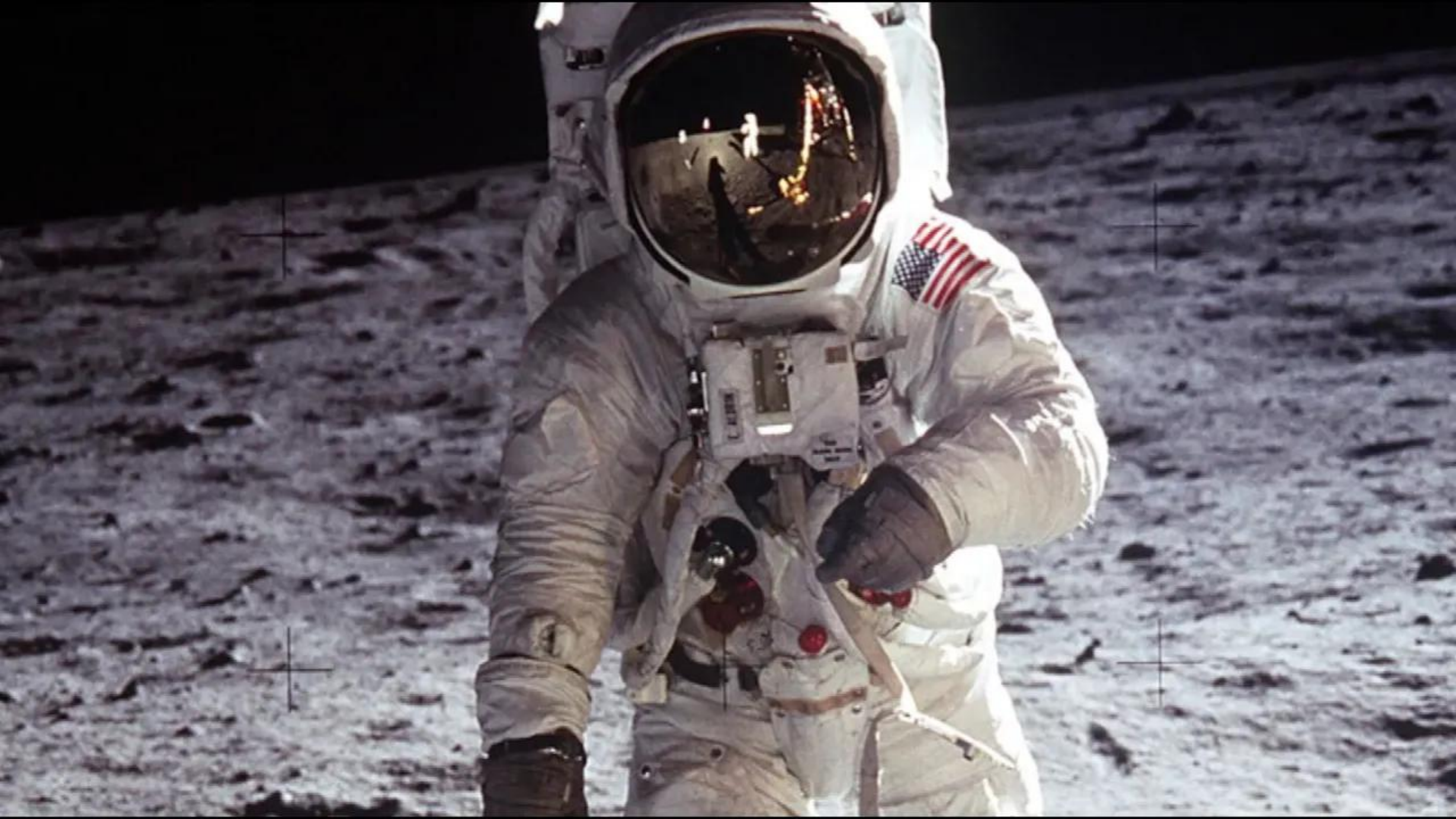

1
00:00:02,889 --> 00:00:02,899
Your Eagle’s undocked.

2
00:00:02,899 --> 00:00:02,929
Roger. How does it look?

3
00:00:02,929 --> 00:00:05,269
The Eagle has wings.

4
00:00:05,269 --> 00:00:06,170
Roger.

5
00:00:06,170 --> 00:00:08,860
EAGLE Looking good.

6
00:00:08,860 --> 00:00:15,809
CAPCOM Roger, Neil. We got a, if you will
give 2 and data, we got the loads for you.

7
00:00:15,809 --> 00:00:22,809
PAO We are now coming up on 30 seconds to
acquisition of the command module and we’ll

8
00:00:26,689 --> 00:00:33,190
stand by for that event.

9
00:00:33,190 --> 00:00:40,190
CAPCOM Columbia, Houston. Over.

10
00:00:42,070 --> 00:00:49,070
COLUMBIA Houston, Columbia. Reading you loud
and clear. How me?

11
00:01:04,269 --> 00:01:11,269
CAPCOM Roger. 5 by, Mike. How did it go? Over.

12
00:01:26,479 --> 00:01:33,479
COLUMBIA Listen, babe, everything's going

just swimmingly. Beautiful.

13
00:01:44,240 --> 00:01:51,240
CAPCOM Great. We're standing by for Eagle.

14
00:01:59,789 --> 00:02:06,789
COLUMBIA Okay, he's coming around.

15
00:02:10,890 --> 00:02:17,890
CAPCOM We copy. Out.

16
00:02:19,769 --> 00:02:26,769
EAGLE Houston, Eagle. How do you read?

17
00:02:35,319 --> 00:02:42,319
CAPCOM 5 by, Eagle. We're standing by for
your burn report. Over.

18
00:03:01,959 --> 00:03:08,959
EAGLE Roger. The burn was on time. The residuals
before knowing: minus 0.1 minus 0.4 minus

19
00:03:26,860 --> 00:03:33,860
0.1, x and z now to zero.

20
00:03:38,510 --> 00:03:45,510
CAPCOM Eagle, Houston. We (garbled) go for
PDI. Over.

21
00:03:53,480 --> 00:03:58,480
EAGLE Roger. Understand.

22
00:03:58,480 --> 00:04:05,480
EAGLE AGS on. (garbled) …ten percent.

23
00:04:08,459 --> 00:04:15,459
PAO 2 minutes 20 seconds. Everything looking
good. We show altitude about 47,000 feet.

24
00:04:31,760 --> 00:04:38,760
Good radar data. Altitude now 33,500 feet.

25
00:04:43,410 --> 00:04:50,410
PAO We’re still GO. Altitude 27,000 feet.

26
00:04:55,060 --> 00:05:02,060
EAGLE …alarm. It appears to come up at 16
68 up.

27
00:05:13,360 --> 00:05:20,360
CAPCOM Roger, copy. Eagle, Houston. We'll
monitor your Delta-H.

28
00:05:28,340 --> 00:05:35,340
EAGLE Delta-H is looking good now.

29
00:05:38,320 --> 00:05:45,320
CAPCOM Roger, Delta-H is looking good to us.
Right on time.

30
00:05:56,630 --> 00:06:03,630
EAGLE Throttle down better than in the simulator.

31
00:06:07,630 --> 00:06:09,670
CAPCOM Rog.

32
00:06:09,670 --> 00:06:16,670
EAGLE AGS and PGNCS look real close. PAO Altitude
now 21 thousand feet. Still looking very good.

33
00:06:26,960 --> 00:06:33,960
Velocity down now to 12 hundred feet per second.

34
00:06:36,110 --> 00:06:43,110
CAPCOM You're looking great to us, Eagle.

35
00:06:43,230 --> 00:06:50,230

EAGLE Okay, I'm still on slough so we may tend to lose as we gradually pitch over. Let

36
00:07:01,540 --> 00:07:08,540
me try auto again now and see what happens.

37
00:07:10,690 --> 00:07:12,730
CAPCOM Roger.

38
00:07:12,730 --> 00:07:18,830
EAGLE Okay, looks like it's holding.

39
00:07:18,830 --> 00:07:25,400
CAPCOM Roger, we got good data.

40
00:07:25,400 --> 00:07:32,400
EAGLE We're go. Hang tight. We're go. 2,000 feet. 2,000 feet into the AGS. 47 degrees.

41
00:07:46,070 --> 00:07:47,920
CAPCOM Roger.

42
00:07:47,920 --> 00:07:50,700
EAGLE 47 degrees.

43
00:07:50,700 --> 00:07:57,700
CAPCOM Eagle looking great. You're go PAO Altitude 1600. 1400 feet. Still looking

44
00:08:02,740 --> 00:08:04,590
very good.

45
00:08:04,590 --> 00:08:10,140
CAPCOM Roger. 1202. We copy it.

46
00:08:10,140 --> 00:08:17,140
EAGLE 35 degrees. 35 degrees. 750, coming down at 23.700 feet, 21 down. 33 degrees.

47
00:08:24,030 --> 00:08:31,030
600 feet, down at 19,540 feet, down at 30,
down at 15. 400 feet, down at 9. (garbled)

48
00:08:40,690 --> 00:08:47,690
forward. 350, down at 4. 330, 3-1/2 down.
We're pegged on horizontal velocity. 300 feet,

49
00:08:54,580 --> 00:09:01,580
down 3 ? , 47 forward (garbled) Down 1 a minute.
1 ? down. 70. Got the shadow out there. 50,

50
00:09:11,160 --> 00:09:18,160
down at 2 ?. 19 forward. Altitude-velocity
lights. 3 ? down, 220 feet. 13 forward. 11

51
00:09:26,280 --> 00:09:33,280
forward, coming down nicely. 200 feet, 4 ? down.
5 ? down. 160, 6 ? down, 5 ? down, 9 forward.

52
00:09:44,650 --> 00:09:51,650
5 percent. Quantity light. 75 feet, things
looking good. Down a half. 6 forward.

53
00:09:59,770 --> 00:10:03,010
CAPCOM 60 seconds.

54
00:10:03,010 --> 00:10:10,010
EAGLE Lights on. Down 2 ? . Forward. Forward.
good. 40 feet, down 2 ?. Picking up some dust.

55
00:10:20,300 --> 00:10:27,300
30 feet, 2 ? down. Faint shadow. 4 forward.
4 forward, drifting to the right a little.

56
00:10:41,140 --> 00:10:48,140
6 (garbled) down a half.

57
00:10:51,870 --> 00:10:55,010

CAPCOM 30 seconds.

58
00:10:55,010 --> 00:11:02,010
EAGLE (Garbled) forward. Drifting right. (garbled)
Contact light. Okay, engine stop. ACA out

59
00:11:08,610 --> 00:11:15,610
of detent. Modes control both auto, descent
engine command override, off. Engine arm,

60
00:11:22,210 --> 00:11:24,740
off. 413 is in.

61
00:11:24,740 --> 00:11:27,360
CAPCOM We copy you down, Eagle.

62
00:11:27,360 --> 00:11:30,120
ARMSTRONG Houston, Tranquility Base here.
The Eagle has landed.

63
00:11:30,120 --> 00:11:37,120
CAPCOM Roger, Tranquility, we copy you on
the ground. You've got a bunch of guys about

64
00:11:44,230 --> 00:11:51,230
to turn blue. We're breathing again. Thanks
a lot.

65
00:12:00,320 --> 00:12:07,320
TRANQUILITY Thank you.

66
00:12:08,000 --> 00:12:15,000
CAPCOM You're looking good here.

67
00:12:20,800 --> 00:12:27,800
TRANQUILITY I tell you. We're going to be
busy for a minute. Master arm on. Take care

68
00:12:52,710 --> 00:12:59,710

of the descent.(garbled) Very smooth touchdown. Looks like we're venting the oxidizer now.

69
00:13:15,580 --> 00:13:22,580
CAPCOM Roger, Eagle. And you are stay for T1. Over. Eagle, you are stay for T1.

70
00:13:43,730 --> 00:13:50,730
CAPCOM Roger, Eagle, and you're stay. Press E 1, over. Eagle, you are stay for T1.

71
00:14:11,880 --> 00:14:18,880
EAGLE Roger, and we're stay for T1.

72
00:14:24,200 --> 00:14:31,200
CAPCOM Roger, and we see you getting the OX.

73
00:14:49,680 --> 00:14:55,690
PAO Neil Armstrong reporting there. No difficulty adapting to the 1/6 gravity of the moon.

74
00:14:55,690 --> 00:15:02,690
EAGLE Window is a relatively level plain crated with a fairly large number of craters of the

75
00:15:06,100 --> 00:15:13,100
five to fifty foot rod and from ridges small 20, 30 feet high I would guess and literally

76
00:15:13,570 --> 00:15:20,570
thousands of little one and two foot craters around the area. We see some angular blocks

77
00:15:21,710 --> 00:15:28,710
out several hundred feet in front of us that are probably 2 feet in size and have angular

78
00:15:49,060 --> 00:15:56,060
edges. There is a hill in view, just about on the ground track ahead of us, difficult

79
00:16:19,410 --> 00:16:26,410
to estimate but might be a half a mile or
a mile.

80
00:16:50,240 --> 00:16:57,240
CAPCOM Roger Tranquility. We copy. Over.

81
00:17:04,279 --> 00:17:11,279
EAGLE Houston, the (garbled) all right.

82
00:17:18,319 --> 00:17:25,319
CAPCOM Houston, Roger. We copy and we're
standing by for your TED.

83
00:17:46,390 --> 00:17:53,390
EAGLE Houston, this is Neil. Radio check.

84
00:18:02,760 --> 00:18:09,760
CAPCOM Neil, this is Houston. Loud and clear.
Break. Break. Buzz, this is Houston. Radio

85
00:18:37,860 --> 00:18:44,860
check and verify TV circuit breaker in.

86
00:18:54,230 --> 00:19:01,230
ALDRIN Roger, TV circuit breaker's in. Receive
loud and clear.

87
00:19:17,620 --> 00:19:24,620
CAPCOM Man, we're getting a picture on the
TV.

88
00:19:29,540 --> 00:19:31,160
ALDRIN Oh, you got a good picture. Huh?

89
00:19:31,160 --> 00:19:38,160
CAPCOM There's a great deal of contrast in
it and currently it's upside-down on our monitor,

90
00:19:43,120 --> 00:19:45,490
but we can make out a fair amount of detail.

91
00:19:45,490 --> 00:19:50,650
ALDRIN Okay, will you verify the position,
the opening I ought to have on the camera.

92
00:19:50,650 --> 00:19:51,120
CAPCOM Stand by.

93
00:19:51,120 --> 00:19:58,120
CAPCOM Okay, Nell, we can see you coming down
the ladder now.

94
00:19:59,770 --> 00:20:06,770
ARMSTRONG Okay, I just checked- getting back
up to that first step, Buzz, it's not even

95
00:20:33,170 --> 00:20:39,280
collapsed too far, but it's adequate to get
back up.

96
00:20:39,280 --> 00:20:39,626
CAPCOM Roger, we copy.

97
00:20:40,400 --> 00:20:45,809
CAPCOM Buzz, this is Houston. F 2 1/160th
second for shadow photography on the sequence

98
00:20:45,809 --> 00:20:46,730
camera.

99
00:20:46,730 --> 00:20:50,429
ALDRIN Okay.
ARMSTRONG I'm at the foot of the ladder. The

100
00:20:50,429 --> 00:20:57,429
LM foot pads are only depressed in the surface

about 1 or 2 inches. Although the surface

101
00:21:02,950 --> 00:21:09,950
appears to be very, very fine grained, as
you get close to it. It's almost like a powder.

102
00:21:20,610 --> 00:21:26,120
Now and then, it's very fine.

103
00:21:26,120 --> 00:21:33,120
ARMSTRONG I'm going to step off the LM now.

104
00:21:35,510 --> 00:21:42,510
ARMSTRONG That's one small step for man. One
giant leap for mankind.

105
00:21:51,549 --> 00:21:58,549
ARMSTRONG As the, the surface is fine and
powdery. I can, I can pick it up loosely with

106
00:22:03,170 --> 00:22:10,170
my toe. It does adhere in fine layers like
powdered charcoal to the sole and sides of

107
00:22:15,809 --> 00:22:17,290
my boots.

108
00:22:17,290 --> 00:22:24,290
ALDRIN …making sure not to lock it on my
way out.

109
00:22:25,750 --> 00:22:29,380
ARMSTRONG Particularly good thought.

110
00:22:29,380 --> 00:22:36,380
ALDRIN That's our home for the next couple
of hours and I want to take good care of it.

111
00:22:50,100 --> 00:22:57,100

Okay, I'm on the top step and I can look down
over the RCU, landing gear pads.

112
00:23:14,880 --> 00:23:21,880
That's a very simple matter to hop down from
one step to the next.

113
00:24:09,910 --> 00:24:16,910
ARMSTRONG Yes, I found it to be very comfortable
and walking is also very comfortable. You've

114
00:24:33,840 --> 00:24:40,840
got three more steps and then a long one.

115
00:24:45,520 --> 00:24:52,520
ALDRIN Okay, I'm going to leave that one foot
up there and both hands down to about the

116
00:25:03,230 --> 00:25:10,230
fourth rung up.

117
00:25:13,000 --> 00:25:20,000
ARMSTRONG There you go.

118
00:25:26,040 --> 00:25:33,040
ALDRIN Okay. Now I think I'll do the same.

119
00:25:47,950 --> 00:25:54,950
ARMSTRONG A little more. About another inch.
There you got it. That's a good step. About

120
00:25:56,590 --> 00:25:57,820
a three footer.

121
00:25:57,820 --> 00:25:59,410
ALDRIN Beautiful, beautiful.

122
00:25:59,410 --> 00:26:03,630
ARMSTRONG Isn't that something. Magnificent

sight down there.

123
00:26:03,630 --> 00:26:05,210
ALDRING Magnificent definition.

124
00:26:05,210 --> 00:26:12,210
ARMSTRONG For those who haven't read the plaque,
we'll read the plaque that's on the front

125
00:26:14,790 --> 00:26:21,790
landing gear of this LM. First there's two
hemispheres, one showing each of the two hemispheres

126
00:26:27,650 --> 00:26:34,650
of the Earth. Underneath it says, " Here Man
from the planet Earth first set foot upon

127
00:26:59,710 --> 00:27:03,740
the Moon, July 1969 A.D. We came in peace
for all mankind." It has the crew members'

128
00:27:03,740 --> 00:27:10,740
signatures and the signature of the President
of the United States.

129
00:27:12,820 --> 00:27:19,820
CAPCOM Tranquility Base, this is Houston.
Could we get both of you on the camera for

130
00:27:22,280 --> 00:27:23,240
a minute, please?

131
00:27:23,240 --> 00:27:24,510
ARMSTRONG Say again, Houston.

132
00:27:24,510 --> 00:27:31,510
CAPCOM Roger. We'd like to get both of you
in the field of the view of the camera for

133

00:27:44,480 --> 00:27:45,360
a minute.

134
00:27:45,360 --> 00:27:52,360
CAPCOM Neil and Buzz, the President of the
United States is in his office now and would

135
00:27:54,890 --> 00:27:58,230
like to say a few words to you. Over.

136
00:27:58,230 --> 00:28:00,490
ARMSTRONG That would be an honor.

137
00:28:00,490 --> 00:28:04,809
CAPCOM Go ahead Mr. President, this is Houston.
Out.

138
00:28:04,809 --> 00:28:11,809
PRES NIXON Neil and Buzz, I am talking to
you by telephone from the Oval Room at the

139
00:28:14,710 --> 00:28:21,710
White House. And this certainly has to be
the most historic telephone call ever made.

140
00:28:24,140 --> 00:28:28,880
I just can't tell you how proud we all are
of what you have done. For every American,

141
00:28:28,880 --> 00:28:35,880
this has to be the proudest day of our lives.
And for people all over
the world, I am sure they, too, join with

142
00:28:45,580 --> 00:28:52,580
Americans, in recognizing what a feat this
is. Because of what you have done, the heavens

143
00:29:03,929 --> 00:29:10,929
have become a part of man's world. And as

you talk to us from the Sea of Tranquility,

144
00:29:15,630 --> 00:29:22,630
it inspires us to double our efforts to bring
peace and tranquility to earth. For one priceless

145
00:29:25,679 --> 00:29:32,679
moment, in the whole history of man, all the
people on this earth are truly one, one in

146
00:29:38,549 --> 00:29:45,549
their pride in what you have done. And one
in our prayers, that you will return safely

147
00:30:16,470 --> 00:30:18,000
to Earth.

148
00:30:18,000 --> 00:30:25,000
ARMSTRONG Thank you, Mr. President. It's a
great honor and privilege for us to be here

149
00:30:36,750 --> 00:30:43,150
representing not only the United States but
men of peace of all nations. And with interest

150
00:30:43,150 --> 00:30:49,929
and a curiosity and a vision for the future.
It's an honor for us to be able to participate

151
00:30:49,929 --> 00:30:51,600
here today.

152
00:30:51,600 --> 00:30:58,600
PRES NIXON And thank you very much and I look
forward, all of us look forward to seeing

153
00:31:07,570 --> 00:31:11,740
you on the Hornet on Thursday.

154

00:31:11,740 --> 00:31:13,799
ARMSTRONG Thank you.

155
00:31:13,799 --> 00:31:17,630
ALDRIN I look forward to that very much, Sir.

156
00:31:17,630 --> 00:31:17,880
ARMSTRONG Thank you. I'm open now.

157
00:31:17,880 --> 00:31:24,490
ALDRIN Now you're clear. You're rubbing
up against me a little bit.

158
00:31:24,490 --> 00:31:25,809
ARMSTRONG Okay?

159
00:31:25,809 --> 00:31:32,809
ALDRIN Allright. That's right. Next the
left. You want to move your foot and I'll

160
00:31:33,840 --> 00:31:35,510
get the hatch.

161
00:31:35,510 --> 00:31:36,539
ARMSTRONG Okay.

162
00:31:36,539 --> 00:31:43,539
ALDRIN Okay, the hatch is closed and latched.
And we're up by it secure.

163
00:31:54,130 --> 00:32:01,130
CAPCOM Columbia, Columbia, this is Houston.
Over.

164
00:32:08,539 --> 00:32:15,539
COLUMBIA Roger, Columbia to Charlie. How do
you read?

165
00:32:27,070 --> 00:32:34,070

CAPCOM Roger, Columbia. This is Houston. We're reading you loud and clear on OMNI Charlie.

166
00:32:52,179 --> 00:32:59,179
The crew of Tranquillity Base is back inside their base, repressurized and they're in the

167
00:33:05,470 --> 00:33:06,940
process of dopping the PLSS's. Everything went beautifully. Over.

168
00:33:06,940 --> 00:33:07,340
COLUMBIA Hallelujah.

169
00:33:07,340 --> 00:33:14,340
CAPCOM And we'd like to get POO and accept from you. We have a state rector up light.

170
00:33:21,740 --> 00:33:28,740
And, after that, we'd like you to realign your platform to the new F marker we sent

171
00:33:36,190 --> 00:33:43,190
up a rev or two ago. Over.

172
00:33:45,840 --> 00:33:51,960
ARMSTRONG Alright. Understand. You want an option 1, 82 option 1.

173
00:33:51,960 --> 00:33:56,289
PAO This is Apollo Control. Dr. Charles Berry reports that heart rates during this EVA period

174
00:33:56,289 --> 00:34:03,289
ranged from a low of 90 for both crewmen to a high of about 125 for Buzz Aldrin for 2

175
00:34:55,379 --> 00:35:02,379
periods. And, a high of 160 for Nell Armstrong at 3 periods. That top reading coming during

176
00:35:06,809 --> 00:35:13,809
the time he was transferring the rock boxes
into the LM. Dr. Berry says the data they

177
00:35:20,140 --> 00:35:27,140
got indicates Nell Armstrong was working very
hard at that time.

178
00:35:37,779 --> 00:35:41,609
CAPCOM Columbia, this is Houston. Over.

179
00:35:41,609 --> 00:35:42,999
TRANQUILITY Houston, Tranquility Base. Go
ahead.

180
00:35:42,999 --> 00:35:49,210
CAPCOM Roger. When you all have a free moment
I have your P8 through P12 flight data. Over.

181
00:35:49,210 --> 00:35:52,690
TRANQUILITY Houston, Tranquility Base. Ready
to copy.

182
00:35:52,690 --> 00:35:59,690
CAPCOM Roger, Tranquility. P8, 114, 30, 57.
P9, 116, 29, 10. P10, 118, 27, 23. Pll, 120,

183
00:36:01,969 --> 00:36:06,880
25, 36. P12, 122, 23, 49. Read back. Over.

184
00:36:06,880 --> 00:36:13,880
TRANQUILITY Roger. PS, 114, 30, 57. P9, 116,
29, 10. P10, 118, 27, 23. Pll, 120, 25, 36.

185
00:36:16,710 --> 00:36:19,440
P12, 122, 23, 49. Over.

186
00:36:19,440 --> 00:36:22,170

CAPCOM Readback correct. Houston out.

187
00:36:22,170 --> 00:36:23,809
COLUMBIA Houston. Columbia.

188
00:36:23,809 --> 00:36:25,989
TRANQUILITY Houston, Tranquility base.

189
00:36:25,989 --> 00:36:30,869
CAPCOM Columbia. Columbia. This is Houston.
Over.

190
00:36:30,869 --> 00:36:37,869
COLUMBIA Coming into high gain.

191
00:36:38,729 --> 00:36:45,729
CAPCOM Roger. Reading you loud and clear on
the high gain, Columbia.

192
00:36:54,599 --> 00:37:01,599
COLUMBIA Roger. Going into P52 attitude. Do
you want a crew status report? (garbled)

193
00:37:05,410 --> 00:37:08,539
CAPCOM Say again, Columbia.

194
00:37:08,539 --> 00:37:15,539
ALDRIN I say again, I am maneuvering to the
P52 attitude and do you want a crew status

195
00:37:21,219 --> 00:37:21,609
report?

196
00:37:21,609 --> 00:37:25,450
CAPCOM Roger and go ahead with your crew status
report.

197
00:37:25,450 --> 00:37:27,759
ALDRIN Roger. No medication. Radiation 100.16.

198
00:37:27,759 --> 00:37:29,289
CAPCOM Houston, we copy.

199
00:37:29,289 --> 00:37:30,829
ALDRIN Houston, Tranquility Base.

200
00:37:30,829 --> 00:37:32,369
CAPCOM Go ahead, Tranquility.

201
00:37:32,369 --> 00:37:39,229
ALDRIN Roger. The weight of the RCU was 12
ounces by itself without the bag and the weight

202
00:37:39,229 --> 00:37:45,989
of the water from the CDR's PLSS was 12 1/2
ounces. That's reading zero with the bag on.

203
00:37:45,989 --> 00:37:52,989
CAPCOM This is Houston. We copy. And for your
information the new LM weight after jettison

204
00:37:56,089 --> 00:38:01,479
of equipment including lithium hydroxide canister
is 10837. Over.

205
00:38:01,479 --> 00:38:03,469
ALDRIN Okay. 10837.

206
00:38:03,469 --> 00:38:10,469
CAPCOM Tranquility Base, this is Houston.
In the flight plan configuration, we show

207
00:38:12,049 --> 00:38:19,049
that the stability control circuit breaker
ACCA on Channel 16 should be open at this

208
00:38:22,910 --> 00:38:24,450
time. Over.

209
00:38:24,450 --> 00:38:31,450
ALDRIN Houston, Tranquility. Say again which one should be closed?

210
00:38:32,140 --> 00:38:39,140
CAPCOM Roger. Panel 16 row 2 stab control ACCA that is A-C-C-A. and it should be open

211
00:38:45,229 --> 00:38:48,299
at this time. Over.

212
00:38:48,299 --> 00:38:51,380
ALDRIN Roger. Coming open.

213
00:38:51,380 --> 00:38:53,690
CAPCOM Roger. Out.

214
00:38:53,690 --> 00:39:00,690
ALDRIN Houston, Tranquility. Do you have a way of showing a configuration of the engine

215
00:39:05,400 --> 00:39:12,400
arm circuit breaker? Over. The reason I am asking is because the end of it appears to

216
00:39:23,269 --> 00:39:30,269
be broken off. I think we can push it back in again. I'm not sure we could pull it out

217
00:39:38,329 --> 00:39:43,609
if we pushed it in though. Over.

218
00:39:43,609 --> 00:39:45,849
CAPCOM Roger, we copy. Standby please.

219
00:39:45,849 --> 00:39:49,249
CAPCOM Tranquility Base, this is Houston. Our telemetry shows the engine arm circuit

220
00:39:49,249 --> 00:39:56,249
breaker in the open position at the present
time. We want you to leave it open until it

221
00:39:56,420 --> 00:40:00,410
is normally scheduled to be pushed in, which
is later on. Over.

222
00:40:00,410 --> 00:40:01,400
ALDRIN Roger. Copy.

223
00:40:01,400 --> 00:40:03,809
TRANQUILITY Houston, Tranquility Base. The
CDR's TDR reads 11014.

224
00:40:03,809 --> 00:40:05,430
CAPCOM Roger. 11014 for the CDR.

225
00:40:05,430 --> 00:40:08,440
TRANQUILITY Roger. LMP reads 09018. Over.

226
00:40:08,440 --> 00:40:09,940
CAPCOM Roger. 09018.

227
00:40:09,940 --> 00:40:16,940
PAO This is Apollo Control. Dr. Berry reports
those dosimeter readings have not changed

228
00:40:16,969 --> 00:40:23,279
since yesterday afternoon indicating that
the crew was not subjected to radiation on

229
00:40:23,279 --> 00:40:26,700
the surface of the moon or if any a very negligible
amount.

230
00:40:26,700 --> 00:40:27,690
COLUMBIA Houston, Columbia. Over.

231
00:40:27,690 --> 00:40:29,430
CAPCOM Columbia, this is Houston. Go ahead.

232
00:40:29,430 --> 00:40:36,430
COLUMBIA Roger, Bruce. When you get a few
minutes could you give me some words on tomorrow's

233
00:40:54,219 --> 00:41:01,219
activities, when they're going to start?

234
00:41:03,079 --> 00:41:04,109
CAPCOM Roger.

235
00:41:04,109 --> 00:41:07,329
CAPCOM Columbia. Columbia. This is Houston.
Over.

236
00:41:07,329 --> 00:41:10,549
CAPCOM Columbia. This is Houston. Over.

237
00:41:10,549 --> 00:41:12,170
COLUMBIA Go ahead.

238
00:41:12,170 --> 00:41:19,150
CAPCOM Roger, Mike. Couple of quick flight
plan updates here. First off, we'd like to

239
00:41:19,150 --> 00:41:26,150
get an 02 fuel cell purge at time 113:30.
Are you copying? Over.

240
00:41:28,529 --> 00:41:30,700
COLUMBIA Roger. Copy.

241
00:41:30,700 --> 00:41:37,700
CAPCOM Secondly, we will return to the nominal
time life with your scheduled wake up of 121

242
00:41:41,049 --> 00:41:48,049
hours and 12 minutes. We sort of slipped by
the lithium hydroxide canister change number

243
00:41:50,160 --> 00:41:57,160
9 during the EVA and EVA prep, and we'd like
you to accomplish that now. The comm per sleep

244
00:42:16,769 --> 00:42:21,969
will be the normal lunar comm configuration.
The RCS configuration, we're requesting that

245
00:42:21,969 --> 00:42:28,969
you use quad Alpha and Bravo. A data load
for R2 should be 01111. Read back. Over.

246
00:42:30,729 --> 00:42:37,729
COLUMBIA Roger. Oxygen in fuel cell purge
at 113:30. Return to the nominal time line

247
00:42:38,549 --> 00:42:45,549
at 121 hours. Wake up. Lithium hydroxide change
number 9 right now. Normal lunar comm sleep

248
00:42:51,680 --> 00:42:58,680
configuration, I'm in that n6w. On the RCS
I understood before you wanted to move the

249
00:43:56,719 --> 00:44:03,719
dap register to 011000 which made sense on
(garble) to pitch only on quad A enable all

250
00:44:18,180 --> 00:44:25,180
in quad B to C and D off, but you don't want
to do that any more, huh?

251
00:44:37,499 --> 00:44:44,499
CAPCOM Columbia. This is Houston. On your
dap load in R2, we were requesting 0 and 4

252
00:45:04,729 --> 00:45:09,489
ones. That is 01111. Over.

253
00:45:09,489 --> 00:45:12,839
COLUMBIA Okay. ….doing it right now.

254
00:45:12,839 --> 00:45:19,839
CAPCOM Roger. And you'll be enabling quads
Alpha and Bravo on the LORCS select, which

255
00:45:21,049 --> 00:45:27,119
is disable Charlie and Delta.

256
00:45:27,119 --> 00:45:30,749
COLUMBIA Got it.

257
00:45:30,749 --> 00:45:37,749
CAPCOM And we have a little less than 2 minutes
to LOS. If you're still up, LOS next time

258
00:45:42,119 --> 00:45:44,450
around will be 11404. Over.

259
00:45:44,450 --> 00:45:45,380
COLUMBIA Roger.

260
00:45:45,380 --> 00:45:52,380
CAPCOM And Columbia, if it's agreeable with
you, we'd like for you to stay awake until

261
00:45:54,559 --> 00:46:01,559
we have one successful acquisition on the
high gain antenna, and I guess you can plan

262
00:46:20,369 --> 00:46:27,369
on turning in shortly after LOS in this next
pass. Over.

263

00:46:45,650 --> 00:46:50,239
COLUMBIA Copy.

264
00:46:50,239 --> 00:46:57,140
CAPCOM Roger. Out.

265
00:46:57,140 --> 00:47:04,140
CAPCOM Tranquility Base. Tranquility Base.
This is Houston. Radio check. Over.

266
00:47:13,950 --> 00:47:16,979
TRANQUILITY Go ahead. Houston.

267
00:47:16,979 --> 00:47:23,979
CAPCOM Reading you loud and clear. Just wanted
to make sure we had comm.

268
00:47:32,690 --> 00:47:39,690
TRANQUILITY We've just finished up, we're
just finishing up our eat period. Be ready

269
00:47:41,160 --> 00:47:45,400
to go back into prep for press.

270
00:47:45,400 --> 00:47:46,609
CAPCOM Roger.

271
00:47:46,609 --> 00:47:53,609
PAO This is Apollo Control at 113 hours, 18
minutes. We have had loss of signal from Columbia.

272
00:47:55,579 --> 00:48:02,579
We have asked Mike Collins to stay awake through
acquisition on the next rev which will be

273
00:48:02,809 --> 00:48:09,809
number 20 so that we can check the automatic
acquisition mode of the high gain antenna.

274

00:48:14,969 --> 00:48:21,969
Once we've verified that, he will start his
rest period. The planned wake up for command

275
00:48:24,559 --> 00:48:25,829
module pilot 121 hours.

276
00:48:25,829 --> 00:48:32,660
PAO This is Apollo control. We're estimating
the change of shift news briefing for 2:00

277
00:48:32,660 --> 00:48:38,369
A.M. central daylight time. 2:00 A.M. central
daylight time for the change of shift briefing.

278
00:48:38,369 --> 00:48:45,369
PAO This is Apollo Control at 113 hours 29
minutes. The change of shift news briefing

279
00:48:47,449 --> 00:48:54,449
is about to start. We will tape any air-ground
transmissions during this period for playback

280
00:49:00,930 --> 00:49:07,359
after the briefing. If the equipment jettison
occurs during the briefing, we will come back

281
00:49:07,359 --> 00:49:10,690
up and provide that for you live.

282
00:49:10,690 --> 00:49:13,539
CAPCOM (Garbled.) This is Houston. Over.

283
00:49:13,539 --> 00:49:15,920
EAGLE Roger. Go ahead, Houston.

284
00:49:15,920 --> 00:49:22,920
CAPCOM Roger. On your next depressurization,
it's acceptable to use the overhead hatch

285
00:49:23,160 --> 00:49:30,160
dump valve in addition to or instead of the
forward hatch dump valve to speed up the depressurization

286
00:49:30,799 --> 00:49:37,799
of the cabin. I have a P-13 update for you
and if you could sometime there give us PU

287
00:49:41,880 --> 00:49:46,029
and data, we'll uplink you a new CSM space
vector. Over.

288
00:49:46,029 --> 00:49:48,079
EAGLE You've got the DSKY.

289
00:49:48,079 --> 00:49:51,670
CAPCOM Roger. Your P-13 time is 124:22:02.
Over.

290
00:49:51,670 --> 00:49:55,699
EAGLE Roger. It's P-13 124:22. Is that 02?
Over.

291
00:49:55,699 --> 00:50:02,160
CAPCOM That's affirmative. That is 02. And
do you have a time estimate for us until you're

292
00:50:02,160 --> 00:50:04,410
ready to start cabin depress? Over.

293
00:50:04,410 --> 00:50:05,910
EAGLE 15 minutes, maybe?

294
00:50:05,910 --> 00:50:06,660
CAPCOM Roger.

295
00:50:06,660 --> 00:50:10,849
CAPCOM Tranquility Base, this is Houston.
Uplink complete. The computer's yours, and

296
00:50:10,849 --> 00:50:13,069
you can go out of data.

297
00:50:13,069 --> 00:50:13,809
EAGLE Roger.

298
00:50:13,809 --> 00:50:16,029
TRANQUILITY Go ahead. Tranquility Base here.

299
00:50:16,029 --> 00:50:23,029
CAPCOM Roger. I guess you guys know that since
you're an hour and a half over the time line,

300
00:50:25,680 --> 00:50:32,680
and we're all taking a day off tomorrow, we're
going to leave you. See you later.

301
00:50:35,369 --> 00:50:39,299
TRANQUILITY I don't blame you a bit.

302
00:50:39,299 --> 00:50:46,140
CAPCOM It’s been a real great day, guys.
I really enjoyed it.

303
00:50:46,140 --> 00:50:53,140
TRANQUILITY Thank you. You couldn't have enjoyed
it as much as we did.

304
00:50:53,769 --> 00:51:00,769
CAPCOM Roger. It sure was great. Sure wish
you'd hurry up and get that trash out of there,

305
00:51:10,529 --> 00:51:10,900
though.

306
00:51:10,900 --> 00:51:13,869
TRANQUILITY Well, we're just about to do it.

307
00:51:13,869 --> 00:51:14,619
CAPCOM Okay.

308
00:51:14,619 --> 00:51:21,619
PAO We're live now. The CAPCOM voice on that
last transmission was Deke Slayton, the Director

309
00:51:21,900 --> 00:51:28,900
of Flight Crew Operations here at MSC.

310
00:51:29,519 --> 00:51:36,519
CAPCOM Tranquility Base, this is Houston.
We showed a suit release valve still on the

311
00:51:44,819 --> 00:51:48,199
AUTO position. It should be closed. Over.

312
00:51:48,199 --> 00:51:51,199
CAPCOM Columbia, this is Houston. Over.

313
00:51:51,199 --> 00:51:53,699
COLUMBIA Houston, Columbia. Go ahead.

314
00:51:53,699 --> 00:52:00,190
CAPCOM Roger. We've successfully reacquired
high gain antenna. Unless you have some other

315
00:52:00,190 --> 00:52:07,190
traffic with us, I guess we'll bid you a good
night and let you get some sleep, Mike. Over.

316
00:52:09,680 --> 00:52:11,680
COLUMBIA Okay. Sounds fine.

317
00:52:11,680 --> 00:52:18,680
CAPCOM And we're going to power down the voice
subcarrier part of our uplink to you, in order

318

00:52:18,759 --> 00:52:25,209
that we don't disturb you while we're talking
to Tranquility Base. If you need us, just

319
00:52:25,209 --> 00:52:32,209
give us a call and we can respond with a time
lag of about a minute to a minute and a half

320
00:52:33,059 --> 00:52:35,789
and get it reconfigured. Over.

321
00:52:35,789 --> 00:52:37,759
COLUMBIA Okay.

322
00:52:37,759 --> 00:52:41,839
CAPCOM Roger and good night.

323
00:52:41,839 --> 00:52:45,539
COLUMBIA Okay and thanks a lot.

324
00:52:45,539 --> 00:52:52,539
PAO We said good night to Mike Collins and
Columbia at 114 hours 6 minutes. And the cabin

325
00:52:55,410 --> 00:53:02,410
is coming down now on Tranquility Base. And
it's down to about 3 ? pounds now and holding

326
00:53:03,699 --> 00:53:04,180
that.

327
00:53:04,180 --> 00:53:11,180
CAPCOM Columbia, this is Houston. We'd like
you to enable the thrusters for BRAVO 1 and

328
00:53:11,979 --> 00:53:14,900
BRAVO 2. AUTO RCS Select. Over.

329
00:53:14,900 --> 00:53:18,319

COLUMBIA BRAVO 1 and BRAVO 2 Enable.

330
00:53:18,319 --> 00:53:19,779
CAPCOM Roger. Out.

331
00:53:19,779 --> 00:53:23,479
PAO The Tranquility Base pressure coming on
down now, 1 ? pounds.

332
00:53:23,479 --> 00:53:29,229
TRANQUILITY We read the following dump valve
until about 2 psi and we're using the overhead

333
00:53:29,229 --> 00:53:29,680
now.

334
00:53:29,680 --> 00:53:31,029
CAPCOM Roger. Out.

335
00:53:31,029 --> 00:53:33,739
TRANQUILITY They’re, they're both open now.

336
00:53:33,739 --> 00:53:37,380
PAO Less than half a pound of pressure now.

337
00:53:37,380 --> 00:53:40,499
CAPCOM Tranquility Base, this is Houston.
Over.

338
00:53:40,499 --> 00:53:42,729
ALDRI N Roger, go ahead.

339
00:53:42,729 --> 00:53:49,430
CAPCOM Roger, on your mission timer we wanted
to pull a circuit breaker and let it cool

340
00:53:49,430 --> 00:53:55,279
down for an hour and a half to two hours.
I believe the breaker is currently open. It

341
00:53:55,279 --> 00:54:02,279
has been off so go ahead and reset the mission
timer circuit breaker. Put the timer control

342
00:54:02,930 --> 00:54:09,930
to reset and hold it in reset for 30 seconds
and then slue it to your desired setting left

343
00:54:14,219 --> 00:54:17,059
to right and voice the timer control to start.
Over.

344
00:54:17,059 --> 00:54:18,989
ALDRIN Okay, we'll try it.

345
00:54:18,989 --> 00:54:25,539
ALDRIN Houston, our mission timer seems to
be sloughing okay. You want to give us a time

346
00:54:25,539 --> 00:54:29,900
hack or can we get it off the CMP, LGC I mean?

347
00:54:29,900 --> 00:54:35,199
CAPCOM Roger Tranquility. I'll give you a
time hack at 114:31:00. It's about 30 seconds

348
00:54:35,199 --> 00:54:36,039
from now. Over.

349
00:54:36,039 --> 00:54:39,289
CAPCOM Standby for a mark at 114:31. Standby.
Mark.

350
00:54:39,289 --> 00:54:45,049
CAPCOM Tranquility, this is Houston. Did you
copy by mark at 114:317?

351
00:54:45,049 --> 00:54:50,329

TRANQUILITY Roger. Thank you, and our mission timer is ready now.

352
00:54:50,329 --> 00:54:57,329
CAPCOM Roger. Very good. And I've got a consumables update for you if you are ready to copy. Over.

353
00:54:58,859 --> 00:55:00,640
TRANQUILITY Okay. Go ahead.

354
00:55:00,640 --> 00:55:07,640
CAPCOM Okay. RCS alpha is 81 percent, RCS bravo 75 percent. Coming up on 115.0 is GET.

355
00:55:08,209 --> 00:55:15,209
Descent oxygen is 31.8 pounds or 59 percent. Descent amp hours 858 and ascent amp hours

356
00:55:15,339 --> 00:55:16,229
574. Over.

357
00:55:16,229 --> 00:55:19,339
TRANQUILITY Roger. Copy. Thank you very much.

358
00:55:19,339 --> 00:55:20,680
CAPCOM Roger. Out.

359
00:55:20,680 --> 00:55:26,719
CAPCOM Tranquility, this is Houston. We also have a set of about 10 questions relating

360
00:55:26,719 --> 00:55:33,219
to observations you made, things you may have seen during the EVA. We can either discuss

361
00:55:33,219 --> 00:55:40,219
a little later on this evening or sometime later in the mission. It's your option. How

362

00:55:41,189 --> 00:55:43,589
do you feel? Over.

363
00:55:43,589 --> 00:55:44,759
TRANQUILITY I guess we can pick them up.

364
00:55:44,759 --> 00:55:47,359
CAPCOM Okay, and your friendly green team
here is pretty well been relieved by your

365
00:55:47,359 --> 00:55:52,219
friendly maroon team, and I'll put Ward on
with the questions.

366
00:55:52,219 --> 00:55:55,049
TRANQUILITY Okay. Thank you, Bruce. Go ahead.

367
00:55:55,049 --> 00:56:01,039
CAPCOM Tranquility, Houston. First question
here is your best estimate of the yaw on the,

368
00:56:01,039 --> 00:56:05,769
of the LM as compared to the nominal of crew
flight plan. Over.

369
00:56:05,769 --> 00:56:10,829
TRANQUILITY We got 13 degrees left on the
ball, and I think that's probably about right.

370
00:56:10,829 --> 00:56:15,099
Looking at the shadow, so we probably, probably
about 13 degrees left of the shadow.

371
00:56:15,099 --> 00:56:18,930
CAPCOM Roger, that's 13 degrees left of the
shadow. And next question relates to the depth

372
00:56:18,930 --> 00:56:22,279
of the bulk sampling that you obtained near
the first part of the EVA, and any changes

373
00:56:22,279 --> 00:56:25,299
in composition that you might have observed
during the bulk sampling interval. Over.

374
00:56:25,299 --> 00:56:28,670
TRANQUILITY I'm not sure I understand that
question, but we got a good bit of the ground

375
00:56:28,670 --> 00:56:35,670
mass in the bulk sample plus a sizeable number
of selective rocks of different types.

376
00:56:37,759 --> 00:56:43,259
CAPCOM Roger, Neil. One of the implications
here is the depth from which the bulk sample

377
00:56:43,259 --> 00:56:47,029
was selected. Did you manage to get down there
several inches or nearer the surface? Over.

378
00:56:47,029 --> 00:56:54,029
TRANQUILITY We got some down from as much
as 3 inches in the area where I was looking

379
00:56:55,680 --> 00:57:00,239
at (garbled), the variation with depth at,
with the bulk sample, that there really was

380
00:57:00,239 --> 00:57:06,609
an appreciable difference, and I didn't run
into any hard bed. Later on, other types and

381
00:57:06,609 --> 00:57:13,390
other areas where I get down just a short
distance, an inch or two, and couldn't go

382
00:57:13,390 --> 00:57:14,189
any further.

383
00:57:14,189 --> 00:57:20,969
CAPCOM Roger. Believe we understand down as deep as 3 inches, did not hit any hard bed,

384
00:57:20,969 --> 00:57:26,849
and no significant changes in composition to that depth. Next question, the second SRC

385
00:57:26,849 --> 00:57:32,769
was packed rather hurriedly due to the time limitations and wonder if you would be able

386
00:57:32,769 --> 00:57:38,229
to divide any more detailed description of the samples which were included in the second

387
00:57:38,229 --> 00:57:39,229
SRC. Over.

388
00:57:39,239 --> 00:57:40,019
of assorted rocks which I picked hurriedly from around the area, tried to get as many

389
00:57:40,019 --> 00:57:41,979
representative types as I could.

390
00:57:41,979 --> 00:57:48,979
CAPCOM Roger, Neil. Next topic here relates to the rays which emanate from the DPS engine

391
00:57:55,109 --> 00:57:57,529
burning area. We were wondering if the rays emanating from the, beneath the engine are

392
00:57:57,529 --> 00:57:58,749
any darker or lighter than the surrounding surface. Over.

393
00:57:58,749 --> 00:58:01,209

TRANQUILITY The ones that I saw back in the back end of the spacecraft appeared to be

394
00:58:01,209 --> 00:58:02,910
a good bit darker, and of course, viewed from the aft end, well, they did have the sun shining

395
00:58:02,910 --> 00:58:04,380
directly on them. It seemed as though the material had been baked somewhat and also

396
00:58:04,380 --> 00:58:05,999
scattered in a radially outward direction, but in that particular area, this feature

397
00:58:05,999 --> 00:58:07,349
didn't extend more than about 2, maybe 3 feet, from the skirt by the engine. Over.

398
00:58:07,349 --> 00:58:08,650
CAPCOM Roger. Understand that near the aft end up to the eve, that the rays did appear

399
00:58:08,650 --> 00:58:10,049
to be darker. I understand, Buzz, that these were, this was the appearance of the material

400
00:58:10,049 --> 00:58:14,180
which had been uncovered by the rays that appeared darker for 2 or 3 feet extending

401
00:58:14,180 --> 00:58:15,219
out. Is that correct?

402
00:58:15,219 --> 00:58:19,089
TRANQUILITY No, I wouldn't say it was necessarily material that had been uncovered. I think

403
00:58:19,089 --> 00:58:20,529
some of the material might have been baked

or in some way covered to be more cohesive

404
00:58:20,529 --> 00:58:20,709
and perhaps go together or something - I don't know. Now, in other areas, before we started

405
00:58:20,709 --> 00:58:20,979
traveling around out front, why we could see that small erosion had taken place in a radially

406
00:58:20,979 --> 00:58:22,019
outward direction, but it had left no significant mark on the surface other than Just having

407
00:58:22,019 --> 00:58:23,140
eroded it away. Now, it was different back in the, right under the skirt itself. It seems

408
00:58:23,140 --> 00:58:25,579
as though the surface had been baked in a streak fashion, and I think a couple of pictures

409
00:58:25,579 --> 00:58:27,589
on film will show that. But that didn't extend very far. Over.

410
00:58:27,589 --> 00:58:29,769
CAPCOM Roger, Tranquility. And this baked appearance is great concern that you described,

411
00:58:29,769 --> 00:58:33,119
at least the suggestion is that it was due to the heat of the engine at any rate. Next

412
00:58:33,119 --> 00:58:33,349
subject, did…

413
00:58:33,349 --> 00:58:33,799
TRANQUILITY I believe so.

414
00:58:33,799 --> 00:58:37,979
CAPCOM Roger. Next subject, did either of
the solar panels on the PSE touch the surface

415
00:58:37,979 --> 00:58:40,140
of the moon during deployment? Over.

416
00:58:40,140 --> 00:58:45,529
TRANQUILITY I think that two corners did touch
just when it was deployed but both of them

417
00:58:45,529 --> 00:58:50,069
did come out at the same time. It unfolded
a little unevenly and of course the crane

418
00:58:50,069 --> 00:58:51,199
that it was on was a little bit, not quite
as level as it was, as I would like to have

419
00:58:51,199 --> 00:58:52,759
it. I think that two corners did touch to
about 1 inch, 3/4 to 1/2 an inch deep and

420
00:58:52,759 --> 00:58:57,239
maybe along the bottom, it might have been
maybe 3 inches leaving a small triangular

421
00:58:57,239 --> 00:59:00,890
coating on two of the corners and I think
these are on the western ones. Over.

422
00:59:00,890 --> 00:59:03,819
CAPCOM Roger. Understand the description and
the next subject on the 2 core tubes which

423
00:59:03,819 --> 00:59:05,609
you collected, how did the driving force required
to collect the two core tubes which you collected,

424

00:59:05,609 --> 00:59:08,930
how did the driving force required to collect
these tubes compare? Was there any difference?

425
00:59:08,930 --> 00:59:09,119
Over.

426
00:59:09,119 --> 00:59:10,979
TRANQUILITY Not significantly. I could get
down to about the first 2 inches without much

427
00:59:10,979 --> 00:59:17,979
of a problem and then as I would pound it
in about as hard as I could do it and the

428
00:59:27,719 --> 00:59:29,630
second one took 2 hands on the handle and
I was putting pretty good dents in the top

429
00:59:29,630 --> 00:59:32,199
of the extension rod and it just wouldn't
go much more than - I think the total depth

430
00:59:32,199 --> 00:59:33,109
might have been about 8 or 9 inches. But even
there it didn't, for some reason, it didn't

431
00:59:33,109 --> 00:59:34,019
seem to want to stand up straight. In other
words, I'd keep driving it in and it would

432
00:59:34,019 --> 00:59:36,459
dig some sort of a hole but it wouldn't , just
penetrate in a way that would support it and

433
00:59:36,459 --> 00:59:36,599
I'd keep it from falling over if that makes
any sense at all!. It didn't really to me.

434
00:59:36,599 --> 00:59:36,699

Over.

435
00:59:37,499 --> 00:59:38,819
the two samples and that in each case you
got down about 2 inches without any problems

436
00:59:38,819 --> 00:59:38,849
and then had to continuing hammering rather
vigorously in order to continue driving it

437
00:59:38,849 --> 00:59:39,079
into a total depth of 8 or 9 inches and even
at that point the rods did not want to stay

438
00:59:39,079 --> 00:59:39,348
vertical, that they'd tend to fall over on
you even after pounding in that far. Is that

439
00:59:39,349 --> 00:59:39,739
I noticed when I took the bit off that the
material was quite well packed, a good bit

440
00:59:39,739 --> 00:59:40,559
darker, and it, the way it adhered to the
cord tube gave me the distinct impression

441
00:59:40,559 --> 00:59:40,650
of being moist. Over.

442
00:59:40,650 --> 00:59:40,949
CAPCOM Roger. I understand the general impression
of being moist as packed in the cord tube.

443
00:59:40,949 --> 00:59:41,269
Next question. We did copy your comments prior
to the EVA of your general description of

444
00:59:41,269 --> 00:59:41,589
the area. We wonder if either of you would
have any more lengthy description or more

445
00:59:41,589 --> 00:59:41,849
detailed description of the general summary
of the geology of the area. Over.

446
00:59:41,849 --> 00:59:42,459
TRANQUILITY We'll postpone our answer to that
one until tomorrow, okay?

447
00:59:42,459 --> 00:59:43,729
CAPCOM Yes indeed. That will be fine. Just
a couple more here and I think these may not

448
00:59:43,729 --> 00:59:45,079
be quite as lengthy as number 7 there. Can
you estimate, estimate the strokes of the

449
00:59:45,079 --> 00:59:45,150
primary and secondary struts? Over.

450
00:59:45,150 --> 00:59:45,390
TRANQUILITY Well, I could do it like this.
Owen. About all the struts are about equally

451
00:59:45,390 --> 00:59:45,660
stroked and the height from the ground to
the first step is about 3 feet or maybe 3

452
00:59:45,660 --> 00:59:45,680
? feet.

453
00:59:45,680 --> 00:59:45,939
CAPCOM Roger. Understand, Nell. Next topic.
Just after landing you pointed out that there

454
00:59:45,939 --> 00:59:46,609
was a hill to the west along the plus Z axis
from the LM. Are there large rocks in that

455

00:59:46,609 --> 00:59:47,419
TRANQUILITY No, I don't believe so. I think
that it's about as level as any other area

456
00:59:47,420 --> 00:59:49,859
the final question. You commented, Nell, that
on your flight to the landing spot you had

457
00:59:49,859 --> 00:59:56,859
passed over a football field size crater containing
rather large blocks of solid rock, perhaps

458
00:59:59,329 --> 01:00:06,329
10 to 15 feet in size. Can you estimate the
distance to this football size crater from

459
01:00:06,699 --> 01:00:10,989
your present position? Over.

460
01:00:10,989 --> 01:00:17,609
TRANQUILITY I thought we'd be close enough
so that when we got outside we could see its

461
01:00:17,609 --> 01:00:24,609
rim back there but I couldn't. But I don't
think that we're more than a half mile beyond

462
01:00:28,189 --> 01:00:31,789
it. That is a half mile west of it.

463
01:00:31,789 --> 01:00:38,789
CAPCOM Roger, so you estimate your present
position less than a half mile approximately

464
01:00:38,809 --> 01:00:41,709
west of this large crater. Over.

465
01:00:41,709 --> 01:00:43,989
TRANQUILITY That's correct.

466
01:00:43,989 --> 01:00:50,759
CAPCOM Okay, you all. That takes care of the questions from our geologists for tonight