1
00:00:02,429 --> 00:00:09,429
11, Houston, the definition is pretty good
on our monitor here. The color's not too (garbled)

2
00:00:15,959 --> 00:00:22,959
at least on this set. Could you describe what
you're looking at, over?

3
00:00:37,940 --> 00:00:44,940
SC You're seeing Earth as we see it out our
left-hand window, just a little more than

4
00:01:10,400 --> 00:01:17,400
a
half Earth. We're looking at the eastern Pacific
Ocean and the north half of the, top half

5
00:01:56,040 --> 00:02:03,040
of the screen, we can see North America, Alaska,
United States, Canada, Mexico and Central

6
00:02:10,310 --> 00:02:17,310
America. South America becomes invisible just
off beyond the terminator or inside the shadow.

7
00:02:44,499 --> 00:02:51,499
We can see the oceans with a definite blue
cast, see white bands of major cloud formations

8
00:03:50,229 --> 00:03:57,229
across the Earth and can see coastlines. I
got the Western U.S., San Joaquin Valley,

9
00:04:20,370 --> 00:04:27,370
the Sierra Mountain Range and peninsula of
Baja, California, and can see some cloud formations

10
00:04:39,060 --> 00:04:46,060
over southeastern U.S. There's one definite
mild storm southwest of Alaska, looks like

11
00:04:56,400 --> 00:05:03,400
about 500 to a thousand miles and another
very minor storm showing the south end of

12
00:05:16,710 --> 00:05:23,710
the screen near the, a long ways south of
the equator, probably 45 degrees or more south

13
00:05:34,979 --> 00:05:41,979
latitude. We can pick out the browns, the
browns in the land forms pretty well. Greens

14
00:05:45,189 --> 00:05:52,189
do not show up very well. Some green showing
along the northeastern, northwestern coast

15
00:05:58,539 --> 00:06:01,909
of the United States and the northwestern
coast of Canada. Roger.

16
00:06:01,909 --> 00:06:07,349
SC Stay here, world. Hold on to your hat.
I'm going to you upside down.

17
00:06:07,349 --> 00:06:14,110
CAPCOM 11, that's a pretty good roll there.

18
00:06:14,110 --> 00:06:21,110
SC Yah, that was pretty sloppy. Let me try
that one again.

19
00:06:28,870 --> 00:06:35,870
CAPCOM You'll never beat out the Thunderbird.

20
00:06:37,479 --> 00:06:44,479
SC I'm making myself seasick, Charlie. I'll
just put you back right-side-up where you

21

00:06:54,710 --> 00:06:55,939
belong.

22
00:06:55,939 --> 00:06:58,400
CAPCOM Roger.

23
00:06:58,400 --> 00:07:05,400
CAPCOM 11, Houston. If you could, we'd like
to see some smiling faces if you could give

24
00:07:19,310 --> 00:07:26,310
us some interior views, I'm sure everybody'd
like to see you. Over.

25
00:07:34,069 --> 00:07:39,949
SC Okay, we'll reconfigure the PB for that.

26
00:07:39,949 --> 00:07:40,340
CAPCOM Roger.

27
00:07:40,340 --> 00:07:47,340
CAPCOM Now we're coming in. Can't quite make
out who that...

28
00:07:51,090 --> 00:07:57,419
SC That's big Mike Collins there.

29
00:07:57,419 --> 00:08:04,419
SC Right, you got a little bit of, yah, hello
there sports fans. You got a little bit of

30
00:08:23,129 --> 00:08:30,129
me on the center couch and Buzz is doing the
camera work this time.

31
00:08:35,669 --> 00:08:36,440
CAPCOM Roger.

32
00:08:36,440 --> 00:08:43,370

SC I'd have put on a coat and tie if I had known about this ahead of time.

33
00:08:43,370 --> 00:08:47,220
CAPCOM Is Buzz holding your cue cards for you, over?

34
00:08:47,220 --> 00:08:54,220
SC Cue card have, a no. We have, we have no intention of competing with the professionals,

35
00:08:55,380 --> 00:09:02,380
believe me. We are very comfortable up here. We do have a happy home. There's plenty of

36
00:09:22,459 --> 00:09:29,459
room for the three of us and I think we're all learning to find our favorite little corner

37
00:09:46,910 --> 00:09:53,910
to, to sit in. And, you know, g is very comfortable but after a while you get to the point where

38
00:09:57,079 --> 00:10:03,600
you sort of get tired of rattling around and banging off the ceiling and the floor and

39
00:10:03,600 --> 00:10:10,600
the sides so you intend to find a little corner somewhere and put your knees up or something

40
00:10:12,670 --> 00:10:19,670
like that to wedge yourself in and that seems more at home.

41
00:10:29,220 --> 00:10:36,220
CAPCOM Houston, roger. Slowly sinking into the sack there.

42
00:10:40,720 --> 00:10:47,720

SC It's really comfortable. Forgot to give
Buzz his flashlight back.

43
00:10:47,779 --> 00:10:54,779
CAPCOM Apollo 11, Houston. Could you give
the folks a view of your patch on your CWG?

44
00:11:34,620 --> 00:11:40,399
Over.

45
00:11:40,399 --> 00:11:47,399
SC Stand by. We're going to try to get it
closer.

46
00:12:16,360 --> 00:12:23,360
CAPCOM All right, 11, Houston. We have the
patch to get temped up through the focus slightly,

47
00:12:26,029 --> 00:12:26,480
over.

48
00:12:26,480 --> 00:12:32,089
CAPCOM 11, Houston. The scan on the camera
makes the, that's a little bit better now.

49
00:12:32,089 --> 00:12:39,089
The flashlight seems to flicker due to the
scan on the TV. We can't see the Eagle. Now

50
00:12:53,959 --> 00:13:00,959
that's a little bit better, over. If you open
the F-stop a little bit more, over.

51
00:13:19,980 --> 00:13:26,980
SC Over. It's open all the way. We're going
to have to move Buzz around a little bit.

52
00:13:30,540 --> 00:13:30,889
CAPCOM Roger.

53
00:13:30,889 --> 00:13:37,889
CAPCOM Okay, Apollo 11, Houston. The colors
are better now. It's coming in. If we could

54
00:14:11,949 --> 00:14:18,949
attempt a little bit better focus on it. There
we go. Our focus is a lot better now. We see

55
00:14:29,470 --> 00:14:36,470
the Eagle coming right in on the lunar surface.
Over

56
00:14:40,300 --> 00:14:45,490
CAPCOM That's very good now.

57
00:14:45,490 --> 00:14:52,490
CAPCOM Apollo 11, Houston. That's very good
now. We can see the Earth in the background,

58
00:15:04,000 --> 00:15:06,269
Apollo 11, and the Eagle coming in.

59
00:15:06,269 --> 00:15:10,660
SC It's probably pretty hard to see the olive
branches, isn't it?

60
00:15:10,660 --> 00:15:12,120
CAPCOM Roger, it is.

61
00:15:12,120 --> 00:15:16,500
SC Well, that's what he has in his talons,
an olive branch.

62
00:15:16,500 --> 00:15:17,230
CAPCOM Copy.

63
00:15:17,230 --> 00:15:21,990
CAPCOM Apollo 11, Houston. We're really impressed
with the clarity and the detail that we have

64
00:15:21,990 --> 00:15:28,990
in the picture. The colors are, it's really
an excellent picture now that I'm looking

65
00:15:32,699 --> 00:15:39,699
on our monitor which is about 12 seconds before
the networks can get it out due to the conversion

66
00:15:47,290 --> 00:15:54,290
that we have here on our TV converter. We're
looking at the controls in the flight, the

67
00:15:54,910 --> 00:16:01,910
main display console and we can see the DSKY
up on the panel. Over.

68
00:16:02,529 --> 00:16:06,750
SC That would be nice if you could take a
look at all the circuit breakers, make sure

69
00:16:06,750 --> 00:16:10,199
the right ones are in and the right ones are
out.

70
00:16:10,199 --> 00:16:12,079
CAPCOM All right, Big Bubba's watching.

71
00:16:12,079 --> 00:16:14,560
SC And we're glad of it.

72
00:16:14,560 --> 00:16:19,779
SC You guys sure been doing a good job of
watching us. We appreciate it.

73
00:16:19,779 --> 00:16:26,779
CAPCOM The spacecraft's been beautiful, 11,
the way, really no complaints at all. Looks,

74

00:16:30,550 --> 00:16:32,240
things are really great.

75
00:16:32,240 --> 00:16:35,879
SC Can you see this DSKY on the embasy?

76
00:16:35,879 --> 00:16:42,879
CAPCOM That's affirmative. It appears that,
can't quite tell what program when the cut

77
00:16:43,160 --> 00:16:48,300
went through. We see you punching in a verb
35, I think it is. Over.

78
00:16:48,300 --> 00:16:55,290
SC Might as well tell the econs or tell the
G&C's they better hold on to their hat and

79
00:16:55,290 --> 00:16:57,620
I'll push the inner button.

80
00:16:57,620 --> 00:17:01,350
CAPCOM Roger. We see a real display now.

81
00:17:01,350 --> 00:17:06,880
CAPCOM That's a good demonstration of how
the crew has the interface with the computer

82
00:17:06,880 --> 00:17:13,880
talking to the programs and all that we have
in the computer.

83
00:17:14,470 --> 00:17:17,840
SC That's right, Charlie. Sometimes it tells
us things and sometimes we tell it things

84
00:17:17,840 --> 00:17:21,380
and mostly it talks to us.

85

00:17:21,380 --> 00:17:28,380
CAPCOM 11, Houston. We just lost our pickup.
I see we're going back outside now. Over.

86
00:17:32,740 --> 00:17:37,000
CAPCOM 11, Houston. You copy? Over.

87
00:17:37,000 --> 00:17:44,000
SC Roger, we copy and as we pan back out to
the distance at which we see the Earth we'll

88
00:17:44,290 --> 00:17:46,520
have Apollo 11 signing off.

89
00:17:46,520 --> 00:17:53,520
CAPCOM Roger, Apollo 11. Thank you much for
the show. It's a real good half hour. Appreciate

90
00:17:54,180 --> 00:17:56,820
it. Thank you very much. Out.

91
00:17:56,820 --> 00:18:03,820
PAO This is Apollo Control. That TV transmission
lasted about 35 minutes.

92
00:18:04,560 --> 00:18:11,560
CAPCOM Apollo 11, Houston. Would you T arrow
reset on the DSKY please? Over.

93
00:18:12,710 --> 00:18:19,210
SC Okay, we should be straightened out now,
Charlie. Back in POO.

94
00:18:19,210 --> 00:18:26,210
CAPCOM Houston, Apollo 11, how do we stand
on the O2 fuel cell purge? Do you want to

95
00:18:30,520 --> 00:18:36,460
go ahead and do that as scheduled in the Flight
Plan?

96
00:18:36,460 --> 00:18:40,410
SC Stand by, 11, over.

97
00:18:40,410 --> 00:18:41,990
CAPCOM Okay.

98
00:18:41,990 --> 00:18:48,500
SC This is 11, Houston. You can commence the
O2 fuel cell purge now if you'd like? Over.

99
00:18:48,500 --> 00:18:49,880
CAPCOM Okay, fine.

100
00:18:49,880 --> 00:18:54,910
SC While Buzz is doing that, I'll change the
aluminum hydroxide.

101
00:18:54,910 --> 00:18:55,820
CAPCOM Roger.

102
00:18:55,820 --> 00:18:58,570
CAPCOM Hello, Apollo 11, Houston, over.

103
00:18:58,570 --> 00:19:03,700
SC Go ahead, Houston, Apollo 11.

104
00:19:03,700 --> 00:19:10,700
CAPCOM Roger, Buzz. The attitude that we're
in right now is a convenient one to start

105
00:19:28,170 --> 00:19:35,170
PTC in. We'd be satisfied with this attitude
so we'd like you to disable quads Charlie

106
00:19:49,130 --> 00:19:52,940
and Delta and we'll wait about five to ten
minutes and then we'll establish the PTC,

107
00:19:52,940 --> 00:19:53,190
over.

108
00:19:53,190 --> 00:19:56,490
SC Roger, disable Charlie and Delta and we'll
wait before starting PTC.

109
00:19:56,490 --> 00:19:57,190
CAPCOM Roger.

110
00:19:57,190 --> 00:20:02,810
PAO This is Apollo Control at 34 hours 46
minutes. Apollo 11 is presently 131,000 nautical

111
00:20:02,810 --> 00:20:07,320
miles from Earth, traveling at a speed of
about 4300 feet per second. During the TV

112
00:20:07,320 --> 00:20:14,320
transmission, the crew advised that they may
possibly be able to take the color television

113
00:20:15,650 --> 00:20:20,980
into the lunar module with them tomorrow at
about 56 hours 30 minutes ground elapsed time.

114
00:20:20,980 --> 00:20:27,980
They reported that the cables had been checked
and appear to be long enough to take them

115
00:20:29,120 --> 00:20:36,120
into the lunar module. During the next hour
or so, the activity here in Mission Control

116
00:20:43,590 --> 00:20:50,590
will be revolving about getting the crew set
up for their rest period and eat period as

117
00:21:00,770 --> 00:21:07,770

we have a very long rest period tonight scheduled
ten hours and that will begin, according to

118
00:21:18,050 --> 00:21:25,050
the flight plan, at about 37 hours ground
elapsed time. However, we would anticipate

119
00:21:31,020 --> 00:21:38,020
if activities move along as they appear to
be at this point, we are somewhat ahead of

120
00:21:45,210 --> 00:21:52,210
the flight plan, then perhaps again we would
be able to get the crew into their rest period

121
00:21:56,360 --> 00:22:03,360
and sleep period a little bit early. At 34
hours 48 minutes, this is Apollo Control Houston.

122
00:22:10,150 --> 00:22:17,150
PAO This is Apollo Control at 35 hours 13
minutes. Apollo 11 is presently about 93,265

123
00:22:19,820 --> 00:22:26,820
nautical miles from the moon and with respect
to the moon it's traveling at a speed of about

124
00:22:28,760 --> 00:22:35,760
4019 feet per second. At this time we are
receiving the tape playback which Goldstone,

125
00:22:42,850 --> 00:22:49,850
the tracking site at Goldstone, California,
received from the spacecraft in that earlier

126
00:22:55,830 --> 00:23:02,830
unscheduled TV transmission. This was a test
of the system using the spacecraft on the

127
00:23:11,530 --> 00:23:18,530

antennas, the small OMNI directional antennas.
Normally transmissions from this distance

128
00:23:22,830 --> 00:23:29,830
would be, would require the high gain antenna.
This television transmission is being processed

129
00:23:30,560 --> 00:23:37,560
and converted to color and we anticipate that
we'll have it available for playback at about

130
00:23:39,390 --> 00:23:46,390
9:00 p.m. We are in conversation with the
spacecraft at this time and we'll pick up

131
00:23:47,930 --> 00:23:54,930
the tape recorder conversation that we
have and then standby to follow any live conversation.

132
00:24:03,480 --> 00:24:10,480
SC Houston, would you say again what your
requested?

133
00:24:11,400 --> 00:24:17,370
CAPCOM Roger, 11, we'd like you to go back
to attitude HOLD, over.

134
00:24:17,370 --> 00:24:18,460
SC Roger

135
00:24:18,460 --> 00:24:25,460
CAPCOM 11, Houston, looks like we're going
to have to reinitialate, reinitialize this

136
00:24:27,000 --> 00:24:28,020
PTC.

137
00:24:28,020 --> 00:24:31,070
SC All right.

138
00:24:31,070 --> 00:24:38,070
SC Okay, do you have any roll angle that you'd
like to stop it in, Charlie? I haven't stopped

139
00:24:41,780 --> 00:24:42,720
it yet.

140
00:24:42,720 --> 00:24:49,720
CAPCOM 11, Houston, it's your preference,
right now if you want to right now. Over.

141
00:24:55,050 --> 00:24:57,060
SC Okay.

142
00:24:57,060 --> 00:25:02,090
CAPCOM Apollo 11, Houston, over.

143
00:25:02,090 --> 00:25:06,120
SC Houston, Apollo 11.

144
00:25:06,120 --> 00:25:13,120
CAPCOM Roger, 11. The problem on that initial,
starting up the PTC was we failed to do the

145
00:25:16,760 --> 00:25:23,760
VERB 49 which, and load the desired initial
attitude, so they are trying to take it back

146
00:25:27,640 --> 00:25:34,640
to the old attitude that we had started up
in a number of hours ago. That's why we picked

147
00:25:45,920 --> 00:25:52,920
up the rates in the other axis. We're going
to wait in this attitude for about twenty

148
00:26:07,330 --> 00:26:14,330
minutes to damp out the rates again and then
we'll proceed with the VERB 49 in LOAD 1 attitude

149
00:26:20,750 --> 00:26:22,180
that we have at this time. Over.

150
00:26:22,180 --> 00:26:27,180
SC Okay, sounds good, Charlie. When you get
to the VERB 49, I'd like for you to give me

151
00:26:27,180 --> 00:26:34,180
the 3 gimbal angle that you want loaded.

152
00:26:34,300 --> 00:26:41,300
CAPCOM Roger, we'll do, over.

153
00:26:43,520 --> 00:26:49,050
SC Thank you.

154
00:26:49,050 --> 00:26:56,050
CAPCOM And, Apollo 11, Houston, we have your
fly-by pad if you're ready to copy. Over.

155
00:27:16,310 --> 00:27:20,920
SC Standby 1.

156
00:27:20,920 --> 00:27:27,920
SC Houston, Apollo1, is that P-30 pass?

157
00:27:31,660 --> 00:27:37,800
CAPCOM That's affirmative. Over.

158
00:27:37,800 --> 00:27:43,220
SC Okay, ready to copy.

159
00:27:43,220 --> 00:27:50,220
CAPCOM All right, Buzz. It's fly-by, it's
a purpose. SPS G&N. 62815 plus 097 minus 020

160
00:27:53,940 --> 00:28:00,940

070 54 5944 minus 00028 plus 00023 plus 00069
029 149 312. Apogee is NA plus 00221 00078

161
00:28:06,010 --> 00:28:13,010
001 00034. Sextant star 01 2185 227. Boresight
star is NA NA NA. Latitude is minus 0265 minus

162
00:28:18,080 --> 00:28:25,080
16500 11899 36228 14 45 647. In the comments
your set stars are Deneb and Vega 007 144

163
00:28:30,530 --> 00:28:37,530
068. No ullage. It's a docked burn using the
PTC REFSMMAT. Standby for your read back.

164
00:28:41,270 --> 00:28:41,600
Over.

165
00:28:41,600 --> 00:28:46,630
SC Okay, would you give me the GEC of the
burn again, please.

166
00:28:46,630 --> 00:28:49,130
CAPCOM Roger, 144 56 47. Over.

167
00:28:49,130 --> 00:28:56,130
SC Roger. Flyby SPS G&N 62815 plus 097 minus
020 070 54 5944 minus 00028 plus 00023 plus

168
00:28:56,630 --> 00:29:03,630
00069 269 149 312. NA plus 00221 00078 001
00034. 01 2185 227. NA . Minus 0265 minus

169
00:29:03,720 --> 00:29:10,720
16500 11899 36228 14 45 647. Deneb and Vega
007 144 068. No ullage. Docked PTC REFSMMAT.

170
00:29:10,800 --> 00:29:11,220
Over.

171
00:29:11,220 --> 00:29:17,050
CAPCOM Roger, say again your roll angle, Buzz,
I copy, I read 029, over.

172
00:29:17,050 --> 00:29:18,300
SC Roger, 029.

173
00:29:18,300 --> 00:29:20,610
CAPCOM Roger, good readback.

174
00:29:20,610 --> 00:29:27,610
SC Houston, Apollo 11. On the 7/10th rate,
the rate loaded into the dap is 1 or 2/10th.

175
00:29:29,130 --> 00:29:30,420
CAPCOM 11. Roger.

176
00:29:30,420 --> 00:29:33,020
CAPCOM Hello Apollo 11, Houston, over.

177
00:29:33,020 --> 00:29:35,180
SC Houston, Apollo 11, over

178
00:29:35,180 --> 00:29:42,180
CAPCOM Roger. Mike, would you please copy
down your VERB 16 NOUN 20. I see the angles

179
00:29:43,690 --> 00:29:50,430
now. Then execute a VERB 49 and load that,
those angles, the NOUN 20 that you see on

180
00:29:50,430 --> 00:29:57,430
the DSKY into the VERB, into the NOUN 22 slot
and prone and that will start our 20 minute

181
00:30:00,960 --> 00:30:03,980
wait through it. Over.

182

00:30:03,980 --> 00:30:10,980
SC Okay, Charlie, I'll do that right now in a matter of inches. Those numbers are plus

183
00:30:33,790 --> 00:30:40,790
04511 plus 09021 and plus 35984. Over.

184
00:30:44,460 --> 00:30:45,020
CAPCOM Roger.

185
00:30:45,020 --> 00:30:51,510
SC It's Apollo 11. I've done that and, of course, I got an immediate 50 18 so I guess

186
00:30:51,510 --> 00:30:58,510
we're set up to proceed from here and they'll start the 20 minute timer.

187
00:31:06,570 --> 00:31:07,760
CAPCOM That's affirmative.

188
00:31:07,760 --> 00:31:11,110
SC Houston, I still question that 7/10th rate with 2/10th loaded into the damper up here,

189
00:31:11,110 --> 00:31:12,010
though. Could you explain? Over.

190
00:31:12,010 --> 00:31:16,740
CAPCOM Roger, we're working on it. Standby 1.

191
00:31:16,740 --> 00:31:18,730
SC Okay.

192
00:31:18,730 --> 00:31:21,040
CAPCOM Apollo 11, Houston, over.

193
00:31:21,040 --> 00:31:22,100

SC Yes, Apollo 11.

194
00:31:22,100 --> 00:31:29,100
CAPCOM Roger, we got a little laser experiment
we like to -- for you to do for us -- If you

195
00:31:31,700 --> 00:31:38,700
got the Earth through any of your windows
or through the telescope, would you so advise?

196
00:31:45,580 --> 00:31:46,800
Over.

197
00:31:46,800 --> 00:31:53,800
SC Standby, Charlie. At this low attitude
what should our high gain angles be? Maybe

198
00:32:05,130 --> 00:32:12,130
that would help us locate you. We don't see
you on the lens.

199
00:32:14,340 --> 00:32:21,340
CAPCOM Standby.

200
00:32:28,610 --> 00:32:35,610
CAPCOM Hello, Apollo 11, Houston. Those high
gain angles are PITCH minus 70, YAW 90. We

201
00:32:59,450 --> 00:33:06,450
think the Earth is apparently it's pretty
close to plus C axis, over.

202
00:33:13,620 --> 00:33:14,910
SC Okay.

203
00:33:14,910 --> 00:33:21,910
SC Okay, Charlie. I got you in the telescope.

204
00:33:22,220 --> 00:33:29,220

CAPCOM Roger, Apollo 11. We got a laser that we're going to, it's a blue/green laser that

205
00:34:03,800 --> 00:34:10,800
we're going to flash on and off in a frequency of on for a second, off for a second. It's

206
00:34:12,819 --> 00:34:19,099
coming out of MacDonald Observatory near El Paso which is, should be right on the terminator,

207
00:34:19,099 --> 00:34:24,349
right inside the terminator. We're going to activate that momentarily. Would you please

208
00:34:24,349 --> 00:34:30,779
take a look through the telescope and see if you can see it? Over

209
00:34:30,779 --> 00:34:33,089
SC Telescope or sextant?

210
00:34:33,089 --> 00:34:35,399
CAPCOM Either one, over.

211
00:34:35,399 --> 00:34:42,399
SC Okay, I'll start with the telescope and if I don't see it there then I'll try the

212
00:34:42,529 --> 00:34:42,759
sextant.

213
00:34:42,759 --> 00:34:49,759
CAPCOM Roger. We'll give you the word when they've got it turned on, over.

214
00:34:53,169 --> 00:34:55,339
SC Okay.

215

00:34:55,339 --> 00:35:02,339
CAPCOM 11, Houston. They don't have it turned on yet. We'll give you the word when they

216
00:35:08,329 --> 00:35:15,329
got it turned on, over.

217
00:35:18,160 --> 00:35:24,470
SC Okay.

218
00:35:24,470 --> 00:35:31,470
CAPCOM Hello, Apollo 11, Houston. We noticed the cryo pressure dropped moment ago. Did

219
00:36:19,470 --> 00:36:26,470
you stir up the cryos? Over.

220
00:36:35,220 --> 00:36:37,859
SC Roger, we've finished cycling operations.

221
00:36:37,859 --> 00:36:39,609
CAPCOM Rog, copy, out.

222
00:36:39,609 --> 00:36:46,609
CAPCOM Hello, Apollo 11, Houston. MacDonald's got the laser turned on Would you take a look?

223
00:36:51,009 --> 00:36:52,039
Over.

224
00:36:52,039 --> 00:36:55,150
SC Okay, Charlie.

225
00:36:55,150 --> 00:36:58,259
CAPCOM It's bluish/green.

226
00:36:58,259 --> 00:37:05,259
CAPCOM 11, Houston. We got some shaft and trunnion that might tweak it up a little bit.

227
00:37:17,349 --> 00:37:24,349
Shaft of 141.5. Trunnion of 39.5, over.

228
00:37:26,430 --> 00:37:30,319
SC Okay, standby.

229
00:37:30,319 --> 00:37:37,319
CAPCOM Apollo 11, Houston. If you see it,
it should be coming up, appear to be coming

230
00:37:51,940 --> 00:37:58,940
up through the clouds. MacDonald reports that
there's a break in the clouds that they're

231
00:38:07,789 --> 00:38:14,789
beaming this thing through. Over.

232
00:38:19,460 --> 00:38:24,130
SC Roger.

233
00:38:24,130 --> 00:38:31,130
CAPCOM Hello Apollo 11, Houston. You can terminate
the exercise on the laser. Rates are steady

234
00:38:38,049 --> 00:38:45,049
enough now for it to come into the PTC, over.

235
00:38:52,599 --> 00:38:59,599
SC Okay, Houston. Neither Neil nor Mike can
see it. Incidentally those shafts and trunnions

236
00:39:01,000 --> 00:39:08,000
just missed pointing at the world.

237
00:39:10,119 --> 00:39:17,119
CAPCOM Roger, thank you.

238

00:39:21,609 --> 00:39:28,609
SC Just as we are looking at it through the scanning telescope, it would be about a, oh,

239
00:40:29,380 --> 00:40:36,380
maybe a third of an Earth radii high and to the left.

240
00:40:51,259 --> 00:40:53,450
CAPCOM Roger.

241
00:40:53,450 --> 00:41:00,450
SC But we did, we did identify the El Paso and it appeared to us to be a break in the

242
00:41:06,519 --> 00:41:10,200
clouds there and we looked in that break and saw nothing.

243
00:41:10,200 --> 00:41:12,380
CAPCOM Roger, thank you much, out.

244
00:41:12,380 --> 00:41:14,180
SC Houston, Apollo 11, over.

245
00:41:14,180 --> 00:41:15,990
CAPCOM Roger, go ahead, over.

246
00:41:15,990 --> 00:41:18,890
SC Were you following that on the DSKY?

247
00:41:18,890 --> 00:41:19,970
CAPCOM Roger, standby.

248
00:41:19,970 --> 00:41:26,970
CAPCOM Eleven, Houston. What's your exact question, over.

249
00:41:27,730 --> 00:41:34,730

SC I've followed the procedure through step
7 down to the point where I've got 27 303

250
00:42:32,539 --> 00:42:35,619
enter and then we go to an operator light.

251
00:42:35,619 --> 00:42:38,749
CAPCOM Roger, stand by.

252
00:42:38,749 --> 00:42:45,749
CAPCOM Apollo ll, Houston, stand by a moment.
We'll have an answer for you momentarily,

253
00:42:52,710 --> 00:42:53,640
over.

254
00:42:53,640 --> 00:43:00,640
SC Okay appreciate it, Charlie. Now the light's
gone out without any further DSKY action.

255
00:43:02,740 --> 00:43:06,470
CAPCOM Roger.
SC Correction, stand by that's not right.

256
00:43:06,470 --> 00:43:13,470
CAPCOM Roger.

257
00:43:19,720 --> 00:43:26,720
CAPCOM Apollo 11, Houston.

258
00:43:33,349 --> 00:43:33,920
SC Houston, Apollo 11.

259
00:43:33,920 --> 00:43:36,680
CAPCOM Roger we've finally gotten concurrence
on the problem here with 50 guys looking at

260
00:43:36,680 --> 00:43:41,359
it. When we were sitting in the 58 team we

attempted to load the erasable before you

261
00:43:41,359 --> 00:43:48,359
terminated the verb 49. So Mike what we're going to have to do is call off the present

262
00:45:03,400 --> 00:45:09,529
CDU's, copy those down and do a verb 49. Load the present, do a proceed then an enter and

263
00:45:09,529 --> 00:45:14,859
then we can then set up attitude hold with step 6, over.

264
00:45:14,859 --> 00:45:19,190
SC Okay, I think that's what we did last time.

265
00:45:19,190 --> 00:45:26,190
CAPCOM It appeared to us that we attempted to load the erasable prior to entering on

266
00:45:27,089 --> 00:45:34,089
the verb 49 which verb 49 was still running and it clobbered the CDU's, over.

267
00:45:35,900 --> 00:45:37,329
SC Okay.

268
00:45:37,329 --> 00:45:43,369
SC Houston, Apollo 11, and we're moving at the proper rate.

269
00:45:43,369 --> 00:45:43,839
CAPCOM Alleluia!

270
00:45:43,839 --> 00:45:46,900
CAPCOM Eleven, Houston. It looks great to us now. Over.

271

00:45:46,900 --> 00:45:53,900
SC It looks fine here Charlie. The (garbled)
part is the only part I don't find explained

272
00:45:58,809 --> 00:45:59,480
yet.

273
00:45:59,480 --> 00:46:06,480
CAPCOM Roger, Mike. We're working on that
one right now. We're coming up with the story

274
00:46:09,539 --> 00:46:12,809
soon, over.

275
00:46:12,809 --> 00:46:17,720
SC Thank you.

276
00:46:17,720 --> 00:46:24,720
CAPCOM Eleven, Houston, we're having corn
from Goldstone to Honeysuckle, over.

277
00:46:31,589 --> 00:46:32,190
SC Okay.

278
00:46:32,190 --> 00:46:35,380
SC Hello Houston, through Honeysuckle or-
-

279
00:46:35,380 --> 00:46:39,839
CAPCOM Apollo 11, Houston go ahead over.

280
00:46:39,839 --> 00:46:44,799
SC You sound good to us through Honeysuckle.
How do we sound?

281
00:46:44,799 --> 00:46:49,920
CAPCOM Roger, 5 by Mike. We'd like to OMNI
configuration as follows. OMNI ALPHA place

282

00:46:49,920 --> 00:46:51,890
in BRAVO, OMNI to OMNI - -

283
00:46:51,890 --> 00:46:57,970
SC - and the configuration as follows: OMNI
ALPHA placed in BRAVO, OMNI to OMNI, high

284
00:46:57,970 --> 00:47:00,930
gain track to MANUAL, high gain yaw 270, pitch
--

285
00:47:00,930 --> 00:47:07,930
PAO This is Apollo Control. At the present
time we are handing over from the tracking

286
00:47:08,009 --> 00:47:15,009
site at Goldstone, California, to the site
at Honeysuckle which accounts for the noise

287
00:47:19,109 --> 00:47:23,599
in the transmission --

288
00:47:23,599 --> 00:47:30,599
SC - I've got S-band OMNI Z OMNI, track to
MANUAL and beam Y and pitch, better say that

289
00:49:10,390 --> 00:49:17,390
again, yaw 2 70 , over.

290
00:49:31,359 --> 00:49:38,359
CAPCOM Roger, Buzz. I broke up that pitch
minus 50 at beam Y, over.

291
00:49:42,839 --> 00:49:45,849
SC Roger, copy.

292
00:49:45,849 --> 00:49:52,849
SC Houston, Apollo 11. Are you ready to copy
some numbers on status report, etc.

293
00:49:59,920 --> 00:50:04,359
CAPCOM Say again, over.

294
00:50:04,359 --> 00:50:11,359
SC Roger, ready to copy some numbers on the
status report, Houston.

295
00:50:17,059 --> 00:50:19,299
CAPCOM Rog. Go ahead, over.

296
00:50:19,299 --> 00:50:26,299
SC Okay, radiation CDR 11005, CMP 10006, LMP
09007. Medication negative, and I got some

297
00:50:27,619 --> 00:50:29,180
(garble).

298
00:50:29,180 --> 00:50:35,450
CAPCOM Go ahead, over.

299
00:50:35,450 --> 00:50:42,450
SC Battery C 37.1, pyro battery A and G both
37.1. RCS ALPHA 82, BRAVO 84, COCCO 85, DELTA

300
00:50:54,589 --> 00:50:56,339
87, over.

301
00:50:56,339 --> 00:51:03,339
CAPCOM Roger, we copy. Radiation 11005 10006
09007. No medication. 37.1 37.1 37.1 82 84

302
00:51:09,489 --> 00:51:12,119
85 87, over.

303
00:51:12,119 --> 00:51:19,119
SC That's affirmative. And you want a LM GM
DELTA V at 1.1.

304

00:51:23,170 --> 00:51:25,170
CAPCOM Roger, copy, 11.

305
00:51:25,170 --> 00:51:31,349
CAPCOM Hello, Apollo 11, Houston. Please verify
that 4 cryo heaters AUTO, the four fans OFF.

306
00:51:31,349 --> 00:51:38,349
SC Okay, we have been holding the 02 heater
in

307
00:52:06,089 --> 00:52:13,089
the OFF position. I believe that
was your last instructions. All the other
heaters are to ON and all fans are OFF. Over.

308
00:52:29,700 --> 00:52:30,880
CAPCOM Roger, standby.

309
00:52:30,880 --> 00:52:37,880
CAPCOM 11, Houston. We would like all heaters
AUTO, over.

310
00:52:38,200 --> 00:52:45,200
SC All four on AUTO, all four fans OFF.

311
00:53:11,779 --> 00:53:18,779
CAPCOM Hello, Apollo 11, Houston. As the sun
sinks slowly in the west, the white team bids

312
00:54:09,839 --> 00:54:16,839
you good night. If we get
a story on

313
00:55:16,339 --> 00:55:23,339
the 7/10ths we can give it to

314
00:58:34,759 --> 00:57:06,410
you

315
00:59:40,099 --> 00:59:44,369
in the morning, over.

316
00:59:44,369 --> 00:59:51,369
SC Okay, sounds fine, thank you, Charlie,
very much.

317
01:00:15,380 --> 01:00:22,380
SC Have a nice day today, Charlie.

318
01:00:45,619 --> 01:00:52,619
CAPCOM Thank you.

319
01:00:55,569 --> 01:01:02,569
SC Good night ail.

320
01:02:20,920 --> 01:02:27,920
PAO This is Apollo Control at 36 hours 11
minutes. At

321
01:04:47,920 --> 01:04:54,920
the present time Apollo 11 is 134 000 nautical
miles from Earth. The velocity is 4216 feet

322
01:11:39,910 --> 01:11:46,910
per second. During that last series of transmissions
from the crew, we received a status report

323
01:12:13,680 --> 01:12:20,680
from Buzz Aldrin and he reported that

324
01:14:36,480 --> 01:14:43,480
the crew has in the past 24 hours taken no
medication. This is similar to the crew status

325
01:14:55,170 --> 01:15:02,170
report we received from them last night. We
bid them good night at 36 hours 9 minutes

326
01:15:21,960 --> 01:15:28,960
or about 2 minutes ago. We anticipate that
the crew will probably have a few more housekeeping

327
01:16:51,050 --> 01:16:58,050
type chores aboard the spacecraft before they
actually turn in and also we'll probably be

328
01:17:20,030 --> 01:17:27,030
combining their eat period with the first
part of that sleep period. At 36 hours 12

329
01:18:24,550 --> 01:18:31,550
minutes into the flight of Apollo 11, this