



1  
00:00:09,430 --> 00:00:03,619  
station this is Houston are you ready

2  
00:00:16,460 --> 00:00:11,600  
Houston station who are ready for the

3  
00:00:19,460 --> 00:00:16,470  
event WC AI radio this is Mission

4  
00:00:38,130 --> 00:00:19,470  
Control Houston please call station for

5  
00:00:38,140 --> 00:00:44,450  
hello Sonny

6  
00:00:51,299 --> 00:00:48,180  
it is and joining me in studio is your

7  
00:01:04,079 --> 00:00:51,309  
sister Medina who is here with me in

8  
00:01:05,609 --> 00:01:04,089  
woods Hall hi Sonny hi Deena hi Mindy

9  
00:01:09,180 --> 00:01:05,619  
how are you there was good to hear your

10  
00:01:12,120 --> 00:01:09,190  
voices hi Sonny uh we are so excited to

11  
00:01:14,279 --> 00:01:12,130  
be talking to you you open-space us here

12  
00:01:16,260 --> 00:01:14,289  
in Woods Hall Deena you were wondering

13  
00:01:17,550 --> 00:01:16,270

where she is yes honey we're just

14

00:01:22,169 --> 00:01:17,560

wondering where you flying over right

15

00:01:24,180 --> 00:01:22,179

now oh I didn't look at world map I know

16

00:01:27,120 --> 00:01:24,190

a couple minutes ago we were over Japan

17

00:01:28,559 --> 00:01:27,130

so I'm sure where we're heading eastward

18

00:01:30,300 --> 00:01:28,569

getting a little bit closer to the

19

00:01:32,100 --> 00:01:30,310

United States right now but I didn't

20

00:01:33,210 --> 00:01:32,110

check world map exactly to know where we

21

00:01:35,520 --> 00:01:33,220

are

22

00:01:37,529 --> 00:01:35,530

I'll try to do that in a little bit your

23

00:01:39,359 --> 00:01:37,539

last visit to the International Space

24

00:01:41,130 --> 00:01:39,369

Station was aboard one of our shuttles

25

00:01:43,469 --> 00:01:41,140

what was it like to blast up into space

26

00:01:49,469 --> 00:01:43,479

aboard a Russian vessel is it similar to

27

00:01:51,960 --> 00:01:49,479

the shuttle or very different it's both

28

00:01:54,540 --> 00:01:51,970

similar and different you know in the

29

00:01:56,190 --> 00:01:54,550

space shuttle of course there's a lot of

30

00:01:58,919 --> 00:01:56,200

people and friends and family who are

31

00:02:00,809 --> 00:01:58,929

there in the Soyuz just for forgetting

32

00:02:02,609 --> 00:02:00,819

everybody to Kazakhstan just a lot fewer

33

00:02:04,650 --> 00:02:02,619

people friends and family but a whole

34

00:02:07,469 --> 00:02:04,660

bunch of you know support people who are

35

00:02:09,210 --> 00:02:07,479

there in Kazakhstan the rocket itself is

36

00:02:10,830 --> 00:02:09,220

a little bit smaller on the shuttle we

37

00:02:13,199 --> 00:02:10,840

had seven people seven crew members

38

00:02:14,699 --> 00:02:13,209

flying and the soy is just three of you

39

00:02:16,800 --> 00:02:14,709

and you're pretty close together all

40

00:02:18,809 --> 00:02:16,810

squished in in a little capsule together

41

00:02:22,589 --> 00:02:18,819

so I sort of think of it as like a

42

00:02:23,970 --> 00:02:22,599

station wagon versus a VW bug in so far

43

00:02:26,520 --> 00:02:23,980

as the living compartment when you're

44

00:02:28,229 --> 00:02:26,530

blasting off the shuttle of course had

45

00:02:30,420 --> 00:02:28,239

two solid rocket boosters and so the

46

00:02:32,040 --> 00:02:30,430

rides a lot more bumpy ER in the very

47

00:02:34,589 --> 00:02:32,050

beginning for the first minute and a

48

00:02:36,750 --> 00:02:34,599

half until they dropped off the Soyuz is

49

00:02:39,479 --> 00:02:36,760

a liquid-fueled rocket so the whole ride

50

00:02:42,240 --> 00:02:39,489

is pretty smooth I think people back at

51  
00:02:44,580 --> 00:02:42,250  
home NASA TV probably saw the interior

52  
00:02:46,530 --> 00:02:44,590  
of the spacecraft because the camera

53  
00:02:48,180 --> 00:02:46,540  
comes on pretty shortly there after

54  
00:02:50,640 --> 00:02:48,190  
liftoff and it almost looks like we're

55  
00:02:52,500 --> 00:02:50,650  
sitting still but it's dynamic inside I

56  
00:02:53,770 --> 00:02:52,510  
guarantee you that because it's you know

57  
00:02:56,320 --> 00:02:53,780  
it's multistage so

58  
00:02:58,360 --> 00:02:56,330  
every time a stage falls off there's

59  
00:03:01,150 --> 00:02:58,370  
pyrotechnics and you feel a pretty big

60  
00:03:02,770 --> 00:03:01,160  
jolt and that's probably obvious on TV

61  
00:03:04,540 --> 00:03:02,780  
too when people were watching and it was

62  
00:03:07,300 --> 00:03:04,550  
very obvious inside the capsule

63  
00:03:08,740 --> 00:03:07,310

so you know that's that that's the

64

00:03:11,280 --> 00:03:08,750

biggest difference I think is the size

65

00:03:13,870 --> 00:03:11,290

and then getting up into space a similar

66

00:03:16,270 --> 00:03:13,880

profile we took two days to get to the

67

00:03:19,030 --> 00:03:16,280

space station and so we had some time to

68

00:03:22,270 --> 00:03:19,040

acclimate a little bit smaller again

69

00:03:24,280 --> 00:03:22,280

working space in the Soyuz but but it

70

00:03:28,150 --> 00:03:24,290

was very similar once we get to orbit

71

00:03:29,979 --> 00:03:28,160

the whole process to come in and dock we

72

00:03:31,360 --> 00:03:29,989

want to get right to some of the you're

73

00:03:32,590 --> 00:03:31,370

gonna be running the Falmouth Road race

74

00:03:35,199 --> 00:03:32,600

up there and you're also doing a

75

00:03:37,750 --> 00:03:35,209

triathlon being in space for a prolonged

76  
00:03:39,580 --> 00:03:37,760  
period of time tough on your body so in

77  
00:03:42,100 --> 00:03:39,590  
an effort to combat those negative

78  
00:03:43,990 --> 00:03:42,110  
effects that's really why you want to be

79  
00:03:44,710 --> 00:03:44,000  
doing this triathlon in space how's the

80  
00:03:47,140 --> 00:03:44,720  
training going

81  
00:03:53,530 --> 00:03:47,150  
when is the triathlon and how do you

82  
00:03:55,630 --> 00:03:53,540  
swim well I'm happy this time to be

83  
00:03:57,910 --> 00:03:55,640  
participating in the in the road race

84  
00:04:00,699 --> 00:03:57,920  
it's a just over seven miles as long

85  
00:04:03,180 --> 00:04:00,709  
history this year's its 40th reunion and

86  
00:04:06,100 --> 00:04:03,190  
also the triathlon with dr. Sanjay Gupta

87  
00:04:07,990 --> 00:04:06,110  
and that's in September so one in August

88  
00:04:10,479 --> 00:04:08,000

and one in September I've been up here

89

00:04:11,949 --> 00:04:10,489

for two weeks now I've been working out

90

00:04:14,050 --> 00:04:11,959

on the bike which is right in front of

91

00:04:16,449 --> 00:04:14,060

me also the treadmill which is around

92

00:04:18,849 --> 00:04:16,459

the corner and the advanced resistive

93

00:04:21,490 --> 00:04:18,859

exercise device which is a weightlifting

94

00:04:24,010 --> 00:04:21,500

machine based on vacuum that were

95

00:04:26,380 --> 00:04:24,020

pushing against a vacuum in a in a

96

00:04:28,630 --> 00:04:26,390

canister the a red is new since I was

97

00:04:31,990 --> 00:04:28,640

here last time the treadmill is a new

98

00:04:33,520 --> 00:04:32,000

treadmill with a wider base so those two

99

00:04:35,890 --> 00:04:33,530

pieces of equipment are a huge upgrade

100

00:04:38,500 --> 00:04:35,900

since I was here last year or last time

101  
00:04:40,420 --> 00:04:38,510  
rather and so we've been working out on

102  
00:04:42,909 --> 00:04:40,430  
those two pieces of equipment pretty

103  
00:04:45,640 --> 00:04:42,919  
heavily I'm doing an interesting

104  
00:04:48,250 --> 00:04:45,650  
exercise protocol it's an experiment

105  
00:04:50,219 --> 00:04:48,260  
it's called sprint and so it does have

106  
00:04:52,990 --> 00:04:50,229  
us doing Sprint's on the treadmill and

107  
00:04:55,180 --> 00:04:53,000  
pretty much trying to max out on your

108  
00:04:57,909 --> 00:04:55,190  
lifting so for this first two weeks it's

109  
00:04:59,440 --> 00:04:57,919  
been tough microgravity is nice to your

110  
00:05:01,839 --> 00:04:59,450  
body you you know you can float around

111  
00:05:03,790 --> 00:05:01,849  
it feels good but when you simulate

112  
00:05:05,260 --> 00:05:03,800  
gravity when you're on the either the

113  
00:05:08,410 --> 00:05:05,270

treadmill or the

114

00:05:10,780 --> 00:05:08,420

a red it sort of hurts and so it's been

115

00:05:13,600 --> 00:05:10,790

a bit of an adjustment to get get into

116

00:05:15,310 --> 00:05:13,610

the exercise but I think by by a couple

117

00:05:18,430 --> 00:05:15,320

weeks for the right road race I'll be

118

00:05:21,640 --> 00:05:18,440

ready I've ran up to five miles

119

00:05:24,150 --> 00:05:21,650

continuously now and and and I think

120

00:05:31,810 --> 00:05:24,160

I'll be ready for the triathlon for sure

121

00:05:34,060 --> 00:05:31,820

lookout sunny that was Deena yeah so

122

00:05:38,190 --> 00:05:34,070

sunny tell us a little bit about the

123

00:05:42,310 --> 00:05:40,780

sure if you can see all around me right

124

00:05:45,190 --> 00:05:42,320

here we're in the u.s. laboratory

125

00:05:47,800 --> 00:05:45,200

there's all sorts of setups for science

126

00:05:50,620 --> 00:05:47,810

experiments there's also behind you at

127

00:05:52,150 --> 00:05:50,630

the camera there's a the Columbus module

128

00:05:54,460 --> 00:05:52,160

which is the European module for

129

00:05:56,740 --> 00:05:54,470

experiments and also the Japanese module

130

00:05:58,870 --> 00:05:56,750

on the left hand side and further down

131

00:06:01,060 --> 00:05:58,880

of course is the Russian module where

132

00:06:04,450 --> 00:06:01,070

there's also experiments going on just

133

00:06:08,340 --> 00:06:04,460

recently I did an experiment called bass

134

00:06:10,750 --> 00:06:08,350

which is looking at combustion in in a

135

00:06:13,630 --> 00:06:10,760

microgravity glovebox which is right

136

00:06:16,840 --> 00:06:13,640

here in the US lab we've also been doing

137

00:06:18,220 --> 00:06:16,850

associated with Sprint and a couple

138

00:06:20,380 --> 00:06:18,230

other experiments we've been doing a lot

139

00:06:21,910 --> 00:06:20,390

of ultrasound so been ultrasounding the

140

00:06:24,670 --> 00:06:21,920

muscles in my leg

141

00:06:26,830 --> 00:06:24,680

also my heart will also be doing

142

00:06:28,420 --> 00:06:26,840

ultrasound on our eyes just to see how

143

00:06:32,980 --> 00:06:28,430

things are changing up here we've had

144

00:06:34,780 --> 00:06:32,990

some issues with eye I problems and

145

00:06:38,050 --> 00:06:34,790

Sprint's will take and get an idea of

146

00:06:41,080 --> 00:06:38,060

how the muscle changes over time in your

147

00:06:42,640 --> 00:06:41,090

leg cardiovascular ICV is the one that

148

00:06:44,740 --> 00:06:42,650

looks at your heart to see what happens

149

00:06:46,810 --> 00:06:44,750

to your heart in microgravity after

150

00:06:48,820 --> 00:06:46,820

sometime of course we also doing all

151  
00:06:52,030 --> 00:06:48,830  
sorts of other material sciences while

152  
00:06:55,690 --> 00:06:52,040  
we're up here there's a robot that we

153  
00:06:56,140 --> 00:06:55,700  
will we'll work with also we'll program

154  
00:06:57,580 --> 00:06:56,150  
him

155  
00:06:59,200 --> 00:06:57,590  
there's experiments that are going on

156  
00:07:03,220 --> 00:06:59,210  
outside of the space station that we

157  
00:07:06,430 --> 00:07:03,230  
really don't interact with there's AMS

158  
00:07:08,470 --> 00:07:06,440  
which is a magnetic spectrometer as well

159  
00:07:10,120 --> 00:07:08,480  
as a refueling mission that's going to

160  
00:07:12,160 --> 00:07:10,130  
happen during this increment at some

161  
00:07:13,930 --> 00:07:12,170  
point in time and just recently right

162  
00:07:16,140 --> 00:07:13,940  
before this interview I was checking out

163  
00:07:18,730 --> 00:07:16,150

the spiders we have two spiders on board

164

00:07:20,520 --> 00:07:18,740

Cleopatra and Nefertiti

165

00:07:23,320 --> 00:07:20,530

and I had to feed them some fruit flies

166

00:07:25,240 --> 00:07:23,330

and we're checking out how they work

167

00:07:27,520 --> 00:07:25,250

because they're jumping spiders and of

168

00:07:29,320 --> 00:07:27,530

course on earth they use gravity for the

169

00:07:31,420 --> 00:07:29,330

for they're jumping to catch their prey

170

00:07:34,360 --> 00:07:31,430

so we're watching to see how they're

171

00:07:36,070 --> 00:07:34,370

adapting to microgravity up here you

172

00:07:38,379 --> 00:07:36,080

know this is your second trip into space

173

00:07:39,909 --> 00:07:38,389

and on the aboard the International

174

00:07:41,680 --> 00:07:39,919

Space Station so you've spent quite a

175

00:07:43,779 --> 00:07:41,690

lot of time in space there are still

176  
00:07:45,700 --> 00:07:43,789  
times that you glance out the window and

177  
00:07:49,839 --> 00:07:45,710  
find yourself catching your breath in

178  
00:07:51,430 --> 00:07:49,849  
awe oh absolutely

179  
00:07:54,100 --> 00:07:51,440  
you know when I was up here before we

180  
00:07:55,659 --> 00:07:54,110  
had just a window a big window in the

181  
00:07:58,240 --> 00:07:55,669  
u.s. segment right here in front of me

182  
00:08:01,270 --> 00:07:58,250  
now it's covered by an experiment called

183  
00:08:02,649 --> 00:08:01,280  
Wharf which is it has taken off the

184  
00:08:05,080 --> 00:08:02,659  
scratch pane so we can take beautiful

185  
00:08:07,990 --> 00:08:05,090  
pictures but most of those are remotely

186  
00:08:10,390 --> 00:08:08,000  
done through you know with in programs

187  
00:08:12,070 --> 00:08:10,400  
with kids planning pictures and all

188  
00:08:14,379 --> 00:08:12,080

sorts of other programs that are working

189

00:08:16,480 --> 00:08:14,389

on automatic pictures from this window

190

00:08:18,070 --> 00:08:16,490

so I can't use this window but around

191

00:08:21,490 --> 00:08:18,080

the corner we have a thing called the

192

00:08:23,709 --> 00:08:21,500

cupola which is six windows around and

193

00:08:25,060 --> 00:08:23,719

then one big window in the center and it

194

00:08:28,330 --> 00:08:25,070

hangs off the bottom of the space

195

00:08:30,969 --> 00:08:28,340

station but you have a full 360 view and

196

00:08:32,680 --> 00:08:30,979

so you can see the edge of the earth you

197

00:08:34,750 --> 00:08:32,690

know as you're flying over it at night

198

00:08:37,029 --> 00:08:34,760

one day I was up there and you're just

199

00:08:40,089 --> 00:08:37,039

flying through the stars of the sky and

200

00:08:43,300 --> 00:08:40,099

I was writing that it was like you know

201  
00:08:45,519 --> 00:08:43,310  
2,000 20,000 Leagues Under the Sea when

202  
00:08:47,319 --> 00:08:45,529  
Captain Nemo opened that big window that

203  
00:08:51,490 --> 00:08:47,329  
was exactly what it felt like it was

204  
00:08:52,329 --> 00:08:51,500  
just amazing to see all the stars Deana

205  
00:08:58,230 --> 00:08:52,339  
any last thoughts

206  
00:09:02,260 --> 00:09:00,700  
well you know of course I'm having fun

207  
00:09:04,990 --> 00:09:02,270  
and I got my little buddy up here with

208  
00:09:07,300 --> 00:09:05,000  
me I know you're taking good care of him

209  
00:09:09,970 --> 00:09:07,310  
so thank you I know he's in Cape Cod

210  
00:09:11,590 --> 00:09:09,980  
loving life on the beach so of course

211  
00:09:13,240 --> 00:09:11,600  
I'm having fun here I know you guys are

212  
00:09:14,620 --> 00:09:13,250  
having fun down there this summer I know

213  
00:09:16,900 --> 00:09:14,630

what's hole in the summertime is

214

00:09:20,260 --> 00:09:16,910

beautiful so enjoy the summer while you

215

00:09:21,790 --> 00:09:20,270

have it sunny we our time is just about

216

00:09:23,320 --> 00:09:21,800

up we just want to say thanks I mean who

217

00:09:25,660 --> 00:09:23,330

would have ever thought we'd be talking

218

00:09:28,630 --> 00:09:25,670

to the space station on the radio so

219

00:09:29,650 --> 00:09:28,640

sunny good luck with your trip and good

220

00:09:32,910 --> 00:09:29,660

luck with the road race and the

221

00:09:35,170 --> 00:09:32,920

triathlon and your research

222

00:09:36,790 --> 00:09:35,180

thank you very much Mindy it's great to

223

00:09:40,750 --> 00:09:36,800

talk to you we'll see you when we get

224

00:09:43,269 --> 00:09:40,760

back station this is Houston ACR that

225

00:09:45,310 --> 00:09:43,279

concludes the WCA I radio portion of the

226

00:09:54,009 --> 00:09:45,320

event please stand by for a voice check

227

00:10:06,639 --> 00:09:59,379

this is CNN how do you hear me we got

228

00:10:08,679 --> 00:10:06,649

you loud and clear how me I hear you

229

00:10:09,910 --> 00:10:08,689

loud and clear and joining me now from

230

00:10:12,369 --> 00:10:09,920

the International Space Station is

231

00:10:12,910 --> 00:10:12,379

expedition 32 flight engineer Sunita

232

00:10:16,359 --> 00:10:12,920

Williams

233

00:10:17,559 --> 00:10:16,369

sunny good to speak with you I I have to

234

00:10:19,090 --> 00:10:17,569

ask how you're doing up there but I have

235

00:10:21,369 --> 00:10:19,100

to tell you I don't the image of you is

236

00:10:23,410 --> 00:10:21,379

really crystal clear it's amazing to see

237

00:10:25,329 --> 00:10:23,420

you like this can you just tell us how

238

00:10:30,519 --> 00:10:25,339

far up in the sky you are how fast

239

00:10:33,269 --> 00:10:30,529

you're going yeah we're about 220 miles

240

00:10:35,609 --> 00:10:33,279

above the planet zipping around at about

241

00:10:38,229 --> 00:10:35,619

17,500 miles an hour so that's about

242

00:10:40,509 --> 00:10:38,239

five miles a second

243

00:10:42,129 --> 00:10:40,519

so we're going a little bit faster than

244

00:10:44,679 --> 00:10:42,139

any airplane down there or any car on

245

00:10:51,970 --> 00:10:44,689

the road right now so the view is is

246

00:10:53,350 --> 00:10:51,980

quick but it's beautiful it's again it's

247

00:10:54,970 --> 00:10:53,360

just remarkable to see you like this

248

00:10:56,919 --> 00:10:54,980

because I just saw you here on earth and

249

00:10:59,350 --> 00:10:56,929

again this picture is so clear we also

250

00:11:02,139 --> 00:10:59,360

watched your launch from Kazakhstan on

251  
00:11:06,789 --> 00:11:02,149  
July 15th how was that for you and how

252  
00:11:08,859 --> 00:11:06,799  
was the launch and docking the launch

253  
00:11:12,210 --> 00:11:08,869  
was spectacular you know it went just

254  
00:11:14,889 --> 00:11:12,220  
just as planned everything was perfect

255  
00:11:16,780 --> 00:11:14,899  
the two days in space was actually just

256  
00:11:20,410 --> 00:11:16,790  
a lot of fun you know three of us

257  
00:11:22,509 --> 00:11:20,420  
Yuri Aki and myself and you know

258  
00:11:24,189 --> 00:11:22,519  
spending spending some time just getting

259  
00:11:26,079 --> 00:11:24,199  
resting up and getting ready for the

260  
00:11:28,539 --> 00:11:26,089  
docking the docking happens about two

261  
00:11:30,460 --> 00:11:28,549  
days after launch and that again when

262  
00:11:32,470 --> 00:11:30,470  
picture-perfect it was an automated

263  
00:11:36,030 --> 00:11:32,480

docking and everything just went

264

00:11:39,220 --> 00:11:36,040

absolutely on time at the right right

265

00:11:45,340 --> 00:11:39,230

time in place and so we docked perfectly

266

00:11:50,060 --> 00:11:48,200

you know and you took me around a mockup

267

00:11:52,070 --> 00:11:50,070

obviously where you are now we talked a

268

00:11:53,900 --> 00:11:52,080

lot about sleeping which I'm fascinated

269

00:11:56,540 --> 00:11:53,910

by even got one of your sleep pods if

270

00:12:01,340 --> 00:11:56,550

you remember how are you sleeping how

271

00:12:02,810 --> 00:12:01,350

does it feel for you up there so an

272

00:12:04,130 --> 00:12:02,820

interesting question you know because

273

00:12:05,990 --> 00:12:04,140

people always asked like how do you

274

00:12:07,490 --> 00:12:06,000

sleep of course there's no bed so we

275

00:12:10,370 --> 00:12:07,500

have sleeping bags and we open the

276

00:12:12,890 --> 00:12:10,380

sleeping bags on the space and the Soyuz

277

00:12:15,200 --> 00:12:12,900

and stretch them out they're some of the

278

00:12:16,730 --> 00:12:15,210

recommendations by the way for the Soyuz

279

00:12:20,450 --> 00:12:16,740

is to have your head in the center

280

00:12:22,670 --> 00:12:20,460

because it does a solar spin while we're

281

00:12:24,530 --> 00:12:22,680

just orbiting while we're waiting to do

282

00:12:26,300 --> 00:12:24,540

a burn to get closer to the space

283

00:12:27,620 --> 00:12:26,310

station and part of that is you know

284

00:12:30,830 --> 00:12:27,630

just so you don't get sick and feeling

285

00:12:32,540 --> 00:12:30,840

that centrifuge feeling but you know all

286

00:12:34,700 --> 00:12:32,550

three of us felt pretty good and we

287

00:12:36,500 --> 00:12:34,710

slept like that the first night but then

288

00:12:39,080 --> 00:12:36,510

afterwards we just slept anywhere we

289

00:12:40,580 --> 00:12:39,090

wanted to sleep so now what they were on

290

00:12:43,010 --> 00:12:40,590

the space station we have four of us

291

00:12:44,750 --> 00:12:43,020

sleeping in the module that's right in

292

00:12:46,970 --> 00:12:44,760

front of the US laboratory which is

293

00:12:49,970 --> 00:12:46,980

called node 2 and we sleep in a little

294

00:12:52,280 --> 00:12:49,980

square pattern for force sleep stations

295

00:12:53,810 --> 00:12:52,290

together and then there's to sleep

296

00:12:56,060 --> 00:12:53,820

stations back in the Russian segment

297

00:12:57,770 --> 00:12:56,070

behind us and sleeping's been great

298

00:13:00,620 --> 00:12:57,780

brought my sleeping bag into my sleep

299

00:13:04,010 --> 00:13:00,630

station close the doors it's quiet it's

300

00:13:05,780 --> 00:13:04,020

dark in there I got it my own we all

301

00:13:07,370 --> 00:13:05,790

have our own laptops in there so we

302

00:13:10,370 --> 00:13:07,380

could do email while we're in there so

303

00:13:12,260 --> 00:13:10,380

it's actually been really nice and some

304

00:13:14,930 --> 00:13:12,270

people also talked about having some

305

00:13:17,120 --> 00:13:14,940

back pain from your spine stretching I

306

00:13:18,740 --> 00:13:17,130

think mine may be got flexible from my

307

00:13:20,600 --> 00:13:18,750

last flight being up here because I

308

00:13:22,580 --> 00:13:20,610

didn't really feel too much back pain at

309

00:13:24,680 --> 00:13:22,590

all this this time it this time around

310

00:13:26,450 --> 00:13:24,690

so sleeping has been great

311

00:13:28,430 --> 00:13:26,460

eating's been great you know

312

00:13:32,889 --> 00:13:28,440

everything's been been pretty perfect so

313

00:13:36,500 --> 00:13:34,910

yeah and you know one of the other

314

00:13:38,030 --> 00:13:36,510

things I did when I when I visited you

315

00:13:40,610 --> 00:13:38,040

at Johnson Space Center was to do a

316

00:13:42,860 --> 00:13:40,620

essentially a virtual reality space walk

317

00:13:44,750 --> 00:13:42,870

and it was I me was a remarkably

318

00:13:46,100 --> 00:13:44,760

challenging I found for myself I even

319

00:13:48,170 --> 00:13:46,110

got nauseated even in the virtual

320

00:13:53,269 --> 00:13:48,180

reality art and do you have any faith

321

00:13:56,420 --> 00:13:53,279

walk plan yeah we have one plan for the

322

00:13:59,329 --> 00:13:56,430

end of August it's called EBA 18 we have

323

00:14:01,009 --> 00:13:59,339

a big box a big computer a power

324

00:14:04,850 --> 00:14:01,019

switching unit outside that we're gonna

325

00:14:06,590 --> 00:14:04,860

switch out and also run some cables from

326

00:14:08,600 --> 00:14:06,600

the u.s. segment back to the Russian

327

00:14:11,030 --> 00:14:08,610

segment to provide power for a module

328

00:14:12,410 --> 00:14:11,040

that they'll put up in the future but

329

00:14:14,990 --> 00:14:12,420

you know what when we're up here for a

330

00:14:17,990 --> 00:14:15,000

little while we get pretty used to being

331

00:14:20,000 --> 00:14:18,000

in different orientations like it's not

332

00:14:22,220 --> 00:14:20,010

it's not a big deal to just turn around

333

00:14:24,920 --> 00:14:22,230

so some of that stuff that you felt

334

00:14:27,740 --> 00:14:24,930

while you are doing the virtual reality

335

00:14:29,420 --> 00:14:27,750

lab still having gravity pulling on you

336

00:14:31,189 --> 00:14:29,430

you know we don't feel that here at all

337

00:14:33,019 --> 00:14:31,199

and particularly after being here for a

338

00:14:35,449 --> 00:14:33,029

little while and then doing a spacewalk

339

00:14:37,670 --> 00:14:35,459

you know I think it feels pretty natural

340

00:14:41,030 --> 00:14:37,680

the only big thing is wearing that that

341

00:14:43,730 --> 00:14:41,040

big EMU or spacesuit that that you saw

342

00:14:45,620 --> 00:14:43,740

pretty upfront and close that's still a

343

00:14:48,199 --> 00:14:45,630

little bit hard to work in and that's

344

00:14:49,610 --> 00:14:48,209

why we work out pretty much a lot it

345

00:14:50,930 --> 00:14:49,620

will every day while we're here up on

346

00:14:57,860 --> 00:14:50,940

the space station to make sure we're

347

00:15:02,360 --> 00:15:00,170

that's a perfect transition fit being

348

00:15:04,910 --> 00:15:02,370

physically ready because you and I also

349

00:15:07,040 --> 00:15:04,920

have decided to do this triathlon

350

00:15:09,050 --> 00:15:07,050

together mid September the Malibu

351

00:15:10,670 --> 00:15:09,060

Nautica triathlon you're going to do it

352

00:15:12,590 --> 00:15:10,680

in space I'm going to put on earth and

353

00:15:14,269 --> 00:15:12,600

again it was one of most fascinating

354

00:15:16,700 --> 00:15:14,279

things for me to watch you train on

355

00:15:18,980 --> 00:15:16,710

earth ha and done the Boston Marathon

356

00:15:21,769 --> 00:15:18,990

before from space back in 2007 I believe

357

00:15:26,600 --> 00:15:21,779

how is your training going what's it

358

00:15:30,019 --> 00:15:26,610

like up there well you know the

359

00:15:31,370 --> 00:15:30,029

adaptation is is great for space so you

360

00:15:33,050 --> 00:15:31,380

know it up here everything feels a

361

00:15:35,150 --> 00:15:33,060

little bit easier you know just you just

362

00:15:37,760 --> 00:15:35,160

I keep floating by it just takes one

363

00:15:39,650 --> 00:15:37,770

hand to move yourself but then when you

364

00:15:41,030 --> 00:15:39,660

start simulating gravity when you get on

365

00:15:42,920 --> 00:15:41,040

the treadmill you have a harness on

366

00:15:44,120 --> 00:15:42,930

that's pulling you down or you get on

367

00:15:46,430 --> 00:15:44,130

the weightlifting machine and you're

368

00:15:50,570 --> 00:15:46,440

actually doing squats and deadlifts

369

00:15:51,710 --> 00:15:50,580

against a weight based on vacuum it

370

00:15:53,840 --> 00:15:51,720

hurts

371

00:15:56,030 --> 00:15:53,850

so this first two weeks we've sort of

372

00:15:58,790 --> 00:15:56,040

used as just get used to the equipment

373

00:16:01,250 --> 00:15:58,800

get to get used to the protocols that

374

00:16:02,960 --> 00:16:01,260

we're doing so I think we're at that

375

00:16:04,760 --> 00:16:02,970

point that we're finally adapted and

376

00:16:06,650 --> 00:16:04,770

ready to start building on it so just

377

00:16:09,860 --> 00:16:06,660

watch out because I'm now I'm ready to

378

00:16:11,630 --> 00:16:09,870

really start preparing for the for the

379

00:16:14,120 --> 00:16:11,640

triathlon and watching the Olympics up

380

00:16:20,870 --> 00:16:14,130

here has been really motivating to turn

381

00:16:22,730 --> 00:16:20,880

us all into really good athletes right

382

00:16:25,400 --> 00:16:22,740

now I better watch what I say here if I

383

00:16:27,320 --> 00:16:25,410

get beat by you up in space

384

00:16:29,120 --> 00:16:27,330

but you are going 17,000 miles an hour

385

00:16:31,579 --> 00:16:29,130

so you do have that going for you you

386

00:16:33,560 --> 00:16:31,589

have the you have the bike I believe

387

00:16:38,120 --> 00:16:33,570

right and it continued yeah just quickly

388

00:16:39,290 --> 00:16:38,130

show us how you do this sure I was

389

00:16:42,110 --> 00:16:39,300

talking about the bike when you're

390

00:16:45,050 --> 00:16:42,120

visiting us before because luckily here

391

00:16:47,900 --> 00:16:45,060

on spit in space we don't need a seat

392

00:17:08,559 --> 00:16:47,910

all we do is put our feet in the pedals

393

00:17:08,569 --> 00:17:14,799

amazing here

394

00:17:21,500 --> 00:17:17,299

and station this Houston ACR check that

395

00:17:24,260 --> 00:17:21,510

your mic is on sorry about that

396

00:17:25,970 --> 00:17:24,270

in the floating it got turned off so we

397

00:17:28,640 --> 00:17:25,980

also have a computer here that we can

398

00:17:30,890 --> 00:17:28,650

dial in the resistance and the speed and

399

00:17:33,650 --> 00:17:30,900

then we also just for health purposes

400

00:17:35,960 --> 00:17:33,660

take our heart rate as we're riding and

401  
00:17:39,230 --> 00:17:35,970  
so we can this is how I'm going to

402  
00:17:41,470 --> 00:17:39,240  
stimulate the bike ride so for the hills

403  
00:17:44,210 --> 00:17:41,480  
I can increase my resistance to match

404  
00:17:46,250 --> 00:17:44,220  
the the route that you're going to take

405  
00:17:54,169 --> 00:17:46,260  
as I would I would assume that Malibu is

406  
00:17:55,970 --> 00:17:54,179  
not flat like Houston right not flat

407  
00:18:08,430 --> 00:17:55,980  
right I want you to increase that

408  
00:18:11,889 --> 00:18:10,090  
doesn't I don't know if you can still

409  
00:18:13,659 --> 00:18:11,899  
hear me as sunny but that does it

410  
00:18:15,220 --> 00:18:13,669  
you were saying yet just get used to

411  
00:18:17,409 --> 00:18:15,230  
doing this does it hurts your knees

412  
00:18:19,029 --> 00:18:17,419  
because you don't have like you think

413  
00:18:20,649 --> 00:18:19,039

about having some gravity to help force

414

00:18:22,480 --> 00:18:20,659

your legs through the revolutions riding

415

00:18:26,799 --> 00:18:22,490

a bike and does it does it hurt the

416

00:18:29,230 --> 00:18:26,809

joints when you're doing it this way no

417

00:18:33,039 --> 00:18:29,240

you know surprisingly enough the bike

418

00:18:35,950 --> 00:18:33,049

for me is is really good for your your

419

00:18:38,529 --> 00:18:35,960

thighs and also cardiovascular as soon

420

00:18:40,810 --> 00:18:38,539

as I start increasing the resistance on

421

00:18:43,359 --> 00:18:40,820

the bike I think the cardiovascular part

422

00:18:44,619 --> 00:18:43,369

sort of starts to take over for me so

423

00:18:46,389 --> 00:18:44,629

that you know the knees are not a

424

00:18:48,970 --> 00:18:46,399

problem at all I think we get a really

425

00:18:51,009 --> 00:18:48,980

good knee and leg workout all for our

426

00:18:53,200 --> 00:18:51,019

joints particularly our hips our knees

427

00:18:55,090 --> 00:18:53,210

and our ankles on the advanced resistive

428

00:18:57,549 --> 00:18:55,100

exercise device and that's what that's

429

00:19:01,109 --> 00:18:57,559

made for you know up here of course we

430

00:19:03,340 --> 00:19:01,119

lose muscle mass and bone density just

431

00:19:04,960 --> 00:19:03,350

instantaneously as every day because

432

00:19:06,639 --> 00:19:04,970

we're not we don't we're not under the

433

00:19:08,799 --> 00:19:06,649

influence of gravity and so we

434

00:19:11,230 --> 00:19:08,809

definitely need some some type of

435

00:19:12,789 --> 00:19:11,240

loading on those parts of our body and

436

00:19:15,340 --> 00:19:12,799

the a red does that and also the

437

00:19:17,289 --> 00:19:15,350

treadmill does that as you you know as

438

00:19:19,239 --> 00:19:17,299

you run and then you come down and you

439

00:19:21,129 --> 00:19:19,249

know put a you know your foot flat on

440

00:19:22,480 --> 00:19:21,139

the treadmill as you're running so both

441

00:19:25,450 --> 00:19:22,490

of those things are good for the bone

442

00:19:27,340 --> 00:19:25,460

mass and the and the must muscle muscle

443

00:19:34,690 --> 00:19:27,350

mass and bone density but this guy for

444

00:19:36,999 --> 00:19:34,700

sure is good for cardiovascular yeah

445

00:19:38,950 --> 00:19:37,009

that's amazing and I did the treadmill

446

00:19:40,899 --> 00:19:38,960

with you and you're actually bungee cord

447

00:19:42,369 --> 00:19:40,909

it down into the treadmill to give you

448

00:19:43,869 --> 00:19:42,379

that to that resistance I got a

449

00:19:45,549 --> 00:19:43,879

squirrely quick I also visited a Food

450

00:19:47,379 --> 00:19:45,559

Lab when I was with you and I think

451  
00:19:48,940 --> 00:19:47,389  
people imagine you know food mountain

452  
00:19:52,180 --> 00:19:48,950  
space be pretty bland stuff I know you

453  
00:19:53,980 --> 00:19:52,190  
like a great deal of choice options with

454  
00:19:55,629 --> 00:19:53,990  
your food how's it going up there for

455  
00:20:00,249 --> 00:19:55,639  
you are you are you getting the types of

456  
00:20:02,830 --> 00:20:00,259  
food that you want yeah we have a really

457  
00:20:04,690 --> 00:20:02,840  
good pretty good menu of food and one

458  
00:20:07,810 --> 00:20:04,700  
thing that's associated with that people

459  
00:20:10,119 --> 00:20:07,820  
send up as our bonus container and also

460  
00:20:12,970 --> 00:20:10,129  
just in general we have condiments you

461  
00:20:15,490 --> 00:20:12,980  
know so we have hot sauce you know red

462  
00:20:17,590 --> 00:20:15,500  
pepper paste garlic paste and that and

463  
00:20:19,930 --> 00:20:17,600

that type of stuff Tabasco so that makes

464

00:20:21,789 --> 00:20:19,940

the food taste a little bit better

465

00:20:23,799 --> 00:20:21,799

you have to remember we don't have a lot

466

00:20:25,749 --> 00:20:23,809

of fresh fruits and vegetables we

467

00:20:27,460 --> 00:20:25,759

brought up in our Soyuz some tomatoes

468

00:20:29,980 --> 00:20:27,470

and that was that was a treat for a

469

00:20:32,560 --> 00:20:29,990

while everything sort of is a little bit

470

00:20:34,419 --> 00:20:32,570

of a casserole type of consistency

471

00:20:36,789 --> 00:20:34,429

sticky and stuff like that so you don't

472

00:20:39,580 --> 00:20:36,799

get a lot of crunch maybe except for

473

00:20:41,379 --> 00:20:39,590

some nuts and things like that and it

474

00:20:43,990 --> 00:20:41,389

gets a little bit tiring drinking your

475

00:20:46,029 --> 00:20:44,000

coffee out of a bag but you know I'll

476

00:20:48,220 --> 00:20:46,039

enjoy my cup of coffee when I get home

477

00:20:50,889 --> 00:20:48,230

you know six months is a small amount a

478

00:20:52,450 --> 00:20:50,899

small price to pay for not enjoying that

479

00:20:57,389 --> 00:20:52,460

cup of coffee in the morning sitting out

480

00:21:00,940 --> 00:20:59,590

it's just absolutely fascinating what

481

00:21:02,889 --> 00:21:00,950

you're doing and even describing the

482

00:21:04,810 --> 00:21:02,899

food you don't want crumbs going around

483

00:21:06,789 --> 00:21:04,820

the the capsule he described it to me

484

00:21:08,379 --> 00:21:06,799

thanks so much for joining us neither

485

00:21:09,490 --> 00:21:08,389

Williams I'm looking forward to doing

486

00:21:13,649 --> 00:21:09,500

the triathlon with you and most

487

00:21:17,590 --> 00:21:15,999

thank you very much it's great to talk

488

00:21:22,899 --> 00:21:17,600

to you and good luck on the triathlon

489

00:21:24,519 --> 00:21:22,909

we'll see you out on the road there the

490

00:21:29,769 --> 00:21:24,529

station this is Houston ACR that

491

00:21:33,490 --> 00:21:29,779

concludes the event thanks sunny Thank

492

00:21:35,350 --> 00:21:33,500

You W CAI radio and CNN station we are