1
00:01:18,080 --> 00:01:11,810
hello Mike you look terrific huh how do

2
00:01:19,789 --> 00:01:18,090
you know not how do you look um things

3
00:01:21,109 --> 00:01:19,799
have been going pretty good here we just

4
00:01:23,300 --> 00:01:21,119
got up and we're getting ready for a new

5
00:01:25,490 --> 00:01:23,310
day to unload the progress a little bit

6
00:01:27,469 --> 00:01:25,500
more and start getting ready for this

7
00:01:29,960 --> 00:01:27,479
it's pretty exciting e vai think the too

8
00:01:33,100 --> 00:01:29,970
much you guys are gonna do for sealian

9
00:01:35,569 --> 00:01:33,110
Sasha and about a week's time we think

10
00:01:40,460 --> 00:01:35,579
did you get everything you need in the

11
00:01:42,770 --> 00:01:40,470
progress vehicle yes i did i'm really

12
00:01:44,359 --> 00:01:42,780
grateful to the guys who really hustled

13
00:01:46,339 --> 00:01:44,369

i mean they did an amazing piece of work

14
00:01:48,320 --> 00:01:46,349
in there about two weeks get some pieces

15
00:01:50,809 --> 00:01:48,330
together for me and i'm pretty much set

16
00:01:54,260 --> 00:01:50,819
up now in the command to module which is

17
00:01:56,899 --> 00:01:54,270
where the airlock is going outside the

18
00:01:59,330 --> 00:01:56,909
space station and it joins on through

19
00:02:01,669 --> 00:01:59,340
the the node of this station complex

20
00:02:05,449 --> 00:02:01,679
where the EBA we've done by bazillion

21
00:02:08,300 --> 00:02:05,459
Sasha please are you getting enough rest

22
00:02:13,580 --> 00:02:08,310
and do you think everyone will be ready

23
00:02:14,930 --> 00:02:13,590
for the EV a yes I think so i think the

24
00:02:16,400 --> 00:02:14,940
ground understands that you know we have

25
00:02:17,930 --> 00:02:16,410
an awful lot of work to do here and

26
00:02:20,090 --> 00:02:17,940
we're getting very pretty fast and

27
00:02:21,559 --> 00:02:20,100
efficiently i think and we'll probably

28
00:02:25,789 --> 00:02:21,569
get the extra day or two of grace that's

29
00:02:28,400 --> 00:02:25,799
gonna be me decision yeah i think it's

30
00:02:30,430 --> 00:02:28,410
important that we know what your own

31
00:02:33,590 --> 00:02:30,440
physical constraints are and you're

32
00:02:35,660 --> 00:02:33,600
living constraints and i'm glad to see

33
00:02:37,520 --> 00:02:35,670
that you feel comfortable about that how

34
00:02:39,650 --> 00:02:37,530
do you feel about your safety you feel

35
00:02:43,970 --> 00:02:39,660
comfortable sanguine with it at the

36
00:02:45,229 --> 00:02:43,980
present time say your ad you come just

37
00:02:47,360 --> 00:02:45,239
dropped a safe to say that again please

38
00:02:49,160 --> 00:02:47,370

how do you feel about the safety

39
00:02:52,789 --> 00:02:49,170
conditions on board right now are you

40
00:02:56,330 --> 00:02:52,799
sanguine with it I've always been

41
00:02:59,000 --> 00:02:56,340
signing with it um I think basically we

42
00:03:01,309 --> 00:02:59,010
have time to move even in pretty extreme

43
00:03:04,039 --> 00:03:01,319
situation where we have a leak and the

44
00:03:05,720 --> 00:03:04,049
pressure is falling pretty fast we had

45
00:03:10,520 --> 00:03:05,730
time to think and consider about what

46
00:03:12,470 --> 00:03:10,530
we're doing oops but this is our friend

47
00:03:14,900 --> 00:03:12,480
that we put up on the progress it's

48
00:03:18,159 --> 00:03:14,910
going to be used to seal up to fill out

49
00:03:20,500 --> 00:03:18,169
the pass through the umbilicals from the

50
00:03:23,770 --> 00:03:20,510
module spectra

51
00:03:26,259 --> 00:03:23,780
and what's this is going to attach onto

52
00:03:27,910 --> 00:03:26,269
the module Specter on to the end cone

53
00:03:30,940 --> 00:03:27,920
imagine inspector stretching off this

54
00:03:33,640 --> 00:03:30,950
way to the side and on the inside of a

55
00:03:36,990 --> 00:03:33,650
node there will be accessible to us

56
00:03:39,339 --> 00:03:37,000
under North pressure these connectors

57
00:03:41,559 --> 00:03:39,349
but what the sealian sash we're going to

58
00:03:43,000 --> 00:03:41,569
do is on the back side there were

59
00:03:45,850 --> 00:03:43,010
already been stuck for the cables like

60
00:03:47,949 --> 00:03:45,860
the kind of Medusa room tables and then

61
00:03:50,199 --> 00:03:47,959
during the EV a the city of special

62
00:03:52,960 --> 00:03:50,209
connect to these cables the parquet was

63
00:03:55,390 --> 00:03:52,970

that about floating free inspector that

64
00:03:59,289 --> 00:03:55,400
would provide the means to get the power

65
00:04:00,460 --> 00:03:59,299
prospective to the base block so I've

66
00:04:03,910 --> 00:04:00,470
got distracted there by this thing

67
00:04:06,309 --> 00:04:03,920
plating infamy generally the safety

68
00:04:10,210 --> 00:04:06,319
concerns here though I think or wilmette

69
00:04:11,800 --> 00:04:10,220
and I'm not I'm not worried tell you my

70
00:04:14,349 --> 00:04:11,810
hats off to our Russian colleagues

71
00:04:17,259 --> 00:04:14,359
that's one incredible piece of hardware

72
00:04:19,120 --> 00:04:17,269
to put together in days I wish we had

73
00:04:21,460 --> 00:04:19,130
the rapid reaction time in the united

74
00:04:23,529 --> 00:04:21,470
states that i see sitting in your hand

75
00:04:27,000 --> 00:04:23,539
there we have a lot to learn from the

76
00:04:29,290 --> 00:04:27,010
Russians i agree with you i am

77
00:04:31,870 --> 00:04:29,300
particularly impressed by this is the

78
00:04:33,939 --> 00:04:31,880
way the the plan is come together exec

79
00:04:36,159 --> 00:04:33,949
Gary cross was on the console asking us

80
00:04:39,159 --> 00:04:36,169
questions even if I a day or two after

81
00:04:40,839 --> 00:04:39,169
the the access and sweet I had to ask

82
00:04:42,339 --> 00:04:40,849
you what are you extending I could tell

83
00:04:44,170 --> 00:04:42,349
there something going on is that this is

84
00:04:45,730 --> 00:04:44,180
what they invented and I must say the

85
00:04:48,040 --> 00:04:45,740
plans with mike is coming together and

86
00:04:49,360 --> 00:04:48,050
you know we had a lot of questions

87
00:04:51,820 --> 00:04:49,370
there's still are questions about how to

88
00:04:54,189 --> 00:04:51,830

do the VA where i'll be during it in the

89
00:04:56,560 --> 00:04:54,199
Soyuz and what we'll do but i think

90
00:04:59,260 --> 00:04:56,570
those questions are being offered well i

91
00:05:01,750 --> 00:04:59,270
tell you i think this is a very valuable

92
00:05:04,870 --> 00:05:01,760
experience and I salute your courage and

93
00:05:06,760 --> 00:05:04,880
Vasily and Alexander because this could

94
00:05:08,170 --> 00:05:06,770
cover a contingency situation which

95
00:05:10,480 --> 00:05:08,180
could occur in the International Space

96
00:05:12,250 --> 00:05:10,490
Station and learning how to work through

97
00:05:13,990 --> 00:05:12,260
this I think is very important and

98
00:05:18,279 --> 00:05:14,000
sticking with the mission is very

99
00:05:20,200 --> 00:05:18,289
important well I agree with you entirely

100
00:05:21,909 --> 00:05:20,210
on that I think the biggest message I'm

101
00:05:24,129 --> 00:05:21,919
getting out of this is is how do we

102
00:05:26,770 --> 00:05:24,139
respond to a situation and the situation

103
00:05:28,120 --> 00:05:26,780
isn't going to be a one-off occurrence

104
00:05:29,709 --> 00:05:28,130
so we're going to have events like this

105
00:05:31,990 --> 00:05:29,719
i think in the future in our combined

106
00:05:33,790 --> 00:05:32,000
space programs and the way we're going

107
00:05:35,110 --> 00:05:33,800
to work together the way we are

108
00:05:39,240 --> 00:05:35,120
standing how people respond to these

109
00:05:41,920 --> 00:05:39,250
emergencies very very useful you know

110
00:05:43,390 --> 00:05:41,930
we're getting down on the surface of

111
00:05:44,710 --> 00:05:43,400
Mars and I don't think you've had the

112
00:05:47,290 --> 00:05:44,720
privilege of seeing some of the

113
00:05:48,969 --> 00:05:47,300

incredible pictures Michael train

114
00:05:55,270 --> 00:05:48,979
because you're still young enough to go

115
00:05:56,290 --> 00:05:55,280
to Mars I love to hear that no I i we

116
00:05:58,779 --> 00:05:56,300
have been really thrilled to hear about

117
00:06:00,580 --> 00:05:58,789
the Mars landing and I must say I think

118
00:06:02,170 --> 00:06:00,590
we were the sum of the few people I see

119
00:06:03,490 --> 00:06:02,180
were off the planet but you know from

120
00:06:07,330 --> 00:06:03,500
Earth who have not seen those pictures

121
00:06:09,100 --> 00:06:07,340
yet we want to very much and and i've

122
00:06:10,540 --> 00:06:09,110
only been thinking about what's going

123
00:06:12,399 --> 00:06:10,550
although Mars with that that fantastic

124
00:06:15,100 --> 00:06:12,409
land apart find it when we're playing

125
00:06:17,200 --> 00:06:15,110
over northern Africa it's it's a red red

126
00:06:19,089 --> 00:06:17,210
sand now there's almost no clouds

127
00:06:21,760 --> 00:06:19,099
present and of course it's a little bit

128
00:06:22,749 --> 00:06:21,770
of a blue tint to the horizon but it

129
00:06:24,309 --> 00:06:22,759
makes me think about what it would be

130
00:06:25,930 --> 00:06:24,319
like to be an orbit around Mars and I do

131
00:06:28,600 --> 00:06:25,940
think we should be doing that pretty

132
00:06:30,189 --> 00:06:28,610
soon got wonderful briefings today from

133
00:06:32,649 --> 00:06:30,199
the brilliant young people here at the

134
00:06:34,510 --> 00:06:32,659
Johnson Space Center and I challenged

135
00:06:36,879 --> 00:06:34,520
them to get us to Mars for a very very

136
00:06:39,999 --> 00:06:36,889
low price in a short period of time and

137
00:06:41,950 --> 00:06:40,009
do outstanding work and I tell you we're

138
00:06:44,140 --> 00:06:41,960

gonna pull it off and I think we're

139
00:06:46,089 --> 00:06:44,150
gonna do it in your career time all

140
00:06:47,950 --> 00:06:46,099
right well I could believe that because

141
00:06:49,390 --> 00:06:47,960
I'm so impressed by the way the

142
00:06:51,610 --> 00:06:49,400
Pathfinder mission has gone off i think

143
00:06:53,589 --> 00:06:51,620
the way that was done for so much less

144
00:06:55,140 --> 00:06:53,599
money than in the past and done so

145
00:06:57,519 --> 00:06:55,150
quickly was really really impressive

146
00:07:00,999 --> 00:06:57,529
should see the excitement of the young

147
00:07:04,450 --> 00:07:01,009
engineers and the mature young engineers

148
00:07:06,369 --> 00:07:04,460
at the JPL they are just on fire I've

149
00:07:08,499 --> 00:07:06,379
been watching them on television I'm so

150
00:07:10,959 --> 00:07:08,509
proud of them I tell you I'm so proud of

151
00:07:12,640 --> 00:07:10,969
the whole NASA team you folks in space

152
00:07:15,490 --> 00:07:12,650
or Russian colleagues and the people

153
00:07:17,200 --> 00:07:15,500
here on the ground and i'll try my best

154
00:07:19,600 --> 00:07:17,210
to get some pictures up to you and

155
00:07:21,279 --> 00:07:19,610
facility and alexander as soon as

156
00:07:24,369 --> 00:07:21,289
humanly possible because I'd like you to

157
00:07:26,320 --> 00:07:24,379
share the excitement with us thank you

158
00:07:27,969 --> 00:07:26,330
very much we'd appreciate that and I'd

159
00:07:29,830 --> 00:07:27,979
like to offer my congratulations to the

160
00:07:31,480 --> 00:07:29,840
GPS even the NASA team that has called

161
00:07:33,339 --> 00:07:31,490
all this stuff off and I'd like to thank

162
00:07:35,019 --> 00:07:33,349
you I'd like to thank everybody in

163
00:07:39,279 --> 00:07:35,029

particular for the incredible response

164
00:07:43,029 --> 00:07:39,289
in our own presence at a moment I found

165
00:07:45,339 --> 00:07:43,039
a response instantaneous helpful there

166
00:07:47,410 --> 00:07:45,349
was never any feeling that you know the

167
00:07:50,020 --> 00:07:47,420
communication was down or lacking

168
00:07:51,370 --> 00:07:50,030
and I'm very grateful for the NASA team

169
00:07:56,920 --> 00:07:51,380
and for the Russian team for what

170
00:07:58,900 --> 00:07:56,930
they've done well I tell you Michael we

171
00:08:00,730 --> 00:07:58,910
think you're terrific we think Vasily

172
00:08:02,980 --> 00:08:00,740
and Alexander's terrific there's a lot

173
00:08:05,680 --> 00:08:02,990
of people on the ground that read about

174
00:08:09,240 --> 00:08:05,690
you and see you on TV day and night our

175
00:08:11,890 --> 00:08:09,250
thoughts are with you and play it safe

176
00:08:13,690 --> 00:08:11,900
name is Natalie woods from Shaw hice

177
00:08:18,910 --> 00:08:13,700
well and what is your role as the

178
00:08:21,550 --> 00:08:18,920
mission specialist my role as a mission

179
00:08:23,530 --> 00:08:21,560
specialist on this flight is to do a lot

180
00:08:25,390 --> 00:08:23,540
of the science experiments I'm a member

181
00:08:27,760 --> 00:08:25,400
of the orbiter of the payload crew here

182
00:08:29,260 --> 00:08:27,770
we're split up into two halves at the

183
00:08:30,730 --> 00:08:29,270
astronauts are running the shuttle and

184
00:08:32,380 --> 00:08:30,740
taking care of all the shuttle systems

185
00:08:34,150 --> 00:08:32,390
the other half or take care of the

186
00:08:36,310 --> 00:08:34,160
experiments back in space that module

187
00:08:38,380 --> 00:08:36,320
where I am right now and part of the

188
00:08:40,990 --> 00:08:38,390

payload crew and we work back here in

189
00:08:46,120 --> 00:08:41,000
two shifts around the clock 24 hours a

190
00:08:48,880 --> 00:08:46,130
day my name is Katie arruda from

191
00:08:54,760 --> 00:08:48,890
magnificat high school and how do you

192
00:08:56,500 --> 00:08:54,770
start a controlled fire in space well we

193
00:08:59,020 --> 00:08:56,510
have a number of combustion experiments

194
00:09:01,450 --> 00:08:59,030
and to control the fires we have special

195
00:09:03,850 --> 00:09:01,460
combustion chambers that they protect us

196
00:09:05,440 --> 00:09:03,860
and the fires from spreading there are

197
00:09:07,600 --> 00:09:05,450
many layers of containment so they don't

198
00:09:09,070 --> 00:09:07,610
get out of control and I'm standing in

199
00:09:10,390 --> 00:09:09,080
front of where the experiments right

200
00:09:13,390 --> 00:09:10,400
here it's a droplet combustion

201
00:09:15,580 --> 00:09:13,400
experiment and it's just an example it's

202
00:09:17,740 --> 00:09:15,590
a pretty heavy steel chamber where the

203
00:09:20,200 --> 00:09:17,750
combustion process actually takes place

204
00:09:22,060 --> 00:09:20,210
so we'll well protect it from any

205
00:09:24,010 --> 00:09:22,070
explosions are from the fires you know

206
00:09:28,150 --> 00:09:24,020
getting out and detecting other parts of

207
00:09:29,770 --> 00:09:28,160
the shuttle my name is David Laska I'm

208
00:09:32,860 --> 00:09:29,780
from holy cross school I'm in a

209
00:09:34,990 --> 00:09:32,870
university program for the summer my

210
00:09:40,870 --> 00:09:35,000
question is do you ever get a chance to

211
00:09:42,520 --> 00:09:40,880
talk to your family in private that's a

212
00:09:45,370 --> 00:09:42,530
great question and it's a coincidence

213
00:09:47,620 --> 00:09:45,380

that I just talked to my wife and my son

214
00:09:49,330 --> 00:09:47,630
have a two-year-old boy and I was able

215
00:09:51,460 --> 00:09:49,340
to talk to them and on this flight

216
00:09:53,140 --> 00:09:51,470
that's the first flight uh driving an

217
00:09:55,360 --> 00:09:53,150
astronaut that we've been able to have

218
00:09:57,010 --> 00:09:55,370
two-way video so i could actually look

219
00:09:58,780 --> 00:09:57,020
at a little video monitor of my

220
00:10:00,730 --> 00:09:58,790
my son sitting there and they were

221
00:10:02,320 --> 00:10:00,740
having they could see a monitor watching

222
00:10:05,350 --> 00:10:02,330
me and we were having a conversation for

223
00:10:07,240 --> 00:10:05,360
maybe 15 minutes and then maybe two

224
00:10:09,130 --> 00:10:07,250
hours later I had a a chance on an

225
00:10:11,710 --> 00:10:09,140
amateur radio to talk to my mother up in

226
00:10:13,660 --> 00:10:11,720
Bloomington Indiana so long but

227
00:10:15,460 --> 00:10:13,670
typically we get a chance maybe every

228
00:10:16,960 --> 00:10:15,470
four days or so to talk to our families

229
00:10:19,300 --> 00:10:16,970
to have one of these video conferences

230
00:10:21,010 --> 00:10:19,310
we do have electronic mail that we can

231
00:10:22,330 --> 00:10:21,020
transfer back and forth then we talk to

232
00:10:25,180 --> 00:10:22,340
our families send messages back and

233
00:10:26,620 --> 00:10:25,190
forth on a daily basis it for the

234
00:10:28,360 --> 00:10:26,630
greatest things every day where the

235
00:10:29,860 --> 00:10:28,370
highlights outside of doing the

236
00:10:32,580 --> 00:10:29,870
experiments looking out the window it's

237
00:10:35,950 --> 00:10:32,590
always great to get messages from home

238
00:10:37,990 --> 00:10:35,960

hey my name is mya davis I'm from Laurel

239
00:10:40,120 --> 00:10:38,000
high school and I was wondering how do

240
00:10:46,420 --> 00:10:40,130
you go about preventing muscle and bone

241
00:10:49,060 --> 00:10:46,430
degeneration okay I understand yeah up

242
00:10:50,530 --> 00:10:49,070
here you don't use any muscles you know

243
00:10:52,780 --> 00:10:50,540
if I want to move to outdoor but it just

244
00:10:56,890 --> 00:10:52,790
takes a little push of my finger and I

245
00:10:58,540 --> 00:10:56,900
go across the space that module here so

246
00:11:00,510 --> 00:10:58,550
I don't have to use any muscles walking

247
00:11:03,160 --> 00:11:00,520
or getting up and moving anything around

248
00:11:05,500 --> 00:11:03,170
so your muscles do atrophy up in space

249
00:11:07,630 --> 00:11:05,510
what we do is we have an exercise bike

250
00:11:09,220 --> 00:11:07,640
called an odometer and each of us right

251
00:11:11,320 --> 00:11:09,230
at about a half an hour a day and that

252
00:11:13,930 --> 00:11:11,330
helps get your cardiovascular system

253
00:11:15,580 --> 00:11:13,940
gets the blood pumping again and help

254
00:11:17,800 --> 00:11:15,590
keep us in safe a little bit for landing

255
00:11:19,630 --> 00:11:17,810
when we land you know you are a little

256
00:11:21,640 --> 00:11:19,640
bit out of sake I feel like a thousand

257
00:11:23,980 --> 00:11:21,650
pound person trying to get out of my

258
00:11:26,350 --> 00:11:23,990
seat of landing but it takes a half an

259
00:11:30,690 --> 00:11:26,360
hour 45 minutes or so and you're able to

260
00:11:35,020 --> 00:11:33,220
hi my name is Katie Halloran from

261
00:11:38,530 --> 00:11:35,030
magnificat high school and my question

262
00:11:39,910 --> 00:11:38,540
is what environmental information do you

263
00:11:45,280 --> 00:11:39,920

hope to gain from your combustion

264
00:11:48,250 --> 00:11:45,290
experiments the combustion experiments

265
00:11:50,560 --> 00:11:48,260
the main goal a two-fold one is to maybe

266
00:11:51,940 --> 00:11:50,570
increase the efficiency of burning you

267
00:11:53,770 --> 00:11:51,950
know so much of our energy down to the

268
00:11:55,930 --> 00:11:53,780
ground from the automobiles to power

269
00:11:58,660 --> 00:11:55,940
plants and electrical generation that

270
00:12:00,370 --> 00:11:58,670
all combustion processes in which I

271
00:12:02,500 --> 00:12:00,380
understand maybe ways to improve the

272
00:12:04,450 --> 00:12:02,510
efficiency if we can just improve it one

273
00:12:05,980 --> 00:12:04,460
or two percent a very small fractional

274
00:12:06,730 --> 00:12:05,990
increase it would have a major impact

275
00:12:08,470 --> 00:12:06,740
around the

276
00:12:10,810 --> 00:12:08,480
world secondly we're trying to

277
00:12:12,130 --> 00:12:10,820
understand the fit process when flames

278
00:12:14,650 --> 00:12:12,140
burn if you look at a candle flame

279
00:12:16,269 --> 00:12:14,660
you'll see a black suit coming emanating

280
00:12:18,790 --> 00:12:16,279
from the flame and we're trying to

281
00:12:21,040 --> 00:12:18,800
understand better what creates the suit

282
00:12:22,810 --> 00:12:21,050
how do you control that and that a major

283
00:12:27,010 --> 00:12:22,820
impact potentially on the ground from

284
00:12:29,260 --> 00:12:27,020
the pollution point of view hi my name

285
00:12:31,750 --> 00:12:29,270
is Jael panag eres from north ridgeville

286
00:12:33,579 --> 00:12:31,760
hi I was wondering what kind of

287
00:12:35,440 --> 00:12:33,589
preparations do you have to go through

288
00:12:40,420 --> 00:12:35,450

so that you are physically and mentally

289
00:12:43,030 --> 00:12:40,430
ready to perform your tasks that's a

290
00:12:45,340 --> 00:12:43,040
great question physically all astronauts

291
00:12:47,500 --> 00:12:45,350
try to stay in pretty good shape most

292
00:12:49,210 --> 00:12:47,510
people run we have a gym that we all

293
00:12:51,760 --> 00:12:49,220
work out at it and my main activity I

294
00:12:53,290 --> 00:12:51,770
like to go swimming so I swim a mile and

295
00:12:55,960 --> 00:12:53,300
a half almost every single day that I

296
00:12:57,820 --> 00:12:55,970
can we're back on earth and so that

297
00:13:00,190 --> 00:12:57,830
that's the physical part of it mentally

298
00:13:02,230 --> 00:13:00,200
you just have to get prepared you got to

299
00:13:04,240 --> 00:13:02,240
know all your material and work really

300
00:13:05,680 --> 00:13:04,250
hard at it for all these experiments

301
00:13:07,449 --> 00:13:05,690
that were performing on the shuttle here

302
00:13:09,699 --> 00:13:07,459
we've been training for your dad for two

303
00:13:11,470 --> 00:13:09,709
years on each of the experiments to make

304
00:13:13,300 --> 00:13:11,480
sure we know exactly how to perform them

305
00:13:15,579 --> 00:13:13,310
inside and out so that if we have a

306
00:13:18,310 --> 00:13:15,589
problem you know we can solve it up here

307
00:13:20,079 --> 00:13:18,320
so it's a lot of mental training and in

308
00:13:21,670 --> 00:13:20,089
physical training and and then come

309
00:13:23,319 --> 00:13:21,680
launch morning you know you're pretty

310
00:13:25,870 --> 00:13:23,329
psyched to get on the shuttle I'm

311
00:13:28,300 --> 00:13:25,880
probably twenty percent a little frayed

312
00:13:29,920 --> 00:13:28,310
and an eighty percent just you know

313
00:13:31,750 --> 00:13:29,930

psyched out my mind and excited about

314
00:13:33,550 --> 00:13:31,760
going on the trail this is some footage

315
00:13:35,319 --> 00:13:33,560
from yesterday where roger and i did an

316
00:13:37,120 --> 00:13:35,329
in-flight maintenance procedure back in

317
00:13:39,819 --> 00:13:37,130
the lab and the purpose of this

318
00:13:43,569 --> 00:13:39,829
procedure was to rewire a thermocouple

319
00:13:46,990 --> 00:13:43,579
and LIF furnace and basically the way

320
00:13:48,880 --> 00:13:47,000
this works is the ground researches it

321
00:13:51,519 --> 00:13:48,890
for as much time as they need and then

322
00:13:53,170 --> 00:13:51,529
they access our procedure which

323
00:13:56,440 --> 00:13:53,180
basically in this case involves writing

324
00:13:58,389 --> 00:13:56,450
some wires from pins on one side of a

325
00:14:00,550 --> 00:13:58,399
connector two sockets on the other side

326
00:14:02,350 --> 00:14:00,560
of the connector and so we got the wires

327
00:14:04,420 --> 00:14:02,360
out of a little kit that we carry in the

328
00:14:06,910 --> 00:14:04,430
orbiter and then Roger and I both

329
00:14:09,340 --> 00:14:06,920
together very carefully made sure that

330
00:14:12,100 --> 00:14:09,350
we got the wires going from the right

331
00:14:13,960 --> 00:14:12,110
pan to the right socket as it sometimes

332
00:14:15,970 --> 00:14:13,970
the case in space things don't work out

333
00:14:19,300 --> 00:14:15,980
exactly the way you plan and as it

334
00:14:20,329 --> 00:14:19,310
turned out the darn sockets on the ends

335
00:14:22,309 --> 00:14:20,339
of the wires were

336
00:14:24,410 --> 00:14:22,319
mental or the episode I were a little

337
00:14:26,689 --> 00:14:24,420
loose in the sockets on the connector so

338
00:14:29,329 --> 00:14:26,699

they wouldn't stay in and so here you

339
00:14:30,530 --> 00:14:29,339
see me getting some duct tape and I'll

340
00:14:32,420 --> 00:14:30,540
tell you I think we'd be lost without

341
00:14:36,110 --> 00:14:32,430
duct tape up here we use it for pretty

342
00:14:38,509 --> 00:14:36,120
much everything and anyhow we were able

343
00:14:40,220 --> 00:14:38,519
to duct tape those things into place and

344
00:14:43,460 --> 00:14:40,230
then you can see how we've got him

345
00:14:46,489 --> 00:14:43,470
restrained there and it worked it was

346
00:14:48,280 --> 00:14:46,499
very successful and we're back up and

347
00:14:50,629 --> 00:14:48,290
working with his science so that was a

348
00:14:53,059 --> 00:14:50,639
good example of how we can work together

349
00:14:55,369 --> 00:14:53,069
as a team with the ground s6 little pump

350
00:14:59,689 --> 00:14:55,379
that occurred during the flight none of

351
00:15:01,759 --> 00:14:59,699
my jobs on sts 94 is earth observations

352
00:15:04,999 --> 00:15:01,769
we have an extensive earth observation

353
00:15:07,420 --> 00:15:05,009
program and it has been ongoing since

354
00:15:10,489 --> 00:15:07,430
the beginning of the shuttle program