1
00:00:03,990 --> 00:00:01,910
hi

2
00:00:06,950 --> 00:00:04,000
i'm sts-131

3
00:00:32,069 --> 00:00:06,960
mission specialist naoko yamazaki

4
00:01:27,270 --> 00:01:03,750
so

5
00:01:33,510 --> 00:01:29,109
good morning discovery and a special

6
00:01:39,910 --> 00:01:36,390
good morning and thank you so much megan

7
00:01:41,990 --> 00:01:39,920
and all the great teams are nasa jackson

8
00:01:44,550 --> 00:01:42,000
and international partners

9
00:01:47,190 --> 00:01:44,560
special thanks to taiichi and youtube

10
00:01:49,270 --> 00:01:47,200
for selecting this beautiful music

11
00:02:07,109 --> 00:01:49,280
looking forward to another great day of

12
00:02:11,990 --> 00:02:08,869
that sounds great naoko your family is

13
00:02:14,949 --> 00:02:12,000

here and they're cheering

14
00:02:18,470 --> 00:02:14,959
oh that's great thanks

15
00:02:22,630 --> 00:02:20,309
this is mission control houston and you

16
00:02:25,030 --> 00:02:22,640
were listening as a spacecraft

17
00:02:27,750 --> 00:02:25,040
communicator megan macarthur called up

18
00:02:31,030 --> 00:02:27,760
to wake up discovery's crew and the song

19
00:02:33,190 --> 00:02:31,040
that was played was a pigeon and a boy

20
00:02:34,830 --> 00:02:33,200
and it's by japanese artist

21
00:02:37,830 --> 00:02:34,840
joe

22
00:02:40,070 --> 00:02:37,840
heiseichi and it was played for japan

23
00:03:04,710 --> 00:02:40,080
aerospace exploration agency astronaut

24
00:03:08,710 --> 00:03:06,070
as you can see the space station's

25
00:03:11,270 --> 00:03:08,720
robotic arms moved in now and has a grip

26
00:03:13,110 --> 00:03:11,280
on the multi-purpose logistics module

27
00:03:39,509 --> 00:03:13,120
inside the space station space shuttle's

28
00:03:49,589 --> 00:03:41,830
so i'd like to make sure you are happy

29
00:03:52,630 --> 00:03:51,430
and we are happy with that tension we

30
00:04:10,470 --> 00:03:52,640
consider it good

31
00:04:14,309 --> 00:04:11,910
confirming that they're ready to go on

32
00:04:15,589 --> 00:04:14,319
to the next step in their work to begin

33
00:04:17,110 --> 00:04:15,599
unpacking the

34
00:04:20,229 --> 00:04:17,120
multi-purpose logistics module from the

35
00:04:25,110 --> 00:04:22,870
yamazaki is uh joined inside the

36
00:04:27,270 --> 00:04:25,120
station's destiny laboratory at the

37
00:04:29,030 --> 00:04:27,280
robotic workstation by mission

38
00:04:31,670 --> 00:04:29,040

specialist stephanie wilson

39
00:04:34,230 --> 00:04:31,680
and helping them out with uh

40
00:04:35,830 --> 00:04:34,240
making sure they get good

41
00:04:44,150 --> 00:04:35,840
video views of the work that they're

42
00:04:47,110 --> 00:04:46,230
it's difficult to tell from this angle

43
00:04:48,469 --> 00:04:47,120
but

44
00:04:50,310 --> 00:04:48,479
the team here on the ground reports that

45
00:04:52,230 --> 00:04:50,320
the unbirth of the

46
00:04:56,150 --> 00:04:52,240
leonardo multipurpose logistics module

47
00:05:00,070 --> 00:04:57,510
mission specialist stephanie wilson and

48
00:05:01,830 --> 00:05:00,080
naoko yamazaki working at the

49
00:05:04,310 --> 00:05:01,840
robotics workstation inside the

50
00:05:08,550 --> 00:05:04,320
station's destiny laboratory

51
00:05:14,629 --> 00:05:11,430
57-foot long robotic arm

52
00:05:18,550 --> 00:05:16,629
13.6

53
00:05:31,270 --> 00:05:18,560
ton temporary module out of the

54
00:05:36,150 --> 00:05:32,870
that module is

55
00:05:38,629 --> 00:05:36,160
21 feet long and 15 feet wide

56
00:05:40,469 --> 00:05:38,639
and weighs a total right now of more

57
00:05:43,029 --> 00:05:40,479
than 13 tons

58
00:05:44,870 --> 00:05:43,039
six tons of that is cargo that

59
00:05:46,870 --> 00:05:44,880
the module is carrying up inside it

60
00:05:48,469 --> 00:05:46,880
basically works as

61
00:05:51,189 --> 00:05:48,479
a moving van

62
00:05:53,110 --> 00:05:51,199
and will be temporarily installed on the

63
00:05:55,590 --> 00:05:53,120

station's harmony node so that the crew

64
00:05:58,150 --> 00:05:55,600
inside the station can unpack all of

65
00:05:59,909 --> 00:05:58,160
that cargo get it inside

66
00:06:02,710 --> 00:05:59,919
the station that's

67
00:06:04,870 --> 00:06:02,720
cargo includes 16 racks four of which

68
00:06:06,629 --> 00:06:04,880
are experiment racks

69
00:06:08,150 --> 00:06:06,639
racks being the

70
00:06:10,469 --> 00:06:08,160
system that the

71
00:06:12,390 --> 00:06:10,479
space station uses to

72
00:06:19,270 --> 00:06:12,400
house equipment and

73
00:06:23,909 --> 00:06:21,590
as i was saying uh four of those racks

74
00:06:26,070 --> 00:06:23,919
are experiment racks the

75
00:06:27,830 --> 00:06:26,080
world observation research facility

76
00:06:29,590 --> 00:06:27,840
which is going to help

77
00:06:31,510 --> 00:06:29,600
improve the

78
00:06:34,070 --> 00:06:31,520
earth observation work that's done from

79
00:06:36,870 --> 00:06:34,080
the station's destiny laboratory window

80
00:06:40,710 --> 00:06:36,880
there's also a

81
00:06:42,070 --> 00:06:40,720
experiment rack that will help improve

82
00:06:43,670 --> 00:06:42,080
or help prevent some of the muscle

83
00:06:45,670 --> 00:06:43,680
atrophy that generally occurs in

84
00:06:48,309 --> 00:06:45,680
astronauts when they live for a long

85
00:06:50,469 --> 00:06:48,319
time in space

86
00:06:52,950 --> 00:06:50,479
and there's a new freezer for the

87
00:06:55,510 --> 00:06:52,960
international space station to keep

88
00:06:58,950 --> 00:06:55,520

the science experiments if they

89
00:07:02,309 --> 00:06:58,960
take part in cold and until they're

90
00:07:04,550 --> 00:07:02,319
ready to be returned to the earth

91
00:07:07,909 --> 00:07:04,560
and one other experiment right called

92
00:07:09,670 --> 00:07:07,919
express rack 7 that's a system that

93
00:07:11,510 --> 00:07:09,680
will provide several different science

94
00:07:13,510 --> 00:07:11,520
experiments with power and water and

95
00:07:15,510 --> 00:07:13,520
other things they need to be successful

96
00:07:16,950 --> 00:07:15,520
as well as just giving them a way to

97
00:07:21,990 --> 00:07:16,960
house it on the international space

98
00:07:26,469 --> 00:07:23,990
the other

99
00:07:28,150 --> 00:07:26,479
12 racks include one system rack for the

100
00:07:30,550 --> 00:07:28,160
space station and

101
00:07:32,950 --> 00:07:30,560
11 racks of cargo

102
00:07:37,589 --> 00:07:32,960
stored in racks and platform to be

103
00:07:42,469 --> 00:07:39,430
the team here on the ground reports that

104
00:07:43,589 --> 00:07:42,479
the robotic arm is in motion and moving

105
00:07:46,790 --> 00:07:43,599
the

106
00:07:48,550 --> 00:07:46,800
leonardo module into place for

107
00:07:56,790 --> 00:07:48,560
docking to the

108
00:08:01,510 --> 00:07:59,350
cbm operator from the rms operator on

109
00:08:06,629 --> 00:08:01,520
the big loop maneuver to rtl complete go

110
00:08:13,430 --> 00:08:09,350
and the houston station and a big group

111
00:08:15,430 --> 00:08:13,440
we're starting the cbm first speech

112
00:08:17,029 --> 00:08:15,440
leonardo multipliers logistics module

113
00:08:18,710 --> 00:08:17,039

has officially been installed on the

114
00:08:19,909 --> 00:08:18,720
station's harmony node

115
00:08:21,510 --> 00:08:19,919
two days

116
00:08:30,230 --> 00:08:21,520
18 hours and three minutes into

117
00:08:33,670 --> 00:08:31,990
mission specialist stephanie wilson nako

118
00:08:38,149 --> 00:08:33,680
yamazaki just about done with their

119
00:08:40,630 --> 00:08:38,159
robotics work for the day moving the

120
00:08:43,110 --> 00:08:40,640
space station robotic arm further away

121
00:08:44,310 --> 00:08:43,120
from the leonardo multipurpose logistics

122
00:08:45,590 --> 00:08:44,320
module

123
00:08:49,190 --> 00:08:45,600
once they uh

124
00:08:51,030 --> 00:08:49,200
get the arm put away and in to its um

125
00:08:52,790 --> 00:08:51,040
overnight position that'll be the end of

126
00:08:54,790 --> 00:08:52,800
robotics work for today but it'll be

127
00:08:57,829 --> 00:08:54,800
called into action again tomorrow for

128
00:09:00,389 --> 00:08:57,839
the first spacewalk of the mission

129
00:09:01,990 --> 00:09:00,399
where it'll be helping transfer the new

130
00:09:05,030 --> 00:09:02,000
ammonia tank assembly out of the

131
00:09:07,190 --> 00:09:05,040
shuttle's cargo bay and onto a temporary

132
00:09:08,790 --> 00:09:07,200
stowage place

133
00:09:25,509 --> 00:09:08,800
on the station's

134
00:09:29,750 --> 00:09:27,269
and station houston on the big loop for

135
00:09:32,389 --> 00:09:29,760
robo we see the maneuver complete

136
00:09:34,470 --> 00:09:32,399
when you get to the safing switch in the

137
00:09:42,150 --> 00:09:34,480
procedure we need you to hold it for 20

138
00:09:46,470 --> 00:09:44,310

houston we understand when we apply

139
00:09:49,030 --> 00:09:46,480
safing you'd like us to hold the switch

140
00:09:57,190 --> 00:09:49,040
for 2-0 seconds

141
00:10:01,030 --> 00:09:58,550
admission specialist stephanie wilson

142
00:10:03,269 --> 00:10:01,040
there talking with capcom mike jensen

143
00:10:05,030 --> 00:10:03,279
about the robotics work she and mission

144
00:10:07,110 --> 00:10:05,040
specialist naoko yamazaki have been

145
00:10:09,350 --> 00:10:07,120
working on they have the space station's

146
00:10:11,590 --> 00:10:09,360
robotic arm in place for what's going to

147
00:10:14,470 --> 00:10:11,600
be its overnight park position

148
00:10:16,069 --> 00:10:14,480
uh it's poised and ready to begin the

149
00:10:21,910 --> 00:10:16,079
first spacewalk of the mission which

150
00:10:25,509 --> 00:10:23,590
its job during that spacewalk is going

151
00:10:27,670 --> 00:10:25,519
to be to move the

152
00:10:28,790 --> 00:10:27,680
new ammonia tank assembly carried up by

153
00:10:30,790 --> 00:10:28,800
discovery

154
00:10:33,190 --> 00:10:30,800
out of the shuttle's cargo bay and over

155
00:10:34,870 --> 00:10:33,200
to a temporary storage location on the

156
00:10:36,550 --> 00:10:34,880
starboard side of the truss

157
00:10:38,630 --> 00:10:36,560
where it's going to spend the

158
00:10:40,470 --> 00:10:38,640
couple of nights before the second

159
00:10:42,470 --> 00:10:40,480
spacewalk of the mission where it's

160
00:10:44,550 --> 00:10:42,480
going to trade place with the

161
00:10:46,710 --> 00:10:44,560
old

162
00:10:48,470 --> 00:10:46,720
ammonia tank assembly currently uh

163
00:10:51,269 --> 00:10:48,480

supplying ammonia to the station's

164
00:10:53,430 --> 00:10:51,279
radiators for cooling

165
00:10:55,910 --> 00:10:53,440
it's going to be a complicated set of

166
00:10:58,550 --> 00:10:55,920
space walks with a lot of robotics work

167
00:11:00,389 --> 00:10:58,560
and a lot of robotics work uh between

168
00:11:02,310 --> 00:11:00,399
spacewalks as well to get moved to

169
00:11:05,590 --> 00:11:02,320
different locations to give it the reach

170
00:11:10,310 --> 00:11:05,600
necessary to perform all of the swaps of

171
00:11:14,310 --> 00:11:11,750
look here down into the vestibule

172
00:11:17,430 --> 00:11:14,320
between the leonardo purpose logistics

173
00:11:19,110 --> 00:11:17,440
module in the harmony node

174
00:11:21,430 --> 00:11:19,120
you can see that the hatch on the

175
00:11:23,269 --> 00:11:21,440
harmony side has already been opened and

176
00:11:25,670 --> 00:11:23,279
the crew is working in that area between

177
00:11:26,870 --> 00:11:25,680
the two called the vestibule

178
00:11:28,870 --> 00:11:26,880
in this view

179
00:11:30,230 --> 00:11:28,880
mission specialist clay anderson and

180
00:11:38,150 --> 00:11:30,240
flight engineer

181
00:11:45,670 --> 00:11:40,710
station this is the time joiner morning

182
00:11:54,829 --> 00:11:47,509
good morning tom the international space

183
00:11:59,350 --> 00:11:58,069
clear we are ready for questions

184
00:12:03,430 --> 00:11:59,360
no that's what they're supposed to say

185
00:12:08,949 --> 00:12:04,470
okay

186
00:12:08,959 --> 00:12:13,030
and tom we're ready for your questions

187
00:12:17,110 --> 00:12:15,269
this is uh i assume this is commander

188
00:12:20,470 --> 00:12:17,120

alan poindexter he's the mission

189
00:12:25,990 --> 00:12:20,480
specialist and do you have uh uh

190
00:12:26,000 --> 00:12:29,110
he's here

191
00:12:29,120 --> 00:12:32,389
hi tom how are you

192
00:12:39,430 --> 00:12:34,629
i'm doing very well and how's it how

193
00:12:43,990 --> 00:12:41,430
they're going very well it's a great day

194
00:12:46,470 --> 00:12:44,000
on the space station we were able to

195
00:12:48,310 --> 00:12:46,480
install our cargo carrier and we'll be

196
00:12:51,750 --> 00:12:48,320
delivering a great experiment to the

197
00:12:55,269 --> 00:12:53,430
i understand you had some problems when

198
00:12:57,430 --> 00:12:55,279
you dock on the space station with your

199
00:13:02,470 --> 00:12:57,440
radar antenna is everything all right

200
00:13:05,829 --> 00:13:03,990
everything's all right we'll be able to

201
00:13:07,430 --> 00:13:05,839
make it back just fine and especially

202
00:13:11,750 --> 00:13:07,440
since we're here at the space station we

203
00:13:17,350 --> 00:13:14,710
now nasa has uh this this is the first

204
00:13:20,470 --> 00:13:17,360
crew in space with three female and two

205
00:13:22,230 --> 00:13:20,480
japanese astronauts in the crew did you

206
00:13:28,069 --> 00:13:22,240
get your hair done before you went up in

207
00:13:33,269 --> 00:13:30,790
of course i always try to represent nasa

208
00:13:35,590 --> 00:13:33,279
as best i can so hopefully i'm looking

209
00:13:37,910 --> 00:13:35,600
pretty good and actually this is the

210
00:13:39,829 --> 00:13:37,920
third uh the third flight with three

211
00:13:40,870 --> 00:13:39,839
women on the space shuttle and the first

212
00:13:43,750 --> 00:13:40,880
with four

213
00:13:45,110 --> 00:13:43,760

women in space together as we joined the

214
00:13:47,030 --> 00:13:45,120
tracy caldwell on the international

215
00:13:51,189 --> 00:13:47,040
space station and yes the first was the

216
00:13:54,949 --> 00:13:52,629
and and um

217
00:13:56,710 --> 00:13:54,959
how did you how did you stephanie get

218
00:13:59,350 --> 00:13:56,720
into uh

219
00:14:01,350 --> 00:13:59,360
the business of uh space shuttling or

220
00:14:02,870 --> 00:14:01,360
being becoming an astronaut what was

221
00:14:04,310 --> 00:14:02,880
your what was your what what is your

222
00:14:06,230 --> 00:14:04,320
story where are you from what kind of

223
00:14:12,470 --> 00:14:06,240
classes did you have to take what was

224
00:14:17,110 --> 00:14:14,389
i was very interested in math and

225
00:14:19,509 --> 00:14:17,120
science and i interviewed an astronomy

226
00:14:21,430 --> 00:14:19,519
professor in middle school and that was

227
00:14:27,030 --> 00:14:21,440
the beginning of my

228
00:14:34,069 --> 00:14:29,110
and your struggle was it a struggle to

229
00:14:38,389 --> 00:14:35,829
struggle takes a lot of hard work and

230
00:14:41,030 --> 00:14:38,399
dedication so the young people out there

231
00:14:44,310 --> 00:14:41,040
they study hard and uh stick with it

232
00:14:46,870 --> 00:14:44,320
they can do it too

233
00:14:48,790 --> 00:14:46,880
i'm in orlando this morning with the

234
00:14:50,470 --> 00:14:48,800
census bureau we're counting we're

235
00:14:51,910 --> 00:14:50,480
counting right now have you filled out

236
00:14:55,750 --> 00:14:51,920
your census form before you went up in

237
00:14:59,670 --> 00:14:58,069
i did fill out my census form before

238
00:15:05,430 --> 00:14:59,680

coming to the space station but i did

239
00:15:12,389 --> 00:15:08,790
because this mission is 13 13 days long

240
00:15:13,910 --> 00:15:12,399
so well will you uh we i know we don't

241
00:15:16,310 --> 00:15:13,920
we don't have any more time but there

242
00:15:19,350 --> 00:15:16,320
are a lot of parents who are listening

243
00:15:22,310 --> 00:15:19,360
right now and what can you tell the

244
00:15:26,710 --> 00:15:22,320
parents on how to encourage their kids

245
00:15:31,590 --> 00:15:28,710
absolutely as they encourage their

246
00:15:33,829 --> 00:15:31,600
children if they support them and expose

247
00:15:36,230 --> 00:15:33,839
them to different opportunities going to

248
00:15:38,150 --> 00:15:36,240
museums and going to airports

249
00:15:40,389 --> 00:15:38,160
all the opportunities that the school

250
00:15:42,150 --> 00:15:40,399
field trips have and just open

251
00:15:44,069 --> 00:15:42,160
opportunities to them then they will

252
00:15:47,749 --> 00:15:44,079
dream have big dreams and they can

253
00:15:48,870 --> 00:15:47,759
pursue whatever their hearts desire

254
00:15:50,790 --> 00:15:48,880
that's cool

255
00:15:52,069 --> 00:15:50,800
and uh do you have your ipod with you

256
00:15:56,150 --> 00:15:52,079
what are you listening to up there in

257
00:16:01,829 --> 00:15:58,949
i have an ipod i have some

258
00:16:03,590 --> 00:16:01,839
i have some tunes to exercise too and i

259
00:16:07,110 --> 00:16:03,600
also have some spiritual music for

260
00:16:16,790 --> 00:16:10,470
discovery iss this is wvit-tv how do you

261
00:16:16,800 --> 00:16:21,509
we read you loud and clear

262
00:16:25,269 --> 00:16:23,590
a lot of children say they want to be an

263
00:16:27,910 --> 00:16:25,279

astronaut when they grow up but a

264
00:16:29,910 --> 00:16:27,920
connecticut man is living the dream the

265
00:16:31,990 --> 00:16:29,920
space shuttle discovery rocketed into

266
00:16:34,230 --> 00:16:32,000
orbit on monday with 40 year old

267
00:16:35,990 --> 00:16:34,240
waterbury native rick mastracchio on

268
00:16:37,990 --> 00:16:36,000
board rick joins us from the

269
00:16:39,590 --> 00:16:38,000
international space station along with

270
00:16:41,990 --> 00:16:39,600
two other discovery crew members

271
00:16:49,269 --> 00:16:42,000
commander alan poindexter and mission

272
00:16:49,279 --> 00:16:52,550
how are you today

273
00:16:56,389 --> 00:16:54,470
i'm great i understand there's a delay

274
00:16:58,550 --> 00:16:56,399
we understand that but rick let's start

275
00:17:01,110 --> 00:16:58,560
off with you you played a special lead

276
00:17:05,829 --> 00:17:01,120
role on this trip so tell us more about

277
00:17:11,429 --> 00:17:09,350
hey i am one of the space walkers

278
00:17:13,029 --> 00:17:11,439
along with clay anderson and what we'll

279
00:17:15,189 --> 00:17:13,039
do is tomorrow we'll go out for our

280
00:17:17,429 --> 00:17:15,199
first spacewalk to begin the

281
00:17:19,189 --> 00:17:17,439
installation of a new ammonia tank on

282
00:17:21,590 --> 00:17:19,199
the international space station and then

283
00:17:23,510 --> 00:17:21,600
we'll finish up that task over

284
00:17:26,949 --> 00:17:23,520
two more space walks later on in the

285
00:17:31,430 --> 00:17:28,950
now stephanie you helped set a record

286
00:17:38,870 --> 00:17:31,440
for the most women in space at the same

287
00:17:43,909 --> 00:17:40,710
it's very historic

288
00:17:46,390 --> 00:17:43,919

we of course are very fortunate to have

289
00:17:47,510 --> 00:17:46,400
had many women come before us

290
00:17:49,510 --> 00:17:47,520
to uh

291
00:17:50,870 --> 00:17:49,520
fly in space and so we're very thankful

292
00:17:53,750 --> 00:17:50,880
for their contributions and their

293
00:17:55,909 --> 00:17:53,760
dedication to make it possible for uh

294
00:17:58,310 --> 00:17:55,919
for the ladies on this flight to have an

295
00:17:59,909 --> 00:17:58,320
opportunity we have many in the

296
00:18:02,470 --> 00:17:59,919
astronaut office that they're very

297
00:18:07,669 --> 00:18:02,480
supportive and are good mentors and so

298
00:18:12,470 --> 00:18:09,990
well you are making me extra proud alan

299
00:18:15,029 --> 00:18:12,480
this next question is for you the crew

300
00:18:16,950 --> 00:18:15,039
is on a 13-day mission what kind of work

301
00:18:22,470 --> 00:18:16,960
do you have planned i know you're very

302
00:18:26,549 --> 00:18:24,549
it's a really busy flight we in this to

303
00:18:28,870 --> 00:18:26,559
the three space walk that rick and clay

304
00:18:31,990 --> 00:18:28,880
are doing we have

305
00:18:34,630 --> 00:18:32,000
about 12 to 13 tons of cargo that we

306
00:18:36,390 --> 00:18:34,640
have to get across from the

307
00:18:38,230 --> 00:18:36,400
multi-purpose logistics module that's

308
00:18:39,750 --> 00:18:38,240
our cargo carrier that we brought up in

309
00:18:42,070 --> 00:18:39,760
our payload bay

310
00:18:44,630 --> 00:18:42,080
we attached it to the space station this

311
00:18:46,390 --> 00:18:44,640
morning stephanie and valko did

312
00:18:48,470 --> 00:18:46,400
and just a few minutes ago we opened a

313
00:18:50,150 --> 00:18:48,480

hatch for that cargo carrier

314
00:18:52,630 --> 00:18:50,160
and we're starting to pull supplies out

315
00:18:54,230 --> 00:18:52,640
now so for the next several days we'll

316
00:18:56,950 --> 00:18:54,240
uh we'll be transferring supplies

317
00:18:58,630 --> 00:18:56,960
science rack research equipment over the

318
00:19:00,630 --> 00:18:58,640
space station

319
00:19:04,470 --> 00:19:00,640
in addition to a new sleeping station

320
00:19:10,070 --> 00:19:07,590
nice now rick back to you growing up in

321
00:19:16,230 --> 00:19:10,080
waterbury i had to ask did you always

322
00:19:20,710 --> 00:19:18,390
i was interested in math and science and

323
00:19:22,549 --> 00:19:20,720
studying things and studying about space

324
00:19:25,350 --> 00:19:22,559
but i never really knew that i could

325
00:19:26,710 --> 00:19:25,360
become an astronaut until i was out of

326
00:19:28,549 --> 00:19:26,720
graduate school and i saw an

327
00:19:30,870 --> 00:19:28,559
advertisement in a magazine and decided

328
00:19:34,710 --> 00:19:30,880
to take a chance and nine years later i

329
00:19:39,830 --> 00:19:37,029
wonderful and the shuttle program comes

330
00:19:42,070 --> 00:19:39,840
to an end after nearly 30 years as

331
00:19:49,270 --> 00:19:42,080
shuttle astronauts will it be a sad day

332
00:19:53,990 --> 00:19:51,350
i don't consider it a sad day at all you

333
00:19:55,830 --> 00:19:54,000
know shuttle has left a great legacy uh

334
00:19:57,270 --> 00:19:55,840
throughout its history

335
00:19:58,310 --> 00:19:57,280
incredible things have done with the

336
00:19:59,350 --> 00:19:58,320
shuttle that

337
00:20:01,110 --> 00:19:59,360
probably could not have been done with

338
00:20:02,549 --> 00:20:01,120

any other vehicle when you think about

339
00:20:04,390 --> 00:20:02,559
the hubble space telescope and the

340
00:20:06,789 --> 00:20:04,400
service commissions to it

341
00:20:08,070 --> 00:20:06,799
and the assembly and uh

342
00:20:09,510 --> 00:20:08,080
and the building of the international

343
00:20:10,789 --> 00:20:09,520
space station

344
00:20:11,830 --> 00:20:10,799
and the use of the international space

345
00:20:13,669 --> 00:20:11,840
station

346
00:20:16,310 --> 00:20:13,679
the shuttle's left incredible legacy

347
00:20:18,950 --> 00:20:16,320
it's a very versatile vehicle and uh

348
00:20:21,029 --> 00:20:18,960
and uh i think it's time to celebrate

349
00:20:25,110 --> 00:20:21,039
the 30 years of flying the vehicle and

350
00:20:29,190 --> 00:20:26,870
you're right it's more of a celebration

351
00:20:31,990 --> 00:20:29,200
i have to ask each and every one of you

352
00:20:39,270 --> 00:20:32,000
what do you do on your downtime i'm just

353
00:20:43,110 --> 00:20:41,029
well one of the great things about being

354
00:20:45,990 --> 00:20:43,120
in space is being able to look at her

355
00:20:49,110 --> 00:20:46,000
and the view out the windows and so

356
00:20:54,230 --> 00:20:49,120
a lot of us spend time looking at earth

357
00:20:57,909 --> 00:20:55,990
yeah i have to agree we spend a lot of

358
00:20:59,430 --> 00:20:57,919
time looking out the window any spare

359
00:21:02,549 --> 00:20:59,440
time that we have which is not much i

360
00:21:04,630 --> 00:21:02,559
should say and then we just enjoy this

361
00:21:06,710 --> 00:21:04,640
enormous space station that we have this

362
00:21:13,190 --> 00:21:06,720
thing is incredible and it's just it's

363
00:21:17,029 --> 00:21:15,029

well i'm looking out the window here and

364
00:21:19,270 --> 00:21:17,039
it's nice but i don't think it's nice is

365
00:21:21,590 --> 00:21:19,280
what you have up there thank you all so

366
00:21:24,549 --> 00:21:21,600
much for your time

367
00:21:28,789 --> 00:21:24,559
discovery iss this is fox news radio how

368
00:21:33,990 --> 00:21:30,789
good morning we have you loud and clear

369
00:21:38,149 --> 00:21:35,990
first the practical stuff commander

370
00:21:40,310 --> 00:21:38,159
poindexter as we talk you've got a

371
00:21:45,029 --> 00:21:40,320
shuttle without a working ku antenna is

372
00:21:49,270 --> 00:21:47,430
not at all we've got a lot of a lot of

373
00:21:50,710 --> 00:21:49,280
capability and a lot of redundancy in

374
00:21:52,630 --> 00:21:50,720
our systems now we're docked to the

375
00:21:53,669 --> 00:21:52,640
international space station

376
00:21:56,230 --> 00:21:53,679
and we're able to use their

377
00:21:57,430 --> 00:21:56,240
communication systems to get our data

378
00:22:02,230 --> 00:21:57,440
and voice

379
00:22:06,789 --> 00:22:04,710
well for rick mastracchio you're doing

380
00:22:08,310 --> 00:22:06,799
three space walks on this mission and

381
00:22:10,070 --> 00:22:08,320
with the shuttle program winding down

382
00:22:12,549 --> 00:22:10,080
you're one of the more experienced nasa

383
00:22:14,630 --> 00:22:12,559
space walkers now most of us down here

384
00:22:20,549 --> 00:22:14,640
will never get the chance what does it

385
00:22:25,830 --> 00:22:23,590
the difficult feeling to describe

386
00:22:27,990 --> 00:22:25,840
the incredible views of the earth from

387
00:22:29,909 --> 00:22:28,000
inside a space suit are just

388
00:22:31,830 --> 00:22:29,919

they're just beautiful the earth is a

389
00:22:33,270 --> 00:22:31,840
beautiful place to look back upon and we

390
00:22:34,630 --> 00:22:33,280
spend a lot of effort trying to get off

391
00:22:36,230 --> 00:22:34,640
the planet and come into space but we

392
00:22:37,669 --> 00:22:36,240
always spend a lot of time looking back

393
00:22:39,350 --> 00:22:37,679
where we came from

394
00:22:41,190 --> 00:22:39,360
the space walks

395
00:22:43,190 --> 00:22:41,200
lot very difficult take a lot of

396
00:22:45,750 --> 00:22:43,200
physical and mental energy

397
00:22:47,590 --> 00:22:45,760
and there's a lot of a lot of risk out

398
00:22:50,789 --> 00:22:47,600
there so we train real hard and we do

399
00:22:55,590 --> 00:22:53,110
and stephanie wilson this is your third

400
00:22:57,029 --> 00:22:55,600
shuttle flight all on the discovery are

401
00:23:01,830 --> 00:22:57,039
you starting to feel a little attached

402
00:23:06,710 --> 00:23:04,149
definitely um discovery's been a great

403
00:23:07,909 --> 00:23:06,720
ship she served me well on two flights

404
00:23:10,070 --> 00:23:07,919
and we are having a little bit of

405
00:23:11,830 --> 00:23:10,080
trouble with the ku but otherwise she's

406
00:23:13,830 --> 00:23:11,840
a great vehicle the folks in florida at

407
00:23:17,909 --> 00:23:13,840
the kennedy space center did a great job

408
00:23:22,390 --> 00:23:19,990
going back to the commander first it was

409
00:23:24,710 --> 00:23:22,400
30 years ago this week that the first

410
00:23:26,390 --> 00:23:24,720
space shuttle took off from florida and

411
00:23:28,950 --> 00:23:26,400
landed a few hours later at edwards air

412
00:23:31,830 --> 00:23:28,960
force base took off

413
00:23:34,549 --> 00:23:31,840

131 flights later what have we learned

414
00:23:37,430 --> 00:23:34,559
and and what have we gained

415
00:23:39,510 --> 00:23:37,440
well uh that's a great question

416
00:23:41,750 --> 00:23:39,520
i could start with uh where we are today

417
00:23:43,669 --> 00:23:41,760
the international space station is a

418
00:23:46,390 --> 00:23:43,679
wonderful research facility and

419
00:23:48,310 --> 00:23:46,400
world-class laboratory here uh orbiting

420
00:23:49,350 --> 00:23:48,320
200 miles above the earth

421
00:23:52,310 --> 00:23:49,360
every day

422
00:23:54,310 --> 00:23:52,320
the combined weight of the

423
00:23:55,909 --> 00:23:54,320
shuttle and station is uh

424
00:23:57,510 --> 00:23:55,919
approaching a million pounds or just

425
00:23:59,830 --> 00:23:57,520
over a million pounds

426
00:24:02,230 --> 00:23:59,840
and it's a marvelous facility we have 13

427
00:24:03,590 --> 00:24:02,240
people on board right now and without

428
00:24:05,990 --> 00:24:03,600
the shuttle we would not have been able

429
00:24:08,070 --> 00:24:06,000
to build this facility the way we did

430
00:24:09,190 --> 00:24:08,080
you can also look back the hubble space

431
00:24:10,789 --> 00:24:09,200
telescope

432
00:24:12,310 --> 00:24:10,799
its deployment and the servicing

433
00:24:13,350 --> 00:24:12,320
missions to the hubble

434
00:24:15,430 --> 00:24:13,360
again

435
00:24:17,990 --> 00:24:15,440
all due to the versatility of the space

436
00:24:20,070 --> 00:24:18,000
shuttle we can we get the magnificent

437
00:24:21,110 --> 00:24:20,080
views and the great science and research

438
00:24:25,669 --> 00:24:21,120

that

439
00:24:29,990 --> 00:24:27,909
for all of you uh please as you know

440
00:24:32,310 --> 00:24:30,000
nasa's plans for the future have changed

441
00:24:34,789 --> 00:24:32,320
and those changes will affect the three

442
00:24:37,110 --> 00:24:34,799
of you very profoundly do you think this

443
00:24:39,190 --> 00:24:37,120
could be your last trip into space or do

444
00:24:45,350 --> 00:24:39,200
you think you'll be involved as the

445
00:24:48,870 --> 00:24:47,190
well i can't speak for the others but i

446
00:24:50,470 --> 00:24:48,880
certainly hope to return to space

447
00:24:51,750 --> 00:24:50,480
someday of course i'm not getting any

448
00:24:53,669 --> 00:24:51,760
younger

449
00:24:55,830 --> 00:24:53,679
but nasa will

450
00:25:00,549 --> 00:24:55,840
build a new vehicle in the upcoming

451
00:25:04,470 --> 00:25:02,310
and i agree with rick this is certainly

452
00:25:06,950 --> 00:25:04,480
a special experience and i hope to have

453
00:25:08,789 --> 00:25:06,960
another opportunity to perhaps be a

454
00:25:14,310 --> 00:25:08,799
member of a long duration flight on the

455
00:25:18,470 --> 00:25:16,470
one last question and that is there are

456
00:25:20,310 --> 00:25:18,480
youngsters who'll be listening to this

457
00:25:22,470 --> 00:25:20,320
what do you want to tell them if they're

458
00:25:24,230 --> 00:25:22,480
thinking they want to go into space give

459
00:25:28,630 --> 00:25:24,240
them some direction what should they be

460
00:25:31,549 --> 00:25:29,909
i think the best direction we can give

461
00:25:35,190 --> 00:25:31,559
our youngsters today

462
00:25:37,350 --> 00:25:35,200
is to dream big and follow those dreams

463
00:25:39,110 --> 00:25:37,360

work hard to attain your goals do

464
00:25:41,909 --> 00:25:39,120
something you enjoy

465
00:25:44,230 --> 00:25:41,919
and work very hard at it i think that's

466
00:25:45,750 --> 00:25:44,240
that's the key to success in life is to

467
00:25:47,750 --> 00:25:45,760
do something that you're happy with and

468
00:25:50,950 --> 00:25:47,760
work really hard at it and

469
00:25:55,669 --> 00:25:53,510
they should study hard uh getting ready

470
00:25:58,149 --> 00:25:55,679
for space that math and science are good

471
00:26:00,630 --> 00:25:58,159
uh good things to study engineering

472
00:26:03,029 --> 00:26:00,640
going into aviation through the military

473
00:26:04,710 --> 00:26:03,039
or other career fields are are very good

474
00:26:07,430 --> 00:26:04,720
and the most important thing is really

475
00:26:10,470 --> 00:26:07,440
to work hard try hard and to stick with

476
00:26:14,149 --> 00:26:12,149
yeah i think the commander and stephanie

477
00:26:15,990 --> 00:26:14,159
summed it up pretty well it find out

478
00:26:19,110 --> 00:26:16,000
find something you really enjoy work

479
00:26:20,710 --> 00:26:19,120
very hard at it be dedicated and put in

480
00:26:22,630 --> 00:26:20,720
an application for nasa and see what

481
00:26:24,149 --> 00:26:22,640
happens

482
00:26:26,149 --> 00:26:24,159
as you can see the hatches are open

483
00:26:29,269 --> 00:26:26,159
between the leonardo multipurpose

484
00:26:31,590 --> 00:26:29,279
logistics module and the harmony node

485
00:26:32,630 --> 00:26:31,600
the crew getting uh

486
00:26:35,990 --> 00:26:32,640
to work

487
00:26:38,789 --> 00:26:37,590
you can see all the cargo inside as

488
00:26:41,190 --> 00:26:38,799

we've been mentioning there's more than

489
00:26:42,310 --> 00:26:41,200
12 000 pounds of cargo and supplies and

490
00:26:44,390 --> 00:26:42,320
equipment

491
00:26:46,870 --> 00:26:44,400
inside leonardo all of that has to be

492
00:26:49,750 --> 00:26:46,880
moved out of it and across that hatchway

493
00:26:53,190 --> 00:26:51,430
the crew once they get everything moved

494
00:26:54,390 --> 00:26:53,200
across and put up where it needs to go

495
00:26:56,549 --> 00:26:54,400
we'll be busy

496
00:26:58,630 --> 00:26:56,559
stuffing leonardo full of different

497
00:27:01,750 --> 00:26:58,640
types of equipment and pieces of

498
00:27:02,750 --> 00:27:01,760
structure that have to come back home

499
00:27:05,510 --> 00:27:02,760
there will be

500
00:27:07,750 --> 00:27:05,520
4109 pounds of equipment that will

501
00:27:09,430 --> 00:27:07,760
be packed in there for the return ride

502
00:27:11,350 --> 00:27:09,440
back to earth

503
00:27:16,789 --> 00:27:11,360
inside leonardo which will be tucked

504
00:27:19,430 --> 00:27:18,070
the crew is going to be very busy over

505
00:27:21,510 --> 00:27:19,440
the next couple of days taking care of

506
00:27:23,190 --> 00:27:21,520
all of that they will have

507
00:27:24,630 --> 00:27:23,200
each and every night

508
00:27:26,310 --> 00:27:24,640
basically a conference call with the

509
00:27:28,070 --> 00:27:26,320
ground teams here to make sure that

510
00:27:30,070 --> 00:27:28,080
everything is

511
00:27:31,669 --> 00:27:30,080
taken care of that needs to be addressed

512
00:27:32,950 --> 00:27:31,679
during the cruise day

513
00:27:34,149 --> 00:27:32,960

and to make sure that the ground teams

514
00:27:36,950 --> 00:27:34,159
are following along that all the

515
00:27:41,750 --> 00:27:36,960
different logistics and inventory items

516
00:27:45,510 --> 00:27:43,510
everything that's inside of there has

517
00:27:47,750 --> 00:27:45,520
its own numbering system until an

518
00:27:50,470 --> 00:27:47,760
assignment in terms of

519
00:27:52,630 --> 00:27:50,480
where it was packed inside leonardo and

520
00:28:04,070 --> 00:27:52,640
also where it ultimately will be stored

521
00:28:08,789 --> 00:28:07,029
and airlock houston

522
00:28:16,950 --> 00:28:08,799
we are on board with you and we're ready

523
00:28:20,710 --> 00:28:18,710
yeah houston we already packed it up we

524
00:28:21,990 --> 00:28:20,720
took some photos uh sweet she took a

525
00:28:23,510 --> 00:28:22,000
couple of photos of it so they'll get

526
00:28:25,029 --> 00:28:23,520
downlinked there it's not a big deal

527
00:28:25,830 --> 00:28:25,039
just some of the paint was scratched we

528
00:28:30,470 --> 00:28:25,840
just want to make sure it gets

529
00:28:33,590 --> 00:28:32,149
okay and we copied this photo call

530
00:28:52,909 --> 00:28:33,600
earlier so

531
00:28:58,630 --> 00:28:55,990
sts-131 crew members rick mastracchio

532
00:29:00,149 --> 00:28:58,640
and clay anderson who are our two space

533
00:29:02,149 --> 00:29:00,159
walkers tomorrow

534
00:29:03,430 --> 00:29:02,159
as well as dottie metcalf lindenberger

535
00:29:06,149 --> 00:29:03,440
who will be serving as the

536
00:29:07,669 --> 00:29:06,159
intravehicular officer or the person who

537
00:29:09,830 --> 00:29:07,679
will be helping coordinate tomorrow's

538
00:29:11,269 --> 00:29:09,840

spacewalk with the crew members are

539
00:29:15,029 --> 00:29:11,279
continuing to work inside the quest

540
00:29:21,669 --> 00:29:19,590
there's jim dutton the sts-131 pilot

541
00:29:24,710 --> 00:29:21,679
you hear the ground team here in houston

542
00:29:27,110 --> 00:29:24,720
asking mastracchio about some video of

543
00:29:29,669 --> 00:29:27,120
an rga which looks like some paint came

544
00:29:31,750 --> 00:29:29,679
off of whenever they unpacked it

545
00:29:35,350 --> 00:29:31,760
this is a rate gyro assembly that the

546
00:29:37,350 --> 00:29:35,360
two spacewalkers will be installing

547
00:29:39,029 --> 00:29:37,360
it seems as whenever they pulled

548
00:29:40,549 --> 00:29:39,039
the wrapping off of it some of the paint

549
00:29:42,070 --> 00:29:40,559
came off it's not going to impact

550
00:29:43,990 --> 00:29:42,080
anything tomorrow at all but they wanted

551
00:29:47,269 --> 00:29:44,000
to go ahead and document it

552
00:29:48,630 --> 00:29:47,279
via photo or video

553
00:29:49,990 --> 00:29:48,640
so they took some pictures of it and

554
00:30:02,470 --> 00:29:50,000
we'll send those down to the ground just

555
00:30:06,149 --> 00:30:04,310
the two spacewalkers for tomorrow's

556
00:30:06,830 --> 00:30:06,159
activities are in the process of doing

557
00:30:28,630 --> 00:30:06,840
the

558
00:30:33,669 --> 00:30:31,909
all of this activity is done so that

559
00:30:35,190 --> 00:30:33,679
the two spacewalkers can avoid what is

560
00:30:37,350 --> 00:30:35,200
called the bend

561
00:30:38,389 --> 00:30:37,360
anyone who is familiar with any sort of

562
00:30:41,510 --> 00:30:38,399
diving

563
00:30:43,110 --> 00:30:41,520

knows about this effect

564
00:30:45,669 --> 00:30:43,120
but the reduced pressure allows all the

565
00:30:47,750 --> 00:30:45,679
nitrogen inside their bloodstreams to

566
00:30:49,029 --> 00:30:47,760
evacuate

567
00:30:50,470 --> 00:30:49,039
and then in the morning they have a

568
00:30:52,310 --> 00:30:50,480
shorter

569
00:30:53,830 --> 00:30:52,320
preparation phase as they get ready to

570
00:31:00,549 --> 00:30:53,840
kick off this first of the three

571
00:31:06,070 --> 00:31:04,310
there's sts-131 pilot jim dutton he as

572
00:31:07,190 --> 00:31:06,080
well as stephanie wilson will be

573
00:31:09,110 --> 00:31:07,200
piloting

574
00:31:11,750 --> 00:31:09,120
the station's robotic arm tomorrow

575
00:31:13,590 --> 00:31:11,760
during the spacewalk activities

576
00:31:15,269 --> 00:31:13,600
that arm is going to reach out and rick

577
00:31:17,430 --> 00:31:15,279
mastracchio and clay anderson will

578
00:31:18,870 --> 00:31:17,440
install the brand new ammonia tank

579
00:31:20,710 --> 00:31:18,880
assembly after it's been removed from

580
00:31:21,509 --> 00:31:20,720
discovery's payload babel put it on that

581
00:31:23,269 --> 00:31:21,519
arm

582
00:31:24,870 --> 00:31:23,279
and both the dutton and stephanie wilson

583
00:31:26,549 --> 00:31:24,880
will move it over toward an external

584
00:31:28,149 --> 00:31:26,559
stowage platform

585
00:31:29,350 --> 00:31:28,159
mr accio and anderson will make their

586
00:31:31,750 --> 00:31:29,360
way up there

587
00:31:34,149 --> 00:31:31,760
on the station structure

588
00:31:36,310 --> 00:31:34,159

they will grab another grapple bar

589
00:31:38,870 --> 00:31:36,320
install it on that ammonia tank assembly

590
00:31:40,950 --> 00:31:38,880
while it is attached to the station's

591
00:31:42,710 --> 00:31:40,960
robotic arm

592
00:31:44,710 --> 00:31:42,720
and then they will temporarily stow that

593
00:31:46,789 --> 00:31:44,720
entire assembly

594
00:31:48,710 --> 00:31:46,799
on a cargo attachment point

595
00:31:50,149 --> 00:31:48,720
outside the station where it will stay

596
00:31:51,269 --> 00:31:50,159
until the second spacewalk of the

597
00:31:53,110 --> 00:31:51,279
mission

598
00:31:54,710 --> 00:31:53,120
and during that time that ammonia tank

599
00:32:02,470 --> 00:31:54,720
assembly will be moved to its permanent

600
00:32:07,509 --> 00:32:05,190
and houston airlock for the camp out

601
00:32:10,549 --> 00:32:07,519
we'd like to start closing the node 1

602
00:32:22,070 --> 00:32:10,559
starboard hatch here in about one minute