1
00:00:00,506 --> 00:00:09,346
[Music]

2
00:00:09,846 --> 00:00:10,466
>> Greetings.

3
00:00:10,586 --> 00:00:12,166
This is Mission Control,
Houston.

4
00:00:12,166 --> 00:00:14,236
And welcome to Space
Station Live.

5
00:00:14,866 --> 00:00:18,136
It's Friday, October 25, 2013.

6
00:00:18,136 --> 00:00:19,436
And you're looking down inside

7
00:00:19,436 --> 00:00:21,866
of the International Space
Station flight control room

8
00:00:22,206 --> 00:00:24,216
at the Johnson Space
Center in Houston, TX.

9
00:00:25,486 --> 00:00:27,996
Inside the room right now,
the Orbit 2 team being led

10
00:00:27,996 --> 00:00:31,426
by Jerry Jason there in the
brown jacket on the right side.

11
00:00:32,246 --> 00:00:34,006
He's the Flight Director
for today's team.

12
00:00:34,466 --> 00:00:36,516
At the CAPCOM position
right above him,

13
00:00:36,656 --> 00:00:40,326
two CAPCOMs supporting the
crew today, Steve Bowen there

14
00:00:40,326 --> 00:00:42,486
at the top, NASA
astronaut supporting all

15
00:00:42,486 --> 00:00:44,726
of the ongoing spacesuit
activities.

16
00:00:45,066 --> 00:00:47,336
And right next to him also
supporting the crew today is

17
00:00:47,336 --> 00:00:48,166
Jay Marschke.

18
00:00:49,436 --> 00:00:51,736
On board the crew
of Expedition 37,

19
00:00:52,166 --> 00:00:54,546
led by Russian cosmonaut
Fyodor Yurchikhin there

20
00:00:54,546 --> 00:00:55,756
on the front row on the left.

21
00:00:56,336 --> 00:00:59,636
Also going across the back row
we have NASA astronaut Karen

22

00:00:59,636 --> 00:01:02,406
Nyberg, European
astronaut Luca Parmitano,

23
00:01:02,816 --> 00:01:06,076
NASA astronaut Mike Hopkins, and
then the two Russian cosmonauts

24
00:01:06,076 --> 00:01:09,686
over there on the right, Oleg
Kotov and Sergey Ryazanskiy.

25
00:01:11,046 --> 00:01:13,666
Some of the major activities
taking place onboard the

26
00:01:13,666 --> 00:01:16,296
International Space
Station this week focusing

27
00:01:16,296 --> 00:01:19,126
on departing vehicles and
also a lot of spacesuit

28
00:01:19,126 --> 00:01:20,546
and space walk preparation.

29
00:01:21,196 --> 00:01:25,546
Starting off with the departure
of the visiting vehicle Cygnus,

30
00:01:26,096 --> 00:01:28,336
managed by the Orbital
Sciences Corporation.

31
00:01:28,706 --> 00:01:31,986
It was unberthed from the
Harmony module back on Tuesday

32
00:01:31,986 --> 00:01:34,026

at 5:05 a.m. Central Time,

33
00:01:34,406 --> 00:01:37,626
released from the
station's robotic arm an hour

34
00:01:37,626 --> 00:01:41,216
and a half later at 6:31 a.m.
Central while the station was

35
00:01:41,216 --> 00:01:45,066
about 262 statute miles over
the Southern Atlantic Ocean.

36
00:01:45,616 --> 00:01:49,406
The craft, which was docked to
the International Space Station

37
00:01:49,406 --> 00:01:53,086
since September 29 when it
delivered about 1300 pounds

38
00:01:53,336 --> 00:01:56,326
of supplies to the
crew of Expedition 37.

39
00:01:56,756 --> 00:02:02,096
It was the final demonstration
milestone of Orbital Sciences

40
00:02:02,096 --> 00:02:03,606
under the commercial resupply --

41
00:02:04,266 --> 00:02:05,666
Commercial Orbital
Transportation

42
00:02:05,666 --> 00:02:06,836
Services contract.

43
00:02:07,746 --> 00:02:10,466
That flight, which was
executed flawlessly on its way

44
00:02:10,466 --> 00:02:14,846
to the station, again departed
on Tuesday and then a day later

45
00:02:14,846 --> 00:02:18,086
on Wednesday at around
12:41 p.m. Central time,

46
00:02:18,086 --> 00:02:20,736
Orbital Sciences flight
controllers commanded the

47
00:02:20,736 --> 00:02:22,646
vehicle to do a final
de-orbit burn

48
00:02:22,646 --> 00:02:24,376
and reenter the earth's
atmosphere.

49
00:02:25,136 --> 00:02:27,886
On board supporting
that work this week,

50
00:02:28,366 --> 00:02:31,456
NASA astronaut Mike Hopkins
was responsible on Monday

51
00:02:31,456 --> 00:02:36,076
to install the common berthing
mechanism controller assembly

52
00:02:36,746 --> 00:02:39,016
at the hatchway which
connected Cygnus

53
00:02:39,016 --> 00:02:40,736
to the earth-facing
side of Harmony.

54
00:02:41,206 --> 00:02:43,816
He was joined in a lot of
these activities on Monday

55
00:02:43,816 --> 00:02:46,066
by Luca Parmitano
and Karen Nyberg,

56
00:02:46,456 --> 00:02:48,066
who were responsible not only

57
00:02:48,066 --> 00:02:51,576
for operating the robotic arm
upon the vehicle's arrival,

58
00:02:51,576 --> 00:02:54,566
but also on Tuesday when
they prepared to release it.

59
00:02:55,396 --> 00:02:58,586
Also on Monday, Luca
Parmitano and Karen Nyberg,

60
00:02:58,586 --> 00:03:01,216
doing the final closeout
photos of the interior

61
00:03:01,216 --> 00:03:04,126
of the Cygnus vehicle
before moving on and closing

62
00:03:04,126 --> 00:03:05,866
up the hatch for the final time.

63
00:03:06,216 --> 00:03:07,946

You can see a little
bit of that right here

64
00:03:07,946 --> 00:03:10,866
as Parmitano is doing
the final hatch closures

65
00:03:10,866 --> 00:03:12,586
and then they conducted
a few leak checks

66
00:03:12,586 --> 00:03:13,696
with teams on the ground.

67
00:03:14,356 --> 00:03:15,846
All of that, again,
in preparation

68
00:03:15,846 --> 00:03:18,146
for that final unberthing
on Tuesday

69
00:03:18,706 --> 00:03:22,246
where Nyberg was responsible

70
00:03:22,246 --> 00:03:24,886
for configuring the
robotic work stations

71
00:03:24,886 --> 00:03:27,646
to control the station arm,
both from the Destiny laboratory

72
00:03:27,646 --> 00:03:30,576
and inside the cupola for that
Cygnus release and departure.

73
00:03:31,066 --> 00:03:33,216
She also set up the
hardware command panel,

74
00:03:33,506 --> 00:03:35,106
which gives the crew
the capability

75
00:03:35,106 --> 00:03:39,456
to send the unmanned cargo
craft any commands during its

76
00:03:39,456 --> 00:03:40,346
departure phase.

77
00:03:40,986 --> 00:03:43,776
Parmitano and Nyberg then
commanded the space station

78
00:03:43,776 --> 00:03:46,766
robotic arm in that
release, again releasing

79
00:03:46,766 --> 00:03:50,306
that Cygnus vehicle,
letting it depart

80
00:03:50,306 --> 00:03:51,856
from the International
Space Station

81
00:03:51,856 --> 00:03:54,946
at 6:31 a.m. Central
time back on Tuesday.

82
00:03:57,256 --> 00:04:00,846
The other major tasks consuming
a lot of crew time onboard both

83
00:04:00,846 --> 00:04:05,036
for the USOS crew and also
the Russians concerning a lot

84
00:04:05,506 --> 00:04:08,826
of upcoming space walk and
also a past space walk,

85
00:04:09,316 --> 00:04:14,816
spacesuit maintenance
with the station EMUs,

86
00:04:15,066 --> 00:04:16,916
with the extravehicular
mobility units.

87
00:04:16,916 --> 00:04:22,266
Mike Hopkins and Karen Nyberg
on Thursday completed a removal

88
00:04:22,266 --> 00:04:24,046
and replacement work on one

89
00:04:24,046 --> 00:04:28,106
of the fan pump separators
inside one of the US spacesuits.

90
00:04:28,366 --> 00:04:29,876
This one in particular was worn

91
00:04:29,876 --> 00:04:34,546
by European astronaut Luca
Parmitano during his July 16

92
00:04:34,546 --> 00:04:38,396
space walk, which was terminate
prematurely once Parmitano

93
00:04:38,396 --> 00:04:41,846
discovered a water leak
buildup inside of his helmet.

94
00:04:42,206 --> 00:04:45,806

Since that space walk, teams
down here on the ground

95
00:04:45,806 --> 00:04:49,186
in Houston and around NASA
have been analyzing the suit

96
00:04:49,186 --> 00:04:52,336
and building up fault trees
for potential culprits.

97
00:04:52,806 --> 00:04:55,476
This fan pump separator,
just one of the suspects

98
00:04:55,476 --> 00:05:00,366
that could potentially have been
responsible for that water leak.

99
00:05:00,836 --> 00:05:06,086
So the crew on board commanded
to replace that unit yesterday.

100
00:05:06,386 --> 00:05:09,286
And following that successful
replacement yesterday,

101
00:05:09,826 --> 00:05:13,446
NASA astronaut Mike
Hopkins is spending much

102
00:05:13,446 --> 00:05:18,476
of his day today doing a quick
verification of that work,

103
00:05:18,476 --> 00:05:20,556
checking out the fan
pump separator component

104
00:05:20,556 --> 00:05:23,416

and also how the water
separator loop inside

105
00:05:23,416 --> 00:05:24,826
of the spacesuit is operating.

106
00:05:25,156 --> 00:05:27,406
So they're going to have
work taking place on Thursday

107
00:05:27,406 --> 00:05:31,176
and all the verification work
being done today on Friday.

108
00:05:32,966 --> 00:05:34,986
Also on board the
International Space Station,

109
00:05:34,986 --> 00:05:37,296
two Russian cosmonauts,
Oleg Kotov

110
00:05:37,296 --> 00:05:39,646
and Sergey Ryazanskiy
have been preparing

111
00:05:39,646 --> 00:05:41,826
for an upcoming space
walk on November 9

112
00:05:42,316 --> 00:05:45,036
where the two will exit out of
the Pirs docking compartment

113
00:05:45,036 --> 00:05:48,046
on the Russian segment for
a spacewalk highlighted

114
00:05:48,046 --> 00:05:52,026
by the two taking a replica

of the Olympic torch outside.

115
00:05:52,456 --> 00:05:54,216
You can see the spacewalk
times there.

116
00:05:54,216 --> 00:05:55,896
That again coming
up on November 9.

117
00:05:56,376 --> 00:05:59,096
The two have been
preparing for this,

118
00:05:59,546 --> 00:06:01,386
which we will be
bringing you coverage

119
00:06:01,386 --> 00:06:03,286
of that spacewalk on NASA TV.

120
00:06:03,366 --> 00:06:07,036
The two preparing for this all
week starting off on Monday,

121
00:06:07,036 --> 00:06:10,296
gathering up a number of the
tools that they'll be needing

122
00:06:10,776 --> 00:06:13,426
for that spacewalk and any
other relevant hardware.

123
00:06:13,906 --> 00:06:18,316
Also gathering the spacesuits
inside of the airlock

124
00:06:18,316 --> 00:06:21,996
for Oleg Kotov to do some
configuration of the suits

125
00:06:22,626 --> 00:06:26,146
on Wednesday and also with
the airlock activating

126
00:06:26,146 --> 00:06:29,126
and inspecting their Orlan
spacesuits on Thursday.

127
00:06:29,726 --> 00:06:31,826
And also recharging
all the water systems

128
00:06:31,826 --> 00:06:33,016
and batteries inside.

129
00:06:33,986 --> 00:06:37,046
Oleg Kotov also on Thursday
doing some leak checks

130
00:06:37,046 --> 00:06:38,496
on the Pirs docking compartment.

131
00:06:38,496 --> 00:06:39,636
And again, the airlock

132
00:06:39,636 --> 00:06:42,246
that they'll be conducting
the space walk out of.

133
00:06:42,246 --> 00:06:46,026
And also checking out any of the
interface equipment responsible

134
00:06:46,026 --> 00:06:49,096
for interacting with their
suits inside of the airlock.

135
00:06:49,536 --> 00:06:52,156

Again, all that in preparation
for an upcoming space walk

136
00:06:52,276 --> 00:06:54,026
by the two Russians, Oleg Kotov

137
00:06:54,026 --> 00:06:56,356
and Sergey Ryazanskiy
on November 9.

138
00:06:58,456 --> 00:07:01,316
Other activities taking place
onboard the International Space

139
00:07:01,316 --> 00:07:04,406
Station, NASA astronaut
Mike Hopkins back

140
00:07:04,406 --> 00:07:06,906
on Tuesday was gathering
up some of the tools

141
00:07:06,906 --> 00:07:11,576
out of the Quest airlock
for the space station EMUs.

142
00:07:11,976 --> 00:07:15,056
Also conducting a
capillary flow experiment.

143
00:07:15,646 --> 00:07:17,866
You can see some quick
video of that here.

144
00:07:17,866 --> 00:07:20,856
It's a fluid physics experiment
onboard the International Space

145
00:07:20,856 --> 00:07:23,416
Station that investigates

a phenomenon known

146
00:07:23,416 --> 00:07:26,786
as capillary flow, which
is used to transfer fluids

147
00:07:26,786 --> 00:07:28,146
in the absence of gravity.

148
00:07:28,756 --> 00:07:32,216
This, an ongoing investigation
hoping to improve current models

149
00:07:32,216 --> 00:07:35,456
down here on the ground
that are used by designers

150
00:07:35,456 --> 00:07:38,076
for fluid transfer systems
such as fuel transfer

151
00:07:38,556 --> 00:07:41,296
and also other liquid
transfers for experiments

152
00:07:41,296 --> 00:07:44,706
in crew use onboard space craft.

153
00:07:45,016 --> 00:07:47,646
So having some pretty important
implications in the design

154
00:07:47,646 --> 00:07:52,316
of future space craft for not
only space station systems,

155
00:07:52,546 --> 00:07:54,236
but also long-duration flights

156

00:07:54,426 --> 00:07:56,946
to far off exploration
destinations.

157
00:07:58,076 --> 00:08:03,596
On Wednesday, Hopkins was doing
some biology experiment work

158
00:08:03,596 --> 00:08:05,856
on his own body,
collecting his vital signs,

159
00:08:05,856 --> 00:08:09,116
which he'll be doing
throughout his increment

160
00:08:09,116 --> 00:08:11,906
on board the International Space
Station, taking simple things

161
00:08:11,906 --> 00:08:13,326
like blood pressure
and temperature

162
00:08:13,736 --> 00:08:15,236
as these astronauts
constantly have

163
00:08:15,236 --> 00:08:17,416
to monitor their
health their increments.

164
00:08:17,806 --> 00:08:21,386
And he was also doing
some extra maintenance

165
00:08:21,736 --> 00:08:25,956
on both suits currently
inside of the Quest airlock.

166

00:08:25,956 --> 00:08:29,946
He was scrubbing out the cooling
water loops both those EMUs,

167
00:08:29,946 --> 00:08:32,706
the one of which he's
been focusing on with

168
00:08:32,706 --> 00:08:35,016
that fan pump separator
over the last few days.

169
00:08:35,406 --> 00:08:39,106
Also doing some maintenance
work on the airlock itself.

170
00:08:39,656 --> 00:08:45,696
And then today, aside from that
checkout and verification work

171
00:08:45,696 --> 00:08:49,356
on the spacesuit to
verify all the work that he

172
00:08:49,356 --> 00:08:50,976
and Karen Nyberg did yesterday,

173
00:08:51,366 --> 00:08:53,606
Hopkins will be doing
an ultrasound

174
00:08:53,606 --> 00:08:56,146
of his eye using the
station's ultrasound system.

175
00:08:58,266 --> 00:09:02,046
Meanwhile, Luca Parmitano, back
on Tuesday set up the EarthCam,

176
00:09:02,046 --> 00:09:04,656

or the earth knowledge acquired
by middle school students,

177
00:09:05,656 --> 00:09:07,546
allowing middle school
students around the world

178
00:09:07,546 --> 00:09:10,666
to request images of various
locations of the earth,

179
00:09:10,666 --> 00:09:14,556
a project that was
initiated by Dr. Sally Ride,

180
00:09:14,556 --> 00:09:15,966
America's first woman in space.

181
00:09:16,426 --> 00:09:18,286
You can learn more about
the EarthCam and sign

182
00:09:18,286 --> 00:09:20,906
up for those missions, one
of which ran all this week.

183
00:09:20,906 --> 00:09:26,556
They do about four per year
at www.earthcam.ucsd.edu.

184
00:09:28,276 --> 00:09:33,166
On Wednesday Parmitano colleting
some biological samples,

185
00:09:33,706 --> 00:09:37,256
also performing the Skin
B experiment which looking

186
00:09:37,256 --> 00:09:40,716
to contribute to a better

understanding of the mechanisms

187
00:09:40,716 --> 00:09:44,066
of skin aging, something
that happens very slowly here

188
00:09:44,066 --> 00:09:47,756
on earth but is accelerated a
great deal in weightlessness.

189
00:09:48,206 --> 00:09:50,716
So taking advantage of that
microgravity environment.

190
00:09:51,296 --> 00:09:54,786
Parmitano also back on
Thursday, participating

191
00:09:54,786 --> 00:09:56,796
in the circadian
rhythms experiment,

192
00:09:57,186 --> 00:09:58,916
looking to gain a
better understanding

193
00:09:58,916 --> 00:10:01,766
of how the microgravity and
the long durations spent

194
00:10:01,766 --> 00:10:06,586
in it affects the astronaut's
sleep cycle and any effect

195
00:10:06,586 --> 00:10:08,026
that that has on
their performance

196
00:10:08,026 --> 00:10:09,566
and healthcare during

their missions.

197
00:10:10,636 --> 00:10:14,126
Meanwhile today, Luca Parmitano
taking a few more biological

198
00:10:14,126 --> 00:10:17,726
samples and also getting
ready for the departure

199
00:10:17,726 --> 00:10:19,646
of another unmanned
cargo craft docked

200
00:10:19,646 --> 00:10:22,786
to the International Space
Station, the European ATV 4,

201
00:10:23,236 --> 00:10:24,786
also known as Albert Einstein.

202
00:10:25,236 --> 00:10:30,016
That's set to depart -- undock
and depart from the aft port

203
00:10:30,016 --> 00:10:32,936
of the Zvezda service
module after being docked

204
00:10:32,936 --> 00:10:35,206
for about four months
to the orbiting complex.

205
00:10:35,676 --> 00:10:39,656
It delivered more than seven
tons of food, fuel, and supplies

206
00:10:39,656 --> 00:10:41,736
to the International
Space Station residents.

207
00:10:42,066 --> 00:10:44,496
That undocking, which we'll
be bringing you coverage here

208
00:10:44,496 --> 00:10:46,116
on NASA TV currently targeted

209
00:10:46,116 --> 00:10:50,296
for 3:59 a.m. Central
time, 4:49 a.m. Eastern.

210
00:10:52,416 --> 00:10:55,016
Karen Nyberg, throughout
the week focusing again

211
00:10:55,016 --> 00:10:57,596
on those Cygnus ops
early in the week

212
00:10:57,596 --> 00:10:59,756
and assisting in the EMU repair.

213
00:11:00,316 --> 00:11:02,396
Aside from that,
back on Tuesday,

214
00:11:02,396 --> 00:11:05,786
she was conducting the
resist tubule experiment,

215
00:11:05,786 --> 00:11:07,176
which she's also doing today.

216
00:11:07,626 --> 00:11:10,226
That's a Japanese
experiment taking place inside

217
00:11:10,226 --> 00:11:12,906

of the Japanese experiment
module that looks

218
00:11:12,906 --> 00:11:15,646
at the mechanisms of
gravity resistance in plants,

219
00:11:16,426 --> 00:11:20,336
something that could potentially
impact the future ability

220
00:11:20,416 --> 00:11:23,296
of astronauts on long-duration
missions to grow plants

221
00:11:23,296 --> 00:11:25,446
and their own food
in spacecraft.

222
00:11:26,096 --> 00:11:28,906
Also, back on Wednesday,
taking some blood samples

223
00:11:28,906 --> 00:11:30,396
for the vascular experiment,

224
00:11:30,916 --> 00:11:32,546
which looks to determine
the impact

225
00:11:32,546 --> 00:11:35,216
of long-duration space
flights on the blood vessels

226
00:11:35,216 --> 00:11:38,526
of astronauts and also develop
any potential countermeasures.

227
00:11:40,576 --> 00:11:43,926
Expedition 37 Commander

Fyodor Yurchikhin doing a lot

228
00:11:43,926 --> 00:11:46,926
of maintenance work throughout
the Russian segment this week.

229
00:11:47,326 --> 00:11:49,596
Back on Monday, he was
inspecting a number

230
00:11:49,636 --> 00:11:52,116
of the Russian controlling
laptops and computers,

231
00:11:52,446 --> 00:11:55,746
and also conducting a Com
test of his Soyuz craft.

232
00:11:56,306 --> 00:11:59,126
Yurchikhin's scheduled
to return to earth coming

233
00:11:59,126 --> 00:12:03,236
up on November 10 alongside
Luca Parmitano and Karen Nyberg.

234
00:12:03,856 --> 00:12:06,446
But on Tuesday picked
up with a lot

235
00:12:06,446 --> 00:12:08,846
of his maintenance activities
doing some preventative

236
00:12:08,846 --> 00:12:11,636
maintenance on the
Zvezda service module's

237
00:12:11,636 --> 00:12:12,796
ventilation systems.

238
00:12:13,396 --> 00:12:17,316
Also continuing that into
Wednesday while also doing a

239
00:12:17,366 --> 00:12:20,816
quick study of the veins in
his lower extremities for part

240
00:12:20,816 --> 00:12:22,476
of a Russian biological
experiment.

241
00:12:23,146 --> 00:12:26,316
On Thursday collecting surface
samples from inside of Zarya

242
00:12:26,316 --> 00:12:32,166
and Zvezda for downlink down
to the ground for controllers

243
00:12:32,166 --> 00:12:34,116
to keep an eye on
the environment

244
00:12:34,116 --> 00:12:36,126
of the International Space
Station for the crew.

245
00:12:36,686 --> 00:12:40,016
And then today he's doing
a cardiovascular evaluation

246
00:12:40,016 --> 00:12:42,276
on himself during
some exercise on one

247
00:12:42,276 --> 00:12:44,156
of the station's
stationary cycles.

248
00:12:44,516 --> 00:12:48,196
And also pre-packing some items,
again, for that upcoming return

249
00:12:48,556 --> 00:12:50,426
on the Soyuz craft
back down to earth.

250
00:12:51,836 --> 00:12:56,216
Meanwhile Oleg Kotov spending
much of his week preparing

251
00:12:56,216 --> 00:12:58,216
for that upcoming
November 9 space walk.

252
00:12:58,656 --> 00:13:02,176
Also getting some time in to do
some experiment work throughout

253
00:13:02,176 --> 00:13:02,606
the week.

254
00:13:03,016 --> 00:13:05,676
Back on Tuesday, he was
gathering some readings

255
00:13:05,676 --> 00:13:09,086
from dosimeters inside of the
Russian Metroyska experiment,

256
00:13:09,406 --> 00:13:11,486
which looks to track
the radiation dosages

257
00:13:11,486 --> 00:13:13,236
that these astronauts
are exposed to.

258
00:13:13,826 --> 00:13:16,806
On Wednesday, collecting some
blood and saliva samples.

259
00:13:17,176 --> 00:13:20,986
But then today, on Friday, he's
assisting Luca Parmitano in all

260
00:13:20,986 --> 00:13:23,166
of the preparation work
for the departure of ATV

261
00:13:23,166 --> 00:13:25,866
and helping him close
out the hatchway

262
00:13:25,866 --> 00:13:27,296
to it for one final time.

263
00:13:27,526 --> 00:13:31,206
And then the final crew member,
Sergey Ryazanskiy focused

264
00:13:31,206 --> 00:13:32,646
on that November 9 space walk

265
00:13:32,706 --> 00:13:35,776
but also conducting a few
experiments throughout the week,

266
00:13:36,366 --> 00:13:39,316
namely back on Wednesday,
he was participating

267
00:13:39,316 --> 00:13:42,456
in the Seiner investigation
doing observations

268
00:13:42,456 --> 00:13:44,316

of the world's oceans
for searching

269
00:13:44,546 --> 00:13:46,726
for bioproductive water areas.

270
00:13:47,186 --> 00:13:50,636
And then today, on Friday, he'll
be conducting the BAR experiment

271
00:13:50,636 --> 00:13:53,596
which looks to develop
effective ways

272
00:13:53,596 --> 00:13:56,156
of determining any
depressurization

273
00:13:56,156 --> 00:13:58,356
that might happen inside
of station modules,

274
00:13:58,836 --> 00:14:01,466
basically a safety task
for these astronauts

275
00:14:01,736 --> 00:14:04,316
and cosmonauts during
long-duration space flights

276
00:14:04,316 --> 00:14:05,996
on the International
Space Station.

277
00:14:06,416 --> 00:14:09,176
So again, a busy week saw
the departure of one craft,

278
00:14:09,516 --> 00:14:12,586
preparation for the departure of

another un-manned cargo vehicle.

279
00:14:12,956 --> 00:14:16,856
A lot of work being done on the
spacesuits for these astronauts

280
00:14:16,856 --> 00:14:19,756
and cosmonauts in preparation
for a space walk coming