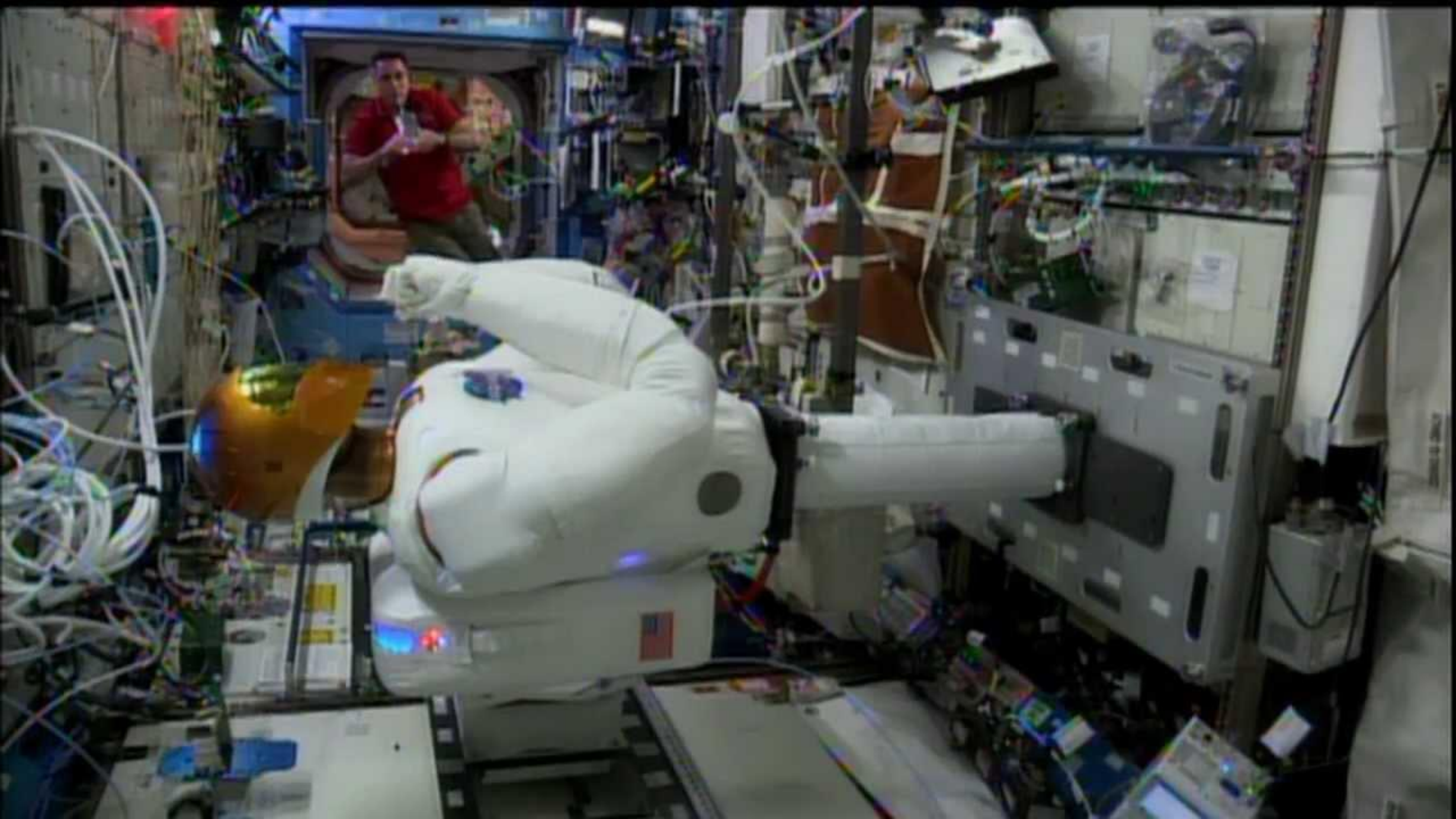

1
00:00:15,190 --> 00:00:12,789
this is mission control we want to

2
00:00:16,950 --> 00:00:15,200
welcome you to today's

3
00:00:19,269 --> 00:00:16,960
space station live it is wednesday

4
00:00:21,029 --> 00:00:19,279
august 28 2013. this is a live view

5
00:00:23,269 --> 00:00:21,039
inside the international space station

6
00:00:25,109 --> 00:00:23,279
flight control room here at the johnson

7
00:00:27,029 --> 00:00:25,119
space center in houston texas this team

8
00:00:29,269 --> 00:00:27,039
today being led by flight director tony

9
00:00:31,349 --> 00:00:29,279
cicacci he's there in the white shirt

10
00:00:33,030 --> 00:00:31,359
sitting to his right but on your screen

11
00:00:34,549 --> 00:00:33,040
to the left is serena anand she's the

12
00:00:35,590 --> 00:00:34,559
capcom today she'll be the one talking

13
00:00:38,549 --> 00:00:35,600

to the crew

14
00:00:40,389 --> 00:00:38,559
up in space

15
00:00:42,150 --> 00:00:40,399
expedition 36 currently on board

16
00:00:43,910 --> 00:00:42,160
including on the far left there

17
00:00:46,150 --> 00:00:43,920
alexander misurkin there in the center

18
00:00:48,470 --> 00:00:46,160
of the screen pablo vinogradov as well

19
00:00:49,830 --> 00:00:48,480
as chris cassidy back there at the back

20
00:00:51,750 --> 00:00:49,840
on the right half of your screen is

21
00:00:53,350 --> 00:00:51,760
karen nyberg on the far right

22
00:00:54,470 --> 00:00:53,360
theodore your cheek and there in the

23
00:00:55,910 --> 00:00:54,480
center of the screen and then look at

24
00:00:57,350 --> 00:00:55,920
parmitano there

25
00:01:00,389 --> 00:00:57,360
at the back standing beside chris

26
00:01:03,349 --> 00:01:01,750
the crew is spending the day working

27
00:01:05,270 --> 00:01:03,359
throughout the entire complex on a

28
00:01:06,710 --> 00:01:05,280
variety of different robotics

29
00:01:08,789 --> 00:01:06,720
experiments and also some routine

30
00:01:10,950 --> 00:01:08,799
maintenance robonaut

31
00:01:12,310 --> 00:01:10,960
is out today chris cassidy spent some

32
00:01:13,750 --> 00:01:12,320
time earlier this morning setting up

33
00:01:15,910 --> 00:01:13,760
robonaut and as you can see robonaut

34
00:01:17,429 --> 00:01:15,920
there flexing his hands and his fingers

35
00:01:19,510 --> 00:01:17,439
being put through the paces by the

36
00:01:21,510 --> 00:01:19,520
ground teams here in houston uh these

37
00:01:23,030 --> 00:01:21,520
checkout procedures of this robot have

38
00:01:24,950 --> 00:01:23,040

been continuing for the past several

39
00:01:26,310 --> 00:01:24,960
months and this week will be no

40
00:01:27,749 --> 00:01:26,320
different robonaut's got a few different

41
00:01:29,990 --> 00:01:27,759
tasks in front of him including

42
00:01:31,830 --> 00:01:30,000
manipulating his task board this is

43
00:01:33,270 --> 00:01:31,840
basically a big project board

44
00:01:34,789 --> 00:01:33,280
that he can move switches and try

45
00:01:37,030 --> 00:01:34,799
different things he can also move his

46
00:01:38,710 --> 00:01:37,040
arms around flex them make sure that

47
00:01:40,630 --> 00:01:38,720
everything is up and running as expected

48
00:01:43,830 --> 00:01:40,640
as these checkouts on this big robot

49
00:01:45,350 --> 00:01:43,840
continue on board the space station

50
00:01:47,670 --> 00:01:45,360
cassidy also busy today setting up

51
00:01:48,870 --> 00:01:47,680
what's known as the frost freezer this

52
00:01:50,950 --> 00:01:48,880
is another one of these experiment

53
00:01:53,590 --> 00:01:50,960
refrigerators that was flown up on board

54
00:01:55,830 --> 00:01:53,600
the htv4 that has the japanese cargo

55
00:01:57,109 --> 00:01:55,840
vehicle that is currently docked

56
00:01:59,109 --> 00:01:57,119
with the u.s segment of the

57
00:02:00,069 --> 00:01:59,119
international space station this frost

58
00:02:01,830 --> 00:02:00,079
freezer

59
00:02:03,270 --> 00:02:01,840
keeps things and experiment samples

60
00:02:05,350 --> 00:02:03,280
extremely cold

61
00:02:06,630 --> 00:02:05,360
and can also function in the event of a

62
00:02:08,630 --> 00:02:06,640
power loss which of course we don't

63
00:02:09,910 --> 00:02:08,640

expect but it is important that these

64
00:02:12,309 --> 00:02:09,920
refrigerators

65
00:02:14,470 --> 00:02:12,319
and these freezers stay extremely cold

66
00:02:17,750 --> 00:02:14,480
in the event of that power law so that

67
00:02:20,550 --> 00:02:17,760
the samples are not ruined

68
00:02:22,150 --> 00:02:20,560
luca parmitano working on the bio lab

69
00:02:23,910 --> 00:02:22,160
this is one of the racks that is inside

70
00:02:25,750 --> 00:02:23,920
the columbus laboratory the european

71
00:02:27,990 --> 00:02:25,760
laboratory onboard the space station

72
00:02:29,670 --> 00:02:28,000
this bio lab is a big rack

73
00:02:32,229 --> 00:02:29,680
that is used for different experiments

74
00:02:34,710 --> 00:02:32,239
like microorganisms cells tissue

75
00:02:36,869 --> 00:02:34,720
cultures and even small plants but

76
00:02:37,750 --> 00:02:36,879
there's a microscope on that that has

77
00:02:40,390 --> 00:02:37,760
some

78
00:02:41,750 --> 00:02:40,400
micro cassettes that are used for data

79
00:02:43,670 --> 00:02:41,760
and other

80
00:02:45,110 --> 00:02:43,680
items that are gathered as the crew uses

81
00:02:46,630 --> 00:02:45,120
that microscope and the ground teams

82
00:02:48,550 --> 00:02:46,640
watch along

83
00:02:50,869 --> 00:02:48,560
but it's not functioning as expected so

84
00:02:52,150 --> 00:02:50,879
he's doing some repair work on it as the

85
00:02:54,070 --> 00:02:52,160
ground teams there in the columbus

86
00:02:56,630 --> 00:02:54,080
control center watch along

87
00:02:57,990 --> 00:02:56,640
as he completes that

88
00:02:59,509 --> 00:02:58,000

karen nyberg is doing some surface

89
00:03:00,869 --> 00:02:59,519
sampling this happens from time to time

90
00:03:03,030 --> 00:03:00,879
aboard the space station they do some

91
00:03:05,270 --> 00:03:03,040
swabbing making sure that everything is

92
00:03:07,190 --> 00:03:05,280
as expected on the station surfaces and

93
00:03:08,390 --> 00:03:07,200
the parts that the crew members touch

94
00:03:10,630 --> 00:03:08,400
it's just like cleaning your house they

95
00:03:12,630 --> 00:03:10,640
have to make sure that nothing

96
00:03:14,309 --> 00:03:12,640
is growing there that shouldn't be so

97
00:03:17,030 --> 00:03:14,319
she'll be doing that later on today and

98
00:03:18,949 --> 00:03:17,040
taking those samples

99
00:03:20,470 --> 00:03:18,959
fyodor yurchikhin and alexander misurkin

100
00:03:22,949 --> 00:03:20,480
have been stowing some tools today of

101
00:03:24,789 --> 00:03:22,959
course these two gentlemen completed two

102
00:03:27,110 --> 00:03:24,799
spacewalks back-to-back over the course

103
00:03:28,710 --> 00:03:27,120
of a week the last one taking place last

104
00:03:30,390 --> 00:03:28,720
week so they're stowing everything that

105
00:03:31,670 --> 00:03:30,400
they used during that

106
00:03:33,110 --> 00:03:31,680
in the russian segment of the space

107
00:03:36,789 --> 00:03:33,120
station that'll take up the majority of

108
00:03:39,990 --> 00:03:38,470
vinogradov has been working on what is

109
00:03:41,190 --> 00:03:40,000
known as the lower body negative

110
00:03:43,509 --> 00:03:41,200
pressure

111
00:03:44,869 --> 00:03:43,519
uh device what this does is it's a pair

112
00:03:47,110 --> 00:03:44,879
of trousers or pants that the crew

113
00:03:49,509 --> 00:03:47,120

members put on and they run some tests

114
00:03:50,869 --> 00:03:49,519
on them or they do some exercises

115
00:03:51,990 --> 00:03:50,879
and what it does is basically what

116
00:03:53,350 --> 00:03:52,000
happens to the crew whenever they come

117
00:03:55,350 --> 00:03:53,360
back to earth

118
00:03:56,550 --> 00:03:55,360
uh the crew members bodies are not used

119
00:03:58,710 --> 00:03:56,560
to being on earth since they're up there

120
00:04:00,309 --> 00:03:58,720
for about six months so what these lbnp

121
00:04:01,670 --> 00:04:00,319
pants do is basically draw the blood

122
00:04:03,190 --> 00:04:01,680
away from the head

123
00:04:04,710 --> 00:04:03,200
to sort of recondition them to get ready

124
00:04:06,229 --> 00:04:04,720
to come back to earth and also to find

125
00:04:12,789 --> 00:04:06,239
out how they react to that so he'll do

126
00:04:15,990 --> 00:04:14,470
chris cassidy alexander misurkin paul

127
00:04:17,590 --> 00:04:16,000
vinogradov also getting ready to come

128
00:04:19,349 --> 00:04:17,600
home they are in their final days aboard

129
00:04:20,870 --> 00:04:19,359
the orbiting complex so they've got some

130
00:04:22,790 --> 00:04:20,880
packing to do before they come back to

131
00:04:24,230 --> 00:04:22,800
earth the night of september the 10th or

132
00:04:25,749 --> 00:04:24,240
the morning of september the 11th over

133
00:04:27,350 --> 00:04:25,759
there in kazakhstan so they're spending

134
00:04:28,550 --> 00:04:27,360
about an hour today

135
00:04:30,070 --> 00:04:28,560
packing up the things that will come

136
00:04:31,430 --> 00:04:30,080
home aboard the soyuz of course they're

137
00:04:32,550 --> 00:04:31,440
going to be coming home aboard the same

138
00:04:34,710 --> 00:04:32,560

vehicle that brought them up to the

139
00:04:36,150 --> 00:04:34,720
station back in march so everything

140
00:04:37,990 --> 00:04:36,160
coming to a close for these three

141
00:04:39,189 --> 00:04:38,000
gentlemen

142
00:04:40,790 --> 00:04:39,199
the crew also has several different crew

143
00:04:42,070 --> 00:04:40,800
earth observation targets for today

144
00:04:44,070 --> 00:04:42,080
they've got a chance to take a look down

145
00:04:45,670 --> 00:04:44,080
at the planet below and take some photos

146
00:04:46,870 --> 00:04:45,680
if they have time

147
00:04:48,629 --> 00:04:46,880
they're going to be taking a look at the

148
00:04:51,189 --> 00:04:48,639
floods that are happening in pakistan

149
00:04:52,550 --> 00:04:51,199
there's been a ton of rain happening

150
00:04:53,990 --> 00:04:52,560
since the early part of the month in

151
00:04:55,270 --> 00:04:54,000
that part of the world there's about a

152
00:04:57,350 --> 00:04:55,280
million people that are affected by

153
00:05:00,310 --> 00:04:57,360
these floods

154
00:05:01,749 --> 00:05:00,320
than 10 000 homes so if they have a

155
00:05:03,189 --> 00:05:01,759
chance to

156
00:05:05,029 --> 00:05:03,199
take some photos of that area they will

157
00:05:06,469 --> 00:05:05,039
do that as they pass overhead they also

158
00:05:07,990 --> 00:05:06,479
have a chance to

159
00:05:09,350 --> 00:05:08,000
on this next pass if you take a look at

160
00:05:11,270 --> 00:05:09,360
the orbit there take some photos of the

161
00:05:13,670 --> 00:05:11,280
mississippi river delta

162
00:05:15,189 --> 00:05:13,680
as you know the mississippi river flows

163
00:05:16,629 --> 00:05:15,199

with quite a bit of force down into the

164
00:05:18,629 --> 00:05:16,639
gulf of mexico and all the sediment that

165
00:05:20,950 --> 00:05:18,639
comes out of that river has been

166
00:05:22,150 --> 00:05:20,960
deposited into the gulf of mexico over

167
00:05:23,590 --> 00:05:22,160
eons

168
00:05:25,430 --> 00:05:23,600
and all that sediment has actually

169
00:05:27,670 --> 00:05:25,440
advanced the coastline but up to 50

170
00:05:30,310 --> 00:05:27,680
miles of the past 5 000 years which

171
00:05:31,909 --> 00:05:30,320
sounds like a long time but it really

172
00:05:33,909 --> 00:05:31,919
isn't in terms of advancing that

173
00:05:37,430 --> 00:05:33,919
coastline so if they have a chance to

174
00:05:38,950 --> 00:05:37,440
take a photo of that they will

175
00:05:40,790 --> 00:05:38,960
we also want to show you a fairly

176
00:05:42,390 --> 00:05:40,800
dramatic photo that the crew captured

177
00:05:45,029 --> 00:05:42,400
day before yesterday of these fires that

178
00:05:46,950 --> 00:05:45,039
are burning in yosemite national park

179
00:05:48,310 --> 00:05:46,960
it's quite quite an incredible image

180
00:05:50,950 --> 00:05:48,320
there of these fires that have destroyed

181
00:05:52,390 --> 00:05:50,960
about 287 square miles

182
00:05:54,230 --> 00:05:52,400
there's about seven thousand

183
00:05:57,270 --> 00:05:54,240
firefighters that are fighting these

184
00:05:58,390 --> 00:05:57,280
fires as we speak there in california

185
00:06:00,150 --> 00:05:58,400
and of course if you would like to take

186
00:06:01,830 --> 00:06:00,160
a look at that picture a little bit

187
00:06:03,790 --> 00:06:01,840
longer just log on to the nasa website

188
00:06:07,749 --> 00:06:03,800

at

189
00:06:09,510 --> 00:06:07,759
and finally today we're going to have a

190
00:06:12,309 --> 00:06:09,520
crew news conference beginning at 1 p.m

191
00:06:13,590 --> 00:06:12,319
central time today 2 p.m eastern time

192
00:06:14,870 --> 00:06:13,600
the crew that will be flying toward the

193
00:06:16,550 --> 00:06:14,880
end of this year up to the space station

194
00:06:18,150 --> 00:06:16,560
will be here to answer questions from

195
00:06:19,990 --> 00:06:18,160
social media members as well as the

196
00:06:22,150 --> 00:06:20,000
traditional media that'll be koichi

197
00:06:24,790 --> 00:06:22,160
wakata from the japanese space agency as

198
00:06:26,629 --> 00:06:24,800
well as rick mastracchio from nasa and

199
00:06:28,150 --> 00:06:26,639
mikhail tiren who is a of course a

200
00:06:30,230 --> 00:06:28,160
russian cosmonaut so those three will be