



Apollo 11: Crew Activities



1
00:00:10,050 --> 00:00:14,390
[Applause]

2
00:00:14,400 --> 00:00:19,269
this is the commander of apollo 11.

3
00:00:19,279 --> 00:00:22,950
a hundred years ago

4
00:00:28,950 --> 00:00:25,349
jules verne

5
00:00:31,830 --> 00:00:28,960
wrote a book about a voiced department

6
00:00:33,590 --> 00:00:31,840
his spaceship colombia

7
00:00:36,950 --> 00:00:33,600
took off

8
00:00:42,389 --> 00:00:40,470
and landed in the pacific ocean

9
00:00:44,350 --> 00:00:42,399
after

10
00:00:45,910 --> 00:00:44,360
completing the trip to the men

11
00:00:48,709 --> 00:00:45,920
[Applause]

12
00:00:50,069 --> 00:00:48,719
it is appropriate to us to share with

13
00:00:52,790 --> 00:00:50,079

you

14

00:00:54,310 --> 00:00:52,800

some of the reflections

15

00:00:59,189 --> 00:00:54,320

of the crew

16

00:01:02,709 --> 00:01:00,310

complete

17

00:01:06,310 --> 00:01:02,719

its rendezvous with the planet earth

18

00:01:12,230 --> 00:01:06,320

and the fan pacific ocean tomorrow

19

00:01:19,030 --> 00:01:15,670

roger this trip of ours to the moon

20

00:01:20,870 --> 00:01:19,040

may have looked to you simple or easy

21

00:01:22,710 --> 00:01:20,880

i'd like to assure you that that has not

22

00:01:25,109 --> 00:01:22,720

been the case

23

00:01:28,469 --> 00:01:25,119

the saturn v rocket which put us into

24

00:01:29,910 --> 00:01:28,479

orbit is an incredibly complicated piece

25

00:01:33,030 --> 00:01:29,920

of machinery

26
00:01:34,390 --> 00:01:33,040
every piece of which works flawlessly

27
00:01:36,550 --> 00:01:34,400
this computer

28
00:01:40,390 --> 00:01:36,560
up above my head

29
00:01:42,310 --> 00:01:40,400
has a 38 000 word vocabulary

30
00:01:44,550 --> 00:01:42,320
each word of which has been very

31
00:02:06,149 --> 00:01:44,560
carefully chosen to be of the utmost

32
00:02:06,159 --> 00:02:12,869
this engine fires for 12 minutes

33
00:02:16,070 --> 00:02:14,470
just thinking i think this is the first

34
00:02:18,550 --> 00:02:16,080
burn in the vicinity of the moon that's

35
00:02:25,350 --> 00:02:18,560
on this side

36
00:02:27,350 --> 00:02:25,360
[Applause]

37
00:02:27,970 --> 00:02:27,360
first descent proposing system down on

38
00:02:29,430 --> 00:02:27,980

this side

39

00:02:31,110 --> 00:02:29,440

[Applause]

40

00:02:32,790 --> 00:02:31,120

any burn of any magnitude at all we'll

41

00:02:34,390 --> 00:02:32,800

see all of our corrective burns around

42

00:02:39,830 --> 00:02:34,400

the back side of the moon

43

00:02:42,340 --> 00:02:41,430

that's right and by that time they're on

44

00:02:45,110 --> 00:02:42,350

the far side again

45

00:02:47,270 --> 00:02:45,120

[Applause]

46

00:02:49,830 --> 00:02:47,280

eagle houston if you'd like to try high

47

00:02:52,630 --> 00:02:49,840

gain pitch two one two yellow three

48

00:02:52,640 --> 00:02:56,080

a minute and a half

49

00:03:10,710 --> 00:03:05,310

[Applause]

50

00:03:15,750 --> 00:03:13,350

coming up on one minute to ignition

51
00:03:17,090 --> 00:03:15,760
one minute to ignition and 13 minutes to

52
00:03:25,310 --> 00:03:17,100
land

53
00:03:25,320 --> 00:03:31,350
[Applause]

54
00:03:33,750 --> 00:03:32,390
don't know that we could take the

55
00:03:34,130 --> 00:03:33,760
tension if they decide to go around

56
00:03:39,350 --> 00:03:34,140
again

57
00:03:46,310 --> 00:03:40,680
40 seconds

58
00:03:49,110 --> 00:03:46,320
[Applause]

59
00:03:49,890 --> 00:03:49,120
[Music]

60
00:03:56,470 --> 00:03:49,900
30 seconds

61
00:04:02,390 --> 00:03:58,710
current altitude about 46 000 feet

62
00:04:05,910 --> 00:04:04,149
i'm just wondering is

63
00:04:07,509 --> 00:04:05,920

as mule trask is sitting here with us

64

00:04:08,630 --> 00:04:07,519

how the moon looks to him as we're

65

00:04:10,149 --> 00:04:08,640

coming over do you think that's the

66

00:04:11,270 --> 00:04:10,159

right place yeah that looks like the

67

00:04:13,620 --> 00:04:11,280

right place

68

00:04:23,350 --> 00:04:13,630

we should have a countdown

69

00:04:26,150 --> 00:04:23,360

[Applause]

70

00:04:28,390 --> 00:04:26,160

ignition 10 10 throttle i suppose that

71

00:04:29,189 --> 00:04:28,400

is wally yes it'll be programmed up as

72

00:04:30,710 --> 00:04:29,199

we

73

00:04:32,070 --> 00:04:30,720

as they get closer

74

00:04:37,590 --> 00:04:32,080

to the surface i think you have that

75

00:04:41,830 --> 00:04:39,189

that's interesting

76

00:04:43,430 --> 00:04:41,840

maybe we're having

77

00:04:45,590 --> 00:04:43,440

little ironic disturbance from the

78

00:04:47,189 --> 00:04:45,600

engine at this point uh no problem just

79

00:04:50,230 --> 00:04:47,199

the fact that might be trouble getting

80

00:04:53,270 --> 00:04:51,510

what it would mean then that we would

81

00:05:08,230 --> 00:04:53,280

not have communication with them in this

82

00:05:08,240 --> 00:05:12,150

animation shows the engine firing

83

00:05:17,189 --> 00:05:14,070

the lunar module is proceeding

84

00:05:19,430 --> 00:05:17,199

[Applause]

85

00:05:20,390 --> 00:05:19,440

from right to left on your screen i'll

86

00:05:21,870 --> 00:05:20,400

leave it

87

00:05:37,270 --> 00:05:21,880

relay to

88

00:05:41,830 --> 00:05:40,469

and everything's looking good here over

89

00:05:42,800 --> 00:05:41,840

i think you can get a little excitement

90

00:05:46,790 --> 00:05:42,810

in charlie duke's voice

91

00:05:49,189 --> 00:05:46,800

[Applause]

92

00:05:51,749 --> 00:05:49,199

eagle houston has to go around angled uh

93

00:05:58,629 --> 00:05:51,759

s-band pitch minus niner y'all plus one

94

00:05:58,639 --> 00:06:07,110

happy

95

00:06:12,469 --> 00:06:08,710

yeah communication center really in good

96

00:06:15,270 --> 00:06:13,990

very closely

97

00:06:19,029 --> 00:06:15,280

roger

98

00:06:19,039 --> 00:06:23,270

oh boy

99

00:06:23,280 --> 00:06:31,189

10 minutes to a landing on the moon

100

00:06:36,790 --> 00:06:32,950

i think it's been almost 10 years since

101
00:06:40,870 --> 00:06:38,150
two minutes 20 seconds everything

102
00:06:49,510 --> 00:06:40,880
looking good we show altitude about 47

103
00:06:54,550 --> 00:06:53,029
now in about four minutes from now

104
00:06:57,909 --> 00:06:54,560
they will get their first look at the

105
00:06:59,589 --> 00:06:57,919
landing area so far now their their

106
00:07:02,070 --> 00:06:59,599
heads are getting a little fluctuation

107
00:07:03,670 --> 00:07:02,080
in the uh

108
00:07:06,070 --> 00:07:03,680
now

109
00:07:07,189 --> 00:07:06,080
roger

110
00:07:09,589 --> 00:07:07,199
baby huh

111
00:07:11,029 --> 00:07:09,599
they are face down windows down you're

112
00:07:12,469 --> 00:07:11,039
still looking good at three coming up

113
00:07:13,510 --> 00:07:12,479

three minutes

114

00:07:16,480 --> 00:07:13,520

their feet

115

00:07:20,870 --> 00:07:16,490

forward

116

00:07:25,350 --> 00:07:23,029

that remark on that ac voltage was a

117

00:07:28,390 --> 00:07:25,360

meter possibly uh and the ground is not

118

00:07:31,920 --> 00:07:29,470

they rolled

119

00:07:42,309 --> 00:07:31,930

[Music]

120

00:07:46,950 --> 00:07:44,070

in about three minutes now they get that

121

00:07:50,550 --> 00:07:46,960

first look when they pitch up

122

00:07:52,070 --> 00:07:50,560

going to more of an upright position

123

00:07:55,749 --> 00:07:52,080

and they can look forward out their

124

00:07:59,589 --> 00:07:57,430

at that point they'll be about three and

125

00:08:01,909 --> 00:07:59,599

a half miles high

126
00:08:12,629 --> 00:08:01,919
making about 103 miles an hour forward

127
00:08:12,639 --> 00:08:33,960
i think it's gonna stop

128
00:08:33,970 --> 00:08:52,470
[Applause]

129
00:08:55,910 --> 00:08:54,470
at that point they could abort the

130
00:08:56,950 --> 00:08:55,920
landing at that point if there had been

131
00:09:06,150 --> 00:08:56,960
a no-go decision

132
00:09:14,310 --> 00:09:06,160
[Applause]

133
00:09:14,320 --> 00:09:33,269
seven minutes left before landing

134
00:09:33,279 --> 00:09:39,150
our front window

135
00:09:39,160 --> 00:09:48,949
[Music]

136
00:09:56,470 --> 00:09:53,509
good radar data altitude now 33 500 feet

137
00:09:58,790 --> 00:09:56,480
hal wasn't too far off

138
00:10:16,230 --> 00:09:58,800

i suspect that uh howe may be uh just

139

00:10:16,240 --> 00:10:23,910

throttle down

140

00:10:28,230 --> 00:10:26,630

we're still go altitude 27 000 feet same

141

00:10:30,389 --> 00:10:28,240

alarm and it appears to come up when we

142

00:10:32,630 --> 00:10:30,399

have a 1668 up

143

00:10:35,430 --> 00:10:32,640

roger copy

144

00:10:38,870 --> 00:10:35,440

what's this alarm wally it's a go uh

145

00:10:44,790 --> 00:10:40,630

function uh that's coming up on the

146

00:10:52,470 --> 00:10:46,870

a verb noun combination no problem as i

147

00:10:55,750 --> 00:10:54,310

better in the simulator

148

00:10:57,030 --> 00:10:55,760

right

149

00:11:05,590 --> 00:10:57,040

they say it's better than the simulator

150

00:11:09,509 --> 00:11:07,509

crowds around this country and all over

151
00:11:11,509 --> 00:11:09,519
the world are watching this listening to

152
00:11:13,990 --> 00:11:11,519
these communities altitude now 21 000

153
00:11:15,750 --> 00:11:14,000
feet still looking good this is the

154
00:11:17,190 --> 00:11:15,760
international rivals building kennedy

155
00:11:21,670 --> 00:11:17,200
airport with

156
00:11:21,680 --> 00:11:25,750
you're looking right now

157
00:11:31,190 --> 00:11:28,790
okay i'm still on flu uh so we may tend

158
00:11:33,350 --> 00:11:31,200
to lose as we gradually picked over let

159
00:11:35,269 --> 00:11:33,360
me try auto again now see what happens

160
00:11:37,110 --> 00:11:35,279
roger he's talking about the high gain

161
00:11:40,829 --> 00:11:37,120
antenna okay

162
00:11:44,630 --> 00:11:40,839
roger we got good data makes the job

163
00:11:46,790 --> 00:11:44,640

easier down to just 14 miles to go and

164

00:11:48,310 --> 00:11:46,800

four and a half minutes seven minutes 30

165

00:11:51,750 --> 00:11:48,320

seconds into the burn four and a half

166

00:11:57,750 --> 00:11:51,760

minutes left in this era altitude 16 300

167

00:12:01,910 --> 00:11:59,829

oh boy

168

00:12:03,030 --> 00:12:01,920

let's break the way the communications

169

00:12:08,069 --> 00:12:03,040

is working

170

00:12:14,389 --> 00:12:09,750

72

171

00:12:17,750 --> 00:12:15,350

per second

172

00:12:19,190 --> 00:12:17,760

uh twitch over time please dude

173

00:12:22,790 --> 00:12:19,200

roger stand by you're looking great at

174

00:12:28,710 --> 00:12:24,470

correction on that velocity now reading

175

00:12:33,430 --> 00:12:28,720

760 feet per second to p64

176

00:12:37,350 --> 00:12:35,590

that's pretty slow for space flying it

177

00:12:39,110 --> 00:12:37,360

is it's the slowest man has ever flown

178

00:12:41,430 --> 00:12:39,120

in space it sure is title says we're

179

00:12:47,110 --> 00:12:41,440

going altitude 9200 feet 8 30 you're

180

00:12:51,990 --> 00:12:49,350

they're just about right 120

181

00:12:54,870 --> 00:12:52,000

high gates

182

00:12:57,110 --> 00:12:54,880

that's the 7600 foot level

183

00:12:58,790 --> 00:12:57,120

1.4 miles high when they get down to a

184

00:12:59,509 --> 00:12:58,800

speed of 98 miles an hour and they're

185

00:13:00,949 --> 00:12:59,519

just

186

00:13:02,790 --> 00:13:00,959

a little under five miles from the

187

00:13:04,550 --> 00:13:02,800

landing site that point they can pitch

188

00:13:16,310 --> 00:13:04,560

forward get a really good view you're

189

00:13:22,389 --> 00:13:18,190

less than a mile from the moon service

190

00:13:24,629 --> 00:13:22,399

manual is good roger copy

191

00:13:25,990 --> 00:13:24,639

altitude 4200 and your goal for landing

192

00:13:29,269 --> 00:13:26,000

over oh

193

00:13:46,550 --> 00:13:31,269

as you understand go for landing 3000

194

00:13:51,910 --> 00:13:48,790

47 degrees dragon

195

00:13:59,269 --> 00:13:53,509

that's these communications too within

196

00:14:04,310 --> 00:14:02,230

altitude 1600 oh this is they've got a

197

00:14:05,590 --> 00:14:04,320

good look at their site now this is the

198

00:14:09,189 --> 00:14:05,600

the critical times they're going to

199

00:14:13,189 --> 00:14:11,509

apparently they're going to

200

00:14:15,189 --> 00:14:13,199

copy it

201
00:14:22,790 --> 00:14:15,199
35 degrees

202
00:14:24,629 --> 00:14:22,800
700 feet 21 down 33 degrees

203
00:14:28,230 --> 00:14:24,639
oh the data is coming in beautiful 100

204
00:14:28,240 --> 00:14:38,550
540 feet down at 30 out of 15.

205
00:14:45,110 --> 00:14:41,910
take 400 feet down at nine

206
00:14:47,990 --> 00:14:45,120
skate forward

207
00:14:54,470 --> 00:14:48,000
350 feet down at four

208
00:14:56,790 --> 00:14:55,509
here uh

209
00:14:59,030 --> 00:14:56,800
tag done

210
00:15:01,509 --> 00:14:59,040
horizontal velocity

211
00:15:03,509 --> 00:15:01,519
standard feet down three and a half 47

212
00:15:04,790 --> 00:15:03,519
forward

213
00:15:09,590 --> 00:15:04,800

hold up

214

00:15:09,600 --> 00:15:22,870
70.

215

00:15:22,880 --> 00:15:25,990
forward

216

00:15:32,230 --> 00:15:28,550
altitude velocity light

217

00:15:35,670 --> 00:15:32,240
and down 220 feet

218

00:15:43,670 --> 00:15:37,990
forward coming down nicely 200 feet four

219

00:15:47,910 --> 00:15:46,150
six sixty six six pass down five and a

220

00:15:51,269 --> 00:15:47,920
half down

221

00:15:57,590 --> 00:15:52,470
good

222

00:16:01,350 --> 00:15:59,670
100 feet three and a half down nine

223

00:16:03,350 --> 00:16:01,360
forward

224

00:16:05,530 --> 00:16:03,360
five percent

225

00:16:06,949 --> 00:16:05,540
underneath

226

00:16:09,749 --> 00:16:06,959

[Applause]

227

00:16:11,110 --> 00:16:09,759

okay 75 feet start looking good down a

228

00:16:14,550 --> 00:16:11,120

half

229

00:16:20,470 --> 00:16:16,710

60 seconds

230

00:16:24,389 --> 00:16:22,380

down two and a half

231

00:16:25,430 --> 00:16:24,399

[Applause]

232

00:16:27,990 --> 00:16:25,440

forward

233

00:16:31,829 --> 00:16:29,670

at

234

00:16:33,670 --> 00:16:31,839

40 feet down two and a half picking up

235

00:16:35,990 --> 00:16:33,680

some dust

236

00:16:37,670 --> 00:16:36,000

three feet two and a half down straight

237

00:16:39,350 --> 00:16:37,680

shadow

238

00:16:41,590 --> 00:16:39,360

four forward

239

00:16:42,470 --> 00:16:41,600

little

240

00:16:43,590 --> 00:16:42,480

six

241

00:16:49,780 --> 00:16:43,600

and a half

242

00:17:17,110 --> 00:17:06,559

[Applause]

243

00:17:21,829 --> 00:17:18,789

the eagle has landed

244

00:17:23,510 --> 00:17:21,839

roger tranquility we copy on the ground

245

00:17:25,040 --> 00:17:23,520

you got a bunch of guys about to turn

246

00:17:27,909 --> 00:17:25,050

blue we're bringing it again

247

00:17:30,560 --> 00:17:27,919

[Laughter]

248

00:17:45,590 --> 00:17:30,570

oh boy thank you

249

00:17:50,549 --> 00:17:48,549

i'm just trying to hold on to my breath

250

00:17:52,470 --> 00:17:50,559

that is really something

251

00:17:53,990 --> 00:17:52,480

very smooth touchdown

252

00:17:56,390 --> 00:17:54,000

kind of nice to be aboard on this one

253

00:18:01,669 --> 00:17:59,110

you know we've been wondering what

254

00:18:03,909 --> 00:18:01,679

what this guy armstrong or alden would

255

00:18:06,390 --> 00:18:03,919

say stepped foot on the moon which comes

256

00:18:08,310 --> 00:18:06,400

a little bit later now

257

00:18:10,789 --> 00:18:08,320

and just to hear him do it

258

00:18:34,470 --> 00:18:10,799

we're left here absolutely with dry

259

00:18:38,310 --> 00:18:36,470

it's a great simulation that you can see

260

00:18:41,750 --> 00:18:38,320

there if you could see it

261

00:18:44,390 --> 00:18:41,760

that little fly spec is supposed to be a

262

00:18:46,070 --> 00:18:44,400

see they must be in a perfect position

263

00:18:50,470 --> 00:18:46,080

upright we've heard no

264

00:18:54,620 --> 00:18:52,630

just a little dust even that concern was

265

00:18:59,029 --> 00:18:54,630

erased

266

00:19:05,830 --> 00:19:00,840

and there they sit on the moon

267

00:19:09,110 --> 00:19:05,840

[Applause]

268

00:19:12,470 --> 00:19:09,120

just exactly nominal exactly of the

269

00:19:14,470 --> 00:19:12,480

fight plan all the way down

270

00:19:15,830 --> 00:19:14,480

man planning this thing on the surface

271

00:19:18,150 --> 00:19:15,840

of the earth

272

00:19:22,390 --> 00:19:18,160

all right

273

00:19:22,400 --> 00:19:37,430

that's

274

00:19:39,830 --> 00:19:38,789

it's interesting that they're referring

275

00:19:52,630 --> 00:19:39,840

to

276
00:19:54,150 --> 00:19:52,640
there's not much new going on these days

277
00:19:58,070 --> 00:19:54,160
i think that one's a race for a long

278
00:20:02,870 --> 00:20:00,789
i'd like to know what some of those kids

279
00:20:06,070 --> 00:20:02,880
stay no stay will be for

280
00:20:08,710 --> 00:20:06,080
the t2 event that is at

281
00:20:11,430 --> 00:20:08,720
21 minutes 26 seconds after initiation

282
00:20:15,029 --> 00:20:11,440
of powered descent

283
00:20:16,789 --> 00:20:15,039
went up telemetry command reset to uh

284
00:20:18,630 --> 00:20:16,799
copy out

285
00:20:21,830 --> 00:20:18,640
this is a nine minute period that they

286
00:20:23,990 --> 00:20:21,840
have in which they could uh

287
00:20:26,630 --> 00:20:24,000
under certain phasing conditions should

288
00:20:29,270 --> 00:20:26,640

take off again and make uh re

289

00:20:32,070 --> 00:20:29,280

re-rendezvous within two orbits of the

290

00:20:34,390 --> 00:20:32,080

nominal yes uh but they're not they now

291

00:20:36,710 --> 00:20:34,400

have the st they stay for that period so

292

00:20:40,549 --> 00:20:36,720

they're apparently not even considering

293

00:20:45,190 --> 00:20:42,710

official time for that touchdown of 102

294

00:20:59,190 --> 00:20:45,200

hours 45 minutes 42 seconds and we will

295

00:21:03,190 --> 00:21:00,630

i'd like to know what those kids are

296

00:21:04,470 --> 00:21:03,200

kind of poo-pooing this thing

297

00:21:05,990 --> 00:21:04,480

they're saying right at this moment i'd

298

00:21:11,669 --> 00:21:06,000

like to know what they thought in those

299

00:21:30,149 --> 00:21:13,750

how can anybody turn off of a world like

300

00:21:35,190 --> 00:21:32,950

they had quite a bit of tolerance

301
00:21:37,190 --> 00:21:35,200
in that landing speed they could have

302
00:21:39,590 --> 00:21:37,200
gotten up to almost seven miles an hour

303
00:22:12,070 --> 00:21:39,600
6.8 miles an hour the struts are made to

304
00:22:15,990 --> 00:22:13,830
and then the right-hand portion of our

305
00:22:18,390 --> 00:22:16,000
screen right now we can see messier

306
00:22:19,669 --> 00:22:18,400
alpha and bravo with the light-colored

307
00:22:36,390 --> 00:22:19,679
rays

308
00:22:40,149 --> 00:22:37,909
i don't know if you can make that but in

309
00:22:42,710 --> 00:22:40,159
the sea of fertility there are a number

310
00:22:46,310 --> 00:22:42,720
of uh cradle craters that are just

311
00:22:50,149 --> 00:22:46,320
barely discernible old old craters whose

312
00:22:52,470 --> 00:22:50,159
outlines are just barely able to be seen

313
00:22:55,350 --> 00:22:52,480

i think we can make them out

314

00:22:57,830 --> 00:22:55,360

the color uh really enhances our ability

315

00:23:00,390 --> 00:22:57,840

to discern features and craters

316

00:23:06,230 --> 00:23:00,400

uh over what we uh see in real time on

317

00:23:10,310 --> 00:23:08,310

right the uh at these low sun angles

318

00:23:13,190 --> 00:23:10,320

there's no trace of brown it's uh now

319

00:23:14,710 --> 00:23:13,200

returned to a very uh gray appearance

320

00:23:16,870 --> 00:23:14,720

and uh

321

00:23:19,110 --> 00:23:16,880

like uh the acreage does it has a look

322

00:23:20,390 --> 00:23:19,120

of plaster of paris to it at this sun

323

00:24:07,830 --> 00:23:20,400

angle which

324

00:24:31,430 --> 00:24:09,190

we're getting a good view of mount

325

00:24:44,630 --> 00:24:32,870

right here we're getting a good view of

326
00:24:51,029 --> 00:24:47,750
and now we're looking at uh

327
00:25:07,510 --> 00:24:51,039
what we call boot hill

328
00:25:29,590 --> 00:25:08,870
the

329
00:25:34,549 --> 00:25:31,190
roger and for your information your

330
00:25:42,789 --> 00:25:34,559
current altitude is 148 nautical miles

331
00:25:46,950 --> 00:25:45,750
i'm unable to uh determine altitude at

332
00:25:48,710 --> 00:25:46,960
all looking out the window i couldn't

333
00:25:49,990 --> 00:25:48,720
feel when you're down at 60 or up at

334
00:25:51,510 --> 00:25:50,000
170.

335
00:25:56,549 --> 00:25:51,520
i bet you could tell if you were down at

336
00:25:56,559 --> 00:26:11,269
clickbait

337
00:26:18,789 --> 00:26:15,269
we're passing some steep ridges here uh

338
00:26:21,350 --> 00:26:18,799

the edges of old craters that

339

00:26:37,269 --> 00:26:21,360
were photographed by apollo 10

340

00:26:41,350 --> 00:26:39,190
observe that also steve even from this

341

00:26:46,710 --> 00:26:41,360
altitude you've got quite a shadow being

342

00:27:09,269 --> 00:26:49,430
the entire surface is getting

343

00:27:12,310 --> 00:27:11,029
roger we show you a little over one

344

00:27:23,830 --> 00:27:12,320
minute from the terminator at the

345

00:27:27,830 --> 00:27:25,750
uh how's the brightness of uh the

346

00:27:29,590 --> 00:27:27,840
picture you're receiving uh i think we

347

00:27:34,070 --> 00:27:29,600
ought to open up the f-stop summit real

348

00:27:38,789 --> 00:27:36,710
yeah the brightness is still doing uh

349

00:27:40,870 --> 00:27:38,799
quite well you can go ahead and

350

00:27:43,110 --> 00:27:40,880
open it up a stop or two the

351
00:27:57,750 --> 00:27:43,120
automatic light level compensation seems

352
00:27:57,760 --> 00:28:15,110
that's a good picture

353
00:28:19,430 --> 00:28:17,110
right there and to the left

354
00:28:20,870 --> 00:28:19,440
the uh crater

355
00:28:22,710 --> 00:28:20,880
the largest of the crater near the

356
00:28:24,549 --> 00:28:22,720
center of the victor right now is maskel

357
00:28:26,310 --> 00:28:24,559
and w this is the possession check

358
00:28:28,070 --> 00:28:26,320
during descent

359
00:28:30,549 --> 00:28:28,080
at

360
00:28:33,350 --> 00:28:30,559
about three minutes and 39 seconds and

361
00:28:36,070 --> 00:28:33,360
it's our downrange position check and

362
00:28:37,990 --> 00:28:36,080
cross range position check prior to

363
00:28:39,669 --> 00:28:38,000

uh going over

364

00:28:42,389 --> 00:28:39,679

face up

365

00:28:45,669 --> 00:28:42,399

uh to acquire the landing radar

366

00:28:47,029 --> 00:28:45,679

at this point we would be unable to see

367

00:28:49,110 --> 00:28:47,039

the

368

00:28:52,149 --> 00:28:49,120

surface below us