



1  
00:00:29,760 --> 00:00:47,990  
you

2  
00:00:52,790 --> 00:00:50,389  
knowing the day i was born

3  
00:00:55,029 --> 00:00:52,800  
when i saw gather round

4  
00:01:07,830 --> 00:00:55,039  
in the wild wonder

5  
00:01:07,840 --> 00:01:22,789  
is

6  
00:01:22,799 --> 00:01:32,550  
endeavor houston good morning

7  
00:01:36,950 --> 00:01:34,069  
and we're in great shape and how about

8  
00:01:41,270 --> 00:01:38,830  
yeah feeling

9  
00:01:45,190 --> 00:01:41,280  
good denver houston we're on the flight

10  
00:01:50,389 --> 00:01:47,109  
okay welcome i'm going to go ahead and

11  
00:01:52,950 --> 00:01:50,399  
start our tape what this is is a little

12  
00:01:54,870 --> 00:01:52,960  
tour that we took from space have down

13  
00:01:57,190 --> 00:01:54,880

the tunnel to the mid deck and the

14

00:01:58,709 --> 00:01:57,200

flight deck and i'll introduce it by

15

00:02:00,310 --> 00:01:58,719

saying that you know we're on the day

16

00:02:02,630 --> 00:02:00,320

before landing so there's a lot of

17

00:02:04,389 --> 00:02:02,640

activity as we prepare to

18

00:02:05,910 --> 00:02:04,399

stow our hardware and finish up our

19

00:02:07,429 --> 00:02:05,920

experiment ops

20

00:02:09,910 --> 00:02:07,439

and i hope that what you'll see is the

21

00:02:12,710 --> 00:02:09,920

environment uh that we've

22

00:02:14,550 --> 00:02:12,720

been working in and uh get a feel for

23

00:02:17,350 --> 00:02:14,560

what it's like this is not cecil did a

24

00:02:23,350 --> 00:02:17,360

mill this is our eyeball view of living

25

00:02:28,390 --> 00:02:25,670

we're going into the hab right now from

26

00:02:30,710 --> 00:02:28,400

the tunnel which runs from the mid deck

27

00:02:32,550 --> 00:02:30,720

to the space tab

28

00:02:34,309 --> 00:02:32,560

it's floating right in front of my eye

29

00:02:35,670 --> 00:02:34,319

so you're seeing what we see as we come

30

00:02:44,949 --> 00:02:35,680

in

31

00:02:45,750 --> 00:02:44,959

center is actually an empty foam cushion

32

00:02:48,390 --> 00:02:45,760

that

33

00:02:50,869 --> 00:02:48,400

contains some of our transfer cargo

34

00:02:53,350 --> 00:02:50,879

we're now scanning to the starboard side

35

00:02:56,390 --> 00:02:53,360

and now to the forward side you can see

36

00:02:59,350 --> 00:02:56,400

uh the tunnel we just came through

37

00:03:03,670 --> 00:02:59,360

and the space hab subsystem computer

38

00:03:07,030 --> 00:03:05,509

and if you've probably noticed we set up

39

00:03:09,110 --> 00:03:07,040

our hardware a little bit differently we

40

00:03:10,949 --> 00:03:09,120

don't have to lay it down on tables any

41

00:03:18,309 --> 00:03:10,959

place we've got a good piece of velcro

42

00:03:22,710 --> 00:03:20,630

we have our cue cards up uh

43

00:03:25,190 --> 00:03:22,720

a handheld mic their velcro and then

44

00:03:27,670 --> 00:03:25,200

over to the starboard side you see many

45

00:03:30,390 --> 00:03:27,680

of the soft containers that were used

46

00:03:32,550 --> 00:03:30,400

for our cargo that worked out very well

47

00:03:35,270 --> 00:03:32,560

now going back towards the aft end you

48

00:03:42,390 --> 00:03:35,280

see the opm rack

49

00:03:46,789 --> 00:03:44,390

and the cushion that's uh

50

00:03:49,190 --> 00:03:46,799

gently tethered to the front

51  
00:03:50,789 --> 00:03:49,200  
now let's go back to the act and we just

52  
00:03:53,430 --> 00:03:50,799  
missed jim we'll see him again a little

53  
00:03:54,869 --> 00:03:53,440  
bit later he was working on mgm which is

54  
00:03:55,910 --> 00:03:54,879  
in the center there you'll see it in a

55  
00:03:58,789 --> 00:03:55,920  
moment

56  
00:04:00,630 --> 00:03:58,799  
right in front of you are the two sam

57  
00:04:03,429 --> 00:04:00,640  
sensor heads those are acceleration

58  
00:04:06,470 --> 00:04:03,439  
measuring systems

59  
00:04:09,750 --> 00:04:06,480  
and up there the blue box is the eof

60  
00:04:12,229 --> 00:04:09,760  
freezer and now the two cgba's

61  
00:04:14,630 --> 00:04:12,239  
that dave tended to during his flight

62  
00:04:16,550 --> 00:04:14,640  
that we transferred during the flight

63  
00:04:18,550 --> 00:04:16,560

those are part of our status check every

64

00:04:20,870 --> 00:04:18,560

day

65

00:04:24,070 --> 00:04:20,880

and surrounding them are more of the

66

00:04:26,710 --> 00:04:24,080

transfer containers the cargo containers

67

00:04:28,629 --> 00:04:26,720

we get a closer look at the sands here

68

00:04:30,390 --> 00:04:28,639

it's flown many flights

69

00:04:32,230 --> 00:04:30,400

comes out of the lewis research center

70

00:04:34,629 --> 00:04:32,240

it's an excellent acceleration

71

00:04:36,950 --> 00:04:34,639

measurement system

72

00:04:39,030 --> 00:04:36,960

these remote heads can be put anywhere

73

00:04:41,510 --> 00:04:39,040

to measure in different frequency ranges

74

00:04:43,749 --> 00:04:41,520

the ac accelerations that experiments

75

00:04:45,909 --> 00:04:43,759

are exposed to

76  
00:04:48,150 --> 00:04:45,919  
there are two chambers to the sams i'm

77  
00:04:51,030 --> 00:04:48,160  
not showing you the active one right now

78  
00:04:53,670 --> 00:04:51,040  
this is uh one of these test cells

79  
00:04:55,590 --> 00:04:53,680  
that is operated at standby over on the

80  
00:04:58,790 --> 00:04:55,600  
left-hand side and maybe we'll just take

81  
00:05:02,469 --> 00:04:58,800  
a peek at an active run here

82  
00:05:03,990 --> 00:05:02,479  
you have to pull the curtain and well

83  
00:05:05,830 --> 00:05:04,000  
i don't know there's a run nope we

84  
00:05:07,510 --> 00:05:05,840  
better not there's a run going on and we

85  
00:05:11,590 --> 00:05:07,520  
don't want to interrupt

86  
00:05:15,110 --> 00:05:11,600  
with the extraneous light

87  
00:05:17,189 --> 00:05:15,120  
that's the mgm camcorder set up

88  
00:05:19,590 --> 00:05:17,199

and up on the ceiling there is part of

89

00:05:22,870 --> 00:05:19,600

the japanese experiment for radiation

90

00:05:25,270 --> 00:05:22,880

monitoring it's called a detector unit

91

00:05:28,870 --> 00:05:25,280

strapped to the ceiling with uh

92

00:05:30,629 --> 00:05:28,880

silver dosimeters trapped around it

93

00:05:32,150 --> 00:05:30,639

another advantage of a weightless

94

00:05:34,150 --> 00:05:32,160

environment is that you can use all

95

00:05:35,590 --> 00:05:34,160

surfaces

96

00:05:39,110 --> 00:05:35,600

and off to your right there on the

97

00:05:42,469 --> 00:05:39,120

starboard side of the space hub is the

98

00:05:44,150 --> 00:05:42,479

dto 11 25 certificate experiment now the

99

00:05:46,629 --> 00:05:44,160

johnson space center

100

00:05:48,469 --> 00:05:46,639

with its uh dosimeter balls that's

101  
00:05:50,390 --> 00:05:48,479  
trapped in various places

102  
00:05:53,110 --> 00:05:50,400  
that's also part of our status check

103  
00:05:58,150 --> 00:05:53,120  
each day when i call down or jim calls

104  
00:06:01,670 --> 00:05:59,510  
it's called a tissue equivalent

105  
00:06:03,590 --> 00:06:01,680  
proportional counter and we're also

106  
00:06:12,150 --> 00:06:03,600  
testing various materials to use a

107  
00:06:17,350 --> 00:06:14,790  
now we scan to the port side we see a

108  
00:06:18,710 --> 00:06:17,360  
large rack that is a combination of two

109  
00:06:21,029 --> 00:06:18,720  
experiments

110  
00:06:22,309 --> 00:06:21,039  
the vrafve

111  
00:06:25,510 --> 00:06:22,319  
and the

112  
00:06:27,270 --> 00:06:25,520  
japanese radiation monitoring experiment

113  
00:06:30,230 --> 00:06:27,280

we've been doing quite a lot of work

114

00:06:32,710 --> 00:06:30,240

with the rmd it has a an electrical

115

00:06:34,550 --> 00:06:32,720

panel there up at the top

116

00:06:37,110 --> 00:06:34,560

and then a data recording unit next to

117

00:06:39,110 --> 00:06:37,120

the computer and that's the rmd laptop

118

00:06:45,029 --> 00:06:39,120

that we have set up for keeping track of

119

00:06:48,710 --> 00:06:46,230

we've done a couple of different

120

00:06:50,469 --> 00:06:48,720

configuration changes during the mission

121

00:06:52,469 --> 00:06:50,479

this is the last configuration change

122

00:06:54,230 --> 00:06:52,479

and we will deactivate this experiment

123

00:06:56,870 --> 00:06:54,240

at the end of the day

124

00:06:58,790 --> 00:06:56,880

we certainly were hoping that the vra

125

00:06:59,749 --> 00:06:58,800

would be up and running i think it's a

126

00:07:02,070 --> 00:06:59,759

great

127

00:07:03,589 --> 00:07:02,080

piece of technology there sometimes it's

128

00:07:05,350 --> 00:07:03,599

the little things that get you in feel

129

00:07:10,790 --> 00:07:05,360

gravity and that's why we test them here

130

00:07:15,990 --> 00:07:12,950

just below the space have logo there you

131

00:07:18,150 --> 00:07:16,000

can see one of the control panels

132

00:07:20,950 --> 00:07:18,160

and it looks like we're going to try to

133

00:07:22,710 --> 00:07:20,960

take a trip down the tunnel but

134

00:07:24,629 --> 00:07:22,720

i forgot to mention that we have two

135

00:07:26,150 --> 00:07:24,639

windows in the overhead and here's

136

00:07:27,990 --> 00:07:26,160

balajon

137

00:07:30,309 --> 00:07:28,000

taking a look out of them

138

00:07:32,309 --> 00:07:30,319

and giving us a greeting

139

00:07:36,469 --> 00:07:32,319

and he's uh wishing a birthday uh

140

00:07:38,790 --> 00:07:36,479

greeting to the president of uzbekistan

141

00:07:41,270 --> 00:07:38,800

now we're going back down the tunnel

142

00:07:43,350 --> 00:07:41,280

and we're going to pass through the ods

143

00:07:49,189 --> 00:07:43,360

or the orbiter docking system which is

144

00:07:53,029 --> 00:07:51,270

those yellow handrails on your left and

145

00:07:55,510 --> 00:07:53,039

right are what i'm using to kind of

146

00:07:59,110 --> 00:07:55,520

float myself down the tunnel

147

00:08:00,550 --> 00:07:59,120

i'm going to come in under the emu's

148

00:08:02,629 --> 00:08:00,560

in the external airlock and we're going

149

00:08:05,510 --> 00:08:02,639

to just look up and take a look at what

150

00:08:16,150 --> 00:08:05,520

we were calling ms7 and ms-8 on our

151  
00:08:21,029 --> 00:08:17,990  
and we'll be uh

152  
00:08:22,790 --> 00:08:21,039  
the center line camera as well today

153  
00:08:25,510 --> 00:08:22,800  
now we're going into

154  
00:08:28,309 --> 00:08:25,520  
a tunnel adapter which is where we keep

155  
00:08:30,070 --> 00:08:28,319  
several bags of stowage

156  
00:08:34,469 --> 00:08:30,080  
during the mission

157  
00:08:38,469 --> 00:08:36,709  
flight data flaw that we're not using

158  
00:08:40,870 --> 00:08:38,479  
now the mid deck is not only a

159  
00:08:42,469 --> 00:08:40,880  
laboratory it's also our living area

160  
00:08:44,149 --> 00:08:42,479  
mike's been working on a lot of our mid

161  
00:08:46,949 --> 00:08:44,159  
deck experiments

162  
00:08:52,070 --> 00:08:46,959  
here he's setting up a camera operation

163  
00:08:56,150 --> 00:08:54,310

as you know we've been working uh some

164

00:08:58,389 --> 00:08:56,160

anomalies with that and we're trying to

165

00:09:03,030 --> 00:08:58,399

understand what's happening in that uh

166

00:09:06,870 --> 00:09:04,870

just above that is the sea bass

167

00:09:08,870 --> 00:09:06,880

experiment and certainly while you can't

168

00:09:10,389 --> 00:09:08,880

see uh the fish the big ones or the

169

00:09:12,230 --> 00:09:10,399

little ones or the snails we've been

170

00:09:14,389 --> 00:09:12,240

peering through the screens because it's

171

00:09:15,590 --> 00:09:14,399

back backlit back there and find it very

172

00:09:17,030 --> 00:09:15,600

interesting

173

00:09:21,990 --> 00:09:17,040

the commander is working out on the

174

00:09:23,670 --> 00:09:22,000

bicycle and we'll all get our turn today

175

00:09:25,750 --> 00:09:23,680

and you can see that we have quite a bit

176

00:09:27,829 --> 00:09:25,760

of stowage that we've been moving around

177

00:09:30,150 --> 00:09:27,839

on the mid deck

178

00:09:33,269 --> 00:09:30,160

these two laptops that represent what's

179

00:09:34,829 --> 00:09:33,279

happening on the gps experiment

180

00:09:48,949 --> 00:09:34,839

dto

181

00:09:48,959 --> 00:09:53,590

sometimes things just get away from you

182

00:10:01,350 --> 00:09:57,350

now we scan to our port side to the mar

183

00:10:03,509 --> 00:10:01,360

area the galley area and the wcs area

184

00:10:05,430 --> 00:10:03,519

and our prime payload just needed to

185

00:10:07,590 --> 00:10:05,440

have something to do so we put him to

186

00:10:12,790 --> 00:10:07,600

work and he's turned out to be very good

187

00:10:16,230 --> 00:10:14,550

we want to give this be a vehicle back

188

00:10:19,269 --> 00:10:16,240

as clean as we got it it really has been

189

00:10:21,110 --> 00:10:19,279

in great shape

190

00:10:22,870 --> 00:10:21,120

i mentioned before this is a

191

00:10:35,509 --> 00:10:22,880

straightening up and cleaning up day and

192

00:10:40,150 --> 00:10:37,910

just saw a little bit of joe there joe's

193

00:10:43,670 --> 00:10:40,160

spending a lot of his time by the galley

194

00:10:45,750 --> 00:10:43,680

working water fills and cwc and so forth

195

00:10:48,470 --> 00:10:45,760

this is a check of the refrigerator the

196

00:10:49,269 --> 00:10:48,480

tehm and one of the things we noticed is

197

00:10:51,110 --> 00:10:49,279

that

198

00:10:52,550 --> 00:10:51,120

we have to keep the filter clean and so

199

00:10:54,389 --> 00:10:52,560

we just cleaned the filter for those

200

00:10:57,430 --> 00:10:54,399

folks we had a small towelette they'd

201  
00:11:01,350 --> 00:10:59,910  
but you can see the cwc bags down there

202  
00:11:05,590 --> 00:11:01,360  
and he's also been

203  
00:11:12,870 --> 00:11:07,430  
we also have activity up on the flight

204  
00:11:17,509 --> 00:11:14,389  
where jim has

205  
00:11:19,670 --> 00:11:17,519  
quite a few cameras arrayed

206  
00:11:22,150 --> 00:11:19,680  
and every time we all get a chance we

207  
00:11:27,110 --> 00:11:22,160  
come up and take some photos for the

208  
00:11:32,069 --> 00:11:29,750  
these are 70 millimeter hasselblad and

209  
00:11:34,470 --> 00:11:32,079  
this is the earth cam camera set up in

210  
00:11:36,790 --> 00:11:34,480  
the starboard window

211  
00:11:38,230 --> 00:11:36,800  
and it now is that taking uh good

212  
00:11:40,150 --> 00:11:38,240  
pictures

213  
00:11:43,350 --> 00:11:40,160

we check it periodically to see if it's

214

00:11:46,870 --> 00:11:45,110

and just to verify that we're in space

215

00:11:52,310 --> 00:11:46,880

that we decide to put a few earth views

216

00:11:56,069 --> 00:11:54,710

with the overhead window

217

00:11:58,870 --> 00:11:56,079

now we're going to look out the app

218

00:12:00,389 --> 00:11:58,880

window at the tail

219

00:12:01,829 --> 00:12:00,399

and the

220

00:12:03,350 --> 00:12:01,839

docking

221

00:12:05,430 --> 00:12:03,360

adapter out there

222

00:12:13,990 --> 00:12:05,440

can't quite see the gas cans but we have

223

00:12:18,230 --> 00:12:16,470

the view of the front cockpit

224

00:12:25,750 --> 00:12:18,240

that's the flight plan that's tethered

225

00:12:28,069 --> 00:12:26,870

and the

226

00:12:30,710 --> 00:12:28,079

oca

227

00:12:36,310 --> 00:12:30,720

pgsc which now has the earth cam

228

00:12:40,230 --> 00:12:37,750

we're still in the process of

229

00:12:42,150 --> 00:12:40,240

reconfiguring from yesterday's undocking

230

00:12:45,110 --> 00:12:42,160

where we had quite a few camcorders set

231

00:12:47,110 --> 00:12:45,120

up to support dto 1114 which was the

232

00:12:49,110 --> 00:12:47,120

mere photo survey so you still see a lot

233

00:12:51,030 --> 00:12:49,120

of cables routed around

234

00:13:00,629 --> 00:12:51,040

it's probably more wired than i've seen

235

00:13:04,710 --> 00:13:02,629

and i hope the earth can people can see

236

00:13:07,269 --> 00:13:04,720

but there are three green dots down

237

00:13:09,990 --> 00:13:07,279

there

238

00:13:12,389 --> 00:13:10,000

well let's go back down the uh

239

00:13:17,350 --> 00:13:12,399

inter-access deck area we'll go down

240

00:13:21,590 --> 00:13:19,269

and we'll say goodbye

241

00:13:23,590 --> 00:13:21,600

to the commander

242

00:13:30,790 --> 00:13:23,600

terry wilcock who's just done a superb

243

00:13:34,230 --> 00:13:32,710

and i'll say goodbye as well and thank