



1  
00:00:05,720 --> 00:00:03,200  
hi I'm Benjamin Chisholm I'm Jennifer

2  
00:00:07,639 --> 00:00:05,730  
Murphy I'm Leah pike we are the power

3  
00:00:46,900 --> 00:00:07,649  
resource officers on the final shuttle

4  
00:00:46,910 --> 00:01:31,880  
see you all soon

5  
00:01:46,710 --> 00:01:35,789  
good morning guys wake up a good luck on

6  
00:01:48,359 --> 00:01:46,720  
this your last mission well Donny's

7  
00:01:50,490 --> 00:01:48,369  
music and boy he can rest assured the

8  
00:01:53,070 --> 00:01:50,500  
people all above the earth know about

9  
00:01:55,350 --> 00:01:53,080  
this music too so we're saying that we

10  
00:01:57,139 --> 00:01:55,360  
really appreciate him taking time out of

11  
00:02:01,560 --> 00:01:57,149  
your busy schedule to send us a message

12  
00:02:06,389 --> 00:02:01,570  
mind are you to using anger

13  
00:02:07,830 --> 00:02:06,399

morning to you Atlantis Atlantis ISS

14

00:02:15,600 --> 00:02:07,840

this is Houston are you ready for the

15

00:02:17,540 --> 00:02:15,610

event we're ready for the event Atlantis

16

00:02:25,759 --> 00:02:17,550

is s please stand by for the White House

17

00:02:30,630 --> 00:02:27,930

hello this is the International Space

18

00:02:35,819 --> 00:02:30,640

Station well this is President Obama who

19

00:02:38,069 --> 00:02:35,829

am I talking to hello mr. president

20

00:02:39,330 --> 00:02:38,079

you're talking to the increment 28 crew

21

00:02:42,120 --> 00:02:39,340

and the crew of the space shuttle

22

00:02:45,840 --> 00:02:42,130

Atlantis oh that's funny because I was

23

00:02:53,039 --> 00:02:45,850

just dialing out for pizza and I didn't

24

00:02:54,360 --> 00:02:53,049

expect to end up in space yes sir it's a

25

00:02:55,890 --> 00:02:54,370

it's really an honor and a privilege

26  
00:02:58,319 --> 00:02:55,900  
that you took some time out of your busy

27  
00:03:01,650 --> 00:02:58,329  
day to meet with us well listen it is

28  
00:03:03,180 --> 00:03:01,660  
wonderful to talk to you and I

29  
00:03:06,330 --> 00:03:03,190  
appreciate you guys taking out the time

30  
00:03:08,610 --> 00:03:06,340  
from from your mission I always want to

31  
00:03:10,530 --> 00:03:08,620  
just let everybody know how personally

32  
00:03:12,240 --> 00:03:10,540  
proud I am of you and the amazing feats

33  
00:03:16,620 --> 00:03:12,250  
you guys are accomplishing in space and

34  
00:03:19,610 --> 00:03:16,630  
I was here in the Oval Office watching

35  
00:03:23,009 --> 00:03:19,620  
you guys take off last Friday we're all

36  
00:03:25,130 --> 00:03:23,019  
watching as the ten of you work together

37  
00:03:27,270 --> 00:03:25,140  
as a team to conduct spacewalks and

38  
00:03:29,150 --> 00:03:27,280

manage experiments and do all the things

39

00:03:33,900 --> 00:03:29,160

that are necessary to keep the space

40

00:03:38,190 --> 00:03:33,910

station humming your example I think

41

00:03:39,930 --> 00:03:38,200

means so much not just to your fellow

42

00:03:42,659 --> 00:03:39,940

Americans but also to your fellow

43

00:03:45,390 --> 00:03:42,669

citizens on earth and and the space

44

00:03:47,210 --> 00:03:45,400

program has always embodied

45

00:03:50,490 --> 00:03:47,220

our sense of adventure and exploration

46

00:03:53,780 --> 00:03:50,500

and encouraged as you guys work in a

47

00:03:57,059 --> 00:03:53,790

really harsh environment and I know that

48

00:03:58,410 --> 00:03:57,069

there have been thousands who've poured

49

00:03:59,640 --> 00:03:58,420

their hearts and souls into America's

50

00:04:01,830 --> 00:03:59,650

space shuttle program over the last

51  
00:04:05,130 --> 00:04:01,840  
three decades that are following this

52  
00:04:07,170 --> 00:04:05,140  
journey with special interest and to

53  
00:04:10,349 --> 00:04:07,180  
them and all the men and women of NASA I

54  
00:04:11,789 --> 00:04:10,359  
want to say thank you you helped our

55  
00:04:14,099 --> 00:04:11,799  
country lead the space age and you

56  
00:04:15,270 --> 00:04:14,109  
continue to inspire us and Captain

57  
00:04:18,090 --> 00:04:15,280  
Ferguson I realized that you're a

58  
00:04:20,069 --> 00:04:18,100  
veteran of previous flights but it must

59  
00:04:22,379 --> 00:04:20,079  
be pretty special to be the commander on

60  
00:04:28,260 --> 00:04:22,389  
the last flight of the historic shuttle

61  
00:04:30,570 --> 00:04:28,270  
program absolutely mr. president and

62  
00:04:31,860 --> 00:04:30,580  
just let me say on behalf of all of the

63  
00:04:33,240 --> 00:04:31,870

international partners aboard the

64

00:04:35,129 --> 00:04:33,250

International Space Station right now

65

00:04:37,560 --> 00:04:35,139

we're all just absolutely honored and

66

00:04:39,570 --> 00:04:37,570

privileged to represent our home

67

00:04:41,879 --> 00:04:39,580

countries in this multinational effort

68

00:04:44,490 --> 00:04:41,889

and to answer your question sir yes it

69

00:04:46,800 --> 00:04:44,500

is it is an extreme pleasure to be up

70

00:04:49,200 --> 00:04:46,810

just a part of this fine crew of four

71

00:04:51,960 --> 00:04:49,210

who will represent our country on the

72

00:04:53,550 --> 00:04:51,970

final space shuttle mission scheduled

73

00:04:55,529 --> 00:04:53,560

for an undocking here in just a few days

74

00:04:57,540 --> 00:04:55,539

in a landing at Kennedy Space Center in

75

00:05:00,210 --> 00:04:57,550

the little less than a week well I

76  
00:05:02,550 --> 00:05:00,220  
understand that you guys are also doing

77  
00:05:05,129 --> 00:05:02,560  
some pretty important mission work up

78  
00:05:06,689 --> 00:05:05,139  
there I understand there's something

79  
00:05:15,629 --> 00:05:06,699  
about innovative robotic refueling

80  
00:05:17,939 --> 00:05:15,639  
mission demonstration yes mr. president

81  
00:05:20,339 --> 00:05:17,949  
we have a piece of equipment on board

82  
00:05:22,680 --> 00:05:20,349  
that has the it's a technology

83  
00:05:25,500 --> 00:05:22,690  
demonstration unit for the special

84  
00:05:28,379 --> 00:05:25,510  
purpose dexterous manipulator to work to

85  
00:05:31,589 --> 00:05:28,389  
show and prove the technology to

86  
00:05:33,779 --> 00:05:31,599  
robotically and remotely service

87  
00:05:35,909 --> 00:05:33,789  
satellites and we're hoping that with

88  
00:05:37,920 --> 00:05:35,919

the work that will be able to do with

89

00:05:40,439 --> 00:05:37,930

the testbed here on space station will

90

00:05:43,589 --> 00:05:40,449

lead us to further advance our robotics

91

00:05:48,600 --> 00:05:43,599

capabilities well that's terrific and

92

00:05:51,600 --> 00:05:48,610

it's a good reminder of how NASA

93

00:05:53,129 --> 00:05:51,610

technology and research oftentimes has

94

00:05:55,649 --> 00:05:53,139

huge spillover effects into the

95

00:05:57,480 --> 00:05:55,659

commercial sector and makes it all that

96

00:05:59,939 --> 00:05:57,490

much more important

97

00:06:02,129 --> 00:05:59,949

in terms of people's day-to-day lives so

98

00:06:03,950 --> 00:06:02,139

I also understand that Atlantis brought

99

00:06:07,350 --> 00:06:03,960

a unique American flag up to the station

100

00:06:10,950 --> 00:06:07,360

one that was flown on the very first

101  
00:06:14,189 --> 00:06:10,960  
shuttle mission and one that will reside

102  
00:06:15,450 --> 00:06:14,199  
on the s erudis until American

103  
00:06:22,170 --> 00:06:15,460  
commercial space company launches

104  
00:06:24,120 --> 00:06:22,180  
astronauts in to the station yes mr.

105  
00:06:27,059 --> 00:06:24,130  
president we we brought a flag that was

106  
00:06:29,159 --> 00:06:27,069  
flown on sts-1 and as a part of a

107  
00:06:30,689 --> 00:06:29,169  
special presentation a little ceremony

108  
00:06:31,980 --> 00:06:30,699  
we're going to have before we undock

109  
00:06:34,170 --> 00:06:31,990  
from the International Space Station

110  
00:06:36,930 --> 00:06:34,180  
will present that to the space station

111  
00:06:39,809 --> 00:06:36,940  
crew and it'll hopefully maintain will

112  
00:06:42,260 --> 00:06:39,819  
maintain a position of Honor until until

113  
00:06:45,749 --> 00:06:42,270

the next vehicle launched from US soil

114

00:06:48,839 --> 00:06:45,759

brings us astronauts up to the dock with

115

00:06:50,279 --> 00:06:48,849

the space station and I understand it's

116

00:06:52,080 --> 00:06:50,289

going to be sort of like a capture the

117

00:06:55,920 --> 00:06:52,090

flag moment here for commercial space

118

00:07:01,499 --> 00:06:55,930

flight so good luck to whoever grabbed

119

00:07:03,390 --> 00:07:01,509

that flank that's an excellent point sir

120

00:07:04,709 --> 00:07:03,400

we sure hope to see some of our

121

00:07:07,110 --> 00:07:04,719

commercial partners climbing on board

122

00:07:08,790 --> 00:07:07,120

really soon and I know there's a lot of

123

00:07:10,320 --> 00:07:08,800

competition out there a lot of people

124

00:07:13,170 --> 00:07:10,330

are fervently working towards this goal

125

00:07:15,120 --> 00:07:13,180

to to be the first one to to send a

126

00:07:17,279 --> 00:07:15,130

commercial astronaut into orbit and we

127

00:07:19,290 --> 00:07:17,289

look forward to seeing them here soon I

128

00:07:21,149 --> 00:07:19,300

also understand today marks an

129

00:07:23,640 --> 00:07:21,159

anniversary of sorts for us in our

130

00:07:27,839 --> 00:07:23,650

Russian colleagues 36 years ago we

131

00:07:32,670 --> 00:07:27,849

launched a u.s. paulo spacecraft and a

132

00:07:36,959 --> 00:07:32,680

Soviet Union Soyuz capsule towards a

133

00:07:39,140 --> 00:07:36,969

Ronda rendezvous in space and you know

134

00:07:41,909 --> 00:07:39,150

it's pretty exciting to know that

135

00:07:44,490 --> 00:07:41,919

American astronauts and Russian

136

00:07:47,059 --> 00:07:44,500

cosmonauts aren't just shaking hands 36

137

00:07:50,749 --> 00:07:47,069

years later but are working every day

138

00:07:54,480 --> 00:07:50,759

with partners from other nations to

139

00:07:59,519 --> 00:07:54,490

represent humankind coming together in

140

00:08:08,669 --> 00:08:05,729

oh yeah mr. president and our crew is

141

00:08:11,879 --> 00:08:08,679

really international right now here's

142

00:08:14,729 --> 00:08:11,889

representatives of three agencies NASA

143

00:08:16,559 --> 00:08:14,739

Ross cosmos and Jackson and we're

144

00:08:20,909 --> 00:08:16,569

working as a one-family actually not as

145

00:08:22,589 --> 00:08:20,919

a crew we are more than just part of or

146

00:08:25,129 --> 00:08:22,599

representatives of each country we are

147

00:08:29,099 --> 00:08:25,139

one big family and now those guys who

148

00:08:31,829 --> 00:08:29,109

appeared almost week ago shared with us

149

00:08:34,980 --> 00:08:31,839

our brilliant International Space

150

00:08:37,649 --> 00:08:34,990

Station well it is a wonderful testimony

151  
00:08:39,149 --> 00:08:37,659  
the human spirit and you need to be like

152  
00:08:41,249 --> 00:08:39,159  
a family because i'm assuming yet to

153  
00:08:47,309 --> 00:08:41,259  
share pretty cramped quarters in the

154  
00:08:50,809 --> 00:08:47,319  
bathroom so you know I my wife and my

155  
00:08:53,519 --> 00:08:50,819  
daughters are always crowding me out so

156  
00:08:59,579 --> 00:08:53,529  
hopefully you guys have a more organized

157  
00:09:00,869 --> 00:08:59,589  
arrangement than we do oh absolutely mr.

158  
00:09:03,660 --> 00:09:00,879  
president we actually have three

159  
00:09:05,699 --> 00:09:03,670  
bathrooms on board and we have a gym we

160  
00:09:07,740 --> 00:09:05,709  
have several bedrooms it's a it's

161  
00:09:09,720 --> 00:09:07,750  
probably one of the more it's probably

162  
00:09:11,910 --> 00:09:09,730  
one of the more spacious homes that

163  
00:09:15,210 --> 00:09:11,920

there is outside of planet Earth well

164

00:09:16,350 --> 00:09:15,220

yeah well look at while this mission

165

00:09:19,829 --> 00:09:16,360

marks the final flight of the space

166

00:09:22,949 --> 00:09:19,839

shuttle program it also ushers in an

167

00:09:25,230 --> 00:09:22,959

exciting new era to push the frontiers

168

00:09:27,660 --> 00:09:25,240

of space exploration and human

169

00:09:30,389 --> 00:09:27,670

spaceflight you guys will continue to

170

00:09:32,730 --> 00:09:30,399

operate or crew members like you will

171

00:09:34,799 --> 00:09:32,740

continue to operate the the ISS in

172

00:09:36,210 --> 00:09:34,809

coming years and seek to use it to

173

00:09:38,540 --> 00:09:36,220

advance scientific research and

174

00:09:40,980 --> 00:09:38,550

technology development I've tasked NASA

175

00:09:43,949 --> 00:09:40,990

with an ambitious new mission to develop

176  
00:09:45,090 --> 00:09:43,959  
the systems and kinds of space

177  
00:09:47,519 --> 00:09:45,100  
technologies that are going to be

178  
00:09:49,980 --> 00:09:47,529  
necessary to conduct exploration beyond

179  
00:09:51,869 --> 00:09:49,990  
Earth and ultimately sending humans to

180  
00:09:53,639 --> 00:09:51,879  
Mars which is obviously no small feat

181  
00:09:57,210 --> 00:09:53,649  
but I know we're going to be up to the

182  
00:09:59,449 --> 00:09:57,220  
task so I just want to say how proud I

183  
00:10:02,819 --> 00:09:59,459  
am of all of you congratulations to NASA

184  
00:10:04,499 --> 00:10:02,829  
to all our international partners and

185  
00:10:06,480 --> 00:10:04,509  
all the personnel past and present who

186  
00:10:09,030 --> 00:10:06,490  
have spent countless hours and untold

187  
00:10:11,340 --> 00:10:09,040  
effort and making the space shuttle and

188  
00:10:12,780 --> 00:10:11,350

the International Space Station a unique

189

00:10:14,820 --> 00:10:12,790

part of our history so

190

00:10:17,700 --> 00:10:14,830

uh accept my gratitude on this

191

00:10:31,460 --> 00:10:17,710

tremendous accomplishment and Godspeed

192

00:10:35,639 --> 00:10:33,749

well thank you very much mr. president

193

00:10:37,319 --> 00:10:35,649

and once again on behalf of all the

194

00:10:38,970 --> 00:10:37,329

international partners on board where

195

00:10:40,470 --> 00:10:38,980

we're privileged that you took some time

196

00:10:42,569 --> 00:10:40,480

to speak with us today and we're honored

197

00:10:45,030 --> 00:10:42,579

to represent everybody everybody on the

198

00:10:56,809 --> 00:10:45,040

planet Earth thank you sir you bet take

199

00:10:59,009 --> 00:10:56,819

care now Thank You mr. president

200

00:11:03,269 --> 00:10:59,019

Atlantis fire since we are now resuming

201  
00:11:05,819 --> 00:11:03,279  
operational audio communications morning

202  
00:11:08,479 --> 00:11:05,829  
Atlanta screw this is CBS News Radio at

203  
00:11:11,069 --> 00:11:08,489  
Kennedy Space Center how do you hear us

204  
00:11:12,840 --> 00:11:11,079  
you hear eyes we have you loud and clear

205  
00:11:15,329 --> 00:11:12,850  
at the Kennedy Space Center well good

206  
00:11:17,280 --> 00:11:15,339  
morning commander Chris Ferguson pilot

207  
00:11:19,710 --> 00:11:17,290  
marine trolol Doug Hurley it's peter

208  
00:11:21,840 --> 00:11:19,720  
king and bill Harwood at KSC and Bill's

209  
00:11:23,220 --> 00:11:21,850  
got our first question well it's just an

210  
00:11:25,619 --> 00:11:23,230  
obvious question right off the bat guys

211  
00:11:27,329 --> 00:11:25,629  
first of all great to see you again yeah

212  
00:11:28,679 --> 00:11:27,339  
I know you got GPC for back up and

213  
00:11:30,629 --> 00:11:28,689

running can you give us some sense of

214

00:11:34,340 --> 00:11:30,639

how that's doing and you're confident

215

00:11:38,069 --> 00:11:36,900

well it actually felled last night i

216

00:11:40,409 --> 00:11:38,079

think it was about an hour and a half

217

00:11:43,129 --> 00:11:40,419

after we fell asleep the alarm went off

218

00:11:46,590 --> 00:11:43,139

and I think we all looked at each other

219

00:11:48,900 --> 00:11:46,600

had that had that bright eyed sort of

220

00:11:50,699 --> 00:11:48,910

bushy-tailed look and raced up to the

221

00:11:52,169 --> 00:11:50,709

flight deck I'll tell you the folks on

222

00:11:53,819 --> 00:11:52,179

the ground did a nice job helping us get

223

00:11:55,139 --> 00:11:53,829

through that we brought up another GPC

224

00:11:57,650 --> 00:11:55,149

to help us out with the functions that

225

00:12:00,389 --> 00:11:57,660

for was produce that was performing and

226

00:12:02,159 --> 00:12:00,399

we got it hopefully back up and running

227

00:12:04,139 --> 00:12:02,169

this morning so it's hanging in there

228

00:12:06,419 --> 00:12:04,149

and we're confident it's going to work

229

00:12:07,590 --> 00:12:06,429

for entry for us this is Peter until you

230

00:12:09,389 --> 00:12:07,600

know everybody has asked every question

231

00:12:11,609 --> 00:12:09,399

under the Sun about what it feels like

232

00:12:13,259 --> 00:12:11,619

to be flying this last mission i'm just

233

00:12:15,749 --> 00:12:13,269

wondering from both of you does this

234

00:12:21,539 --> 00:12:15,759

feel any different than you expected it

235

00:12:26,159 --> 00:12:21,549

to it if so how and that's a that's a

236

00:12:29,129 --> 00:12:26,169

good question Peter I you know for me my

237

00:12:32,960 --> 00:12:29,139

last mission my only mission was sts-127

238

00:12:37,499 --> 00:12:32,970

2 j.a we it was a 16-day mission it was

239

00:12:40,409 --> 00:12:37,509

5 EV a's and i honestly think this one

240

00:12:42,569 --> 00:12:40,419

has been busier which is which which

241

00:12:44,340 --> 00:12:42,579

surprises me a little bit

242

00:12:46,259 --> 00:12:44,350

and I you know the obvious reason is we

243

00:12:47,999 --> 00:12:46,269

have three less sets of hands to help

244

00:12:54,979 --> 00:12:48,009

out and I think that for me is the

245

00:12:59,850 --> 00:12:58,229

well I'll tell you after after getting

246

00:13:01,650 --> 00:12:59,860

back here it is it's a very familiar

247

00:13:04,769 --> 00:13:01,660

environment this is the third time I've

248

00:13:06,509 --> 00:13:04,779

been here and I'd have to say I agree

249

00:13:09,210 --> 00:13:06,519

with Doug to a certain extent this has

250

00:13:11,129 --> 00:13:09,220

been incredibly busy when there's a free

251  
00:13:13,229 --> 00:13:11,139  
moment usually you can run over the MPL

252  
00:13:16,019 --> 00:13:13,239  
em or our cargo module and you can

253  
00:13:17,789 --> 00:13:16,029  
always find something to do and even

254  
00:13:19,889 --> 00:13:17,799  
when there's nothing to do in the npl em

255  
00:13:21,720 --> 00:13:19,899  
we can go back to the closet which is

256  
00:13:23,069 --> 00:13:21,730  
the permanent Logistics Module that they

257  
00:13:24,929 --> 00:13:23,079  
have here and you can always help them

258  
00:13:26,759 --> 00:13:24,939  
reorganize here so there there is an

259  
00:13:28,199 --> 00:13:26,769  
awful lot of work left to do here and

260  
00:13:29,639 --> 00:13:28,209  
the days you know it's been hard to

261  
00:13:31,109 --> 00:13:29,649  
believe it's been almost a week since we

262  
00:13:34,650 --> 00:13:31,119  
launched and the days are just clicking

263  
00:13:36,269 --> 00:13:34,660

by so we're we got a lot to do in the

264

00:13:38,220 --> 00:13:36,279

next few days but we're looking forward

265

00:13:39,809 --> 00:13:38,230

undocking and especially that great view

266

00:13:41,519 --> 00:13:39,819

of the flyer on commander is real

267

00:13:43,379 --> 00:13:41,529

hardwood again you just brought a point

268

00:13:44,759 --> 00:13:43,389

up to me the I just got back from the

269

00:13:46,199 --> 00:13:44,769

Johnson Space Center where I've been for

270

00:13:48,600 --> 00:13:46,209

several days and i have to tell you the

271

00:13:50,489 --> 00:13:48,610

mood there is sobres probably putting it

272

00:13:52,470 --> 00:13:50,499

optimistically I mean it's pretty

273

00:13:54,359 --> 00:13:52,480

depressed I think there's a feeling of

274

00:13:56,039 --> 00:13:54,369

abandonment perhaps it's not so much the

275

00:13:57,449 --> 00:13:56,049

end of shuttle but the gap before

276

00:13:58,650 --> 00:13:57,459

there's going to be anything else what

277

00:14:00,359 --> 00:13:58,660

do you what do you have to say to those

278

00:14:01,769 --> 00:14:00,369

guys all the folks who trained you and

279

00:14:04,199 --> 00:14:01,779

put these missions together over the

280

00:14:09,960 --> 00:14:04,209

years and made it happen right here at

281

00:14:13,079 --> 00:14:09,970

the brink at the very end you know bill

282

00:14:14,879 --> 00:14:13,089

we were talking to a few folks it with

283

00:14:16,559 --> 00:14:14,889

some of our commercial providers here at

284

00:14:18,359 --> 00:14:16,569

the Kennedy Space Center just a couple

285

00:14:20,309 --> 00:14:18,369

weeks before launch and I was actually

286

00:14:23,669 --> 00:14:20,319

very encouraged to hear that there's

287

00:14:25,499 --> 00:14:23,679

some hardware for for the Orion MPCV

288

00:14:26,999 --> 00:14:25,509

that's due for delivery at the Kennedy

289

00:14:29,609 --> 00:14:27,009

Space Center soon you know of course we

290

00:14:32,309 --> 00:14:29,619

have a commercial folks at SpaceX and

291

00:14:34,409 --> 00:14:32,319

the other corporations working on plans

292

00:14:36,359 --> 00:14:34,419

as well so I think that that that

293

00:14:38,249 --> 00:14:36,369

sobering attitude that you may sense is

294

00:14:39,749 --> 00:14:38,259

that really just a prelude you know

295

00:14:41,220 --> 00:14:39,759

everybody realizes the shuttle program

296

00:14:42,989 --> 00:14:41,230

everything they've worked on for the

297

00:14:45,449 --> 00:14:42,999

last 30 years is coming to a close but

298

00:14:47,519 --> 00:14:45,459

you know by and large we have something

299

00:14:49,439 --> 00:14:47,529

right behind it and I think once we can

300

00:14:51,960 --> 00:14:49,449

finally get over the fact that the

301

00:14:54,179 --> 00:14:51,970

shuttle is gone and it's it's day has

302

00:14:55,619 --> 00:14:54,189

come I believe will begin to pick up the

303

00:14:56,160 --> 00:14:55,629

pieces and everyone will see that we

304

00:14:57,780 --> 00:14:56,170

really do

305

00:14:59,190 --> 00:14:57,790

have some vibrant programs out there

306

00:15:01,350 --> 00:14:59,200

that we're working on so I know it's

307

00:15:02,910 --> 00:15:01,360

tough but you know it's it's kind of one

308

00:15:04,560 --> 00:15:02,920

of those wake type things you have to

309

00:15:06,560 --> 00:15:04,570

come to terms with the end before you

310

00:15:09,509 --> 00:15:06,570

can really put on a new beginning

311

00:15:11,819 --> 00:15:09,519

commander Ferguson and pilot Doug Hurley

312

00:15:13,650 --> 00:15:11,829

thank you so much for the answers this

313

00:15:15,870 --> 00:15:13,660

morning safe rest of the flight we look

314

00:15:21,120 --> 00:15:15,880

forward to your safe return here to KSC

315

00:15:24,750 --> 00:15:21,130

and just under a week thanks so much for

316

00:15:27,210 --> 00:15:24,760

spending time with us Atlantis ISS this

317

00:15:29,340 --> 00:15:27,220

is Houston ACR that concludes the CBS

318

00:15:34,889 --> 00:15:29,350

radio portion of the event please stand

319

00:15:36,509 --> 00:15:34,899

by for a voice check from kyw-tv the

320

00:15:39,000 --> 00:15:36,519

space shuttle Atlantis is a final

321

00:15:40,560 --> 00:15:39,010

shuttle mission and it's an orbit with

322

00:15:42,240 --> 00:15:40,570

the International Space Station right

323

00:15:44,280 --> 00:15:42,250

now as you know shuttle commander Chris

324

00:15:46,350 --> 00:15:44,290

Ferguson graduated from Archbishop Ryan

325

00:15:47,970 --> 00:15:46,360

high school and Drexel University

326

00:15:50,519 --> 00:15:47,980

Kristen the shuttle pilot Doug Hurley

327

00:15:52,590 --> 00:15:50,529

join us live now from the International

328

00:15:54,329 --> 00:15:52,600

Space Station to talk about the mission

329

00:15:56,340 --> 00:15:54,339

and how it's going gentlemen good

330

00:15:59,040 --> 00:15:56,350

morning to you hey good morning to all

331

00:16:02,610 --> 00:15:59,050

or can you help you how you doing yeah

332

00:16:05,130 --> 00:16:02,620

not bad you want fantastic please it

333

00:16:06,960 --> 00:16:05,140

sets the mission thus far how it's going

334

00:16:11,790 --> 00:16:06,970

everything going to plan so great to see

335

00:16:14,189 --> 00:16:11,800

the two of you oh absolutely we've had

336

00:16:15,870 --> 00:16:14,199

we've had a great time up here from the

337

00:16:17,790 --> 00:16:15,880

the last that the ground control folks

338

00:16:20,220 --> 00:16:17,800

told us we're well ahead in what we call

339

00:16:22,560 --> 00:16:20,230

transfer the very act of getting all of

340

00:16:24,240 --> 00:16:22,570

our cargo that 10,000 pounds of food and

341

00:16:25,620 --> 00:16:24,250

supplies that we brought up to sustain

342

00:16:27,389 --> 00:16:25,630

the International Space Station we're

343

00:16:29,519 --> 00:16:27,399

well ahead and in transferring that over

344

00:16:31,139 --> 00:16:29,529

so I'm happy we've had some minor

345

00:16:33,000 --> 00:16:31,149

glitches with our general purpose

346

00:16:34,710 --> 00:16:33,010

computers but we're recovering from them

347

00:16:36,030 --> 00:16:34,720

as well so you know if I had to

348

00:16:38,490 --> 00:16:36,040

summarize I think the missions going

349

00:16:41,519 --> 00:16:38,500

really well I don't know when the

350

00:16:44,130 --> 00:16:41,529

shuttle lands and this thing is all over

351

00:16:46,290 --> 00:16:44,140

what's the next step in in space

352

00:16:48,480 --> 00:16:46,300

exploration and what do you think and

353

00:16:50,309 --> 00:16:48,490

what do you want your roles to be in it

354

00:16:52,740 --> 00:16:50,319

in the future well there's a lot going

355

00:16:54,840 --> 00:16:52,750

on you know we're going to continue to

356

00:16:57,389 --> 00:16:54,850

man the International Space Station at

357

00:16:59,069 --> 00:16:57,399

least for the next decade so we've got

358

00:17:01,019 --> 00:16:59,079

folks training and working there so

359

00:17:04,500 --> 00:17:01,029

there's an opportunity to fly again in

360

00:17:06,569 --> 00:17:04,510

space doing that we've also got o our

361

00:17:08,939 --> 00:17:06,579

Orion MPCV

362

00:17:11,179 --> 00:17:08,949

crew vehicle that we're working on at

363

00:17:13,740 --> 00:17:11,189

NASA we've got commercial providers

364

00:17:15,389 --> 00:17:13,750

eventually working on commercial

365

00:17:17,850 --> 00:17:15,399

transportation to and from the

366

00:17:19,620 --> 00:17:17,860

International Space Station and you know

367

00:17:21,480 --> 00:17:19,630

I think Chris and I just you know we

368

00:17:23,490 --> 00:17:21,490

would like to contribute wherever we can

369

00:17:25,799 --> 00:17:23,500

we love the space business you know

370

00:17:27,899 --> 00:17:25,809

we've flown our entire lives and we'd

371

00:17:31,080 --> 00:17:27,909

like to continue support that if we can

372

00:17:32,759 --> 00:17:31,090

before we go I know of course we've all

373

00:17:34,799 --> 00:17:32,769

said that you've graduated Archbishop

374

00:17:36,120 --> 00:17:34,809

Ryan high school director University and

375

00:17:38,610 --> 00:17:36,130

when it comes to those two schools and

376

00:17:40,289 --> 00:17:38,620

your family how did that moment those

377

00:17:42,830 --> 00:17:40,299

moments back then prepare you for what's

378

00:17:45,120 --> 00:17:42,840

going on right now being a Philly guy I

379

00:17:46,620 --> 00:17:45,130

got a wonderful education there in

380

00:17:48,840 --> 00:17:46,630

Philadelphia that's where I developed a

381

00:17:50,669 --> 00:17:48,850

love of science and math Drexel

382

00:17:52,740 --> 00:17:50,679

University and actually I have a little

383

00:17:54,779 --> 00:17:52,750

piece of the fells planetarium from the

384

00:17:57,060 --> 00:17:54,789

Franklin Institute on board so all

385

00:17:58,889 --> 00:17:57,070

places I love to spend time when I was a

386

00:18:00,930 --> 00:17:58,899

child and developed like I said a love

387

00:18:03,210 --> 00:18:00,940

of flying and a love of math and science

388

00:18:06,690 --> 00:18:03,220

so it's a great city great city for

389

00:18:09,240 --> 00:18:06,700

technology and I miss it a lot

390

00:18:10,710 --> 00:18:09,250

Oh gentlemen we thank you so much for

391

00:18:12,300 --> 00:18:10,720

your efforts and your contributions to

392

00:18:13,860 --> 00:18:12,310

the space program to you and the team

393

00:18:16,110 --> 00:18:13,870

and the rest of everyone out there

394

00:18:17,640 --> 00:18:16,120

continued success and keep those a

395

00:18:19,080 --> 00:18:17,650

yankees phillies conversations to a

396

00:18:21,180 --> 00:18:19,090

minimum we'll see you when you get back

397

00:18:27,150 --> 00:18:21,190

down on tell from it take care god speed

398

00:18:29,370 --> 00:18:27,160

take care have a great day Atlanta's

399

00:18:34,230 --> 00:18:29,380

station this is the Associated Press how

400

00:18:35,340 --> 00:18:34,240

do you hear me we have you loud and

401  
00:18:39,060 --> 00:18:35,350  
clear aboard the International Space

402  
00:18:41,430 --> 00:18:39,070  
Station well good morning talking to you

403  
00:18:43,440 --> 00:18:41,440  
from the Kennedy Space Center today my

404  
00:18:45,480 --> 00:18:43,450  
first question for you commander I'm

405  
00:18:47,490 --> 00:18:45,490  
wondering how unsettling was it to be

406  
00:18:50,100 --> 00:18:47,500  
awakened by the alarms last night and

407  
00:18:51,840 --> 00:18:50,110  
how worried are you about the general

408  
00:18:57,390 --> 00:18:51,850  
state of the computers considering this

409  
00:18:59,370 --> 00:18:57,400  
is the second such failure it's kind of

410  
00:19:01,560 --> 00:18:59,380  
interesting you know of course the alarm

411  
00:19:02,970 --> 00:19:01,570  
went off about an hour or so after we

412  
00:19:04,890 --> 00:19:02,980  
fell asleep and I think that that's when

413  
00:19:06,210 --> 00:19:04,900

you're in your deepest state of sleep so

414

00:19:08,070 --> 00:19:06,220

we all woke up and looked at it one

415

00:19:09,570 --> 00:19:08,080

another and you know we're wondering

416

00:19:11,820 --> 00:19:09,580

really what was going on but we were up

417

00:19:13,410 --> 00:19:11,830

in the flight deck in no time and i'll

418

00:19:15,570 --> 00:19:13,420

tell you the ground support team on the

419

00:19:17,100 --> 00:19:15,580

ground there you know the orbit three

420

00:19:19,290 --> 00:19:17,110

shift who usually works while we're

421

00:19:21,630 --> 00:19:19,300

sleeping they were all over the problem

422

00:19:23,010 --> 00:19:21,640

and they had us put some corrective

423

00:19:25,110 --> 00:19:23,020

action and we were back in bed and

424

00:19:28,170 --> 00:19:25,120

probably about a half hour so and then

425

00:19:30,120 --> 00:19:28,180

this morning we we again working with

426  
00:19:32,310 --> 00:19:30,130  
with our ground control folks in Houston

427  
00:19:33,960 --> 00:19:32,320  
got that general purpose computer up and

428  
00:19:35,610 --> 00:19:33,970  
running so we're out very optimistic

429  
00:19:36,840 --> 00:19:35,620  
it's going to work for entry of course

430  
00:19:39,570 --> 00:19:36,850  
we had an earlier problem with one of

431  
00:19:41,040 --> 00:19:39,580  
our GP sees as well so we're doing well

432  
00:19:42,810 --> 00:19:41,050  
here and I'm confident everything's

433  
00:19:47,970 --> 00:19:42,820  
going to look good when we undock in a

434  
00:19:49,710 --> 00:19:47,980  
couple days I'm wondering of I know

435  
00:19:52,140 --> 00:19:49,720  
there are several more days left in your

436  
00:19:55,260 --> 00:19:52,150  
flight but so far if you each had to

437  
00:19:56,820 --> 00:19:55,270  
choose what is the one highlight of your

438  
00:20:01,170 --> 00:19:56,830

mission the memory that you're going to

439

00:20:04,650 --> 00:20:01,180

take back with you and keep forever well

440

00:20:09,360 --> 00:20:04,660

I actually have to the first would be

441

00:20:12,000 --> 00:20:09,370

the dv8 we did the other day where sandy

442

00:20:14,400 --> 00:20:12,010

and I were running the space station

443

00:20:17,400 --> 00:20:14,410

robotic arm from the cupola and to have

444

00:20:18,740 --> 00:20:17,410

both Mike and Ron fly right out in front

445

00:20:22,430 --> 00:20:18,750

of us you know with

446

00:20:24,080 --> 00:20:22,440

and feet you know it just it really

447

00:20:25,670 --> 00:20:24,090

seemed like it was out of a science

448

00:20:27,170 --> 00:20:25,680

fiction movie you know you could see the

449

00:20:29,420 --> 00:20:27,180

expression on their faces as they're

450

00:20:32,330 --> 00:20:29,430

riding the arm wherever they were going

451

00:20:34,190 --> 00:20:32,340

and it was just you know it's kind of

452

00:20:36,590 --> 00:20:34,200

seared into my memory and then the other

453

00:20:39,860 --> 00:20:36,600

one actually happened last night we were

454

00:20:42,800 --> 00:20:39,870

flying west of Australia kind of at the

455

00:20:46,970 --> 00:20:42,810

bottom of our orbit and saw an

456

00:20:49,070 --> 00:20:46,980

incredible southern lights aurora and it

457

00:20:50,900 --> 00:20:49,080

was the best one I've seen in in my to

458

00:20:53,390 --> 00:20:50,910

space flights and it was just

459

00:21:01,850 --> 00:20:53,400

unbelievable to view we had out the

460

00:21:03,560 --> 00:21:01,860

cupola I'll share my personal moment and

461

00:21:05,840 --> 00:21:03,570

it was the same one I had on my last

462

00:21:07,520 --> 00:21:05,850

flight you know as you as we rendezvous

463

00:21:10,700 --> 00:21:07,530

with the space station you approach it

464

00:21:12,920 --> 00:21:10,710

from below and you pause there to do the

465

00:21:14,990 --> 00:21:12,930

rotation maneuver and it's just that

466

00:21:18,890 --> 00:21:15,000

moment as your poise there beneath this

467

00:21:21,380 --> 00:21:18,900

incredibly mammoth space station and it

468

00:21:24,380 --> 00:21:21,390

really is it's just a feeling of awe and

469

00:21:26,900 --> 00:21:24,390

you're humbled by what humans can create

470

00:21:30,740 --> 00:21:26,910

when they work together to do things in

471

00:21:33,260 --> 00:21:30,750

space it's just it's a it's in it's an

472

00:21:35,780 --> 00:21:33,270

incredibly memorable moment and I will

473

00:21:38,270 --> 00:21:35,790

never ever ever duplicate it or forget

474

00:21:40,120 --> 00:21:38,280

it well thank thank you very much both

475

00:21:47,420 --> 00:21:40,130

of you Godspeed to you and your crew and

476  
00:21:50,060 --> 00:21:47,430  
Godspeed to space shuttle Atlantis this

477  
00:21:51,260 --> 00:21:50,070  
is s this is irene klotz with Reuters I

478  
00:21:53,990 --> 00:21:51,270  
understand you're going to be speaking

479  
00:21:56,120 --> 00:21:54,000  
with President Obama later today if he

480  
00:21:58,130 --> 00:21:56,130  
asked you what you think he needs to do

481  
00:22:00,320 --> 00:21:58,140  
to keep the space program relevant in

482  
00:22:07,400 --> 00:22:00,330  
people's lives what would you tell him

483  
00:22:10,130 --> 00:22:07,410  
and why well I think probably number one

484  
00:22:13,070 --> 00:22:10,140  
on the on the list would be the the

485  
00:22:15,710 --> 00:22:13,080  
source of inspiration that doing amazing

486  
00:22:18,530 --> 00:22:15,720  
things up in space provides for young

487  
00:22:20,330 --> 00:22:18,540  
men and women I became involved in the

488  
00:22:22,520 --> 00:22:20,340

space program because i remember

489

00:22:25,040 --> 00:22:22,530

watching Neil Armstrong walk on the moon

490

00:22:26,540 --> 00:22:25,050

in 1969 and it was just through

491

00:22:28,490 --> 00:22:26,550

following the Apollo program in the

492

00:22:30,680 --> 00:22:28,500

Gemini program that I developed just a

493

00:22:32,240 --> 00:22:30,690

keen interest in science and math and

494

00:22:34,430 --> 00:22:32,250

flight

495

00:22:36,200 --> 00:22:34,440

it just it propelled me on a career that

496

00:22:38,450 --> 00:22:36,210

took me through naval aviation and then

497

00:22:41,690 --> 00:22:38,460

on to the space program so if for no

498

00:22:43,940 --> 00:22:41,700

other reason we need we need to to

499

00:22:45,710 --> 00:22:43,950

inspire generations that that will

500

00:22:47,780 --> 00:22:45,720

follow us to do wonderful things like

501  
00:22:50,270 --> 00:22:47,790  
this and plus we need to explore where

502  
00:22:52,220 --> 00:22:50,280  
we're we're explorers by Nature we need

503  
00:22:54,020 --> 00:22:52,230  
to leave low Earth orbit again and go

504  
00:22:55,730 --> 00:22:54,030  
back to the moon or an asteroid or Mars

505  
00:22:59,630 --> 00:22:55,740  
we need to have a destination it's in

506  
00:23:01,550 --> 00:22:59,640  
our destiny thank you for sandy can you

507  
00:23:03,530 --> 00:23:01,560  
paint us a little word picture of what

508  
00:23:05,750 --> 00:23:03,540  
the ISS looks like with all the stuff

509  
00:23:07,550 --> 00:23:05,760  
you've brought floating around there and

510  
00:23:11,480 --> 00:23:07,560  
the routing around to find the old

511  
00:23:14,390 --> 00:23:11,490  
equipment to come back home in a word

512  
00:23:17,270 --> 00:23:14,400  
it's crowded up here almost every module

513  
00:23:20,660 --> 00:23:17,280

has these white we call cargo transfer

514

00:23:23,840 --> 00:23:20,670

bags or CT bees they're stuck with

515

00:23:26,840 --> 00:23:23,850

bungees to the front of panels the pmm

516

00:23:28,430 --> 00:23:26,850

which is the permanent stowage module

517

00:23:31,460 --> 00:23:28,440

that was brought up a couple flights ago

518

00:23:34,820 --> 00:23:31,470

if you look in through the hatch the pmm

519

00:23:36,860 --> 00:23:34,830

all you will see our white bags stuck to

520

00:23:38,570 --> 00:23:36,870

walls because there's not enough space

521

00:23:41,150 --> 00:23:38,580

for some of the things that we brought

522

00:23:43,640 --> 00:23:41,160

up to go behind the racks or behind or

523

00:23:45,500 --> 00:23:43,650

inside the stowage area so it's sort of

524

00:23:46,880 --> 00:23:45,510

a sea of white bags holding around and

525

00:23:50,150 --> 00:23:46,890

we're hoping to help straighten it up a

526

00:23:52,190 --> 00:23:50,160

little bit before we leave thank you for

527

00:23:54,920 --> 00:23:52,200

Rex about a week and a half before you

528

00:23:57,950 --> 00:23:54,930

launch the first module of china's space

529

00:23:59,810 --> 00:23:57,960

station reach the launch site if they're

530

00:24:01,580 --> 00:23:59,820

able to get it into orbit and to staff

531

00:24:06,440 --> 00:24:01,590

it don't you think it'd be kind of weird

532

00:24:10,550 --> 00:24:06,450

to ignore them in orbit oh absolutely

533

00:24:12,410 --> 00:24:10,560

you know what I think in space is one of

534

00:24:14,560 --> 00:24:12,420

the biggest international brotherhood's

535

00:24:17,060 --> 00:24:14,570

they have you know here we are a crew of

536

00:24:18,710 --> 00:24:17,070

different countries we have you know

537

00:24:21,050 --> 00:24:18,720

American astronauts and Russian

538

00:24:22,760 --> 00:24:21,060

astronauts and japanese astronaut we all

539

00:24:24,260 --> 00:24:22,770

work together as one big team we work

540

00:24:26,450 --> 00:24:24,270

together we solve problems together we

541

00:24:28,070 --> 00:24:26,460

laugh together we eat together it is the

542

00:24:29,420 --> 00:24:28,080

best example of international

543

00:24:30,980 --> 00:24:29,430

cooperation I know of it's at the

544

00:24:33,320 --> 00:24:30,990

working level and I think that kind of

545

00:24:35,540 --> 00:24:33,330

works its way up to two other parts of

546

00:24:36,800 --> 00:24:35,550

the country so China Venus base i think

547

00:24:38,810 --> 00:24:36,810

is a great thing I think the more

548

00:24:40,010 --> 00:24:38,820

nations it get in space the better

549

00:24:43,280 --> 00:24:40,020

cooperation will have with each other

550

00:24:45,590 --> 00:24:43,290

thank you for Doug how comfortable are

551  
00:24:48,049 --> 00:24:45,600  
you that the ISS is going to be the

552  
00:24:54,500 --> 00:24:48,059  
human us human spaceflight program for

553  
00:24:56,180 --> 00:24:54,510  
the next decade or so Oh completely you

554  
00:24:57,980 --> 00:24:56,190  
know we've got some great folks at work

555  
00:25:00,440 --> 00:24:57,990  
in the international space station

556  
00:25:03,500 --> 00:25:00,450  
program and you know there's been just

557  
00:25:06,760 --> 00:25:03,510  
extensive planning to get the station

558  
00:25:09,740 --> 00:25:06,770  
and in this posture for the next decade

559  
00:25:11,360 --> 00:25:09,750  
we've got several automated vehicles

560  
00:25:12,470 --> 00:25:11,370  
that can resupply we've got commercial

561  
00:25:15,400 --> 00:25:12,480  
providers that are going to be coming

562  
00:25:18,680 --> 00:25:15,410  
online in a year or so to provide the

563  
00:25:22,220 --> 00:25:18,690

cargo as well and eventually crew

564

00:25:24,470 --> 00:25:22,230

support taking us back and forth so the

565

00:25:26,570 --> 00:25:24,480

ISS is in great hands it's a great crew

566

00:25:28,789 --> 00:25:26,580

on board and you know the future

567

00:25:30,500 --> 00:25:28,799

couldn't look any brighter thanks also

568

00:25:32,210 --> 00:25:30,510

for you I was just wondering if you were

569

00:25:35,510 --> 00:25:32,220

surprised that you launched on the first

570

00:25:36,950 --> 00:25:35,520

try considering the weather at KSC and

571

00:25:45,049 --> 00:25:36,960

then that last-minute glitch with the

572

00:25:48,169 --> 00:25:45,059

motu vent arm yeah i had thought i had

573

00:25:50,750 --> 00:25:48,179

brought my 127 karma along with me there

574

00:25:52,970 --> 00:25:50,760

for a few you know when we walked out

575

00:25:55,490 --> 00:25:52,980

and you know while we were strapping in

576  
00:25:57,560 --> 00:25:55,500  
and we were getting updates so while we

577  
00:26:00,770 --> 00:25:57,570  
were laying on her backs and then and

578  
00:26:02,600 --> 00:26:00,780  
then we we got to go and and then the

579  
00:26:05,570 --> 00:26:02,610  
next thing happened at 31 seconds so I

580  
00:26:08,000 --> 00:26:05,580  
was thinking no but it just worked out

581  
00:26:10,220 --> 00:26:08,010  
so good we couldn't be happier it was

582  
00:26:12,440 --> 00:26:10,230  
great for our family or friends and all

583  
00:26:14,390 --> 00:26:12,450  
the guests and then the I guess close to

584  
00:26:16,880 --> 00:26:14,400  
a million people that were watching us

585  
00:26:19,250 --> 00:26:16,890  
so it's always great to launch on the

586  
00:26:23,240 --> 00:26:19,260  
first first try and I'm glad to finally

587  
00:26:24,770 --> 00:26:23,250  
be able to say I did that hello Johnson

588  
00:26:31,850 --> 00:26:24,780

sabay center we have you loud and clear

589

00:26:36,030 --> 00:26:34,080

good morning this is eric berger with

590

00:26:38,760 --> 00:26:36,040

Houston Chronicle congratulations on

591

00:26:41,550 --> 00:26:38,770

such a great mission so far there's been

592

00:26:43,050 --> 00:26:41,560

a lot of talk about first or excuse me

593

00:26:45,990 --> 00:26:43,060

last during this flood and I want to ask

594

00:26:47,850 --> 00:26:46,000

about it first specifically do any of

595

00:26:49,530 --> 00:26:47,860

the crew members of Atlanta's plan to

596

00:26:52,050 --> 00:26:49,540

stick around with NASA to fly on the

597

00:26:54,810 --> 00:26:52,060

MPCV or is that something that is a bit

598

00:26:56,580 --> 00:26:54,820

too far in the future thank you well I

599

00:26:58,260 --> 00:26:56,590

think if you asked any one of us we

600

00:27:01,830 --> 00:26:58,270

would love a shot up flying another

601  
00:27:03,540 --> 00:27:01,840  
vehicle so definitely you know and we've

602  
00:27:05,970 --> 00:27:03,550  
got opportunities prior to that you know

603  
00:27:08,340 --> 00:27:05,980  
we've got multiple flights to the

604  
00:27:10,530 --> 00:27:08,350  
International Space Station you know we

605  
00:27:13,110 --> 00:27:10,540  
were going to crew this beautiful

606  
00:27:15,000 --> 00:27:13,120  
complex for the next ten years plus so

607  
00:27:17,760 --> 00:27:15,010  
there's plenty of opportunities to fly

608  
00:27:19,650 --> 00:27:17,770  
and I don't see any reason why not stay

609  
00:27:24,270 --> 00:27:19,660  
and see what happens it's a real bright

610  
00:27:26,490 --> 00:27:24,280  
future good morning Ted over from

611  
00:27:30,630 --> 00:27:26,500  
channel 13 here in Houston great to talk

612  
00:27:33,150 --> 00:27:30,640  
with you guys I'm curious what have you

613  
00:27:35,250 --> 00:27:33,160

done in your downtime on this mission to

614

00:27:37,500 --> 00:27:35,260

make sure that you capture some of these

615

00:27:39,600 --> 00:27:37,510

last moments what what things have you

616

00:27:41,790 --> 00:27:39,610

made sure you saw out the windows or

617

00:27:42,870 --> 00:27:41,800

done with the shuttle to tell us a

618

00:27:47,130 --> 00:27:42,880

little bit about how you've spent your

619

00:27:49,950 --> 00:27:47,140

downtime what well for me I had a chance

620

00:27:51,930 --> 00:27:49,960

to look out the without the cupola where

621

00:27:53,580 --> 00:27:51,940

it's a great window and we can see the

622

00:27:54,810 --> 00:27:53,590

Aurora Australis the Southern Lights we

623

00:27:57,030 --> 00:27:54,820

all kind of crowded around and got to

624

00:27:58,920 --> 00:27:57,040

see that and just savoring every minute

625

00:28:01,350 --> 00:27:58,930

of floating in space and then once in a

626

00:28:02,340 --> 00:28:01,360

while when you're on Atlantis when at

627

00:28:03,600 --> 00:28:02,350

the end of the day you kind of look

628

00:28:05,760 --> 00:28:03,610

around the mid deck and think of all the

629

00:28:08,070 --> 00:28:05,770

guys and women who were there before you

630

00:28:09,480 --> 00:28:08,080

and who had a had a part in the space

631

00:28:11,370 --> 00:28:09,490

program and you think wow this is that

632

00:28:14,400 --> 00:28:11,380

this is the last flight so it does cross

633

00:28:16,350 --> 00:28:14,410

your mind once in a while good morning

634

00:28:18,720 --> 00:28:16,360

this is john donnelly with Fox 26 here

635

00:28:20,490 --> 00:28:18,730

in Houston also and I'm passing along a

636

00:28:22,620 --> 00:28:20,500

question from one of our viewers she

637

00:28:24,750 --> 00:28:22,630

wants to know what would the astronauts

638

00:28:26,460 --> 00:28:24,760

be able to take from the last trip and

639

00:28:29,730 --> 00:28:26,470

will you have a job when you get back on

640

00:28:31,500 --> 00:28:29,740

earth oh absolutely you know Johnson

641

00:28:32,880 --> 00:28:31,510

Space Center although we're reaching the

642

00:28:35,010 --> 00:28:32,890

end of the space shuttle program is

643

00:28:37,050 --> 00:28:35,020

still a vibrant place to work there'll

644

00:28:38,760 --> 00:28:37,060

be a transitional period here as we hand

645

00:28:39,960 --> 00:28:38,770

over a lot of the responsibilities for

646

00:28:41,789 --> 00:28:39,970

going to low Earth orbit to our

647

00:28:43,619 --> 00:28:41,799

commercial providers but

648

00:28:46,200 --> 00:28:43,629

this is an opportunity for us to look

649

00:28:48,810 --> 00:28:46,210

beyond low-earth orbit and but perhaps

650

00:28:50,369 --> 00:28:48,820

back to the moon or to an asteroid where

651

00:28:54,259 --> 00:28:50,379

we'd like to travel too soon so there'll

652

00:28:59,249 --> 00:28:56,729

Gina's and Sara ABC news from mike

653

00:29:01,529 --> 00:28:59,259

fossom mike we thought we heard you

654

00:29:03,869 --> 00:29:01,539

trying to whistle before your spacewalk

655

00:29:05,729 --> 00:29:03,879

on Tuesday tell me a little bit about

656

00:29:07,109 --> 00:29:05,739

that and why you couldn't whistle and

657

00:29:14,789 --> 00:29:07,119

then when you're done I'd like you to

658

00:29:16,080 --> 00:29:14,799

whistle a tune for me I'll pass the

659

00:29:20,249 --> 00:29:16,090

second happier question to my a

660

00:29:21,570 --> 00:29:20,259

spacewalk buddy Ron Garan we run and I

661

00:29:23,129 --> 00:29:21,580

were both doing a little whistling in

662

00:29:25,379 --> 00:29:23,139

the airlock it's just one of the strange

663

00:29:27,419 --> 00:29:25,389

phenomena whereas the pressure is

664

00:29:29,489 --> 00:29:27,429

dropping in the airlock our suit is just

665

00:29:31,560 --> 00:29:29,499

you know a little over four pounds of

666

00:29:33,720 --> 00:29:31,570

pressure and once this air pressure

667

00:29:36,090 --> 00:29:33,730

inside the airlock goes down close or

668

00:29:37,799 --> 00:29:36,100

goes down to zero then your overall

669

00:29:39,419 --> 00:29:37,809

pressures down low and I think it has to

670

00:29:42,749 --> 00:29:39,429

do with the air the density of the air

671

00:29:46,229 --> 00:29:42,759

but I really can't explain a lot about

672

00:29:49,080 --> 00:29:46,239

the probably the the resonant frequency

673

00:29:50,820 --> 00:29:49,090

of the the cavity of your mouth as you

674

00:29:53,340 --> 00:29:50,830

are blowing the air through it like that

675

00:29:57,450 --> 00:29:53,350

and so it's kind of interesting that you

676  
00:29:59,099 --> 00:29:57,460  
know buddy we can all whistle you know

677  
00:30:02,430 --> 00:29:59,109  
and normal and Ronald through the tune

678  
00:30:06,119 --> 00:30:02,440  
but it's one of the things that you can

679  
00:30:07,950 --> 00:30:06,129  
physically use to just take a look and

680  
00:30:09,840 --> 00:30:07,960  
appreciate the fact that that things are

681  
00:30:12,029 --> 00:30:09,850  
changing you can feel the air that

682  
00:30:13,590 --> 00:30:12,039  
you're breathing in is different it's

683  
00:30:15,930 --> 00:30:13,600  
the lower density and you can tell that

684  
00:30:18,119 --> 00:30:15,940  
we have a card of kind of a procedure

685  
00:30:20,430 --> 00:30:18,129  
card in the airlock and you can wave

686  
00:30:23,519 --> 00:30:20,440  
that back and forth and as you do you

687  
00:30:25,080 --> 00:30:23,529  
can feel less resistance on it as the

688  
00:30:26,489 --> 00:30:25,090

air pressures dropping the whistling is

689

00:30:27,869 --> 00:30:26,499

just something else to have a little fun

690

00:30:40,200 --> 00:30:27,879

with what you try not to think about

691

00:30:48,039 --> 00:30:42,580

Atlantis is s this is kennedy space

692

00:30:49,270 --> 00:30:48,049

center PA oh how do you hear me hello

693

00:30:55,870 --> 00:30:49,280

Kat any space center we have you loud

694

00:30:57,070 --> 00:30:55,880

and clear agra zine i was wondering if

695

00:30:58,720 --> 00:30:57,080

you could highlight some of the

696

00:31:00,970 --> 00:30:58,730

scientific experiments that you're

697

00:31:02,410 --> 00:31:00,980

working on on the international space

698

00:31:05,549 --> 00:31:02,420

station that you think will particularly

699

00:31:08,080 --> 00:31:05,559

inspire the public about care on earth

700

00:31:09,850 --> 00:31:08,090

but that's an excellent question you

701  
00:31:11,590 --> 00:31:09,860  
know we've had a permanent human

702  
00:31:13,659 --> 00:31:11,600  
presence on the National Space Station

703  
00:31:16,120 --> 00:31:13,669  
for over a decade now and over that time

704  
00:31:18,760 --> 00:31:16,130  
we've conducted over 600 scientific

705  
00:31:19,960 --> 00:31:18,770  
experiments and you know one of the one

706  
00:31:22,390 --> 00:31:19,970  
of the things that we're trying to do is

707  
00:31:24,220 --> 00:31:22,400  
to see how humans can go further in

708  
00:31:26,799 --> 00:31:24,230  
exploration go beyond Earth orbit

709  
00:31:28,720 --> 00:31:26,809  
explore our solar system but nearly all

710  
00:31:30,820 --> 00:31:28,730  
of the experiments that we conduct have

711  
00:31:32,710 --> 00:31:30,830  
a direct application on earth from

712  
00:31:36,010 --> 00:31:32,720  
growing crops better to making new

713  
00:31:38,110 --> 00:31:36,020

materials new medicines we had some very

714

00:31:40,659 --> 00:31:38,120

significant research in the development

715

00:31:44,289 --> 00:31:40,669

of a vaccine for Salmonella studying our

716

00:31:46,690 --> 00:31:44,299

earth learning how the learning about

717

00:31:48,940 --> 00:31:46,700

the human impact on the environment how

718

00:31:51,580 --> 00:31:48,950

the inner core of the earth works and

719

00:31:54,190 --> 00:31:51,590

possibly lead to better ways to predict

720

00:31:57,820 --> 00:31:54,200

earthquakes better safe automobile

721

00:31:59,890 --> 00:31:57,830

safety better energy efficiency fuel

722

00:32:01,990 --> 00:31:59,900

efficiency so the list goes on and on on

723

00:32:04,030 --> 00:32:02,000

it's just amazing the research that's

724

00:32:05,500 --> 00:32:04,040

being conducted up here and that's

725

00:32:06,940 --> 00:32:05,510

because this is a very very unique

726

00:32:09,070 --> 00:32:06,950

environment the research that's being

727

00:32:10,870 --> 00:32:09,080

conducted up conducted up here simply

728

00:32:13,090 --> 00:32:10,880

cannot be done anywhere else in the

729

00:32:15,310 --> 00:32:13,100

world and so that's why this is such an

730

00:32:16,840 --> 00:32:15,320

important research facility and this is

731

00:32:20,169 --> 00:32:16,850

really a global asset the International

732

00:32:21,669 --> 00:32:20,179

Space Station Marcia Dunn Associated

733

00:32:24,190 --> 00:32:21,679

Press with another question for

734

00:32:25,840 --> 00:32:24,200

commander Ferguson back in Houston you

735

00:32:27,820 --> 00:32:25,850

describe for me the overwhelming

736

00:32:29,440 --> 00:32:27,830

sensation that shuttle crews get when

737

00:32:31,450 --> 00:32:29,450

they pause at the base of the pad on

738

00:32:32,860 --> 00:32:31,460

launch day and look up at the ship I'm

739

00:32:35,140 --> 00:32:32,870

wondering can you tell me what that

740

00:32:37,240 --> 00:32:35,150

moment was like for you last Friday when

741

00:32:43,000 --> 00:32:37,250

you looked up at atlanta's knowing

742

00:32:46,360 --> 00:32:43,010

that's the last shuttle launch well I'll

743

00:32:48,610 --> 00:32:46,370

tell you Marsha it is that has one trip

744

00:32:50,680 --> 00:32:48,620

that every shuttle crew has to make and

745

00:32:52,419 --> 00:32:50,690

I think I speak for everyone who has

746

00:32:52,950 --> 00:32:52,429

ever flown on a space shuttle to stand

747

00:32:55,660 --> 00:32:52,960

there

748

00:32:58,120 --> 00:32:55,670

poised at the bottom of a living

749

00:32:59,740 --> 00:32:58,130

breathing vehicle and it's literally

750

00:33:01,270 --> 00:32:59,750

raining off the side of the external

751

00:33:03,400 --> 00:33:01,280

tank because of the condensation that

752

00:33:06,130 --> 00:33:03,410

forms from the extremely cold cryogenic

753

00:33:07,780 --> 00:33:06,140

fuels it's it's wheezing its hissing

754

00:33:09,490 --> 00:33:07,790

it's moaning you look up at it and I

755

00:33:11,050 --> 00:33:09,500

remember my first commander looked at me

756

00:33:13,030 --> 00:33:11,060

and he said do you believe they're going

757

00:33:15,970 --> 00:33:13,040

to let us take this thing into space and

758

00:33:19,450 --> 00:33:15,980

with every subsequent crew I've been on

759

00:33:21,850 --> 00:33:19,460

I've tried to share that same that same

760

00:33:24,220 --> 00:33:21,860

reflection with with my crew it's it's

761

00:33:25,660 --> 00:33:24,230

incredibly awe-inspiring and just like

762

00:33:27,550 --> 00:33:25,670

the pictures that you see the next day

763

00:33:29,440 --> 00:33:27,560

in them in the photograph it's just

764

00:33:30,910 --> 00:33:29,450

incredibly surreal to stand there and

765

00:33:32,350 --> 00:33:30,920

look up at it and know that in a matter

766

00:33:37,840 --> 00:33:32,360

of hours it's going to be orbiting the

767

00:33:40,090 --> 00:33:37,850

earth hi it's James Dean from Florida

768

00:33:42,160 --> 00:33:40,100

today another question for Ron this is

769

00:33:43,780 --> 00:33:42,170

the last time I guess will in a very

770

00:33:46,780 --> 00:33:43,790

long time we'll see a crowd this big on

771

00:33:48,550 --> 00:33:46,790

the station although you'll continue to

772

00:33:49,930 --> 00:33:48,560

fly there for many years to come will it

773

00:33:52,450 --> 00:33:49,940

seemed a little bit smaller a little

774

00:33:58,060 --> 00:33:52,460

less fun perhaps when you don't get

775

00:34:00,400 --> 00:33:58,070

these occasional visitors well I think

776

00:34:03,640 --> 00:34:00,410

it will seem a little bit smaller

777

00:34:06,670 --> 00:34:03,650

actually because you know all the all

778

00:34:08,409 --> 00:34:06,680

the tons of cargo that have arrived from

779

00:34:10,750 --> 00:34:08,419

Atlantis have filled this place up so

780

00:34:14,350 --> 00:34:10,760

there's a there's a lot less a room for

781

00:34:16,180 --> 00:34:14,360

us humans so but that that is really

782

00:34:19,030 --> 00:34:16,190

really important because you know we are

783

00:34:21,669 --> 00:34:19,040

outfitting this station to function for

784

00:34:23,290 --> 00:34:21,679

the rest of the decade and Atlanta says

785

00:34:25,750 --> 00:34:23,300

has really set us on the pace we're

786

00:34:27,490 --> 00:34:25,760

doing that so and we aren't we're going

787

00:34:29,649 --> 00:34:27,500

to miss these guys a lot it's it's been

788

00:34:31,690 --> 00:34:29,659

really wonderful having them up here it

789

00:34:34,210 --> 00:34:31,700

is it is nice to have visitors and

790

00:34:36,850 --> 00:34:34,220

especially great visitors like these

791

00:34:40,270 --> 00:34:36,860

guys are and you know it'll be sad when

792

00:34:41,770 --> 00:34:40,280

when that stops but you know we're going

793

00:34:44,889 --> 00:34:41,780

to continue on this this place is

794

00:34:46,720 --> 00:34:44,899

amazing and it's going to continue to

795

00:34:48,610 --> 00:34:46,730

function to continue to be utilized in

796

00:34:53,860 --> 00:34:48,620

great part because of the great mission

797

00:34:55,450 --> 00:34:53,870

so far that these guys have conducted hi

798

00:34:57,400 --> 00:34:55,460

it's bill Harwood CBS News with the

799

00:35:02,080 --> 00:34:57,410

question for I think Sergei Volkov if I

800

00:35:04,120 --> 00:35:02,090

could Sergei you've heard the u.s.

801  
00:35:06,070 --> 00:35:04,130  
reporters asked US astronauts about the

802  
00:35:06,550 --> 00:35:06,080  
end of the shuttle and what might come

803  
00:35:08,080 --> 00:35:06,560  
next

804  
00:35:10,120 --> 00:35:08,090  
you what are the Russians think about

805  
00:35:12,010 --> 00:35:10,130  
that when you guys talk about it the end

806  
00:35:14,920 --> 00:35:12,020  
of the shuttle and this gap is coming up

807  
00:35:16,390 --> 00:35:14,930  
in NASA's reliance on Russia for

808  
00:35:24,130 --> 00:35:16,400  
transportation what do you guys think

809  
00:35:26,860 --> 00:35:24,140  
about that thanks for us it's also over

810  
00:35:28,420 --> 00:35:26,870  
said that no more shuttles will appear

811  
00:35:30,850 --> 00:35:28,430  
on board the station because thanks to

812  
00:35:35,920 --> 00:35:30,860  
this brilliant machine we were able to

813  
00:35:40,990 --> 00:35:35,930

build this station so big and ready to

814

00:35:44,050 --> 00:35:41,000

have six personal crew of course we we

815

00:35:47,320 --> 00:35:44,060

would like to continue to fly with our

816

00:35:50,410 --> 00:35:47,330

friends and say you are ready to

817

00:35:54,700 --> 00:35:50,420

continue this exploration of space on

818

00:35:56,410 --> 00:35:54,710

low orbits advanced science us this is

819

00:36:01,450 --> 00:35:56,420

NASA headquarters PA oh how do you read

820

00:36:05,260 --> 00:36:01,460

me we have a loud and clear on the

821

00:36:08,260 --> 00:36:05,270

International Space Station line hi

822

00:36:09,490 --> 00:36:08,270

Suzanne presto from VOA Ron can you tell

823

00:36:11,770 --> 00:36:09,500

us a bit more about your science

824

00:36:13,150 --> 00:36:11,780

activities on station particularly any

825

00:36:14,650 --> 00:36:13,160

experiments you've been working on that

826

00:36:19,180 --> 00:36:14,660

will be coming back down on shuttle

827

00:36:20,680 --> 00:36:19,190

thank you well um that that would take a

828

00:36:22,300 --> 00:36:20,690

long time to answer we've been we have

829

00:36:25,030 --> 00:36:22,310

been doing a lot of science on board and

830

00:36:27,070 --> 00:36:25,040

as far as i know i think the only well i

831

00:36:30,370 --> 00:36:27,080

mean there's a lot of human research

832

00:36:32,530 --> 00:36:30,380

where we're kind of the subjects and

833

00:36:33,670 --> 00:36:32,540

there's a lot of that science that's

834

00:36:35,080 --> 00:36:33,680

going to go down on the shuttle we also

835

00:36:38,470 --> 00:36:35,090

have some spiders on board right now

836

00:36:40,900 --> 00:36:38,480

that are being studied and they are

837

00:36:43,390 --> 00:36:40,910

going down on the shuttle as well but

838

00:36:45,310 --> 00:36:43,400

we've been conducting experiments fluid

839

00:36:48,660 --> 00:36:45,320

experiments approaching crystal growth

840

00:36:51,190 --> 00:36:48,670

experiments plant growth experiments

841

00:36:52,600 --> 00:36:51,200

experiments with the human body and the

842

00:36:53,770 --> 00:36:52,610

function of the human body looking at

843

00:36:57,580 --> 00:36:53,780

things like you know how to conduct

844

00:37:00,060 --> 00:36:57,590

combat osteoporosis so there's a quite a

845

00:37:02,740 --> 00:37:00,070

bit of science going on board combustion

846

00:37:05,200 --> 00:37:02,750

science we've been doing as well so we

847

00:37:06,640 --> 00:37:05,210

are we are at the at the beginning of

848

00:37:11,590 --> 00:37:06,650

full utilization of this amazing

849

00:37:13,480 --> 00:37:11,600

research facility Atlantis ISS this is

850

00:37:17,980 --> 00:37:13,490

marshall space flight center PA oh how

851

00:37:20,790 --> 00:37:17,990

do you hear me we have you loud and

852

00:37:27,400 --> 00:37:24,700

hi my name is Rikki Klaus from WHNT news

853

00:37:30,010 --> 00:37:27,410

19 and I wanted to ask much of the world

854

00:37:33,190 --> 00:37:30,020

was watching as you guys sky rocketed

855

00:37:34,780 --> 00:37:33,200

into space excited you know loving to

856

00:37:43,810 --> 00:37:34,790

see you what what was going through your

857

00:37:44,830 --> 00:37:43,820

head when when that was happening well

858

00:37:46,660 --> 00:37:44,840

there's a lot of emotions going through

859

00:37:47,740 --> 00:37:46,670

your mind it's it the edge a space

860

00:37:49,990 --> 00:37:47,750

shuttle launch is a very interesting

861

00:37:51,880 --> 00:37:50,000

experience it's it's kind of like the

862

00:37:53,410 --> 00:37:51,890

year in the year prior to the launch

863

00:37:54,820 --> 00:37:53,420

you're preparing for the Super Bowl but

864

00:37:56,800 --> 00:37:54,830

you don't know exactly what day the

865

00:37:58,780 --> 00:37:56,810

super bowl is so you get all prepared

866

00:37:59,710 --> 00:37:58,790

and even on the day of your scheduled

867

00:38:01,210 --> 00:37:59,720

launch you're looking at the weather

868

00:38:02,650 --> 00:38:01,220

think is are we going to go aren't we

869

00:38:04,330 --> 00:38:02,660

gonna go and I'm this launch it was no

870

00:38:06,100 --> 00:38:04,340

different we had a seventy percent

871

00:38:08,500 --> 00:38:06,110

chance of not going but we gotta

872

00:38:09,520 --> 00:38:08,510

prepares it for going and you walk out

873

00:38:11,260 --> 00:38:09,530

there and you look at this amazing

874

00:38:13,120 --> 00:38:11,270

vehicle on the launch pad and you and

875

00:38:14,890 --> 00:38:13,130

you just a nothing comes in with your

876  
00:38:16,750 --> 00:38:14,900  
mind but Wow and you get up there and

877  
00:38:18,400 --> 00:38:16,760  
strapped in and you're still waiting and

878  
00:38:20,230 --> 00:38:18,410  
you never know for sure whether you're

879  
00:38:21,880 --> 00:38:20,240  
going until at the last second because

880  
00:38:24,520 --> 00:38:21,890  
we had a hold at 31 seconds and we're

881  
00:38:25,810 --> 00:38:24,530  
going to oh no now what and the funny

882  
00:38:27,310 --> 00:38:25,820  
thing about that as they picked up the

883  
00:38:29,770 --> 00:38:27,320  
count and Austin was like ready set go

884  
00:38:31,270 --> 00:38:29,780  
and bam we were off to the races and we

885  
00:38:33,520 --> 00:38:31,280  
were getting shot off the planet and it

886  
00:38:35,560 --> 00:38:33,530  
was just absolutely amazing so the whole

887  
00:38:37,600 --> 00:38:35,570  
ride up you get your big wide eyed and

888  
00:38:39,220 --> 00:38:37,610

it's experiencing all the all the the

889

00:38:43,690 --> 00:38:39,230

the thrill of the g's and also the

890

00:38:46,030 --> 00:38:43,700

incredible sights and sounds you hear my

891

00:38:47,920 --> 00:38:46,040

name is Monica Rick's I'm with wafs out

892

00:38:50,200 --> 00:38:47,930

of the rocket city and Sandy I've been

893

00:38:52,330 --> 00:38:50,210

admiring your hair all morning and this

894

00:38:56,020 --> 00:38:52,340

question is for you too you've been this

895

00:38:57,460 --> 00:38:56,030

is your second time up at the ISS tell

896

00:39:00,160 --> 00:38:57,470

me the changes that have gone through

897

00:39:03,310 --> 00:39:00,170

the space station and and how it looks

898

00:39:05,470 --> 00:39:03,320

now and also you've got six days left

899

00:39:06,940 --> 00:39:05,480

before you know some crew members leave

900

00:39:12,310 --> 00:39:06,950

is there anything you want to do before

901  
00:39:14,320 --> 00:39:12,320  
you fly back well certainly the space

902  
00:39:16,540 --> 00:39:14,330  
station feels a lot like home the minute

903  
00:39:18,970 --> 00:39:16,550  
we opened the hatch I felt like I never

904  
00:39:20,440 --> 00:39:18,980  
left but in the in the meantime that

905  
00:39:23,260 --> 00:39:20,450  
since I've been here two years ago

906  
00:39:25,480 --> 00:39:23,270  
several new modules have arrived the

907  
00:39:28,350 --> 00:39:25,490  
most enjoyable one of which is the

908  
00:39:30,760 --> 00:39:28,360  
cupola which is this very nice windowed

909  
00:39:32,950 --> 00:39:30,770  
module that we can see these spectacular

910  
00:39:35,320 --> 00:39:32,960  
views of the earth so

911  
00:39:37,060 --> 00:39:35,330  
almost after a couple hours after we

912  
00:39:39,010 --> 00:39:37,070  
docked and we had a break we all ran up

913  
00:39:41,620 --> 00:39:39,020

to the cupola to see the view from there

914

00:39:43,120 --> 00:39:41,630

so the station you know it's the same

915

00:39:44,829 --> 00:39:43,130

but yet it's different in some ways a

916

00:39:46,720 --> 00:39:44,839

lot of the operations still the same

917

00:39:48,910 --> 00:39:46,730

these guys are taking great care of it

918

00:39:50,200 --> 00:39:48,920

as far as the remaining time of the

919

00:39:52,030 --> 00:39:50,210

mission we're going to finish out our

920

00:39:53,890 --> 00:39:52,040

transfer and hopefully we'll get that

921

00:39:56,260 --> 00:39:53,900

done a little bit early and we'll have

922

00:39:58,000 --> 00:39:56,270

some time to spend in the cupola at some

923

00:40:00,430 --> 00:39:58,010

the other windows and just with our

924

00:40:03,310 --> 00:40:00,440

station colleagues and and share some

925

00:40:05,710 --> 00:40:03,320

memories before we have to leave good

926

00:40:07,599 --> 00:40:05,720

morning this is matt bigler KCBS radio

927

00:40:09,579 --> 00:40:07,609

and this is a question for X or whoever

928

00:40:11,500 --> 00:40:09,589

would like to field it and we're

929

00:40:13,780 --> 00:40:11,510

speaking to you from Silicon Valley the

930

00:40:15,609 --> 00:40:13,790

home of Google and Facebook and things

931

00:40:17,980 --> 00:40:15,619

like social media and the iPhone and my

932

00:40:20,290 --> 00:40:17,990

question is what effect do you think

933

00:40:23,109 --> 00:40:20,300

that some of these high tech innovations

934

00:40:25,870 --> 00:40:23,119

have had on America's interest in space

935

00:40:31,210 --> 00:40:25,880

travel and our ability to explore the

936

00:40:33,220 --> 00:40:31,220

final frontier well I think that

937

00:40:35,050 --> 00:40:33,230

technology is it has an inherent

938

00:40:37,150 --> 00:40:35,060

interest and people just taken hair and

939

00:40:38,440 --> 00:40:37,160

interest in it and I think Silicon

940

00:40:39,970 --> 00:40:38,450

Valley is the genesis a lot of the

941

00:40:42,040 --> 00:40:39,980

technology we use here on the space

942

00:40:45,220 --> 00:40:42,050

station so I really do think it plays a

943

00:40:47,170 --> 00:40:45,230

very important role from from from

944

00:40:48,849 --> 00:40:47,180

inspiring grade school kids to actually

945

00:40:51,220 --> 00:40:48,859

providing the science that we need to do

946

00:40:52,300 --> 00:40:51,230

our do our research here and I think

947

00:40:53,740 --> 00:40:52,310

that's going to always keep people

948

00:40:55,810 --> 00:40:53,750

curious and curiosity is a very

949

00:40:57,310 --> 00:40:55,820

important thing that you need to to be

950

00:40:59,440 --> 00:40:57,320

able to develop a space program then

951

00:41:01,030 --> 00:40:59,450

develop a good research program that can