6 This next one will be at 25:40. Right?

05:13:20 C6 Check. Coming up.

05:13:29 C6 There it is. Good point.

05:13:40 C6 Coming down towards Sirius.

05:13:43 C6 That's what's supposed to happen, isn't it?

05:13:45 P6 Yes.

05:13:55 P6 Okay. The next one will be Point Charlie.

05:14:10 P6 That was 25:40, wasn't it?

05:14:13 C6 Check. 27:20, Charlie.

05:14:17 P6 27:20 is Charlie.

05:14:20 C6 Okay.

05:14:27 P6 It's 31:50.

05:14:44 C6 Boy, you're sneaking right up on Sirius! Bright as Sirius too.

05:14:48 P6 Yes.

05:14:58 P6 You got both of them, Wally. 27:20.

05:15:08 P6 Okay. ... Right on it. MARK.

05:15:11 P6 Beautiful Delta-V. Push START COMP.

05:15:13 C6 ... Push.

05:15:20 P6 Okay, I'll get 69 out of here.

05:15:27 C6 27:20.

05:15:31 P6 That looks good.

05:15:34 P6 031 Forward. Was it right?

05:15:37 C6 It was right!

05:15:39 P6 It's about right. ... I'll get these data here.

05:15:46 C6 [REDACTED]

05:15:49 P6 [REDACTED].

05:15:53 C6 [REDACTED]

05:15:56 C6 Okay. Frank, the light went off here now. (Lost sunlight.) I have to turn on some ...

05:16:08 P6 You were brighter than Sirius until then.

05:16:22 P6 This thing's a little bit low here. I'll get the other one.

05:16:29 C Check on the ACQ lights too.

05:16:32 P6 Okay, my backup solution is 2 feet per second up, and 23 feet per second forward, which will put us in this position. We'll take a closed loop at range data point. We'll speed up the summary. It was screwed up for some reason.

05:16:56 P6 27:20 - 31:50 is when we reset now.

05:17:05 P6 I'll try to turn this down for you a little.

05:17:07 C6 Do you log these numbers? I do need some help. (Acquiring light.)

05:17:10 P6 Right - that's good.

05:17:12 C6 Do you have them in sight?

05:17:15 P6 Negative.

05:17:20 C6 Still no. Right?

05:17:22 P6 We can go a GET of the burn ... 17. He set at 16:54 ... we'll be okay.

05:17:36 C6 Okay.

05:17:39 P6 I'm coming up to 30 minutes. Right?

05:17:41 C6 Yes. Just see little tiny dots. 30 minutes time now.

05:18:00 C6 Very good.

05:18:15 C6 We'll be burning shortly.

05:18:24 C6 Okay.

05:18:29 P6 Okay, we're coming up here, Wally. 31 minutes.

05:18:39 C6 Not much upthrust left on that.

05:18:43 C6 You up one minute before.

05:18:44 C6 Say again.

05:18:46 P6 Up was one. Down before. And one right.

05:18:47 C6 Yes.

05:18:56 P6 Here we are. Rate Command.

05:18:58 C6 We're burning.

05:19:39 P6 Okay, I've got my clock reset and counting.

05:19:41 C6 Another one of the lights is on. Better check it.

05:19:43 P6 Okay.

05:19:56 P6 Okay, Wally.

05:19:57 P6 Okay.

05:20:02 P6 You just track on it from 3 to 5 minutes. I got it.

05:20:03 C6 Okay.

05:20:07 C6 After 5 minutes. Right? I'm going to go out on fuel Mark.

05:20:10 C6 Fuel remaining is 62 percent.

05:20:17 C6 How about that?

05:20:22 C6 Just 400 pounds. That should do.

05:20:24 P6 I imagine so.

05:20:27 P6 [REDACTED]

05:20:30 P6 [REDACTED]

05:20:36 P6 [REDACTED]

05:20:37 C6 Oh, how about time sync?

05:20:38 P6 Okay, we're passing 1 minute, Wally.

05:20:41 C6 ...

05:20:46 P6 I had my time sync right in there.

05:20:54 P6 Transfer time went off pretty well, Frank. Set your clock for 2 minutes and we'll pass at about 30 degrees.

## TANANARIVE

05:20:56 P6 ... burning are being run pretty well ...

05:20:59 C7 Roger.

05:21:01 P6 ... in about 30 degrees, Frank.

05:21:03 C7 Okay.

05:21:10 P6 30 degrees. Continue to track.

05:21:13 P6 20 seconds to go 2 minutes.

05:21:15 P6 Okay. 20 seconds to go to 2 minutes.

05:21:17 C7 [REDACTED]

05:21:18 C6 [REDACTED]

05:21:20 P6 [REDACTED]

05:21:20 C6 We'll go for 4, Frank. For 3 minutes.

05:21:21 C7 Roger. 3 minutes.

05:21:32 P6 Hey, once we get right on [REDACTED]

05:21:37 C7 You say you're pitching out at 3 degrees now?

05:21:39 P6 About 3 degrees.

05:21:41 C7 Right ...

05:21:42 C6 About 32. It'll start increasing pretty fast now.

05:21:44 C6 Got a good burn.

05:21:47 P6 How does it burn?

05:21:50 C7 We can't see ... I hope they're working.

05:22:00 C6 I've a very dim source on that. It's probably the dock light.

05:22:01 P7 We've got a very dim ... light.

05:22:03 P6 Can't see any thrusting lights.

05:22:05 P7 Negative ...

05:22:07 C6 We've got real good radar so far, so it has good lock logic.

05:22:09 P6 I have Sirius but I don't have anybody else.

05:22:16 C6 He's down below us.

05:22:22 P6 Okay. We have to hack for 4 minutes?

05:22:26 C6 3.

05:22:27 P6 Okay.

05:22:28 P6 Coming up on 3 minutes, if you can make it.

05:22:29 P6 ... 3 minutes ...

05:22:30 C6 How much?

05:22:31 P6 5, 4, 3, 2, 1

05:22:32 P6 Okay. 5, 4, 3, 2, 1.

05:22:37 P6 MARK.

05:22:38 P6 3 minutes.

05:22:39 C7 Roger. Made it.

05:22:40 C Okay. We're in sync.

05:22:41 P6 Okay. Our data look good. Yes, we're in a little close, Wally.

05:22:42 P6 ...

05:22:44 C6 Close?

05:22:45 P6 Yes, I mean we transferred a little late because ... we played conservative.

05:22:47 C6 Roger.

05:22:48 P6 How's our range rate doing?

05:22:49 C6 Okay. You want some of that? That's about 105. No, 155.

05:22:54 P6 That's good.

05:22:55 P6 Nominal's 165.

05:22:58 C6 I've got a real dim light out there.

05:23:04 C6 No. That's not it.

05:23:22 P6 A real dim light up there ...

05:23:25 P6 We'll blink it a couple times.

05:23:36 C6 ...

05:23:37 C6 Okay. That was it.

05:23:39 C7 It's off now.

05:23:41 P6 Okay ...

05:23:43 C7 It's coming on now.

05:23:45 P6 Roger ...

05:23:49 C7 And we don't have any ACQ lights ... zero.

05:23:53 C6 Yes. That's what I see. (First night sighting.)

05:24:03 P6 I don't want to blind you, Wally, on this thing.

05:24:08 C6 Good. I'll go ahead Frank.

05:24:18 P6 We've about 35 to go.

05:24:20 C6 About 35 degrees.

05:24:21 P7 Roger.

05:24:24 C6 Got the dock light on?

05:24:29 P6 ...

05:24:34 P6 The lights are on.

05:24:36 P6 ... turning dock light off.

05:24:37 C7 ... yet.

05:24:38 P6 ...

05:24:39 C6 Hurry up a bit so I can aline the platform.

05:24:40 P6 I have to get data.

05:24:41 P6 Hey, hold it right there! Stay where you are!

05:24:42 C6 ...

05:24:43 C7 You want me to do that or do you want me to stay where I am? I better stay where I am, I guess.

05:24:44 P6 21.84.

05:24:46 P6 ...

05:24:54 P6 38.3. Okay, you got her.

05:24:56 C6 Going down. (To a line platform.)

05:25:00 P6 Four.

05:25:02 C6 Three.

05:25:54 P6 Right on the line.

05:26:03 C6 Where's our plot?

05:26:05 P6 Right there.

05:26:06 C6 Start getting the point. You can talk to them about that.

05:26:08 P6 Yes.

05:26:12 P6 Gemini VII, VI. From our plot on the data point, looks like we're right on the line. The last data point was 38 degrees at about 22 miles.

05:27:02 C6 Pitching up at 10 minutes.

05:27:04 C6 Yes.

05:27:08 C6 Okay. I'll pitch up and look at you again, Frank.

05:27:24 C6 Pitch angle ... I better stay locked on.

05:27:27 P6 I got him.

05:27:28 C6 Blinking?

05:27:29 P6 You're blinking.

05:27:30 P6 Looks like you're blinking, Frank.

05:27:34 C6 Okay, that was him.

05:27:46 P6 A little to the right.

05:27:52 P6 About 50 degrees.

05:27:54 C6 About 50 degrees, Frank.



05:28:00 P6 Okay, let's get that data point.

05:28:10 C6 Right on.

05:28:13 P6 What do you get, Wally?

05:28:14 C6 It's 7 forward, 5 left, 7 up.

05:28:19 P6 5 left and 7 up. Go get him!

05:28:23 C6 Up first?

05:28:24 P6 Yes. You can get thrust orthogonally if you want to.

05:28:26 C6 And forward last.

05:28:27 P6 Yes. Up and left.

05:28:28 C6 Yes.

05:28:53 P6 Okay. We have to track 15 to 17.

05:28:57 P6 About 55 degrees, Frank.

05:29:04 C6 Affirmative. Affirmative.

05:29:05 C6 He wants ... you to ...

05:29:06 P6 Yes. We need a tad up.

05:29:07 C6 Good.

05:29:08 P6 A little below. I'll take it off the ball.

05:29:11 P6 Wally, range rate, if you get a chance.

05:29:12 C6 Okay. About 105 to 110.

05:29:15 P6 Okay.

05:29:16 P6 Good show.

05:29:17 C6 Recording.

05:29:19 P6 Range-rate reading 110. The attitude is approximately 55 off the ball. The range is 13.06.

05:29:23 C6 Good.

05:29:51 C6 Roger. About 62 degrees.

05:29:55 C6 Very good.

05:33:09 P6 Wally, how did it seem to track him with respect to stars on that reticle? This is just an evaluation.

05:33:15 P6 My stars look pretty bleak out there.

05:33:56 C6 I don't have any. There's the dock light.

05:34:05 C6 You're right on it now, Frank.

05:34:14 C6 Very good.

05:34:15 P6 Okay. Coming up to 15 minutes.

05:34:21 C6 Pretty good track. Dock light is bright as the Agena.

05:34:39 P6 If you get a chance, you can get me some range-rate readings.

05:34:44 C6 Less than 100. About 90 now.

05:34:56 P6 Good show!

05:35:15 P6 It's really bright now, isn't it? (Dock light.)

05:35:16 C6 Yes.

05:35:32 P6 16 minutes.

05:35:39 C6 Sneaking up to meet you, Frank. Directly abeam and to the left are two stars called Castor and Pollux.

05:35:57 C6 Pitch.

05:36:00 P6 Ballpark pitch is about 70 degrees.

05:36:15 P6 The idea is we go ...

05:36:16 C6 Yes.

05:36:21 P6 Boy, the dock light knocks out the ACQ lights, doesn't it?

05:36:24 C6 Yes. Why don't you tell him? I'm too busy.

05:36:25 P6 Frank, you're just what we thought before. Your dock light completely wipes out the ACQ lights.

05:36:32 C6 Oh no, no, no! (Don't turn dock light off.)

05:36:44 P6 7.77 (Range.)

05:36:53 P6 Okay. Zero addresses 25, 26 and 27. That's better.

05:37:10 P6 74.2. Okay. 25.

05:37:12 C6 There are some stars out there. Good!

05:37:36 C6 You got 19 minutes?

05:37:41 P6 Coming up on 19.

05:37:44 P6 Sure do. I'd get the data otherwise.

05:37:46 C6 27 ...

05:37:49 P6 Okay. Good show, Wally!

05:38:24 C6 Do you see Castor and Pollux?

05:38:25 P6 Oh, yes, I sure do.

05:38:27 C6 We're going to perform the backup check.

05:38:29 P6 Yes. Okay. Stand by ... Okay, you've got 3 seconds to go, Wally. 2, 1. MARK.

05:38:38 C6 Got it.

05:38:44 P6 We're about 10 degrees ahead of schedule but that isn't too bad. We transferred a little late ... with no sweat, Wally.

05:38:53 C6 Yes.

05:38:54 P6 Okay. Next data point will be at 22 minutes.

05:38:58 C6 Right.

05:39:20 P6 Okay. The next correction will probably be - may

be a little bit up. Here it is; I have it for you on the plot. We're right there.

05:39:23 C6 Oh, yes.

05:39:29 P6 Here's where we transmit. We're coming right up to it.

05:39:42 P6 ... there are 20 minutes to go.

05:39:44 P6 22 is 94.3. And that is 14.3. The total.

05:39:54 C6 ...

05:40:00 P6 I'm going to say 60 percent up.

05:40:03 C6 That's it, right?

05:42:04 P6 I can't get a photo.

05:42:06 C6 Oh, yes.

05:42:10 P6 6 up to the back-up.

05:42:11 C6 [REDACTED]

05:42:24 P6 [REDACTED]

05:42:26 C6 [REDACTED]

05:42:29 P6 [REDACTED]

05:42:41 P6 [REDACTED]

COASTAL SENTRY QUEBEC

05:42:42 P7 [REDACTED]

05:42:44 C6 [REDACTED]

05:42:46 C6 [REDACTED]

05:42:48 P6 [REDACTED]

05:42:50 ... [REDACTED]

05:42:56 C6 [REDACTED],  
[REDACTED]

05:42:59 P6 [REDACTED]

05:43:05 C6 [REDACTED]

05:43:10 P6 What is it?

05:43:17 C6 4 forward, 5 right, 3 up.

05:43:20 P6 4 forward, 5 right, 3 up.

05:43:23 C6 6 right.

05:43:24 P6 6.

05:43:27 C6 5 right, 3 up.

05:43:39 P6 Okay.

05:43:44 C6 5 right.

05:43:48 C6 About 110 degrees.

05:43:53 P6 That's all that we should have.

05:44:03 C6 Yes. That's all.

05:44:05 P6 Okay. Catch-up mode, Wally.

05:44:09 C6 That goes 250.

05:44:11 C6 Pulse mode.

05:44:34 P6 Cleared addresses 25, 26 and 27. Okay.

05:44:37 C6 Is recording continuous now?

05:44:39 P6 Roger.

05:44:47 C6 Good.

05:44:49 P6 Okay. We have a real pass. 15 on.

05:44:58 P6 110 - 110 - 110 degrees, 69 is 110 degrees. 2.77.

05:45:09 C6 Very good.

05:45:12 P6 And give us 55.

05:45:13 P6 [REDACTED]

05:45:24 C6 [REDACTED]

05:45:27 P6 [REDACTED]

05:45:38 C6 2. We are right here. That swung us in, tight on, ... right there.

05:45:44 P6 Okay.

05:45:45 C6 This swung us in. Good going.

05:45:51 C6 That really is great. Didn't drop at all.

05:45:52 P6 That's good.

05:45:59 C6 R-dot is about 45 ... Good.

05:46:00 C6 Okay. At 27 minutes after ... We'll give them the pitch angle here, will you?

06:46:05 P6 Okay.

05:46:12 P6 115 degrees on pitch. That ball ... pitch ... That's about right.

05:46:17 C6 Yes.

05:46:22 P6 Does it look like they are going up?

05:46:24 C6 A little bit.

05:46:27 C6 ... Let's leave it alone a little while.

05:46:39 P6 Okay. 17 at 27, 117, 60.

05:46:43 C6 How's the plot look?

05:46:44 P6 2 miles. 100 - 206. May be going up a little bit on you.

05:47:07 C6 No. It looks pretty good. We wish we had a

parallel course.

05:47:10 C6 Yes. Pretty hard to argue. Good stars there.

05:47:17 P6 Okay. Good show. I'll call it out to you.

05:47:19 C6 Yes.

05:47:22 P6 120 degrees, 1.7 miles. We're decent now, Wally.

05:47:23 C6 ... 120 degrees.

05:47:27 C7 ...

05:47:32 C6 1.7 miles.

05:47:34 C7 Roger.

05:47:41 C6 Coming right up.

05:47:46 C6 It's not going up nor down? Or right?

05:47:51 C6 Or right.

05:47:59 P6 How's the range rate?

05:48:02 C6 About 42.

05:48:09 P6 Okay. Good show.

05:48:10 C6 Okay.

05:48:11 C6 It's going down a little bit, if anything.

05:48:14 P6 Okay. Go ahead and stop it.

05:48:15 C6 Yes.

05:48:16 C6 Distance now.

05:48:19 P6 Okay. 22 - -

05:48:21 C6 Very good.

05:48:22 P6 125 degrees - 125 degrees at 1.2 miles.

05:48:39 P6 Yes, you better not let it go down now. I'll try

to get another scale.

05:48:43 C6 Yes.

05:49:05 C6 Roger.

05:49:06 C6 There's the RCS light.

05:49:10 P6 Okay. RCS Heaters - turn them on.

05:49:12 P6 One mile, Wally.

05:49:14 C6 Roger.

05:49:24 P6 1 mile, at 127 degrees.

05:49:30 C6 That's right. Holding steady on the ball.

05:49:38 P6 Looks good.

05:49:39 C6 Yes.

05:49:41 C6 We're getting their light.

05:49:43 P6 Look at that bright light! There he is. Just waiting.

05:49:46 P6 We're coming out in the sun, too, Wally.

05:49:47 C6 Yes.

05:49:48 C6 How about that?

05:49:52 C6 Hope he has some ...

05:49:53 P6 Roger.

05:49:58 P6 74. That's at 30 (minutes).

05:50:04 P6 .74.

05:50:05 C6 Roger.

05:50:10 P6 It's going way down now.

05:50:12 C6 What?




05:50:13 P6 It's going down with respect to the stars.  
05:50:15 C6 [REDACTED]  
05:50:16 P6 [REDACTED]  
05:50:17 C6 [REDACTED]  
05:50:19 P6 [REDACTED]  
05:50:20 C6 [REDACTED]  
05:50:21 C6 [REDACTED]  
05:50:22 P6 Okay. I have .57 miles.  
05:50:23 C6 ... for a while.  
05:50:25 C6 ...  
05:50:26 C6 Fine stars in the back to the north ([REDACTED])  
05:50:27 C6 Oh yes. .54.  
05:50:28 C6 [REDACTED]  
05:50:29 P6 .51.  
05:50:30 P6 ...  
05:50:31 P6 Stand by to brake.  
05:50:33 C6 Ready to brake.  
05:50:34 P6 Brake at .48 nautical miles.  
05:50:44 C6 Point, I'll call that.  
05:50:48 P6 .4 nautical miles.  
05:51:00 P6 32. .32.  
05:51:02 C6 Right.  
05:51:07 P6 .30 at ...

05:51:09 P6 Ha, ha.

05:51:12 P6 .32 - .30.

05:51:19 P6 Quarter of a nautical mile.

05:51:24 P6 ...

05:51:28 P6 Looks like you've got it slowed down. We're holding 22, 22 - -

05:51:34 C6 Okay ...

05:51:41 P6 1200 feet.

05:51:46 P6 1200 feet at 33.

05:52:00 P6 We're in good shape.

05:52:01 C6 Roger. Dropped a little bit.

05:52:02 P6 .17. Just about 1000 feet, Wally.

05:52:21 C6 1000 feet.

05:52:24 P6 .16 at 33:30.

05:52:41 P6 800 feet.

05:52:42 C6 Roger.

05:52:46 P6 800 feet at 37 (minutes).

05:52:51 C6 Got R-dot at about 6.

05:52:53 P6 Good show.

05:52:55 C6 Want to clear the IVI's?

05:52:56 P6 IVI is clear.

05:52:57 P6 It's numbered.

05:52:58 C6 Group -

05:52:59 P6 ...

05:53:00 C6 There's 25.  
05:53:01 P6 27.  
05:53:03 C6 Okay. 27 ...  
05:53:04 C6 They look like they're on fire.  
05:53:07 C6 So bright.  
05:53:10 P6 There's 27 aft, 14 left.  
05:53:12 C6 Keep that range coming.  
05:53:19 P6 .11.  
05:53:22 P6 660 feet.  
05:53:36 P6 540 feet.  
05:53:37 C6 Roger.  
05:53:41 P6 540 feet at 35 (minutes).  
05:53:43 C6 Check.  
05:53:49 P6 360 feet.  
05:53:50 C6 Roger.  
05:53:54 P6 Gosh they're bright!  
05:53:55 C6 Yes.  
05:53:57 P6 300 feet.  
05:53:58 C6 Roger.  
05:53:59 P6 We're directly below them.  
05:54:06 C6 Roger.  
05:54:08 P6 Pitch is 90 degrees.  
05:54:10 C6 Roger.  
05:54:12 P6 240 feet. MARK.

05:54:13 C6 Roger.

05:54:19 C7 Having fun? (First contact with VII.)

05:54:21 P6 130 feet.

05:54:29 P7 120 feet.

05:54:31 C6 Hello there!

05:54:36 P6 All zips on our radar. Shows 300.

05:54:38 P7 Is that right?

05:54:41 P6 Holding 120, Wally.

05:54:42 C6 Roger.

05:54:43 P6 120 at - 36.

05:54:53 P6 It's still 120 at 36.

05:55:05 C6 ~~REDACTED~~

05:55:08 C6 You can tell them to turn off the dock light, if they want to save power.

05:55:11 P6 Good. Turn off the dock light, Frank, if you want to save power now.

05:55:13 C6 Yes.

05:55:22 C6 Roger. (Question from VII about antenna sticking out.)

05:55:34 C6 Did I hear something?

05:55:36 C6 Out HF is .

05:55:39 C7 ... We got all surfaces ...

05:55:42 C6 Probably. I'll retrack the HF a little more.

05:55:46 P6 You got a big string hanging on the back of you.

05:55:51 C7 That's the strap we've been talking about.

05:55:52 P6 Yes. It looks like you have a big rope hanging from the back, Frank. It's probably the strap you've been talking about.

05:55:58 C7 Yes, and you have one too. How about coming around and looking me over?

05:56:00 P6 Be very glad to.

05:56:01 CC Gemini VI, Gemini VI, Houston CAP COM. Standing by.

05:56:03 P6 Oh, oh! Sunlight!

05:56:08 P6 Houston, this is Gemini VI. Go ahead.

05:56:12 CC Roger. We're interested in your status.

05:56:24 P6 That sun is blinding.

05:56:30 P6 Hello Houston. Gemini VI.

05:56:36 P6 Holding 120.

05:56:38 CC Gemini VI. Houston is standing by.

05:56:41 C6 Roger. We're all sitting up here playing bridge together.

05:56:48 C6 Well we have a - what range are we, Tom?

05:56:51 P6 Roger. We have 120 feet steady.

05:56:54 CC Roger. Understand. Stationkeeping at 120 feet.

05:56:58 C6 I can't see him.

05:56:59 C6 Can you see him?

05:57:01 C7 You got a lot of stuff all around the back end of you. Must be the ... off from the ... test ...

05:57:02 P6 I can't see him. If you can probably keep --

05:57:07 C6 Let me know how close you think we are, Frank. I can't see it at all. The sun's in my eyes.

05:57:13 P6 ...

05:57:14 P6 Okay ... Up a little bit, just a little bit.  
You're right on it in yaw, Wally.

05:57:19 C6 I got the radar needles. That's all I can see.  
Completely in the sun.

05:57:24 C6 You want me to stay stationary now, Wally? We're  
almost face up.

05:57:47 C7 This is VII.

05:57:49 C6 Go ahead, Frank.

05:57:50 C7 I'm going to go ahead and put it on Inertial neutral  
here and stay right on the horizon, if that's what  
precious wants.

05:57:56 C6 Great ...

05:57:57 C7 Say again.

05:57:59 C6 That will be fine, Frank.

05:58:00 C7 Okay.

05:58:05 P6 Houston, this is Gemini VI. Propellant remaining  
is approximately 50 percent.

05:58:11 CC Roger. Copy. The OAMS remaining, 50 percent.

## HAWAII

05:59:16 CC Gemini VI, Hawaii CAP COM.

05:59:19 C6 Go.

05:59:20 CC Okay. We're showing you GO here on the ground.  
Can you give me your status?

05:59:24 C6 We're in formation with VII and everything is GO  
here.

05:59:28 CC Roger. Congratulations! Excellent!

05:59:30 C6 Thank you. A lot of fun.

05:59:39 C6 You guys really are showing a ... of droop on those wires hanging there.

05:59:45 C7 Stop ... it on me.

05:59:48 C7 Where are they hanging from?

05:59:51 C6 Well, Frank, it looks like it comes out at the separation between - it might be the Fiberglas. It's approximately - oh - 10 to 15 feet long.

06:00:00 C7 The separation <sup>plane</sup> ~~came~~ from the booster, right?

06:00:02 C6 Affirmative.

06:00:03 C7 That's exactly where you have one, too. It really belted around there when you were firing your thrusters.

06:00:10 C6 Looks like about 8 or 9 feet long and double wire.

06:00:13 C7 Right.

06:00:14 C6 We're going to take a picture of it.

06:02:11 CC Gemini VI, Hawaii.

06:02:14 C6 Go ahead, Hawaii.

06:02:15 CC I've got an update for you if you're not too busy to copy either - a short one.

06:02:18 C6 I'll let Tom talk to you.

06:02:20 CC Okay.

06:02:29 P6 Okay. Gemini VI ready to copy.

06:02:31 CC Okay. D-8: 06:35:00; pass at Hawaii; Rev 4. D-8: 08:10:00; pass at Hawaii; Rev 5. That's it.

06:03:00 P6 Roger. D-8: at C6 plus 35 plus 00; pass at Hawaii on Rev 4. D-8: C8 plus 10 plus 00; pass at Hawaii on Rev 5.

06:03:13 CC Okay. Very good. You've got it.

06:03:34 CC VI and VII, Hawaii. We'll be standing by if you have anything for us.

06:03:39 P6 There just seems to be a little traffic up here, that's all.

06:03:42 CC Call a policeman.

06:03:46 P6 It was pretty trying during the terminal run. As we looked out, we could see the two Gemini stars casting off to the right of Gemini VI - correction - VII. They were all in a line.

06:03:59 CC Roger.

06:06:24 C7 We've lost you, VI.

06:06:27 C6 You've lost sight of me, sir?

06:06:28 C7 Roger.

06:06:32 C6 I must affirm a few little things.

06:06:34 C7 Okay.

06:06:41 C6 Keep to your left now.

06:06:42 C6 This is the night light, is it?

06:06:45 C7 Say again.

06:06:46 C6 This doesn't act like a night light, or is that an experiment light?

06:06:49 C7 No. They should both be off.

06:07:09 CC VI, what's your range?

06:07:13 C6 20 feet.

06:07:16 CC Roger.

06:08:21 P7 The flag or the letters are ... Looks like they're seared as much at launch as they are when you come back from reentry.



06:08:29 P6 Jim, noticed your blue field is practically burned off.

06:08:33 P7 Right.

06:08:39 CC Gemini VI, Houston.

06:08:41 C6 Go ahead, Elliot.

06:08:43 CC Do you have an estimate of your TPI fuel and braking fuel?

06:08:48 C6 Roger. Stand by.

06:09:25 CC Gemini VI, we're interested in Delta-V's on the terminal phase initiation and the braking, and also several million people are interested in a little more description of the braking and your station-keeping.

06:09:38 P6 Roger, Elliot. Gemini VI. We've initiated with a Delta-V that was 031 forward. It started initially at 007 up and decreased to 004 up at initiation and right 001. At the completion of TPI we had 62 percent fuel remaining.

06:10:07 CC Roger.

06:10:08 P6 And now for the big questions.

06:10:12 C6 We have about 49 now, Elliot.

06:10:15 CC Roger. 49 percent now.

06:10:18 P6 That's affirmative. Our first stick course was 007 forward, 005 left, and 007 up. The final mid-course was 004 forward, 06 right, and 003 up. This pretty much conforms with the plot. We're a little bit below the nominal line there - of the plot at that time. In the braking, we knocked up 27 feet per second Delta-V with our brakings. There's 27 feet per second aft - a total of about 14 left.

06:11:00 CC Roger. 27 feet per second aft and about 14 left.

06:11:05 P6 Roger. 14 left was the final one.

06:11:09 CC Roger.

06:11:10 P6 And we will hit position at 120 feet per. We have indicating 50 percent fuel.

06:11:18 CC Roger. Copy.

06:11:19 P6 R-dots, all the way through, looked fairly nominal and the one backup solution that I did get for the m.d-course reads very close with the closed loop.

06:11:30 CC Roger, Tom.

06:11:31 P6 Right now, we are SEF VII and BEF and we're - oh, I'd say what - 10 feet apart.


06:11:37 C6 Roger. About that.


06:11:38 P6 Yes.


06:11:46 CC Say again, your range, VI.


06:11:49 P6 About 10 feet.

06:11:50 CC Roger.

06:12:13 C7 

06:12:15 C6 

06:12:16 C7 

06:12:18 C6 

06:13:27 CC Gemini VII and VI, would you continue with the description of your stationkeeping?

06:13:41 C7 Right now, VI is about 10 feet above and to the left of VII. We're just flying nose to nose, approximately 15 feet apart.

06:13:51 CC Roger.

06:13:53 P7 We can very clearly see the horizon scanners up ...

06:15:18 P7 Wally, I can see your lateral thrusters are firing

out about 40 feet from what we - visual, from what we can see.

06:15:26 C6 How are they doing?

06:15:28 P7 We can't tell now. We're in too close. But when you were doing your Braking Maneuver we could see them ... quite a bit out.

06:15:47 P7 I'll come back in, so we can get nose-to-nose a little bit.

06:16:03 P6 Looks like those wires guillotined off the booster and not at the spacecraft ...

06:16:09 C7 Yes, you have the same thing, only it's in back of yours.

06:16:12 C6 The wire bundles, of course.

06:16:31 CC Gemini VI, did I understand you to report that thruster plumes were seen 40 feet out?

06:16:40 C6 That was Gemini VII, and I'm sure they saw them that far. We could see them; looks like within a ... down with them.

06:16:47 P7 Houston, on this Breaking Maneuver our lateral thrusters fire quite aways out.

06:16:52 CC Roger, VII.

TEXAS

06:19:04 P6 Yes. What's confusing?

06:19:06 CC Gemini VI, would you switch your adapter C-Band to COMMAND?

06:19:10 C6 Gemini VI, adapter to COMMAND.

06:19:17 C7 What did you say, Wally?

06:19:18 C6 You guys sure have big deals.

06:19:20 CC Ha! ha! ha!

06:19:23 C6 If you're in white, you're in style.  
06:19:25 CC Right.  
06:19:36 CC Gemini VI, Houston.  
06:19:38 C6 Go ahead, Elliot.  
06:19:40 CC On that update at Hawaii, those remarks of the pass  
at Hawaii, Rev 4 and Rev 5, actually do not apply  
to you. Those were instructions to Hawaii.  
06:31:37 C7 12 o'clock tomorrow morning?  
06:31:39 ... ... after tomorrow morning.  
06:31:43 ... ... easier ones on Saturday.  
06:31:46 ... I'll pass.  
06:31:50 C6 How's the food supply holding out?  
06:31:52 C7 Oh, it's in good shape.  
06:31:54 P7 It's holding out, but it's the same thing day after  
day.

## ROSE KNOT VICTOR

06:33:42 C6 ... point off. Right, yes.  
06:33:46 P7 We picked you up, Wally, when the sun reflected off  
your adapter.  
06:33:49 C6 Yes.  
06:33:51 CC Wally, is it good to see the lights on final?  
06:33:53 C6 Affirmative. It's good.  
06:33:55 CC Okay.  
06:33:58 CC At what range could they see?  
06:33:59 C6 Usually just before transfer, but the ...  
06:34:13 C6 This is on the long range ... transfer.

06:34:15 CC Roger.

06:34:37 CC Gemini VI, have you been doing any In-Plane Fly-Around?

06:34:40 C6 No, I've been just looking around. We're trying to get ready for a night pass here ...

06:34:46 CC Roger.

06:38:14 CC Hey Wally!

06:38:15 C6 Go ahead.

06:38:17 C7 When we get around to the next stateside let us try it for about 5 minutes, will you? I'm after - the fuel is bouncing up a little bit.

06:38:19 P6 Sure.

06:38:23 C7 Okay.

06:38:27 C7 I'm going to platform for the nighttime pass, if you want to back off just a little bit.

06:38:31 C6 When I get in there you're going to leave the platform up?

06:38:34 P6 Yes, we're going to leave it up.

06:38:36 C6 Okay.

06:39:38 C6 That will help you there, Frank, or ... back a little more?

06:39:39 C7 That's okay. I ... in the plat mode now.

06:39:42 C6 Roger.

06:39:45 P6 ... on the line right now.

06:39:47 C6 Roger.

06:39:54 C7 This gauge is bouncing right around 15 percent if you look at it right. ... to the left ...

06:40:01 P7 Oh, good. I think we better pitch over.

## TANANARIVE

06:54:02 CC Gemini VI, Gemini VI, Houston CAP COM. How do you read?

06:54:08 P6 Loud and clear, Houston. Go ahead.

06:54:10 CC Could you give us a report on your night station-keeping?

06:54:16 P6 No trouble at all. We're about 20 feet apart, using the docking lights and the cabin lights of the spacecraft.

06:54:26 CC Roger. Understand no trouble at all. 20 feet apart. Using the docking lights on VI.

06:54:33 P6 We're using the docking lights from VI to illuminate - -

06:54:41 CC Roger, understand. Docking lights on VI to illuminate VII.

06:55:00 P6 Spacecraft ...

06:55:02 C7 Say again.

06:55:04 P6 ... just talking about.

06:55:07 C7 You're not close.

06:55:08 P6 ... ring you up.

06:55:09 C7 That's your dump.

06:55:11 P6 Oh, okay.

06:55:18 P7 Can you see Frank's beard, Wally?

06:55:20 C6 Yes, I see yours better, right now.

06:55:25 P6 Did you wipe your mouth, Jim, after you ate?

06:55:30 P6 You must have just wiped your mouth, Jim. Did you?

06:55:34 P7 Yes. Right.

06:55:36 P6 How's the visibility through these windows? They're pretty bad from this side.

06:55:40 P7 Yes. It's pretty bad. We noticed ... that some see through the windows. They are pretty bad on this side.

06:55:52 P7 Through your window, they're right on top of us.

06:56:18 CC Gemini VI, Houston. We'd like a report on whether you have done a Fly-Around yet on the day side.

06:56:26 P6 Negative. We canceled that to get the ...

06:56:32 CC Roger, VI.

06:56:37 P6 ... we're satisfied to stay here as long as you let us.

06:56:49 P6 We have about 47 percent ... remaining at this time.

06:56:51 CC Roger. 47 percent remaining.

06:57:08 C6 The forest fires really kick them out, don't they, Jim?

06:57:10 P7 Right. They've been there all the time, Wally.

06:57:12 C6 Yes. That fire down there to your left is an oil fire, I think.

06:57:18 P7 Oh, you see one there from the air?

06:57:21 P6 Right. Maybe that was down to your left. It's ... night.

06:57:26 P7 Okay.

06:57:33 P6 ... any way you do it.

06:57:37 P7 Between the black marks.

06:57:42 P7 With your light on, Wally, I can just see the flame of the front of the nozzle.

06:57:43 C6 Roger.

06:58:44 P7 Drinking water, right, Wally?

06:58:47 C6 Roger.

06:58:49 P7 ... voltmeter very much to look at.

06:58:54 C7 ... rough day.

06:58:55 C6 Ha! ha!

06:58:59 C6 Don't let him kid you. I'm just a ...

06:59:02 P7 Roger. ...

06:59:24 C6 ... Merry Christmas and get it over with.

06:59:28 P7 Yes. I still wish we had a pot of fuel here.

06:59:37 C6 You should work up a ...

06:59:39 P7 Right.

07:00:09 C6 ...

07:00:12 P7 That's right.

07:00:45 P6 Back up just a little bit.

07:00:49 P7 There doesn't seem to be any shape of a ... just a glob comes out.

07:00:52 P6 ... ball of fire attitude ... light out all you can see is the initial flame.

07:01:02 P7 ... for awhile.

07:01:09 P7 As you approached us in the rendezvous we could see the fire way out to about 40 feet.

07:01:15 P6 Very good.

07:01:21 P7 Now we didn't even know you were there, Wally.

07:01:23 C6 Right here.

07:01:24 P7 Yes.



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07:01:25 C6 Roger. ...

07:01:27 C6 Ha! ha!

07:01:30 C6 Now I can see you a little more ... taking off on the ...

07:01:36 P7 My ... off.

07:01:43 P6 No. I guess it's because I get so many reflections on the window.

07:01:52 P7 Roger. We saw that.

07:01:54 P6 ... sunlight.

07:01:57 P7 Roger. I could hit you with it.

07:02:00 P.. ...

07:02:02 P.. ... Very good. ... on the next flight.

COASTAL SENTRY QUEBEC

07:22:06 C7 ... your flight plan, Hawaii.

07:22:09 C7 7 hours 22 minutes ... for a vent.

07:22:12 C6 Check 22.

07:22:13 C7 Roger.

07:22:20 C6 We'll switch to your experiment, then we'll fly around, if that's all right with you.

07:22:25 C7 Let us have about 5 minutes ... trying to move around in this node.

07:22:30 C6 Oh, fine.

07:22:34 C7 In fact, how about that right now?

07:22:35 C6 Sure, my Maneuver switch has been off for the last 15 minutes.

07:22:38 C7 Okay, we'll just coast around here a little bit and see what it looks like.

07:22:41 C6 Very good.

07:22:46 C7 This experiment will start in about 13 minutes, this morning.

07:22:49 C6 Okay ... Plat mode and Node 2.

07:23:55 C7 I know ... with you.

07:24:01 C6 It's looking pretty good.

07:24:03 C7 Yes, those heaters work fine.

07:24:17 C7 Yes, you're right.

07:24:19 C6 ...

07:24:21 C7 That's what I mean - there are times when it looks like there's nothing there.

07:24:24 C6 Yes, a couple of white flakes, and that's about it.

07:24:27 C7 Yes.

## HAWAII

07:34:01 C6 We'll be dumping in about 2-1/2 minutes. Radar contact.

07:35:30 CC Okay, Gemini VI. Will you put your Quantity Read switch to the ECS O2 position?

07:35:36 P6 You got it.

07:35:38 CC Okay.

07:35:39 P6 Want to do a - just ... fly around here very shortly.

07:35:42 CC Roger. Start the tape dump now.

07:35:46 P6 Roger.

07:35:50 P6 We're ready to dump.

07:36:41 C7 Boy, those windows are really bad. I got a good look at your window, Wally. It's really coated.

07:36:46 C6 Yes.

07:36:48 C6 We were lucky.

07:36:58 CC All right.

07:37:02 C6 ... that's a real big problem there.

07:37:04 C7 Wally, can you tell if there's any purge at all?

07:37:07 C6 Say again.

07:37:08 C7 Could you tell if we're purging at all?

07:37:12 C6 I see some white flakes, bubble, white things come off. Not actually bubbles, but ...

07:37:27 C7 Could you move down a little bit so you're more in line with us?

07:37:30 C6 Moving down.

07:37:45 CC VI, Quantity Read switched to OFF.

07:37:48 C6 Roger. Switch off.

07:37:50 CC Roger.

07:40:45 CC VI, we're finished with the experiment.

07:40:48 C6 Roger. ...

07:40:52 CC VI, Hawaii.

07:40:56 C6 Go ahead, Hawaii.

07:40:57 CC Okay. We have nothing else for you here. Do you need anything?

07:41:02 C6 If we need anything, we'll disturb you ... flying around right now.

07:41:06 C6 All right. We'll be standing by.

07:41:08 C6 Roger. We have about 46 percent prop quantity.

07:41:14 C6 Say again your prop quantity. 46 percent?

07:41:16 C6 That's correct.

07:41:18 C6 Okay. Thank you.

07:42:44 C7 You going over the top, Wally?

07:42:46 C6 That's right.

07:42:47 C7 Okay.

07:42:57 P7 It's a liquid Freon or Neon or something from the cold IR experiment.

07:43:02 C6 Oh, is that what it is?

07:43:03 P7 Yes.

07:43:33 C7 How does it look from back there?

07:43:35 C6 Looks good.

08:08:02 ... check over ...

08:08:06 C7 ... load is looking?

08:08:09 C6 We're looking right at your vehicle now.

08:08:11 C7 What's the - how much of a ... have I got?

08:08:14 C6 ... Flight.

08:08:16 C7 ... just talk out there.

08:08:21 C7 Under the nose here, during the yaw up.

08:08:25 C6 ... pretty clean that far out.

## ROSE KNOT VICTOR

08:12:24 CC Gemini VI, you'll get your block update over CSQ.  
08:12:28 C7 The burn was successful.  
08:13:01 CC You will be dumping in approximately 30 minutes, VI.  
08:13:06 C6 Could you hold with it for 1 minute?  
08:13:08 CC Sure can.

## TANANARIVE

08:33:34 CC Gemini VI, this is Houston.  
08:33:42 C6 This is VI. Read you loud and clear.  
08:33:45 CC Roger, Gemini VI. You'll get your PLA update over the CSQ on this revolution if you can copy.  
08:33:49 C6 Rather wait one more orbit. Over.  
08:33:57 CC I understand you want to wait for one more orbit. Is that correct?  
08:34:00 C6 Affirm ... wait one more orbit.  
08:34:04 CC Okay. We'll hold it off for another orbit.  
08:34:06 C6 Thank you.  
08:34:10 C6 ...

## COASTAL SENTRY QUEBEC

08:59:08 C6 Gemini VII, this is VI. If you can hold it in yaw for just a little while, we'll try and get in close and get all these close shots of you.

## HAWAII

09:10:38 CC Gemini VI, Hawaii CAP COM.

09:10:40 C6 Go ahead, Hawaii.

09:10:41 CC How are you doing?

09:10:43 C6 Very good. We're getting a whole bunch of movies this morning.

09:10:46 CC That's great! I'll be glad to see those. We show you GO here on the ground and I got a Sep Maneuver update when you're ready to copy.

09:10:54 C6 Okay. Stand by.

09:11:00 CC Ready to copy, there?

09:11:07 CC VI, Hawaii. Ready to copy?

09:11:09 C6 Stand by.

09:11:10 CC Okay.

09:11:20 P6 VI is ready to copy.

09:11:22 CC Okay. GET B: 9:44:00; Delta-V, 9 feet per second; your burn time 0 plus 15; yaw and pitch are zero; Core 25, 90090; Cores 26 and 27 are all zeros; forward-firing thrusters, a Retrograde Maneuver, this is your Sep Maneuver.

09:12:17 P6 Roger. For separation burn: GET, 09 plus 44 plus 00; Delta-VT of 9.0; duration, 0 plus 15; yaw 0, pitch 0. ... Core 25, 90090; 26, 27, all zeros; thruster forward-firing with the Retrograde Maneuver.

09:12:42 CC Okay, Tom, very good. You got it all.

09:12:44 CC And Stand by. I want to get one up to VII.

09:14:40 CC Okay, VII and VI. Hawaii will be standing by. We have about another 4 or 5 minutes here.

09:14:45 C6 Hawaii. Gemini VI.

09:14:49 C6 Hawaii CAP COM, Gemini VI.  
09:14:51 CC Gemini VI, Hawaii CAP COM. GO.  
09:14:53 C6 Roger. We asked for another orbit for photography.  
There seems to be no reason to raise ...  
09:15:00 CC Okay, Wally. Stand by one.  
09:15:01 C6 Okay.  
09:15:25 CC Gemini VI, Hawaii.  
09:15:27 C6 Go ahead.  
09:15:28 CC All that I just gave you, you can scrub it out.  
They're giving you GO for another revolution.  
09:15:31 C6 Very good. We have about 41 percent fuel, ...  
over.  
09:15:37 CC Roger, I copy that.

COASTAL SENTRY QUEBEC

10:28:45 CC Gemini VI, CSQ CAP COM.  
10:28:49 C6 CSQ. Gemini VI. Go.  
10:28:51 CC Roger. We'd like for you to observe VII on this  
roll procedure and let us know if you see any  
water coming out of VII.  
10:28:59 P6 Roger. I will be observing and moving and taking  
pictures.  
10:29:03 CC Roger.  
10:29:06 P6 At this point, no observation.  
10:29:08 CC Roger.  
10:29:10 CC Also, VI, you'll get a maneuver update through -  
Sep Maneuver update over Hawaii this revolution.

10:29:16 C6 Roger.

10:29:17 P6 You might inform Colonel Cooper that we just ... still-photographed and movies of Gemini VII going over the Himalayas at sunrise.

10:29:30 CC Roger.

10:30:12 C7 We're planning now. I can see if there are any substances.

10:30:16 C6 Only saw one flake that time, Frank.

10:30:18 C7 There's a whole lot coming by, right by my side.

10:30:22 C7 ... for you, Wally.

10:30:25 C6 I see some now. Yes. Is that your water boiler?

10:30:28 C7 I guess so.


10:30:30 C6 Yes. I see it now.


10:30:33 C6 ...

10:30:42 C7 Right.

10:30:43 C7 Just aft of you, that's the water boiler.

10:32:02 P6 The wiring cable, Frank, is hanging on. By your centrifugal force it's just about straight out now. Looks like it's about 10 feet long. ... to the adapter.

10:32:16 C7 

10:32:19 P6 

10:32:20 C7 Can you affirm ... whips all around right there.

10:32:25 C6 It's right at the separation plane.

10:32:26 C7 That's right.

10:32:35 P6 ... come and look for us so ...

10:32:39 P7 All right.



10:34:09 C6 VII, this is VI. Apparently we can see lots and lots of water coming out all over the back of ...

10:34:14 P7 Thank you.

10:34:24 P7 VI, this is VII. I think it helped out our fuel cells a little, too.

10:34:29 P6 Affirmative.

10:34:30 P7 Good show. I hope it stays up ...

10:34:50 P7 ... better start the ..., Wally.

10:34:54 C6 Okay. Will go.

10:35:02 P7 ... cable wind up behind you.

10:35:07 P7 I got a real ball of ice back there ... water ...

10:35:09 P6 Yes. You sure do! It's a big ball!

10:35:15 C7 Is it the water boiler?

10:35:17 P6 It certainly looks ...

10:35:20 P7 Was it there before, VI?

10:35:22 P6 Negative.

10:35:25 P6 I suggest you roll starboard about 30 degrees and you'll put it right in the sun.

10:35:31 CC Gemini VI, CSQ. You say the water - the frozen water appears beyond the water boiler?

10:35:37 P6 Yes, that's obvious to us, yes.

## HAWAII

10:46:14 C7 We wanted to roll about 180 degrees to the right or left and to get that blob of ice in the sun.

10:46:22 P6 Okay.

10:46:23 C7 Try out the water boiler outlet.

10:46:31 P6 180 degrees to the right. How's that?

10:46:33 C7 Fine.

10:47:02 CC Gemini VI, Hawaii CAP COM.

10:47:03 P6 Gemini VI.

10:47:04 CC Okay. I've got your Sep Maneuver update if you're ready to copy.

10:47:07 P6 Stand by.

10:47:15 P6 VI is ready.

10:47:17 CC Okay. Radar and track and solid telemetry on both vehicles. Okay. We're showing you GO here on the ground. And here we go: GET B; 11 plus 14 plus 29; Delta-V, 9 feet per second; burn time, 0 plus 15; yaw 00, pitch 00; Core 25, 90090; Cores 26 and 27 are all zeros; and it will be a forward firing thruster burn; Retrograde Maneuver.

10:48:05 P6 Roger. The separation is 11 plus 14 plus 29; Delta-V, 9.0 feet per second; duration, 0 plus 15; yaw 0, pitch 0; Core 25, 90090; 26 and 27, all zeros; thruster is forward-firing; retrograde burn.

10:48:29 CC Okay, Tom. You got it all and here's what we'd like you to do prior to making the burn. We'd like you to move 5 to 10 feet north of Spacecraft VII and about 50 feet behind. This is prior to making the burn. Now the reason for this is to keep the Spacecraft VII D-4/D-7 instrument away from the sun.

10:48:57 P6 Affirmative.

10:48:58 C6 Are you worried about us getting between the sun and him?

10:49:03 CC That's what it looks like.

10:49:04 C6 We've never been there, we watched out for that.

10:49:07 CC Okay, Wally, that's where they'd like you to go just prior to making the burn. Okay!

10:49:11 C6 Okay. I'll just try to keep our shadow off of him all this time.

10:49:14 CC Roger. Very good. You will be having the UHF 6 over the RKV.

10:49:19 C6 Roger.

10:49:20 CC Gemini VI, Hawaii.

10:51:42 C7 ... that's a fine place to start to burn some, Wally. I think they just did not want the IR sensor pointing into the sun.


10:51:48 C6 Got you, Frank.


10:51:50 P6 I have both eyes on your water boiler outlet ... looks like a small ... about the size of a tube.


10:52:30 CC Okay, VI and VII. We'll see you tomorrow.

10:52:32 C7 Thank you.

10:52:33 C6 Roger. Good show here.

10:52:37 CC 

10:52:40 P6 

10:52:43 CC 

10:53:05 P6 Hawaii. VI. We have 36 percent of our propellant remaining.

10:53:10 CC Okay, VII. 36 percent - correction, VI, - 36 percent propellant remaining.

10:53:16 P6 One of those four numbers will work.

10:53:31 CC Does that thing handle like a Maseratti?

10:53:34 P6 ...

10:53:36 CC Okay. Roger.

10:53:41 C6 It handles very nicely ...

ROSE KNOT VICTOR

11:23:04 CC Gemini VI, RKV CAP COM.  
11:23:06 P6 Go ahead ...  
11:23:07 CC How'd your separation burn go?  
11:23:10 P6 ...  
11:23:13 CC Roger.  
11:23:14 P6 ...  
11:23:16 CC Roger.  
11:24:42 P6 Gemini VI ... overnight, RKV.  
11:24:44 CC That's affirm.  
11:28:27 P6 ...  
11:28:34 P7 ... come on, you want the back light off?  
11:28:36 P6 ...  
11:28:45 P6 Okay, Frank ... degrees.  
11:28:51 C7 Do you want us to follow you?

COASTAL SENTRY QUEBEC

12:09:14 CC Gemini VI, CSQ. Do you copy?  
12:09:17 C6 I'd like to have that ... GET.  
12:09:21 CC Say again.  
12:09:23 C6 ... copy ... GET ... Can we - -  
12:09:26 CC Roger.

12:09:27 CC ... copy now. You ready?

12:09:29 C6 Go ahead.

12:09:31 CC 11:40:41: that's Rev 8; 19.8 degrees east; right ascension, 08:15:27.

12:09:53 P6 Roger. Understand 11:40:41: Rev 8; 19.8 degrees east; right ascension, 08 plus 15 plus 27.

12:10:03 CC Roger, and VI on your OAMS status, your fuel remaining is 148 pounds; oxidizer remaining, 193 pounds. Our calculations show that to be an actual 43 percent remaining on propellant, and that was calculated prior to your last sep burn.

12:10:26 P6 ... I cut you out. Would you say again after quantity?

12:10:31 CC Roger. Did you copy the fuel and oxidizer remaining?

12:10:36 P6 No.

12:10:37 C6 Okay. Propellant quantity remaining: actual, 43 percent.

12:10:43 P6 Roger. Understand 43 percent. We're reading about 32.

12:10:47 CC Roger. Well, this calculation is made before your last sep burn.

12:10:53 P6 Understand.

## CANTON

12:21:53 CC Gemini VI, Gemini VI, Houston CAP COM. Over.

12:22:15 CC Gemini VI, Gemini VI, Houston CAP COM. How do you read? Over.

12:23:10 CC Gemini VI, Gemini VI, Houston CAP COM. I've got your PIA updates. Over.

12:23:29 C6 VI. Over.

12:23:31 CC Gemini VI, Houston. Now reading you very weak. Are you ready to copy your update? Over.

12:23:36 C6 Affirmative.

12:23:38 CC Understand you're ready. Area 9-Bravo. That's Area 9-Bravo: GET RC, 13:19:36; 400K is 20 plus 25; reverse bank is 26 plus 13; all of these bank angles, for all these updates, will be 90 degrees, 90 degrees. Area 10-Delta: GET RC, 14:17:05; 400K, 20 plus 32; reverse bank, 25 plus 54. 11-2: GET RC, 15:52:02; 400K, 20 plus 11; reverse bank, 25 plus 40. 12-2 GET RC, 17:25:40; 400K, 20 plus 03; reverse bank, 25 plus 35; Area 13-2: GET RC, 19:01:21; 400K is 19 plus 58; reverse bank, 25 plus 28. Did you copy Gemini VI?

12:25:51 P6 ... we lost ...

12:25:54 C6 What's the rest of that for 17-1 ...

12:26:07 CC Gemini VI, Gemini VI, our estimate now looks about 25 plus 15, that's 25 plus 15.

12:26:23 P6 ...

## ROSE KNOT VICTOR

12:56:46 CC Gemini VI, RKV CAP COM. We're copying your dump. I'm transmitting you a Tx.

12:56:51 C6 Roger.

12:56:54 C6 ...

12:56:56 CC Roger.

12:57:46 CC Gemini VI, RKV. We have a Posigrade Maneuver update for you as soon as we finish with Gemini VII crew status report.

12:57:56 C6 Roger.

12:59:11 CC Gemini VI, RKV CAP COM.

12:59:13 C6 Go.

12:59:16 CC Roger. Are you ready to copy your maneuver update?

12:59:20 C6 Roger. Stand by one.

12:59:44 C6 Gemini VI ready to copy.

12:59:46 CC Roger. GET B: 13:25:52; Delta-V, 9 feet per second; burn time, 0 plus 11; 0 yaw, 0 pitch; Core 25, 00090; Core 26 and Core 27, all 0's; aft thrusters; the maneuver is posigrade.

13:00:24 C6 Roger. Burn at 13 plus 25 plus 52; Delta-V, 09 feet per second; 00 plus 11 seconds; yaw 0, pitch 0; Core 25, 00090; 26 and 27 all 0's; thrusters aft, posigrade.

13:00:53 CC Roger. You got it.

13:01:16 CC VI, did you copy the block-update over Canton, the complete block-update?

13:01:19 C6 That's affirm.

13:01:24 CC Okay.

13:01:44 CC Roger. How about you, VI?

13:01:47 C6 ... looks like a very easy pass ...

13:01:51 CC Roger.

13:01:53 C6 Australia, we're all ready for it and ... both day and night station ... no difficulty at all.

13:02:00 CC Roger.

13:02:02 C6 Pressure's now pulse mode and platform on.

13:02:05 CC Roger.

13:02:08 C6 We didn't have any trouble. We were pulsing all around looking at ...

13:02:11 CC Sounds like fun.

13:02:13 C6 Sure is.

13:02:15 C6 Got a bunch of pretties running around the back of that thing.

13:02:18 CC Did you get some good pictures?

13:02:20 C6 Oh, we sure hope so. We snapped about ... four rolls of color about 50 ... Hasselblad.

13:04:37 CC Roger. Have a good night's sleep. I feel like a baby sitter. I tuck you in every night, and now I'm baby sitting for four of you.

13:04:52 C7 ...

13:04:52 C7 ...

13:04:57 CC Don't sweat it, we're watching you.

## COASTAL SENTRY QUEBEC

13:40:48 CC Gemini VI, this is CSQ Surgeon. Standing by for Command Pilot's blood pressure.

13:41:20 CC Gemini VI, CSQ. Do you copy?

13:41:35 CC Gemini VI, CSQ. Do you copy?

13:41:40 P6 CSQ. Read you loud and clear.

13:41:44 CC Roger. Stand by for Surgeon.

13:41:49 CC Let's expedite up there, Chuck.

13:41:54 CC Your cuff is full-scale.

13:42:27 CC We have a valid blood pressure. Standing by for Pilot's blood pressure.

13:42:57 CC Your cuff is full-scale.

13:43:33 CC We have a valid blood pressure. Standing by for a food and water report.



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13:44:01 CC Gemini VI, standing by for your food and water report.

13:44:10 CC Also like to get a cabin temp reading and your suit inlet temp reading.

13:44:15 P6 Roger. On the food and water report, both Pilots have consumed two meals. We'll add up the water for you in a minute. Cabin temperature, 84. The suit temperature was 58.

13:44:35 CC Roger. I'd like to get a propellant quantity remaining and an OAMS source pressure.

13:44:43 P6 32 percent indicated propellant quantity. OAMS source temperature is 70 degrees; psi is 1650.

13:44:58 CC Copy. 1650.

13:45:01 CC We have a valid oral temp on Command Pilot.

13:45:07 CC Okay, at your convenience we'd like you to run a cabin temp survey and just record it in your log book for post-flight. We'd like the cabin's ambient dry and wet bulb, suit inlet dry and wet bulb. Remove the blue nozzle and check directly in the O<sub>2</sub> flow. If possible, we'd like a hatch surface temperature and side wall surface temperature.

~~13:45:35~~ P6 Okay. We're going to relax after a hard day's work. You'll get that jazz sometime tomorrow.

13:45:41 CC That's affirmative. At your convenience.

13:45:43 C6 Okay.

13:45:48 CC I'd like your evaluation of your posigrade burn.

13:45:50 P6 No residual.

13:45:53 CC Roger.

CARNARVON

20:05:26 P6 Carnarvon CAP COM, Gemini VI.

20:05:28 CC Gemini VI, Carnarvon. Go ahead.

20:05:29 P6 Roger. Just to tell you that we're over you.  
And could we have an update on our node and for  
... check?

20:05:38 CC Stand by.

20:06:34 CC Gemini VI, Carnarvon.

20:06:36 P6 Go ahead.

20:06:38 CC I have your node update: 20:42:09; Rev 13; one  
one - -

20:07:37 C6 We have the platform up and we're alined to plat-  
form.

20:07:42 CC Roger.

20:07:46 C6 The propellant quantity remaining is about 31  
percent. Did you get it?

20:07:51 CC I did copy.

20:08:00 C6 ... degrees.

20:08:17 CC Gemini VI, Carnarvon.

20:08:19 C6 Roger.

20:08:21 CC We're trying to keep the conversation down as much  
as possible for - until one more revolution ...  
end of sleep period.

20:08:27 C6 Roger.

## CARNARVON

21:40:11 CC Gemini VI, Carnarvon.

21:40:13 P6 Go, Carnarvon.

21:40:15 CC Roger. We've had a little problem with your tape recorder. We would like to have you place your reentry C-Band to CONTINUOUS, please.

21:40:25 P6 Reentry C-Band, go CONTINUOUS.

21:40:30 CC Okay, Tape Recorder Power circuit breaker on.

21:40:38 P6 Tape Recorder Power circuit breaker on.

21:40:42 CC Okay, place your Tape Playback switch to the RESET position, momentarily, then back to COMMAND.

21:40:48 P6 Put the RESET to COMMAND.

21:41:14 CC Gemini VI, Carnarvon. Seems like we've got the same problem with your tape recorder as we had on VII. If you can reach it, try to tap it. Maybe we can get the tape motion.

21:41:25 C6 I thought I had this trouble with ... Station before.

21:41:28 CC Copy.

21:41:33 CC Right. Okay, stand by VI. I'm going to VII now and get a purge.

21:41:39 P6 Roger.

21:42:31 CC Gemini VI, Carnarvon.

21:42:32 P6 Gemini VI. Go.

21:42:35 CC Okay, I have some instructions for you. Okay, you can power up. I would like to bring your computer up, and bring you up to power, and bring your radar up to standby; after 5 minutes turn radar on and copy radar readings every 10 minutes, between Carnarvon and US.

21:43:05 CC What we want there is range, pitch and time.

21:43:09 P6 Okay. We've got our computer on, it's in PRELAUNCH. Turned radar on at 42 minutes elapsed time.

21:43:16 CC Roger. What we want off your radar is your time, range and pitch.

21:43:20 P6 On Spacecraft VII?

21:43:21 CC That's affirm. We already turned the transponder on.

21:43:25 P6 Okay, he'll be aft of me. That's correct, right?

21:43:32 CC That is affirm.

21:43:33 P6 Okay, we'll get to look at you all now; we're purging.

21:43:38 CC Also I have a flight plan update for you, whenever you're ready to copy.

21:44:12 CC Are you ready to copy, VI?

21:44:13 P6 That's affirmative. Go ahead.

21:44:16 CC Okay. Time: 22:25:06; crew status report at Carnarvon. That completes the update; it was just a short item. Can you position your Cryo Gaging switch to ECS O<sub>2</sub>, please?

21:44:38 P6 Roger. ECS O<sub>2</sub>. At 22:25:06: crew status at Carnarvon.

21:44:41 CC At Carnarvon ... two.

21:44:46 P6 Carnarvon, Gemini VI.

21:44:47 CC Go ahead VI.

21:44:49 P6 Roger. I checked the Command Pilot. One Actyfed pill at 35 minutes past 21 hours. That's from nasal congestion.

21:45:04 CC Can you repeat, please?

21:45:05 C6 Roger. I took one Actyfed (Spell: Actyfed) pill at 21 hours 35 minutes.

21:45:16 CC Roger. We copy. Okay, you can turn your Cryo Gaging switch back to OFF, VI.

21:45:25 C6 Roger. We're going around to pick up VII.

22:04:41 CC Gemini VI, Houston.

22:04:59 CC Gemini VI, Gemini VI, Houston.

22:05:03 P6 This is Gemini VI. Go.

22:05:05 CC Roger, Gemini VI. Request that you kick the tape recorder. We feel that the tape might be out of the limits which, by kicking it, we might get good tape operation.

22:05:15 P6 Roger. I'll kick my foot.

22:05:18 CC Also, we'd request any range, elevation, and time that you may have gotten by now from the line of sight to Gemini VII.

22:05:30 P6 Roger. We have a lock-on now, ... at 21:50 we had a range of 22.24 nautical miles ... at 22 plus 00 we had a range of 17.63 nautical miles and we still have a positive lock-on. At 51 we have a range of 16.0 nautical miles.

22:06:08 CC Roger. Read back, Gemini VI.

22:06:15 P6 Roger. 21:50, we have a range of 22.24 nautical miles; at 22:00, we have a range of 17.63 nautical miles.

22:06:41 CC Roger, Gemini VI.

22:06:43 P6 ... VII.

## TEXAS

22:24:51 CC Gemini VI, Texas CAP COM. We'd like to remind the Command Pilot to put the oral temp probe in his mouth at this time.

22:25:02 P6 You just ruined a good breakfast.

22:25:05 CC Sorry.

22:25:29 CC Go ahead.

22:26:18 P6 Hello, Houston, this is Gemini VI with the water, food and sleep reports.

22:26:26 CC Roger. Gemini VI, Houston Surgeon. Go ahead.

22:26:30 P6 Roger. Command Pilot has a total of 129 half-ounce drinks and three meals, Pilot has 113 half-ounce drinks and three meals.

22:26:49 CC Roger. Copy three meals apiece, one with 129 half-ounce drinks and one with 113 half-ounce drinks for the Command Pilot and Pilot, respectively. Can you give us a report on your sleep?

22:27:04 P6 We slept approximately 5 hours apiece.

22:27:09 CC How good?

22:27:24 CC Gemini VI, Houston Surgeon. Would the Pilot send us a blood pressure while we're waiting for the Command Pilot's oral temp?

22:27:36 P6 Roger. Houston, double purge complete on Section 2.

22:27:54 CC Roger on double purge complete on Section 2.

22:27:58 CC Place your Fuel Cell Control 2 circuit breaker off.

22:28:03 P6 Roger. Completed.

22:28:09 CC Repeat Step 5. Open -

22:28:18 CC Cuff is full-scale, VI.

22:28:20 CC Open-circuit readouts on 2A, 2B, and 2C voltage.

22:28:30 P6 Open-circuit voltage readouts on 2A, 2B, and 2C are all off-scale high, about 32 volts.

22:28:38 CC Put back on line.

22:28:41 P6 Roger. Section 2 coming back on-the-line.

22:28:45 CC Command Pilot VI; oral temp valid.

22:28:50 CC After 10 minutes, Crossover off.

22:29:10 P6 Houston, Section 2 back on-the-line and Crossover still on.

22:29:17 CC Gemini VI Pilot, blood pressure valid. Command Pilot blood pressure. We're standing by.

22:29:23 C6 Roger.

22:29:46 CC Gemini VI, Houston. Place your Tape Recorder Power circuit breaker off.

22:29:52 P6 VI has Power Recorder circuit breaker off.

22:29:55 CC I'm sorry, that's an error. Place your Tape Recorder Control circuit breaker off.

22:30:00 P6 Roger. Control off.

22:30:04 P6 VII, this is VI. Would you flip on your acquisition lights again for me, please?

22:30:07 CC Cuff is full-scale, CP.

22:30:11 P7 Acquisition on, VI.

22:30:14 C6 Roger.

22:30:16 CC Command Pilot VI, pump your cuff up again; you've pulled your bulb off.

22:30:33 CC Cuff is full-scale.

22:31:11 CC Gemini VI, Houston. We'll be standing by for any time, range and, if possible, Address 59 Theta readouts, between you and VII.

22:31:45 P6 Roger, Houston. ... get the word on the Theta, - we have the range.

22:31:50 CC Roger. We request to have that information, please.

22:31:55 P6 Roger. The range at 20 - at our GET of 21:50:00: plus 22.24. The range 22 plus 00 plus 00 was 17.63. The range at 22 plus 12 plus 00 was 18.33. The range at 22 plus 20 plus 00 was 19.55. The range

at 22 plus 30, range was 26.31.

22:32:40 CC Roger, Gemini VI. Can you tell me if the Spacecraft VII is above your altitude or below your altitude?

22:32:48 P6 He is above our altitude.

22:32:51 CC He was above you when you got those readings?

22:32:53 P6 That is affirmative, and I have him in sight with reflected lights here.

22:32:57 CC You have him in sight with reflected light?

22:32:59 P6 That's affirmative.

22:33:01 C6 We have both high ACQ lamps of reflected light.

22:33:04 CC Can you give me an estimation of the elevation angle - -?

22:33:05 C6 ... got for you but we want to get cleaned up in here; to track him only proves that we're able to rendezvous and we've done that. We'd like to get the cockpit stowed fairly soon here.

22:33:17 CC Roger.

22:33:20 P6 So we know what radar range and Theta is already. You want to give us an update on what the real retro time is?

22:33:35 CC Gemini VI, Houston. Understand. Will you have any non-nominal stowage?

22:33:41 C6 We're considering leaving the water bags in the right aft box and not changing them to the left-hand box; otherwise, they will be identical.

22:33:51 CC Roger. Water bags in the right aft as opposed to the left aft box.

22:33:58 C6 That is correct. They will be where they were for launch.

22:34:02 CC Roger. Same place that they were in launch. And I'd like to reverify that, at the time these readings



were taken, Gemini VII was above you.

22:34:12 P6 That's affirmative.

22:34:14 CC Thank you very much, Gemini VI.

22:34:16 P6 Roger. 4 or 5 degrees above. We can see them now.

22:34:19 CC 4 or 5 degrees above; thank you very much.

22:34:23 C6 We're trying - would you give us an update on our 17-1 retrofire time, just so we can prep up to it?

22:34:29 CC Roger.

22:34:36 CC 14:53:21 GMT. GET is 25:15:55. Gemini VI, Houston. Did you copy?

22:34:53 C6 Roger. We have a GMT of 14 plus 53 plus 51. GET RC at 25 plus 15 plus 55.

22:35:06 CC Roger. That GMT is 14:53:21. Your GET is correct.

22:35:12 P6 Roger. Gemini out.

## BERMUDA

22:35:29 CC Gemini VI, Houston. Please verify Tape Recorder Power circuit breaker on. Tape Recorder Control circuit breaker off.

22:35:38 P6 That is affirmative. Our Tape Recorder Power is on, Control is off.

22:35:42 CC Thank you very much, Tom.

22:35:50 CC Gemini VI, Houston Surgeon. You noticing some effect from the Actyfed yet?

22:35:56 C6 I'm using less Kleenex. I miss also not being able to ... during the early morning reveille.

22:36:08 CC Roger, Gemini VI.

22:36:15 C6 We should ..., but we're doing okay.

22:36:19 CC Roger. Copy, VI.

22:36:28 CC Good morning, Captain Schirra.

22:36:30 C6 Good morning, Chris. That was a ball!

22:36:34 CC You're doing great. Let's put it down on the elevator.

22:36:38 C6 Number 3 or Number 2?

22:36:40 CC Your choice.

22:36:42 C6 Roger. We'll try them both.

22:36:45 CC Stand by. We'll have to change the targeting.

22:36:50 C6 ... getting set up for that rendezvous.

22:36:54 C6 ... or we'll be on the boat.

22:36:57 CC Roger.

22:36:59 P7 VI, VII.

22:37:01 C6 Go ahead, Jim.

22:37:02 P7 Want to wager who gets closest?

22:37:05 C6 ...

22:37:10 CC I need some payola there.

22:37:15 C6 We're going to make the bet out of contact with ground stations.

## CANARY ISLANDS

22:42:39 CC Gemini VI, Canary.

22:43:42 P6 Roger. Radar coming off.

22:43:44 CC Very, very good. We'd like your computer in PRELAUNCH.

22:43:48 P6 Roger. Going there. It's in PRELAUNCH.  
22:43:55 CC Roger. Thank you.  
22:48:09 CC Sorry we don't have too much for you there, VI.  
22:48:15 C6 We really regret that on those fuel cells.  
22:48:19 CC We copy that.  
22:48:26 C6 Good show, Canaries.  
22:48:28 CC Roger. Thank you.

## CARNARVON

23:20:27 CC Gemini VI, Carnarvon CAP COM.  
23:20:31 C6 Roger, VI. Go.  
23:20:33 CC Roger. I have an update for your RN minus RP for Area 17-1, if you're prepared to copy.  
23:20:41 C6 Stand by.  
23:20:47 C6 Ready to copy.  
23:20:49 CC Roger. Bank angle 00 degrees; RN minus RP, plus 107; bank angle 44 degrees; RN minus RP, 0; bank angle 90 degrees; RN RP, minus 197. Do you copy?  
23:21:20 C6 Roger ... that first ...  
23:21:27 CC Say again, Gemini VI.  
23:21:29 C6 ... make the reentry charts up ...  
23:21:49 CC Gemini VI, Carnarvon CAP COM. You're breaking up on us. Could you say again, please?  
23:21:54 C6 Roger, Roger. On these updates here, we didn't receive that. How about going real slow with it. Okay?  
23:22:04 CC Roger. Say again. For Area 17-1: bank angle

00 degrees; the RN minus RP will be a plus 107; second reading - bank angle, 44 degrees; the RN, RP will be 0; third one - at 90 degrees bank angle, RN minus RP will be a minus 197. Do you copy?

23:22:51 C6 Roger. I copy on 17-1: bank angle 00 degrees; RN minus RP, plus 107; bank angle of 44 degrees; RN minus RP, 0; 90-degree bank angle; RN, RP, minus 197.

23:23:07 CC That's affirmative.

23:23:20 CC You're looking good from the ground.

23:23:22 C6 Roger. We're just completing some of our major stowage jobs.

## HAWAII

23:46:28 CC Gemini VI, Hawaii CAP COM.

23:46:31 C6 Go ahead, Hawaii.

23:46:33 CC How are you doing this morning?

23:46:34 C6 Real good. Just about squared away for retro.

23:46:37 CC Very good. We show you GO here on the ground and I don't have anything for you, Gemini VI.

23:46:41 C6 Negative ... all that stuff was done coming across the States.

23:46:45 CC Roger. Understand. If you need anything, give me a shout.

23:46:47 C6 Okay. Thank you, Hawaii.

23:55:49 C6 Gemini VII, Gemini VI. Can you see us?

23:55:53 C7 Negative.

23:56:00 C7 Sure can't.

23:56:01 C6 You can now, can't you?

23:56:04 C7 No. Sure can't, Wally.  
23:56:06 C7 We're in the light. We'll put the docking light on.  
23:56:10 C7 We're just drifting. I don't know which way we're looking at.  
23:56:13 C6 Okay.

## TEXAS

23:56:52 CC Gemini VI, Gemini VI. Place your ... on, please.  
23:57:12 C6 Roger. They're on.  
23:57:25 CC Roger.  
23:57:29 C6 Roger, Houston.  
23:57:30 C6 Gemini VII, this is Gemini VI. We have an object, looks like a satellite going from north to south, probably in a polar orbit. He's in a very low trajectory traveling from north to south and has a very high climbing ratio. It looks like it might even be a ... Very low. Looks like he might be going to reenter soon. Stand by one ... You might just let me try to pick up that thing.  
23:58:03 (Music - JINGLE BELLS - from Spacecraft VI)  
23:58:22 P7 We got them too, VI.  
23:58:26 C6 That was live, VII, not tape.  
23:58:36 CC You're too much, VI!  
23:58:39 C6 ...  
24:00:03 CC Gemini VI. Stand by for an update on your computer for a retro. Are you ready to accept it?  
24:00:10 C6 Gemini VI. Affirmative. We are in PRELAUNCH.  
24:00:14 CC Roger. You're ready.

24:00:36 C6 Elliot ... updated your book. We moved out of PRELAUNCH to CATCH-UP and then back to PRELAUNCH.

24:00:45 CC Roger. We'll send it again.

24:00:50 C6 Affirmative.

24:01:41 CC Gemini VI. I'm ready to give you a readout on the MDIU quantities so that you can check them. Are you ready to copy?

24:01:48 P6 Stand by one second, will you?

24:02:14 P6 Gemini VI is ready to copy.

24:02:16 CC Roger. Address 03, 38549; Core 04, 61388; Core 05, 07513; Core 66, 65384; Core 07, 35999; Core 08, 40014. Are you copying, VI?

24:03:04 P6 Got all through 6, you faded out on 7. Repeat for 7 on. You faded out.

24:03:12 CC Roger, Tom. Core 07, 35999; Core 08, 40014; Core 09, 12421; Core 10, 02346; Core 11, 29217. Do you copy?

24:03:47 P6 Roger. Copied all of them. We'll check the MDIU.

24:03:51 CC Okay. Why don't you read back those real quick, Tom?

24:03:54 P6 Roger. 03 is 38549; 04 is 61388; 05 is 07513; Core 66, 65384; 07, 35999; 08, 40014; 09, 12421; Core 10, 02346; Core 11, 29217.

24:04:37 CC Roger, Tom. For your information, our T/M verifies this, and we have run out a solution and it looks good. Would you read 03 back? I was interrupted. I did not get your read-back. I think it was correct.

24:04:52 P6 Roger. 03 is 38549.

24:04:56 CC Roger. They all check, Tom.

24:05:03 P6 We'll give her a go.

24:05:06 CC I've got an Area 17-1 update for you also.

24:05:14 CC When you're ready to copy.

24:05:16 P6 Go.

24:05:20 CC GET RC: 25:15:58; RET 400K; 20 plus 15. RET RB: 26 plus 38, bank left 55. Do you copy?

24:05:47 P6 Roger ... GET RC: 25:15:58; RET 400K, 20 plus 15; reverse bank, 26 plus 38; bank left 55 degrees.

24:06:07 CC Roger. That's correct, VI.

24:06:40 CC Gemini VI, we want to try another tape dump here, just one more try. Would you place your Tape Recorder Control circuit breaker on, and verify the Tape Recorder Power circuit on?

24:06:56 P6 Roger. Tape Recorder on, Control circuit breakers are on.

24:07:00 CC Roger.

24:07:49 P6 Houston, Gemini VI. All cores check satisfactorily.

24:07:53 CC Very good, VI.

24:09:28 CC Gemini VI, Houston. How are you coming on the retro preparations? Getting everything stowed away?

24:09:53 P6 Roger. We have one camera out and we'll throw it down in the box when we're all finished up.

24:10:39 CC Very good. Don't let that satellite get away from you.

24:10:48 P6 You sure did let it get away from him.

24:11:09 CC Gemini VI. We have no joy on your tape dump. We'd like you to place the Tape Recorder Power circuit breaker off and leave the Control circuit breaker on.

24:11:21 P6 Roger. Power off, Control on.

24:11:23 CC Roger, Tom.

24:11:34 P6 Houston, Gemini VI. Do you have the latest ... readouts for the nominal?

24:11:44 CC You're very weak, VI. Say again.

24:11:46 P6 Roger. Do you have the latest nominal IVI rate with the readouts?

24:11:51 CC They're the same as we gave you on preflight. The 308 number.

24:12:12 P6 Houston, this is Gemini VI. I'm going to suggest ... stowed.

24:12:20 CC Say again, Tom. You were just a little fast there. Something about stowage.

24:12:24 P6 Roger. Give us the IVI coverage again. It still doesn't look right.

24:12:30 CC Roger. It's 308 amps - - stand by.

24:12:38 CC And 117 down.

24:12:42 P6 Roger. Copy 308 amps and 117 down.

24:12:46 CC Roger.

TANANARIVE

24:36:29 C6 Tananarive, Gemini VI. Request a time hack on GET.

24:36:36 CC Roger, Gemini VI. This is Tananarive. On my Mark it will be 14:14:30.

24:49:15 C6 4, 3, 2, 1.

24:49:19 C6 MARK.

24:49:22 CC Roger.

24:49:32 C6 ...

24:49:39 CC Couldn't understand that, VI, say again.



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24:49:43 C6 Roger ...  
24:49:52 CC Negative, we don't have ground elapsed time on VI.

CARNARVON

24:49:57 CC Gemini VI, Carnarvon CAP COM.  
24:50:00 C6 Carnarvon, Gemini VI here.  
24:50:03 CC Roger. We've got some information for you if you're ready to copy.  
24:50:08 C6 Go ahead. We copy.  
24:50:16 CC Roger, the weather in the recovery area is .5 cloud cover, 10 miles visibility, 3 knots wind, 360 degrees from the north. Seas 3 feet, very light. Barometer 30.06.  
24:50:43 C6 Roger. The recovery is .5 cloud cover, 10 miles vis, 3 knots and 360 degrees from the north, seas are 3 feet and very light, barometer 30.06.  
24:50:57 CC That's affirmative. We'd also like to have you close the Tape Recorder Power circuit breaker and make sure that the Tape Playback switch is in the COMMAND position.  
24:51:10 C6 Power circuit breaker is closed and in the COMMAND position. Could you give us a hack on our GET?  
24:51:17 CC Roger. Let's see, you're at 24 hours and 54 minutes and approximately 35 minutes, 35 seconds.  
24:51:32 C6 Can you give us the Mark at 53:45?  
24:51:47 CC MARK. 53:45.  
24:51:51 C6 Roger. We're right on it.  
24:51:53 CC Roger. We've got about 2 minutes to your 20-minute mark on your event timer.  
24:51:59 C6 Check.

24:52:06 CC Gemini VI, Carnarvon CAP COM.

24:52:10 C6 Go ahead.

24:52:11 CC During retrofire go ahead and use both rings. After retrofire turn Ring B off and do not use it, only Ring A, unless both rings are required for attitude control.

24:52:30 C6 Roger. That's what I wanted to do.

24:52:33 CC Roger. They do not want you to dump it after drogue deploy.

24:52:40 C6 You mean leave the fuel in the lines?

24:52:43 CC That's affirmative.

24:52:50 CC Ten seconds. 3, 2, 1.

24:52:59 CC MARK.

24:53:02 C6 I'm with you.

24:53:04 CC Roger. Your Tr is right in sync with the ground.

24:53:24 CC Flight says on the Ring B clear the lines, but leave the motor valves off.

24:53:38 C6 Roger, that's an OFF position, right?

24:53:36 CC Roger.

24:55:30 C6 Carnarvon, our final PQI reading is 29 percent. This is Gemini VI.

24:55:41 CC Roger, VI.

24:55:53 CC Gemini VI, Carnarvon CAP COM. We'll have LOS shortly. You are looking good here on the ground. We'll see you back at the ranch.

24:56:01 C6 Roger. Thanks for all your help. We've had a good day.

24:56:05 CC Roger. It was our pleasure. Carnarvon bids you good-bye.

24:56:08 C6 Roger. I'd like to come and see you someday.

## CANTON

25:12:55 CC Gemini VI, Gemini VI, Houston CAP COM. How do you read?

25:13:02 C6 This is Gemini VI, loud and clear.

25:13:05 CC Roger. Can you confirm Tr minus 4 plus 16 check list complete?

25:13:10 C6 Affirmative.

25:13:12 CC Roger. Standing by for countdown.

25:13:16 C6 Both rings are ...

25:13:24 CC We didn't copy that, VI.

25:14:59 CC 60 seconds. Mark 1 minute.

25:15:05 C6 Say that again, Houston.

25:15:07 CC That was 1 minute to retrofire.

25:15:14 C6 1 minute.

25:15:30 CC 30 seconds.

25:15:49 CC 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, Retrofire.

25:16:24 C6 ... retrofire.

25:16:27 CC Roger, VI.

25:16:28 C6 ... 309 aft, 1 right ...

25:16:35 CC Understand 309 aft and 1 right. Say again down.

25:16:40 C6 116.

25:16:43 CC 116, Roger.

25:16:49 C6 ...

25:17:13 C6 ...  
25:17:19 CC Say again, VI.  
25:17:24 C6 Roger. ...  
25:17:31 CC Roger, VI.

## HAWAII

25:17:47 CC Gemini VI, Hawaii CAP COM.  
25:17:50 C6 Go, Hawaii.  
25:17:51 CC Okay, give me your attitude during retrofire.  
25:17:53 C6 ... as far as I can tell.  
25:17:55 CC Okay. All four retros, MANUAL or AUTO.  
25:17:58 C6 All AUTO and ... 1 foot per second nominal.  
25:18:02 CC Very good. Advise retrojett.  
25:18:05 C6 ...  
25:18:12 C6 Hawaii, we're all clean and Reentry Attitude now.  
25:18:15 CC Roger. You're looking real good here on the ground.  
25:18:18 C6 Roger.  
25:18:37 CC Gemini VI, I'll give you a time hack to start your counting-up test. Plus 3 minutes and about 15 seconds.  
25:18:44 C6 Roger. I feel like I need them.  
25:18:54 CC 5, 4, 3, 2, 1.  
25:18:59 CC MARK.  
25:19:04 C6 Roger.  
25:19:06 CC Okay, you all squared away?

25:19:08 C6 All set here, thank you.

25:19:10 CC Okay. Did you get retrojett?

25:19:11 C6 That's affirmative. I called that out. I guess I had no hack time at that point.

25:19:16 CC Okay, very good.

25:19:17 C6 Right on time.

25:19:18 CC Roger.

25:19:39 CC Your RCS is looking real fine.

25:19:42 C6 It sure is.

25:20:00 CC Secondary O2 and your main bus are looking real good.

25:20:03 C6 Roger. This bird has been a beauty all the way.

25:20:08 CC You're headed for a good deep *draft* command!

25:20:11 C6 Ha, Ha, Ha!

25:25:21 C6 Sorry I can't join the Pacific Fleet ... landing.

25:20:25 CC Roger.

25:21:10 C6 Really a good job Frank and Jim; we'll see you on the beach.

25:21:13 C7 Okay, Wally.

25:21:14 C6 Did you have a chance to see us during that ...

25:21:17 C7 We couldn't get a picture of you because we don't have any thrusters now.

25:21:20 C6 Roger. Did you have a chance to see though?

25:21:22 C7 No.

25:21:23 C6 Okay.

25:22:21 CC VI, Hawaii.

25:22:22 C6 Go, Hawaii.

25:22:23 CC Okay. Your horizon will be lit at 400K.

25:22:27 C6 Roger.

25:22:33 C6 Do you have a time for 400K?

25:22:38 CC 400K, 20 plus 15.

25:22:42 C6 We have that. Thank you.

25:22:43 CC Okay.

25:22:44 C6 We've ... 26 plus 38.

25:22:47 CC That's affirm.

25:22:49 C6 Very good.

25:23:12 CC It looks real good, VI.

25:23:15 C6 Roger.

25:23:51 CC VI, Hawaii. We have nothing further. We'll be seeing you.

25:23:54 C6 Roger, Hawaii. Thank you, Jim.

25:23:58 CC Roger.

## CALIFORNIA

25:28:26 CC Gemini VI, Houston. How do you read?

25:28:33 CC Roger. We have no further update for your 400K time at this point.

25:28:39 C6 Roger, Elliot.

25:28:43 CC Looking real good, Wally. The computer summation looks real good from here.

25:28:47 C6 Very good.

## TEXAS

25:33:48 CC Gemini VI, Houston. The helicopters are airborne.

25:33:52 C6 Roger, Elliot. We have a good horizon.

25:33:55 CC Roger, horizon.

25:34:22 CC Gemini VI, your 400K time is good.

25:34:25 C6 Roger.

25:35:01 CC Gemini V says the elevator is lowered.

25:35:06 C6 Roger.

25:35:28 CC Gemini VI, Houston. Have an update on your REP RB.

25:35:33 C6 ... Ready to copy.

25:35:37 CC REP RB: 26 plus 39; roll left 47, roll right 47; initial needle deflection shows a 12-mile overshoot.

25:35:53 C6 Roger. ... REP RB: 26 plus 39; roll left 47 degrees, roll right 47; initial ... shows 12-mile overshoot.

25:36:04 CC Roger.

25:36:24 CC Gemini VI, that was REP RB. Did you copy that?

25:36:26 C6 Roger. REP RB, 26 plus 39.

25:36:31 CC Roger.

25:44:05 CC Gemini VI, Houston. How do you read?

25:44:08 C6 Gemini VI, loud and clear.

25:44:10 CC Roger. We read you out of blackout.

25:44:12 C6 Okay, stand by, we'll ...

25:44:21 CC Gemini VI, this is ... have you on radar. I'm tracking you in at 43 miles. Over.

25:44:27 C6 Roger.

25:44:33 CC Roger. We have radar contact on you from the carrier, Gemini VI.

25:44:36 C6 Roger, we'll be ...

25:44:38 CC Roger. They're expecting you.

25:44:43 C6 Roger. ...

25:44:51 CC ... Over.

25:44:58 C6 ... I believe.

25:45:08 C6 ...

25:45:12 CC Gemini, Gemini VI. We have your drogue time as 29 plus 45; main time as 31 plus 06.

25:45:22 C6 That's 29 plus 45.

25:45:47 CC Gemini VI, Gemini VI, Airborne. Over.

25:45:55 C6 Drogue is out.

25:45:57 CC Roger, drogue.

25:46:16 CC Gemini VI, how did the reentry look on the gages?

25:46:19 C6 Just fine during the drogue; we're all right ...

25:46:40 CC Gemini VI, Houston. Can you give us a readout as to how the reentry looked on the needles?

25:47:25 C6 ... Gemini VI. Over.

25:47:33 CC This is Houston. Go ahead, VI.

25:49:05 C6 ... this is Gemini VI transmitting in the blind. How do you read?

25:49:13 CC Houston reads you, Gemini VI. Can you confirm main?

25:49:16 CC Gemini VI, this is Russ Land Leader. Roger, we are reading you. We believe we are 30 miles away, on the way. Over.



25:49:25 C6 Gemini VI, Roger.

25:50:12 CC Gemini VI, this is Russ Land Leader. Can you give us your altitude?

25:50:16 C6 It's 2,000 feet, descending about 35 feet per second.

25:50:23 CC ... 2,000 feet.

25:50:26 C6 That's affirmative. 30 feet per second.

25:50:53 C6 Gemini VI, 1,000 feet, 30 feet per second.

25:50:57 CC Roger, Leader. Roger, out.

25:53:16 CC Gemini VI, Russ Land Leader. How do you read? Over.

25:55:57 CC Gemini VI, Gemini VI, Airborne. Over.

25:56:25 CC Gemini VI, Gemini VI. This is ... Over.

26:00:15 CC Gemini VI, Search 2. Over.

26:00:17 C6 Roger ... and we're in fine shape. We'd like to go aboard ... shortly and ... Over.

26:00:29 CC ... This is Airborne 2 ... Over.