



1  
00:00:07,349 --> 00:00:06,309  
i believe that this nation should commit

2  
00:00:09,350 --> 00:00:07,359  
itself

3  
00:00:11,509 --> 00:00:09,360  
to achieving the goal

4  
00:00:13,350 --> 00:00:11,519  
before this decade is out

5  
00:00:16,470 --> 00:00:13,360  
of landing a man on the moon and

6  
00:00:18,950 --> 00:00:16,480  
returning him safely to the earth we

7  
00:00:21,590 --> 00:00:18,960  
choose to go to the moon in this decade

8  
00:00:24,550 --> 00:00:21,600  
and do the other things not because they

9  
00:00:26,550 --> 00:00:24,560  
are easy but because they are hard

10  
00:00:28,870 --> 00:00:26,560  
because that goal

11  
00:00:32,069 --> 00:00:28,880  
will serve to organize and measure the

12  
00:00:36,389 --> 00:00:32,079  
best of our energies and skills

13  
00:00:38,630 --> 00:00:36,399

the date was may 25th 1961.

14

00:00:40,389 --> 00:00:38,640  
thrust into a race for international

15

00:00:42,549 --> 00:00:40,399  
space supremacy

16

00:00:44,869 --> 00:00:42,559  
president john f kennedy passed the

17

00:00:59,990 --> 00:00:44,879  
torch to a young national aeronautics

18

00:01:04,869 --> 00:01:02,229  
the complex sophisticated space shuttle

19

00:01:07,510 --> 00:01:04,879  
of today with its ability to routinely

20

00:01:10,230 --> 00:01:07,520  
carry six or more people into space

21

00:01:15,190 --> 00:01:10,240  
began as a tiny capsule where even one

22

00:01:17,429 --> 00:01:15,200  
person felt cramped the mercury program

23

00:01:19,109 --> 00:01:17,439  
the seven flights of project mercury

24

00:01:20,469 --> 00:01:19,119  
proved that humans could survive in

25

00:01:23,190 --> 00:01:20,479  
space

26  
00:01:24,630 --> 00:01:23,200  
the next step was gemini expanding our

27  
00:01:26,870 --> 00:01:24,640  
reach

28  
00:01:29,429 --> 00:01:26,880  
the two unmanned and 10-man flights of

29  
00:01:31,429 --> 00:01:29,439  
project gemini subjected man and

30  
00:01:33,590 --> 00:01:31,439  
equipment to flights of up to two weeks

31  
00:01:36,469 --> 00:01:33,600  
in duration

32  
00:02:20,229 --> 00:01:36,479  
america thrilled to the first spacewalk

33  
00:02:24,309 --> 00:02:22,229  
the cumulative experience of these early

34  
00:02:26,869 --> 00:02:24,319  
man flights gave nasa a foundation of

35  
00:02:29,110 --> 00:02:26,879  
confidence for its next project

36  
00:02:32,070 --> 00:02:29,120  
apollo the national effort that

37  
00:02:34,949 --> 00:02:32,080  
fulfilled a dream as old as humanity a

38  
00:02:37,430 --> 00:02:34,959

human on the moon

39

00:02:39,350 --> 00:02:37,440  
from mercury to apollo the space program

40

00:02:42,229 --> 00:02:39,360  
depended on the goddard space flight

41

00:02:43,990 --> 00:02:42,239  
center for its link to earth

42

00:02:46,710 --> 00:02:44,000  
for goddard was the home of the manned

43

00:02:49,670 --> 00:02:46,720  
space flight network the central control

44

00:02:51,750 --> 00:02:49,680  
for 29 ground tracking stations four

45

00:02:54,309 --> 00:02:51,760  
tracking ships and eight specially

46

00:02:56,390 --> 00:02:54,319  
modified tracking planes

47

00:02:58,309 --> 00:02:56,400  
these were scattered around the world to

48

00:03:01,509 --> 00:02:58,319  
keep in constant communication with the

49

00:03:03,509 --> 00:03:01,519  
astronauts in their vehicle

50

00:03:05,430 --> 00:03:03,519  
for a manned mission to the moon project

51  
00:03:08,710 --> 00:03:05,440  
apollo would need a monster rocket

52  
00:03:11,270 --> 00:03:08,720  
called saturn 5

53  
00:03:13,270 --> 00:03:11,280  
saturn 5 was just one item on nasa's

54  
00:03:15,270 --> 00:03:13,280  
long shopping list

55  
00:03:17,110 --> 00:03:15,280  
years of testing and designing went into

56  
00:03:19,030 --> 00:03:17,120  
preparing astronauts

57  
00:03:21,190 --> 00:03:19,040  
rockets and equipment for the first

58  
00:03:23,350 --> 00:03:21,200  
lunar landing

59  
00:03:27,750 --> 00:03:23,360  
cape canaveral soon to be named cape

60  
00:03:31,030 --> 00:03:27,760  
kennedy needed a building 525 feet tall

61  
00:03:32,869 --> 00:03:31,040  
where the saturn v the apollo spacecraft

62  
00:03:35,350 --> 00:03:32,879  
and the moon landing ship could be put

63  
00:03:38,149 --> 00:03:35,360

together atop a track carrier as big as

64

00:03:40,149 --> 00:03:38,159

a baseball diamond

65

00:03:41,750 --> 00:03:40,159

before humans could land on the moon it

66

00:03:52,070 --> 00:03:41,760

was necessary to learn about the

67

00:03:56,309 --> 00:03:53,990

in those days we were not at all sure

68

00:03:58,789 --> 00:03:56,319

about what the space environment was and

69

00:03:59,670 --> 00:03:58,799

we were very concerned about

70

00:04:09,190 --> 00:03:59,680

the

71

00:04:10,949 --> 00:04:09,200

picture taking ranger spacecraft sent

72

00:04:12,949 --> 00:04:10,959

back thousands of lunar photographs

73

00:04:14,869 --> 00:04:12,959

before crash landing into the lunar

74

00:04:16,870 --> 00:04:14,879

surface

75

00:04:19,349 --> 00:04:16,880

as the time grew closer to the historic

76  
00:04:22,390 --> 00:04:19,359  
moon landing guided crews checked and

77  
00:04:24,310 --> 00:04:22,400  
rechecked every circuit every antenna

78  
00:04:26,150 --> 00:04:24,320  
every console to assure that nothing

79  
00:04:28,150 --> 00:04:26,160  
would go wrong during this landmark

80  
00:04:29,990 --> 00:04:28,160  
mission

81  
00:04:31,830 --> 00:04:30,000  
and we were we had the responsibility of

82  
00:04:33,830 --> 00:04:31,840  
testing these facilities

83  
00:04:36,390 --> 00:04:33,840  
from an operation standpoint utilizing

84  
00:04:37,990 --> 00:04:36,400  
the facilities of nascom

85  
00:04:39,670 --> 00:04:38,000  
and we

86  
00:04:41,270 --> 00:04:39,680  
we supported 24 hours a day for a

87  
00:04:42,790 --> 00:04:41,280  
monthly period of time

88  
00:04:44,710 --> 00:04:42,800

during a program called we used to call

89

00:04:46,790 --> 00:04:44,720

it agnoff but it's apollo goss

90

00:04:49,110 --> 00:04:46,800

qualification navigation program

91

00:04:51,270 --> 00:04:49,120

where we used to track lunar orbiter

92

00:04:53,510 --> 00:04:51,280

with the 30 foot antennas parabolic

93

00:04:55,189 --> 00:04:53,520

antennas which we called usb antennas

94

00:04:56,870 --> 00:04:55,199

that were located at the demand space

95

00:04:59,110 --> 00:04:56,880

flight stations around the world

96

00:05:00,710 --> 00:04:59,120

as far as preparation for the mission

97

00:05:01,990 --> 00:05:00,720

and troubleshooting circuits when they

98

00:05:03,749 --> 00:05:02,000

would fail

99

00:05:05,990 --> 00:05:03,759

i like to think of it and i used to call

100

00:05:08,390 --> 00:05:06,000

it then the great db witch hunt because

101

00:05:11,029 --> 00:05:08,400

we had made promises to the network that

102

00:05:12,710 --> 00:05:11,039

we could exchange test tones between our

103

00:05:14,629 --> 00:05:12,720

center and the remote tracking stations

104

00:05:16,870 --> 00:05:14,639

and get those test tones back plus or

105

00:05:18,310 --> 00:05:16,880

minus three db which is a pretty

106

00:05:19,670 --> 00:05:18,320

stringent requirement for the

107

00:05:22,790 --> 00:05:19,680

air-to-ground

108

00:05:24,550 --> 00:05:22,800

astronaut voice relay circuits

109

00:05:26,950 --> 00:05:24,560

the man destined to put the first

110

00:05:28,469 --> 00:05:26,960

footprint on the moon was commander neil

111

00:05:30,710 --> 00:05:28,479

a armstrong

112

00:05:32,629 --> 00:05:30,720

a former nasa test pilot who had

113

00:05:35,029 --> 00:05:32,639

experience in space during project

114

00:05:38,310 --> 00:05:35,039

gemini

115

00:05:40,390 --> 00:05:38,320

edwin e aldrin jr known as buzz who

116

00:05:41,990 --> 00:05:40,400

would be the second man on the moon had

117

00:05:44,310 --> 00:05:42,000

a doctor of science degree in

118

00:05:46,150 --> 00:05:44,320

astronautics

119

00:05:48,550 --> 00:05:46,160

michael collins with a bachelor of

120

00:05:50,950 --> 00:05:48,560

science degree was to fly the apollo

121

00:05:52,790 --> 00:05:50,960

command ship in parking orbit around the

122

00:05:55,189 --> 00:05:52,800

moon while his fellow crewmen explored

123

00:06:18,870 --> 00:05:55,199

below

124

00:06:23,590 --> 00:06:21,510

armstrong went aboard at 6 54 a.m and

125

00:06:26,790 --> 00:06:23,600

took position in the apollo's left hand

126

00:06:39,189 --> 00:06:28,710

five minutes to lift off and still

127

00:06:45,830 --> 00:06:42,950

t-minus 15 seconds guidance is internal

128

00:06:46,790 --> 00:06:45,840

12 11 10

129

00:07:06,309 --> 00:06:46,800

9

130

00:07:11,430 --> 00:07:08,629

perhaps a million americans came to cape

131

00:07:15,029 --> 00:07:11,440

kennedy to see the astronauts off

132

00:07:17,350 --> 00:07:15,039

so did 3 000 newsmen from 56 countries

133

00:07:20,230 --> 00:07:17,360

half of the u.s congress and the vice

134

00:07:22,870 --> 00:07:20,240

president of the united states

135

00:07:25,270 --> 00:07:22,880

former president lyndon b johnson an

136

00:07:27,350 --> 00:07:25,280

avid space program supporter and mrs

137

00:07:29,589 --> 00:07:27,360

johnson were among those who followed

138

00:07:31,189 --> 00:07:29,599

the apollo 11 liftoff

139

00:07:36,230 --> 00:07:31,199

millions more watched the launch on

140

00:07:40,309 --> 00:07:38,390

immediately following launch

141

00:07:42,790 --> 00:07:40,319

the 30-foot antennas at goddard's

142

00:07:45,110 --> 00:07:42,800

merritt island tracking station picked

143

00:07:46,790 --> 00:07:45,120

up communications with the spacecraft

144

00:07:49,670 --> 00:07:46,800

then handed the circuits off to the

145

00:07:51,909 --> 00:07:49,680

ground station at grand bahama island

146

00:07:54,150 --> 00:07:51,919

then bermuda followed by the tracking

147

00:07:57,270 --> 00:07:54,160

ship vanguard in the atlantic ocean and

148

00:07:59,589 --> 00:07:57,280

so on around the world

149

00:08:01,510 --> 00:07:59,599

goddard was the control center for all

150

00:08:02,710 --> 00:08:01,520

the ground stations that were around the

151  
00:08:03,909 --> 00:08:02,720  
world that we're going to be supporting

152  
00:08:05,350 --> 00:08:03,919  
and that we're supporting the manna

153  
00:08:07,110 --> 00:08:05,360  
flight program

154  
00:08:09,189 --> 00:08:07,120  
nascom's the central hub of the nasa

155  
00:08:10,309 --> 00:08:09,199  
communications network and still is to

156  
00:08:12,070 --> 00:08:10,319  
this day

157  
00:08:13,830 --> 00:08:12,080  
which means all of the signals coming in

158  
00:08:15,589 --> 00:08:13,840  
from the remote tracking stations reach

159  
00:08:17,990 --> 00:08:15,599  
goddard before we hand them off to other

160  
00:08:20,710 --> 00:08:18,000  
facilities but during apollo everything

161  
00:08:22,150 --> 00:08:20,720  
came into goddard first so anything that

162  
00:08:24,710 --> 00:08:22,160  
was said

163  
00:08:26,550 --> 00:08:24,720

as an example the the astronaut voices

164

00:08:28,390 --> 00:08:26,560

would be in a digital format from the

165

00:08:29,990 --> 00:08:28,400

spacecraft but when they reached the

166

00:08:32,389 --> 00:08:30,000

tracking stations they were put into an

167

00:08:34,070 --> 00:08:32,399

analog form and traveled that way into

168

00:08:36,709 --> 00:08:34,080

goddard where we conferenced all of the

169

00:08:39,670 --> 00:08:36,719

voice circuits together and then handed

170

00:08:41,269 --> 00:08:39,680

them off to jsc to houston

171

00:08:43,829 --> 00:08:41,279

views of their home from the apollo

172

00:08:46,790 --> 00:08:43,839

spacecraft reminded earthlings the world

173

00:08:48,949 --> 00:08:46,800

over of how fragile their planet is and

174

00:08:50,870 --> 00:08:48,959

of the need to preserve and protect its

175

00:08:53,110 --> 00:08:50,880

resources

176

00:08:55,350 --> 00:08:53,120

the pictures they saw and the video

177

00:08:57,509 --> 00:08:55,360

coverage we have today would look like

178

00:08:59,509 --> 00:08:57,519

nothing more than gobbledygook without

179

00:09:01,269 --> 00:08:59,519

the special camera and processing

180

00:09:03,750 --> 00:09:01,279

techniques developed by a team of

181

00:09:05,590 --> 00:09:03,760

goddard engineers

182

00:09:07,509 --> 00:09:05,600

not only did they have a couple modes of

183

00:09:09,750 --> 00:09:07,519

operation which were simply let's try

184

00:09:12,230 --> 00:09:09,760

this if this doesn't work but

185

00:09:13,430 --> 00:09:12,240

we also had a very limited bandwidth and

186

00:09:15,670 --> 00:09:13,440

we the grand equipment had to

187

00:09:18,389 --> 00:09:15,680

reconstruct the picture so that would be

188

00:09:20,630 --> 00:09:18,399

usable the picture as transmitted

189

00:09:22,630 --> 00:09:20,640

would not be able to be telecast on a

190

00:09:24,470 --> 00:09:22,640

home receiver

191

00:09:25,590 --> 00:09:24,480

as viewed it would be a very flickering

192

00:09:27,430 --> 00:09:25,600

picture that

193

00:09:31,110 --> 00:09:27,440

would not be too usable except for

194

00:09:32,870 --> 00:09:31,120

possibly an engineer evaluation

195

00:09:34,550 --> 00:09:32,880

when the camera on the lunar lander

196

00:09:36,630 --> 00:09:34,560

began to transmit pictures as it

197

00:09:38,310 --> 00:09:36,640

approached the moon the goddard team

198

00:09:40,550 --> 00:09:38,320

received the signal at a special

199

00:09:42,790 --> 00:09:40,560

processing facility set up in sydney

200

00:09:46,870 --> 00:09:42,800

australia

201  
00:09:50,070 --> 00:09:46,880  
people were just

202  
00:09:51,829 --> 00:09:50,080  
so excited and they actually set up

203  
00:09:53,430 --> 00:09:51,839  
television monitors in

204  
00:09:56,230 --> 00:09:53,440  
the uh i believe it was called peace

205  
00:09:57,750 --> 00:09:56,240  
cross the main square in sydney where

206  
00:10:00,389 --> 00:09:57,760  
thousands of people came out to to

207  
00:10:01,670 --> 00:10:00,399  
witness this

208  
00:10:03,110 --> 00:10:01,680  
contact light

209  
00:10:04,870 --> 00:10:03,120  
okay engine stop

210  
00:10:06,550 --> 00:10:04,880  
aca had a defense

211  
00:10:09,670 --> 00:10:06,560  
boat control both auto decent engine

212  
00:10:13,350 --> 00:10:09,680  
command override off engine arm off 13

213  
00:10:15,190 --> 00:10:13,360

is in we copy it down eagle

214

00:10:17,430 --> 00:10:15,200

uh

215

00:10:18,710 --> 00:10:17,440

tranquility base here the eagle has

216

00:10:21,430 --> 00:10:18,720

landed

217

00:10:23,190 --> 00:10:21,440

the first word may have been houston but

218

00:10:25,990 --> 00:10:23,200

the first people to hear it were

219

00:10:30,630 --> 00:10:26,000

goddard's voice controllers

220

00:10:30,640 --> 00:10:43,990

it's

221

00:10:47,269 --> 00:10:45,910

the primary package was a seismic

222

00:10:49,910 --> 00:10:47,279

package the

223

00:10:50,870 --> 00:10:49,920

two of detailed moonquakes

224

00:10:53,190 --> 00:10:50,880

and a

225

00:10:54,870 --> 00:10:53,200

laser retro reflector package which is

226

00:10:59,030 --> 00:10:54,880

quite small

227

00:11:00,870 --> 00:10:59,040

but it had 64 cube reflectors in it

228

00:11:02,230 --> 00:11:00,880

so they could use their lasers from the

229

00:11:04,230 --> 00:11:02,240

earth and

230

00:11:06,230 --> 00:11:04,240

find to fine-tune the distance between

231

00:11:08,470 --> 00:11:06,240

the earth and the moon

232

00:11:09,910 --> 00:11:08,480

those small retroreflectors are still

233

00:11:11,910 --> 00:11:09,920

used today

234

00:11:14,630 --> 00:11:11,920

by bouncing lasers off these lunar base

235

00:11:15,990 --> 00:11:14,640

reflectors goddard scientists continue

236

00:11:17,829 --> 00:11:16,000

to learn about the movement of the

237

00:11:19,990 --> 00:11:17,839

earth's crustal plates with the same

238

00:11:22,470 --> 00:11:20,000

accuracy as when they were first placed

239

00:11:24,470 --> 00:11:22,480

on the moon

240

00:11:25,910 --> 00:11:24,480

not long after noon the next day the

241

00:11:28,069 --> 00:11:25,920

21st

242

00:11:29,910 --> 00:11:28,079

the astronauts fired the ascent engine

243

00:11:32,069 --> 00:11:29,920

and launched eagle on the first leg of

244

00:11:33,910 --> 00:11:32,079

what was to be a triumphant return to

245

00:11:37,350 --> 00:11:33,920

earth

246

00:11:42,069 --> 00:11:37,360

apollo 11 splashed down at 12 50 p.m

247

00:11:46,790 --> 00:11:42,079

eastern daylight time on july 24 1969

248

00:11:49,990 --> 00:11:46,800

about 900 miles southwest of hawaii

249

00:11:51,910 --> 00:11:50,000

two goddard satellites ats one and three

250

00:11:54,150 --> 00:11:51,920

were used to relay television coverage

251  
00:11:57,670 --> 00:11:54,160  
of the recovery operations to an anxious

252  
00:11:59,430 --> 00:11:57,680  
world the big thing that we did and i

253  
00:12:01,509 --> 00:11:59,440  
think well because it was spectacular

254  
00:12:03,509 --> 00:12:01,519  
because everybody saw it was the

255  
00:12:06,069 --> 00:12:03,519  
television through our microwave system

256  
00:12:08,470 --> 00:12:06,079  
on the ats spacecraft at one time we

257  
00:12:10,389 --> 00:12:08,480  
planted a little

258  
00:12:12,790 --> 00:12:10,399  
12 15 foot antenna

259  
00:12:14,550 --> 00:12:12,800  
on the flight deck of the carrier and

260  
00:12:16,949 --> 00:12:14,560  
actually transmitted

261  
00:12:19,030 --> 00:12:16,959  
to live television from the

262  
00:12:20,790 --> 00:12:19,040  
carrier from what was going on on the

263  
00:12:22,470 --> 00:12:20,800

deck of the carrier

264

00:12:24,870 --> 00:12:22,480

via the ats satellite back to the

265

00:12:27,750 --> 00:12:24,880

networks it was the only possible live

266

00:12:29,110 --> 00:12:27,760

call live television to the whole world

267

00:12:30,870 --> 00:12:29,120

could see what was going on and of

268

00:12:34,069 --> 00:12:30,880

course included in that

269

00:12:35,750 --> 00:12:34,079

was the the actual recovery

270

00:12:36,790 --> 00:12:35,760

apollo did more than reach for the

271

00:12:38,629 --> 00:12:36,800

future

272

00:12:41,269 --> 00:12:38,639

it refreshed our spirits and heightened

273

00:12:43,509 --> 00:12:41,279

our awareness of the human potential

274

00:12:45,190 --> 00:12:43,519

for the united states apollo provided

275

00:12:47,590 --> 00:12:45,200

renewed confidence

276

00:12:49,670 --> 00:12:47,600

that given the resolve resources and

277

00:12:52,230 --> 00:12:49,680

commitment of a free people

278

00:12:57,750 --> 00:12:52,240

the u.s can lead mankind in the great

279

00:13:01,430 --> 00:13:00,230

we lived through an era

280

00:13:04,629 --> 00:13:01,440

and

281

00:13:06,470 --> 00:13:04,639

part of that era was the the time that

282

00:13:08,389 --> 00:13:06,480

john kennedy said

283

00:13:10,150 --> 00:13:08,399

i challenge this nation to put a man in

284

00:13:12,069 --> 00:13:10,160

orbit and return him safely within this

285

00:13:14,629 --> 00:13:12,079

decade

286

00:13:17,829 --> 00:13:14,639

uh pursuant to that i don't think any of

287

00:13:20,550 --> 00:13:17,839

us will ever forget that

288

00:13:22,629 --> 00:13:20,560

famous day in dallas

289

00:13:25,269 --> 00:13:22,639

and then to put the men on the moon and

290

00:13:27,509 --> 00:13:25,279

bring him back safely was quite

291

00:13:31,590 --> 00:13:27,519

a monument memorial and i think all of

292

00:13:35,910 --> 00:13:33,750

we were a pretty young organization i i

293

00:13:38,069 --> 00:13:35,920

think i was in my 20s and i think just

294

00:13:40,389 --> 00:13:38,079

about all of the uh

295

00:13:42,550 --> 00:13:40,399

the voice controllers and the contractor

296

00:13:44,629 --> 00:13:42,560

workforce were were people in their 20s

297

00:13:46,710 --> 00:13:44,639

and possibly early 30s

298

00:13:49,030 --> 00:13:46,720

and it was a just a very exciting time

299

00:13:50,629 --> 00:13:49,040

for us i mean we would put hours and

300

00:13:52,870 --> 00:13:50,639

hours and hours of work in and we were

301  
00:13:54,310 --> 00:13:52,880  
proud to do it because we did see our

302  
00:13:56,150 --> 00:13:54,320  
piece in the puzzle

303  
00:13:58,310 --> 00:13:56,160  
and what our what our own personal

304  
00:14:00,550 --> 00:13:58,320  
accomplishments and we felt quite proud

305  
00:14:03,430 --> 00:14:00,560  
that we were part of bringing that data

306  
00:14:05,670 --> 00:14:03,440  
back to them because

307  
00:14:08,550 --> 00:14:05,680  
there was a whole purpose to get science

308  
00:14:10,150 --> 00:14:08,560  
data and that's what we did

309  
00:14:12,069 --> 00:14:10,160  
i think the biggest satisfaction was

310  
00:14:13,750 --> 00:14:12,079  
that it enabled everybody in the world

311  
00:14:16,710 --> 00:14:13,760  
to see something

312  
00:14:18,389 --> 00:14:16,720  
that was a one-shot one-time affair

313  
00:14:21,110 --> 00:14:18,399

which was the first step

314

00:14:21,990 --> 00:14:21,120

and that's basically what we worked on

315

00:14:23,910 --> 00:14:22,000

and

316

00:14:25,910 --> 00:14:23,920

as other speakers that i've heard speak

317

00:14:27,189 --> 00:14:25,920

said that we worked a lot of long hours

318

00:14:31,269 --> 00:14:27,199

and

319

00:14:33,189 --> 00:14:31,279

that worked on that program probably

320

00:14:37,189 --> 00:14:33,199

agrees that uh they didn't notice it it

321

00:14:39,189 --> 00:14:37,199

was uh just too exciting to uh to to be

322

00:14:41,990 --> 00:14:39,199

concerned about the hours you spent it

323

00:14:44,629 --> 00:14:42,000

was a unique project and

324

00:14:46,150 --> 00:14:44,639

we haven't been back in a long time and

325

00:14:48,230 --> 00:14:46,160

it is something that

326

00:14:50,310 --> 00:14:48,240

we were really proud to be a part of and

327

00:14:51,670 --> 00:14:50,320

every country we went to they were all

328

00:14:52,870 --> 00:14:51,680

proud to be participating well it was a

329

00:14:54,870 --> 00:14:52,880

great thing for

330

00:14:56,790 --> 00:14:54,880

for for the united states

331

00:14:58,629 --> 00:14:56,800

it was a great thing for nasa