1
00:00:42,879 --> 00:01:00,069
it ain't no country club

2
00:01:00,079 --> 00:01:10,950
he

3
00:01:10,960 --> 00:01:25,030
fun in his says

4
00:01:25,040 --> 00:01:42,870
on that lunch life

5
00:02:34,630 --> 00:01:58,789
is

6
00:02:44,309 --> 00:02:36,070
good morning endeavor welcome to flight

7
00:02:49,270 --> 00:02:46,150
morning good morning houston and we're

8
00:02:53,990 --> 00:02:49,280
ready to have some more fun

9
00:02:58,390 --> 00:02:56,070
yeah that was a great selection carl i

10
00:06:08,070 --> 00:02:58,400
really loved it

11
00:06:15,430 --> 00:06:09,590
houston looks like a nice night down

12
00:06:20,309 --> 00:06:17,990
now brent we have the weather

13
00:06:21,909 --> 00:06:20,319

radar and the visible satellite picture

14
00:06:24,230 --> 00:06:21,919
up on our screens right now and there is

15
00:06:25,590 --> 00:06:24,240
a front coming by we're clear now but we

16
00:06:27,110 --> 00:06:25,600
expect some

17
00:06:28,870 --> 00:06:27,120
squall weather

18
00:06:30,550 --> 00:06:28,880
towards morning here

19
00:06:32,629 --> 00:06:30,560
glad you got a good look

20
00:06:34,150 --> 00:06:32,639
yeah tom we just passed right overhead

21
00:06:36,550 --> 00:06:34,160
and we could see that stuff out to the

22
00:06:37,909 --> 00:06:36,560
north and west

23
00:06:39,430 --> 00:06:37,919
we're just concerned that it goes

24
00:06:44,150 --> 00:06:39,440
through florida by the time you guys are

25
00:06:44,160 --> 00:07:10,950
whenever

26
00:07:19,189 --> 00:07:13,189
endeavor no reply 90 seconds to a tdrs

27
00:08:17,350 --> 00:07:20,790
and endeavor we have a great view of the

28
00:08:21,350 --> 00:08:19,749
those lacy webs across the states as we

29
00:08:27,909 --> 00:08:21,360
went over it look forward to getting a

30
00:08:27,919 --> 00:11:02,550
yeah you know you'll have a great time

31
00:11:07,110 --> 00:11:04,230
and a hands up your conversation with

32
00:11:10,949 --> 00:11:07,120
south africa is still on at one hour and

33
00:11:16,230 --> 00:11:12,710
okay we copy and we're setting up for

34
00:11:16,240 --> 00:11:22,470
thanks winston

35
00:11:26,389 --> 00:11:24,550
is uh koishi done with his exercise and

36
00:11:30,630 --> 00:11:26,399
yet if not i'll call him on the west

37
00:11:38,069 --> 00:11:33,750
i didn't have as much length as the that

38
00:11:39,350 --> 00:11:38,079

of imus and i cleaned them off

39
00:11:41,269 --> 00:11:39,360
okay thanks

40
00:11:45,990 --> 00:11:41,279
during your off-duty time did you get to

41
00:11:52,870 --> 00:11:50,069
yes we demonstrated a very famous uh go

42
00:11:55,829 --> 00:11:52,880
play in a novel of a noble award

43
00:12:01,190 --> 00:11:58,230
dan is a good player and we really

44
00:12:12,389 --> 00:12:02,870
the game

45
00:12:17,030 --> 00:12:14,710
well actually uh

46
00:12:18,310 --> 00:12:17,040
dan gave me this a good part

47
00:12:20,710 --> 00:12:18,320
and uh

48
00:12:23,590 --> 00:12:20,720
i was playing the person who who won the

49
00:12:25,430 --> 00:12:23,600
game so i was supposed to be one but

50
00:12:26,470 --> 00:12:25,440
it took so long and we didn't come to

51
00:12:28,710 --> 00:12:26,480
the uh

52
00:12:31,030 --> 00:12:28,720
the end of the game

53
00:12:33,030 --> 00:12:31,040
okay we're going lost here you sure have

54
00:12:36,629 --> 00:12:33,040
a lot to space a lot of territory play

55
00:12:41,990 --> 00:12:38,389
never houston are you ready to talk to

56
00:12:44,230 --> 00:12:42,000
johannesburg south africa

57
00:12:46,310 --> 00:12:44,240
yes sir we sure are sorry

58
00:12:50,790 --> 00:12:46,320
okay here they come johannesburg this is

59
00:12:55,590 --> 00:12:52,790
another this is johannesburg how do you

60
00:12:58,710 --> 00:12:57,509
jonasberg we read you loud and clear

61
00:13:00,550 --> 00:12:58,720
welcome aboard the space shuttle

62
00:13:01,990 --> 00:13:00,560
endeavour

63
00:13:03,350 --> 00:13:02,000

ryan winston

64
00:13:04,470 --> 00:13:03,360
thank you so much giving us a few

65
00:13:06,550 --> 00:13:04,480
minutes to talk to you we really

66
00:13:08,550 --> 00:13:06,560
appreciate it

67
00:13:10,150 --> 00:13:08,560
this is teddy school in south africa we

68
00:13:12,310 --> 00:13:10,160
have some students from pro tech who

69
00:13:13,990 --> 00:13:12,320
have some fascinating questions for you

70
00:13:17,190 --> 00:13:14,000
and we're going to go to our first

71
00:13:18,870 --> 00:13:17,200
student who is sashim over to you sasha

72
00:13:21,670 --> 00:13:18,880
hi captain

73
00:13:23,350 --> 00:13:21,680
my name is sachin i'm from kempton park

74
00:13:25,829 --> 00:13:23,360
we are students of pro-tech and we

75
00:13:27,269 --> 00:13:25,839
really consider this a great privilege

76
00:13:28,870 --> 00:13:27,279
because this is really a once in a

77
00:13:31,190 --> 00:13:28,880
lifetime opportunity

78
00:13:33,590 --> 00:13:31,200
and my question to you is how long have

79
00:13:37,350 --> 00:13:33,600
you been in space and when can we expect

80
00:13:42,069 --> 00:13:39,509
well actually just past the seven day

81
00:13:42,870 --> 00:13:42,079
mark in space we've been up for uh just

82
00:13:45,829 --> 00:13:42,880
over

83
00:13:47,269 --> 00:13:45,839
seven days and one hour right now

84
00:13:51,590 --> 00:13:47,279
and we're going to be up here for about

85
00:13:56,550 --> 00:13:53,190
our next question comes from a young

86
00:13:57,910 --> 00:13:56,560
lady imalda i hope to you melda hi this

87
00:14:00,310 --> 00:13:57,920
is inela

88
00:14:02,310 --> 00:14:00,320

i just wanna ask attend brian

89
00:14:09,430 --> 00:14:02,320
how did you choose to become an

90
00:14:13,110 --> 00:14:11,110
well i'll tell you i'll start off with

91
00:14:16,069 --> 00:14:13,120
that question i

92
00:14:18,230 --> 00:14:16,079
have have been a navy pilot most of my

93
00:14:19,670 --> 00:14:18,240
adult life and i chose to become an

94
00:14:22,069 --> 00:14:19,680
astronaut because i thought that would

95
00:14:24,389 --> 00:14:22,079
be a nice next step a nice next

96
00:14:27,030 --> 00:14:24,399
challenge for me in the work that i was

97
00:14:29,269 --> 00:14:27,040
already doing in aviation and science

98
00:14:31,030 --> 00:14:29,279
and i tell you since being up here on my

99
00:14:33,110 --> 00:14:31,040
first flight i haven't regretted that

100
00:14:35,430 --> 00:14:33,120
decision at all this has been a

101
00:14:37,670 --> 00:14:35,440
tremendous experience and i wish you all

102
00:14:41,910 --> 00:14:37,680
could be here with me and share it's

103
00:14:47,829 --> 00:14:44,790
in koichi good

104
00:14:50,389 --> 00:14:47,839
our next question will come from ashley

105
00:14:52,870 --> 00:14:50,399
yeah i'm actually from sorento

106
00:14:55,269 --> 00:14:52,880
i heard that i had rumors about like are

107
00:14:57,590 --> 00:14:55,279
you going to land on math soon is it

108
00:14:57,600 --> 00:15:02,389
ashley went into know that about mars

109
00:15:06,389 --> 00:15:03,670
okay you want to know if we're going to

110
00:15:07,189 --> 00:15:06,399
land on mars soon well i have to answer

111
00:15:09,430 --> 00:15:07,199
uh

112
00:15:11,509 --> 00:15:09,440
no we're not going to land on mars soon

113
00:15:13,430 --> 00:15:11,519

however we at nasa do

114
00:15:16,069 --> 00:15:13,440
have plans and work

115
00:15:18,230 --> 00:15:16,079
long-term plans at work to go to mars i

116
00:15:20,069 --> 00:15:18,240
think probably the next big step will be

117
00:15:21,509 --> 00:15:20,079
to go back to the moon as you know we

118
00:15:24,790 --> 00:15:21,519
walked on the moon

119
00:15:26,069 --> 00:15:24,800
about 25 26 years ago the next big step

120
00:15:27,750 --> 00:15:26,079
would go back to the moon and then

121
00:15:29,030 --> 00:15:27,760
hopefully from there we'll go on to mars

122
00:15:31,910 --> 00:15:29,040
but i don't think that's going to happen

123
00:15:33,829 --> 00:15:31,920
anytime soon i will add though that by

124
00:15:35,509 --> 00:15:33,839
the time you get to be my age and a

125
00:15:38,870 --> 00:15:35,519
flying space maybe you'll be one of the

126
00:15:42,230 --> 00:15:40,470
thanks so much gentlemen our next

127
00:15:43,430 --> 00:15:42,240
question comes from another young lady

128
00:15:46,310 --> 00:15:43,440
candice

129
00:15:48,150 --> 00:15:46,320
over to you candace hi there winston um

130
00:15:49,910 --> 00:15:48,160
i spoke to you before

131
00:15:52,629 --> 00:15:49,920
about preparation mentally and

132
00:15:54,389 --> 00:15:52,639
physically or what you experienced in

133
00:15:58,550 --> 00:15:54,399
space where you prepared for it

134
00:16:03,269 --> 00:16:00,310
okay i

135
00:16:05,350 --> 00:16:03,279
i think i was as best prepared as i

136
00:16:07,670 --> 00:16:05,360
possibly could have been the training we

137
00:16:09,350 --> 00:16:07,680
have is very very excellent but of

138
00:16:11,910 --> 00:16:09,360

course we have no way of truly

139
00:16:14,389 --> 00:16:11,920
simulating zero g the only way to

140
00:16:16,389 --> 00:16:14,399
experience it is to come up here and uh

141
00:16:18,230 --> 00:16:16,399
physically we all have gotten along very

142
00:16:21,110 --> 00:16:18,240
well in space of course our commander

143
00:16:22,870 --> 00:16:21,120
brian and uh our ms-1 mission leader

144
00:16:25,030 --> 00:16:22,880
chow have flown before but the other

145
00:16:27,829 --> 00:16:25,040
four of us were brand new but you'd be

146
00:16:29,829 --> 00:16:27,839
amazed at how quickly your body adapts i

147
00:16:32,550 --> 00:16:29,839
felt a little uneasiness the first day

148
00:16:34,949 --> 00:16:32,560
but i was not ill at all and we all feel

149
00:16:37,430 --> 00:16:34,959
great we're having just a wonderful time

150
00:16:38,790 --> 00:16:37,440
up here

151
00:16:39,910 --> 00:16:38,800
konnichiwa

152
00:16:42,949 --> 00:16:39,920
um

153
00:16:44,550 --> 00:16:42,959
koichi wakata i hope i got that right

154
00:16:45,990 --> 00:16:44,560
thanks for taking the time to talk to us

155
00:16:48,470 --> 00:16:46,000
we've got a young gentleman here by the

156
00:16:50,949 --> 00:16:48,480
name of sam who who really feels that

157
00:16:54,870 --> 00:16:50,959
you gentlemen are a great role model for

158
00:16:57,030 --> 00:16:54,880
him um and he's got a question for you

159
00:16:58,949 --> 00:16:57,040
i just wanted to know um when you're

160
00:17:11,909 --> 00:16:58,959
viewing the earth from space it doesn't

161
00:17:16,870 --> 00:17:14,390
well we've been in space for almost a

162
00:17:20,230 --> 00:17:16,880
week and

163
00:17:23,189 --> 00:17:20,240

i was very surprised to to see my body's

164
00:17:24,230 --> 00:17:23,199
adaptation into this microgravity uh so

165
00:17:26,870 --> 00:17:24,240
quickly

166
00:17:30,150 --> 00:17:26,880
and uh we are feeling very good and we

167
00:17:34,789 --> 00:17:30,160
are doing uh our job in here and uh it's

168
00:17:38,950 --> 00:17:36,470
very much uh

169
00:17:41,430 --> 00:17:38,960
um our next question comes from another

170
00:17:42,710 --> 00:17:41,440
one of our students it's your son over

171
00:17:43,830 --> 00:17:42,720
here

172
00:17:45,590 --> 00:17:43,840
hi

173
00:17:46,470 --> 00:17:45,600
i like to find out

174
00:17:48,789 --> 00:17:46,480
how

175
00:17:57,909 --> 00:17:48,799
space exploration will benefit us in the

176
00:18:00,950 --> 00:17:59,350
that was a little bit broken but i

177
00:18:02,710 --> 00:18:00,960
believe your question was about how

178
00:18:09,190 --> 00:18:02,720
space would benefit us in the future is

179
00:18:13,029 --> 00:18:10,549
uh you saw would you ask the question

180
00:18:18,630 --> 00:18:15,590
um i'd like to know how space

181
00:18:21,350 --> 00:18:18,640
exploration will benefit us on earth and

182
00:18:24,789 --> 00:18:23,510
yeah that's a very good question and

183
00:18:26,630 --> 00:18:24,799
it's one that

184
00:18:28,470 --> 00:18:26,640
that we consider all the time because

185
00:18:30,310 --> 00:18:28,480
everything that we do has to have a

186
00:18:32,789 --> 00:18:30,320
purpose and that purpose is generally to

187
00:18:34,549 --> 00:18:32,799
better some portion of our lives on

188
00:18:37,110 --> 00:18:34,559

earth that turns out we can come to

189
00:18:39,590 --> 00:18:37,120
space and do uh lots of lots of things

190
00:18:42,789 --> 00:18:39,600
we can do that we cannot do on earth

191
00:18:45,430 --> 00:18:42,799
we can do medical experiments up here we

192
00:18:47,830 --> 00:18:45,440
can perhaps invent new drugs to combat

193
00:18:50,150 --> 00:18:47,840
diseases uh we may be able to grow new

194
00:18:52,710 --> 00:18:50,160
crystals to be able to run faster

195
00:18:54,470 --> 00:18:52,720
computers uh though the list is endless

196
00:18:57,190 --> 00:18:54,480
and we could talk about that

197
00:18:59,669 --> 00:18:57,200
for many many uh hours about how space

198
00:19:01,830 --> 00:18:59,679
can benefit but it's not limited to any

199
00:19:03,430 --> 00:19:01,840
one area it really spans uh every part

200
00:19:07,430 --> 00:19:03,440
of the everyday life on earth and we

201
00:19:11,110 --> 00:19:09,430
astronaut scots um we understand that

202
00:19:13,830 --> 00:19:11,120
you you have three objectives on this

203
00:19:16,390 --> 00:19:13,840
mission one of them being to retrieve a

204
00:19:18,470 --> 00:19:16,400
japanese communication satellite um we

205
00:19:20,070 --> 00:19:18,480
also have a question now from sean also

206
00:19:21,350 --> 00:19:20,080
one of our students in connection with

207
00:19:25,110 --> 00:19:21,360
the mission

208
00:19:27,110 --> 00:19:25,120
okay um i dr scott and his crew

209
00:19:29,590 --> 00:19:27,120
my name is sean i like to know what's

210
00:19:35,350 --> 00:19:29,600
the purpose of your mission

211
00:19:39,990 --> 00:19:37,669
are you absolutely right they we had

212
00:19:42,150 --> 00:19:40,000
several uh main objectives on this

213
00:19:44,230 --> 00:19:42,160

mission and uh one was which to uh

214
00:19:45,430 --> 00:19:44,240
retrieve the japanese satellite space

215
00:19:47,510 --> 00:19:45,440
fly unit

216
00:19:49,750 --> 00:19:47,520
the other one was to deploy and then

217
00:19:53,350 --> 00:19:49,760
retrieve a satellite called the host

218
00:19:55,350 --> 00:19:53,360
oast satellite and the way that we went

219
00:19:58,470 --> 00:19:55,360
about those retrievals is by doing a

220
00:20:00,549 --> 00:19:58,480
rendezvous and the rendezvous

221
00:20:02,470 --> 00:20:00,559
involved basic orbital mechanics in

222
00:20:04,789 --> 00:20:02,480
other words we had to plan our launch

223
00:20:06,710 --> 00:20:04,799
for a certain time and day so that we

224
00:20:09,590 --> 00:20:06,720
have enough fuel and

225
00:20:12,150 --> 00:20:09,600
enough time to catch up to the satellite

226
00:20:14,950 --> 00:20:12,160
and approach it we have we used a what's

227
00:20:17,110 --> 00:20:14,960
called an r bar approach whereas we flew

228
00:20:19,110 --> 00:20:17,120
out of the earth's radius of vector

229
00:20:21,270 --> 00:20:19,120
along the earth's radius up to the

230
00:20:24,470 --> 00:20:21,280
satellite we opened up the payload bay

231
00:20:25,430 --> 00:20:24,480
doors and koichi wakata here on my

232
00:20:27,350 --> 00:20:25,440
left

233
00:20:29,029 --> 00:20:27,360
operated the robot arm to reach out and

234
00:20:31,510 --> 00:20:29,039
grapple the satellites and burst them

235
00:20:33,909 --> 00:20:31,520
both inside the payload bay now that's a

236
00:20:36,149 --> 00:20:33,919
very quick and simple explanation of a

237
00:20:38,870 --> 00:20:36,159
somewhat complex uh

238
00:20:41,110 --> 00:20:38,880

task but it was it's really really

239
00:20:43,669 --> 00:20:41,120
fascinating to participate in it really

240
00:20:46,789 --> 00:20:43,679
to see the crew operate as a single unit

241
00:20:48,789 --> 00:20:46,799
was great we had myself sending commands

242
00:20:51,029 --> 00:20:48,799
to the satellite through the computer uh

243
00:20:53,669 --> 00:20:51,039
commander brian duffy was actually

244
00:20:55,750 --> 00:20:53,679
flying the vehicle actually it was hands

245
00:20:57,350 --> 00:20:55,760
on the stick and throttle flying when he

246
00:20:59,110 --> 00:20:57,360
flew it close enough and stabilized the

247
00:21:01,510 --> 00:20:59,120
koichi weeps out with the robot arm and

248
00:21:03,990 --> 00:21:01,520
brought you into the bay that really was

249
00:21:05,510 --> 00:21:04,000
quite uh an event and quite a sight to

250
00:21:08,230 --> 00:21:05,520
behold even for those of us who were

251
00:21:09,990 --> 00:21:08,240
participating

252
00:21:12,390 --> 00:21:10,000
um my next question is to with

253
00:21:14,870 --> 00:21:12,400
winston-scott sean mike here i just want

254
00:21:17,350 --> 00:21:14,880
to find out about the evas otherwise

255
00:21:19,510 --> 00:21:17,360
known as spacewalks could you tell us

256
00:21:22,870 --> 00:21:19,520
more about the spacewalks um if you have

257
00:21:25,430 --> 00:21:22,880
any plan if you've done any yet

258
00:21:27,350 --> 00:21:25,440
oh i sure can this flight consisting of

259
00:21:30,549 --> 00:21:27,360
two spacewalks the first was done by

260
00:21:31,750 --> 00:21:30,559
leroy chow and dr dan barry the second

261
00:21:34,070 --> 00:21:31,760
spacewalk was the one that i

262
00:21:36,310 --> 00:21:34,080
participated on and dr chow participated

263
00:21:38,789 --> 00:21:36,320

on that one with me the purpose of these

264
00:21:42,230 --> 00:21:38,799
spacewalks was to uh

265
00:21:44,230 --> 00:21:42,240
to test out uh equipment and structures

266
00:21:46,310 --> 00:21:44,240
and techniques and so on that we might

267
00:21:48,390 --> 00:21:46,320
use in building the international space

268
00:21:51,190 --> 00:21:48,400
station the second purpose was to test

269
00:21:52,710 --> 00:21:51,200
out improvements to our uh suits our

270
00:21:54,710 --> 00:21:52,720
extra vehicular mobility in our

271
00:21:57,190 --> 00:21:54,720
spacesuits and i guess that was the

272
00:21:59,669 --> 00:21:57,200
highlight of my space space walk even

273
00:22:01,669 --> 00:21:59,679
though it was a very busy six and a half

274
00:22:03,430 --> 00:22:01,679
hours of space walking the most

275
00:22:05,909 --> 00:22:03,440
important part i think was the 35

276
00:22:08,789 --> 00:22:05,919
minutes that i used to stand still in

277
00:22:12,310 --> 00:22:08,799
the most cold environment that we could

278
00:22:13,909 --> 00:22:12,320
achieve and i activated the thermal uh

279
00:22:15,350 --> 00:22:13,919
the heating units on my suit to see

280
00:22:17,190 --> 00:22:15,360
whether or not they would keep me warm

281
00:22:19,590 --> 00:22:17,200
and i'm happy to report that they they

282
00:22:21,270 --> 00:22:19,600
worked very very well i

283
00:22:23,590 --> 00:22:21,280
never once fell uncomfortable out there

284
00:22:26,310 --> 00:22:23,600
in the coal of space so anyway we've had

285
00:22:27,590 --> 00:22:26,320
two evas and uh i just enjoyed that i

286
00:22:28,870 --> 00:22:27,600
wouldn't trade that experience for

287
00:22:31,430 --> 00:22:28,880
anything else in the world it was

288
00:22:35,270 --> 00:22:33,510

absolutely absolutely incredible visuals

289
00:22:37,190 --> 00:22:35,280
left sir our next question is for

290
00:22:41,590 --> 00:22:37,200
astronauts uh were carson it comes from

291
00:22:45,669 --> 00:22:43,990
my name's karen and i'd like to know

292
00:23:01,830 --> 00:22:45,679
what is wrong with the satellite that

293
00:23:06,630 --> 00:23:03,750
this satellite called

294
00:23:10,070 --> 00:23:06,640
ffu space fly unit was launched by a

295
00:23:13,750 --> 00:23:10,080
japanese rocket back in march of last

296
00:23:16,230 --> 00:23:13,760
year and it has been conducting various

297
00:23:20,149 --> 00:23:16,240
scientific researches such as material

298
00:23:22,149 --> 00:23:20,159
processing astronomical observation and

299
00:23:24,470 --> 00:23:22,159
systems which will be used in the space

300
00:23:26,310 --> 00:23:24,480
station alpha which will start its

301
00:23:28,390 --> 00:23:26,320
assembly next year

302
00:23:30,310 --> 00:23:28,400
and they have been conducting uh very

303
00:23:33,270 --> 00:23:30,320
successful experiments and we

304
00:23:36,070 --> 00:23:33,280
successfully retrieved the satellite and

305
00:23:38,310 --> 00:23:36,080
after we go back home on the earth the

306
00:23:39,909 --> 00:23:38,320
japanese engineers and scientists will

307
00:23:40,789 --> 00:23:39,919
gather a lot of

308
00:23:44,950 --> 00:23:40,799
very

309
00:23:50,950 --> 00:23:46,390
gentlemen our next question comes from

310
00:23:56,310 --> 00:23:54,470
in terms of japanese us relations

311
00:23:58,950 --> 00:23:56,320
what does this mission hold what does it

312
00:24:01,510 --> 00:23:58,960
hope to improve what what what in terms

313
00:24:03,590 --> 00:24:01,520

of the us japanese relations the joint

314
00:24:05,029 --> 00:24:03,600
mission are we going to see more joint

315
00:24:07,029 --> 00:24:05,039
mission in space

316
00:24:13,269 --> 00:24:07,039
and what what are the immediate benefits

317
00:24:19,190 --> 00:24:16,630
konichiwa it's a very good question

318
00:24:22,310 --> 00:24:19,200
and this successful retrieval of the

319
00:24:24,230 --> 00:24:22,320
space flight unit was achieved because

320
00:24:25,990 --> 00:24:24,240
we had a very good coordination and

321
00:24:28,789 --> 00:24:26,000
cooperation between

322
00:24:32,310 --> 00:24:28,799
uh the mission control center in nasa in

323
00:24:34,549 --> 00:24:32,320
houston and also sfu's mission control

324
00:24:36,870 --> 00:24:34,559
center in japan

325
00:24:39,110 --> 00:24:36,880
and we showed a perfect teamwork during

326
00:24:40,549 --> 00:24:39,120
this retrieval together with the crew

327
00:24:42,310 --> 00:24:40,559
members here

328
00:24:45,110 --> 00:24:42,320
and this is one of the very good

329
00:24:47,669 --> 00:24:45,120
examples of international cooperation

330
00:24:50,390 --> 00:24:47,679
and i think international cooperation is

331
00:24:52,950 --> 00:24:50,400
the most important thing to proceed on

332
00:24:56,310 --> 00:24:52,960
to further frontier in space

333
00:24:58,390 --> 00:24:56,320
and both united states and japan are

334
00:25:01,110 --> 00:24:58,400
participating in the international space

335
00:25:04,230 --> 00:25:01,120
station app program which will start its

336
00:25:05,110 --> 00:25:04,240
assembly as i told you last next next

337
00:25:06,230 --> 00:25:05,120
year

338
00:25:09,190 --> 00:25:06,240

and

339
00:25:13,350 --> 00:25:09,200
i think this is a very key

340
00:25:16,630 --> 00:25:13,360
element of the future in space program

341
00:25:19,269 --> 00:25:16,640
how far is the reality of an actual

342
00:25:21,669 --> 00:25:19,279
space station where

343
00:25:24,870 --> 00:25:21,679
different countries will be involved is

344
00:25:26,710 --> 00:25:24,880
it still in the in the books or is it

345
00:25:31,350 --> 00:25:26,720
how far is it going to be to be a

346
00:25:33,190 --> 00:25:31,360
reality that is the us japan russia

347
00:25:35,430 --> 00:25:33,200
the involvement of

348
00:25:43,990 --> 00:25:35,440
countries in space establishing an

349
00:25:48,789 --> 00:25:46,310
okay this international space station

350
00:25:51,190 --> 00:25:48,799
will start its assembly next year late

351
00:25:54,789 --> 00:25:51,200
next year and the participants are

352
00:25:57,669 --> 00:25:54,799
united states canada europe japan and

353
00:25:59,830 --> 00:25:57,679
also russia

354
00:26:00,870 --> 00:25:59,840
do you hope to invite us sometime in the

355
00:26:02,789 --> 00:26:00,880
future

356
00:26:04,870 --> 00:26:02,799
such as south africa

357
00:26:08,950 --> 00:26:04,880
if we become involved in the space camp

358
00:26:14,070 --> 00:26:11,590
when i was a when i was five years old i

359
00:26:16,710 --> 00:26:14,080
saw the apollo luna landing and for me

360
00:26:19,269 --> 00:26:16,720
was just a dream at the time but now the

361
00:26:21,510 --> 00:26:19,279
world is changing and i think it's it's

362
00:26:23,269 --> 00:26:21,520
very uh i feel very happy that i'm

363
00:26:26,230 --> 00:26:23,279

involved in this space program and i

364
00:26:28,070 --> 00:26:26,240
feel and i hope that the many more

365
00:26:31,350 --> 00:26:28,080
people from around the world will be

366
00:26:34,549 --> 00:26:31,360
able to proceed participate in this

367
00:26:36,789 --> 00:26:34,559
activity in space

368
00:26:38,870 --> 00:26:36,799
i regard so especially

369
00:26:40,950 --> 00:26:38,880
thank you very much our next question

370
00:26:43,190 --> 00:26:40,960
comes from sashin

371
00:26:45,190 --> 00:26:43,200
and it's um for you astronaut brian

372
00:26:50,230 --> 00:26:45,200
duffy

373
00:26:53,669 --> 00:26:50,240
y'all said that the last

374
00:26:54,950 --> 00:26:53,679
spacewalk was 25 years ago this walk was

375
00:26:57,430 --> 00:26:54,960
before y'all

376
00:27:00,070 --> 00:26:57,440
why has it been so long since the next

377
00:27:04,950 --> 00:27:00,080
space mission or next since this moon

378
00:27:10,710 --> 00:27:07,990
yeah the uh the last moonwalk was uh was

379
00:27:13,190 --> 00:27:10,720
approximately 25 years ago that's right

380
00:27:15,590 --> 00:27:13,200
and um it turned out that the space

381
00:27:17,430 --> 00:27:15,600
program of the united states um

382
00:27:18,950 --> 00:27:17,440
after that time after we had been to the

383
00:27:21,750 --> 00:27:18,960
to the moon a number of times it

384
00:27:22,549 --> 00:27:21,760
continued on to the next step

385
00:27:24,870 --> 00:27:22,559
of

386
00:27:28,070 --> 00:27:24,880
space exploration and that was to create

387
00:27:30,149 --> 00:27:28,080
a vehicle that could regularly

388
00:27:33,110 --> 00:27:30,159

exit the earth's atmosphere and make it

389
00:27:35,430 --> 00:27:33,120
to space to carry cargo and people into

390
00:27:36,789 --> 00:27:35,440
space and be able to do it easily be

391
00:27:37,830 --> 00:27:36,799
able to go up and to be able to come

392
00:27:39,669 --> 00:27:37,840
down

393
00:27:42,230 --> 00:27:39,679
so they the united states set out to

394
00:27:44,549 --> 00:27:42,240
build the first reusable space vehicle

395
00:27:45,669 --> 00:27:44,559
and that's the space shuttle which

396
00:27:47,750 --> 00:27:45,679
we're aboard

397
00:27:50,470 --> 00:27:47,760
right now as we speak

398
00:27:53,269 --> 00:27:50,480
so we did need to continue going back to

399
00:27:55,830 --> 00:27:53,279
the moon we could have and we perhaps we

400
00:27:57,990 --> 00:27:55,840
have a lot to learn yet however at the

401
00:28:00,950 --> 00:27:58,000
time when they made that decision

402
00:28:03,190 --> 00:28:00,960
back in the 1970s their decision was to

403
00:28:05,750 --> 00:28:03,200
build a reusable vehicle that we could

404
00:28:07,269 --> 00:28:05,760
get to space and back regularly so

405
00:28:08,789 --> 00:28:07,279
that's where we are today we have a

406
00:28:10,870 --> 00:28:08,799
great future ahead of us we have a lot

407
00:28:12,549 --> 00:28:10,880
of great things to do we really do look

408
00:28:14,710 --> 00:28:12,559
forward to going back to the moon we do

409
00:28:16,389 --> 00:28:14,720
look forward to going to mars we i don't

410
00:28:20,310 --> 00:28:16,399
think they're that far away

411
00:28:24,310 --> 00:28:21,990
this is scott rudelsberger in washington

412
00:28:26,389 --> 00:28:24,320
commander duffy uh thank you very much

413
00:28:29,669 --> 00:28:26,399

as well as winston scott and koichi

414
00:28:31,430 --> 00:28:29,679
wakata for joining us today

415
00:28:32,870 --> 00:28:31,440
and also thank you to uh certainly our

416
00:28:39,830 --> 00:28:32,880
pleasure thank you for coming aboard and

417
00:28:43,350 --> 00:28:41,990
in johannesburg houston thank you very

418
00:28:44,950 --> 00:28:43,360
much for sharing a space flight

419
00:28:47,350 --> 00:28:44,960
experience

420
00:28:49,110 --> 00:28:47,360
with us endeavors approaching hawaii at

421
00:28:51,990 --> 00:28:49,120
this time but in

422
00:28:54,630 --> 00:28:52,000
about 45 minutes at 26 after the hour

423
00:28:55,990 --> 00:28:54,640
they will be above johannesburg

424
00:28:58,070 --> 00:28:56,000
it'll be in the daylight you will not be

425
00:28:59,669 --> 00:28:58,080
able to see them but they will sure

426
00:29:04,950 --> 00:28:59,679
appreciate the view of your beautiful