1
00:00:05,110 --> 00:00:03,350
this is mission control houston the crew

2
00:00:07,030 --> 00:00:05,120
of expedition 36 onboard the

3
00:00:08,790 --> 00:00:07,040
international space station has had an

4
00:00:11,190 --> 00:00:08,800
extremely busy week onboard the orbiting

5
00:00:13,350 --> 00:00:11,200
complex monday started off

6
00:00:15,509 --> 00:00:13,360
in proper order with a russian spacewalk

7
00:00:17,430 --> 00:00:15,519
that was conducted by fyodor yurchikhin

8
00:00:20,070 --> 00:00:17,440
and alexander mazurkin

9
00:00:22,230 --> 00:00:20,080
they finished this six hour 34 minute

10
00:00:23,750 --> 00:00:22,240
space walk and took care of pretty much

11
00:00:25,990 --> 00:00:23,760
everything that was on the list of items

12
00:00:27,429 --> 00:00:26,000
that they needed to address the majority

13
00:00:29,349 --> 00:00:27,439

of the activities were to get ready for

14
00:00:31,349 --> 00:00:29,359
the new russian multipurpose laboratory

15
00:00:33,110 --> 00:00:31,359
module that will replace the piers

16
00:00:34,870 --> 00:00:33,120
docking compartment several months from

17
00:00:36,709 --> 00:00:34,880
now of course piers is one of the older

18
00:00:39,110 --> 00:00:36,719
parts of the international space station

19
00:00:40,069 --> 00:00:39,120
but this new mlm will offer some more

20
00:00:41,990 --> 00:00:40,079
room

21
00:00:44,709 --> 00:00:42,000
better access to experiments and also an

22
00:00:46,310 --> 00:00:44,719
airlock and a docking port for upcoming

23
00:00:48,470 --> 00:00:46,320
visiting vehicles

24
00:00:50,069 --> 00:00:48,480
this crew installed some cable clamps to

25
00:00:52,630 --> 00:00:50,079
get ready for that some handrails and

26
00:00:54,790 --> 00:00:52,640
tested some rendezvous equipment

27
00:00:56,470 --> 00:00:54,800
they also swapped out a flow control

28
00:00:58,709 --> 00:00:56,480
valve that is part of the zarya modules

29
00:01:00,869 --> 00:00:58,719
coolant system and also retrieving an

30
00:01:03,590 --> 00:01:00,879
experiment outside during that space

31
00:01:05,830 --> 00:01:03,600
walk this was the 169th spacewalk in

32
00:01:06,789 --> 00:01:05,840
support of space station assembly and

33
00:01:09,230 --> 00:01:06,799
maintenance

34
00:01:13,750 --> 00:01:09,240
we now have a total amount of

35
00:01:15,350 --> 00:01:13,760
1067 hours and 43 minutes

36
00:01:16,710 --> 00:01:15,360
speaking of spacewalks chris cassidy

37
00:01:18,550 --> 00:01:16,720
look apartmentano getting ready for

38
00:01:21,030 --> 00:01:18,560

their two spacewalks coming up on july

39
00:01:22,390 --> 00:01:21,040
9th and july 16th they have several

40
00:01:24,469 --> 00:01:22,400
different tasks that they're going to be

41
00:01:25,990 --> 00:01:24,479
accomplishing during that time but they

42
00:01:27,990 --> 00:01:26,000
spent some time inside the quest airline

43
00:01:29,830 --> 00:01:28,000
getting their suits ready also getting

44
00:01:32,230 --> 00:01:29,840
the tools ready to go karen nyberg also

45
00:01:33,749 --> 00:01:32,240
helped them out as we take a look

46
00:01:35,030 --> 00:01:33,759
forward to that spacewalk we'll have a

47
00:01:37,749 --> 00:01:35,040
briefing here at the johnson space

48
00:01:40,630 --> 00:01:37,759
center on july 2nd that will air at 1 pm

49
00:01:43,270 --> 00:01:40,640
central time 2 pm eastern time from here

50
00:01:44,789 --> 00:01:43,280
at the johnson space center our coverage

51
00:01:47,030 --> 00:01:44,799
of both of those spacewalks will begin

52
00:01:49,350 --> 00:01:47,040
at 6am on both those days on july 9th

53
00:01:50,950 --> 00:01:49,360
and july 16th with those six and a half

54
00:01:53,830 --> 00:01:50,960
hour spacewalks getting kicked off

55
00:01:56,230 --> 00:01:53,840
around 7 10 a.m central time on both of

56
00:01:58,630 --> 00:01:56,240
those mornings

57
00:02:00,389 --> 00:01:58,640
cargo operations also continued with the

58
00:02:01,830 --> 00:02:00,399
albert einstein automated transfer

59
00:02:03,510 --> 00:02:01,840
vehicle here you see chris cassidy

60
00:02:05,109 --> 00:02:03,520
moving some of the items

61
00:02:06,069 --> 00:02:05,119
from the russian segment into the u.s

62
00:02:08,790 --> 00:02:06,079
segment

63
00:02:11,029 --> 00:02:08,800

that atv launched on june 5th it docked

64
00:02:13,910 --> 00:02:11,039
on june 15th it is back on the russian

65
00:02:16,229 --> 00:02:13,920
segment of the iss on the zvezda service

66
00:02:17,750 --> 00:02:16,239
module it brought up 7.3 tons of

67
00:02:19,510 --> 00:02:17,760
supplies and the crew will be busy over

68
00:02:20,869 --> 00:02:19,520
the next several days unloading it and

69
00:02:22,630 --> 00:02:20,879
then they'll start packing it full of

70
00:02:24,869 --> 00:02:22,640
trash and other items that are no longer

71
00:02:27,589 --> 00:02:24,879
needed on board the space station and

72
00:02:29,270 --> 00:02:27,599
then coming up in late october atv will

73
00:02:30,949 --> 00:02:29,280
say farewell and it will be sent into a

74
00:02:33,589 --> 00:02:30,959
destructive reentry into the earth's

75
00:02:36,949 --> 00:02:35,750
dexter was also busy this week dexter is

76
00:02:38,630 --> 00:02:36,959
one of the robots outside the

77
00:02:40,710 --> 00:02:38,640
international space station built by the

78
00:02:42,949 --> 00:02:40,720
canadian space agency the ground teams

79
00:02:44,869 --> 00:02:42,959
were testing dexter there on the end of

80
00:02:47,670 --> 00:02:44,879
the station's robotic arm dexter is a

81
00:02:49,910 --> 00:02:47,680
fairly large robot into each of its arms

82
00:02:51,990 --> 00:02:49,920
there's two of them about 11 feet across

83
00:02:53,509 --> 00:02:52,000
dexter's about 12 feet tall

84
00:02:55,430 --> 00:02:53,519
but they were using

85
00:02:57,270 --> 00:02:55,440
different maneuvers to check out dexter

86
00:02:59,430 --> 00:02:57,280
to see if it can open up some of the bay

87
00:03:02,470 --> 00:02:59,440
doors on the outside of the station and

88
00:03:04,390 --> 00:03:02,480

also turn some screws all this testing

89
00:03:06,070 --> 00:03:04,400
is part of the checkout activities of

90
00:03:09,589 --> 00:03:06,080
dexter to make sure that it's ready to

91
00:03:11,750 --> 00:03:09,599
go for future operations

92
00:03:13,430 --> 00:03:11,760
meanwhile robonaut inside the station

93
00:03:15,030 --> 00:03:13,440
continued this week of robotic

94
00:03:17,350 --> 00:03:15,040
activities as it was being checked out

95
00:03:19,190 --> 00:03:17,360
as well you see it rotating around there

96
00:03:21,350 --> 00:03:19,200
it was operating its task board this

97
00:03:23,509 --> 00:03:21,360
week as it threw some switches and also

98
00:03:25,190 --> 00:03:23,519
moved some things around luca parmitano

99
00:03:27,030 --> 00:03:25,200
there in the screen he was watching over

100
00:03:29,750 --> 00:03:27,040
as the ground commands were sent to move

101
00:03:31,589 --> 00:03:29,760
robonaut around he also handed off an

102
00:03:33,190 --> 00:03:31,599
airflow monitor this morning

103
00:03:34,470 --> 00:03:33,200
to robonaut to

104
00:03:36,470 --> 00:03:34,480
check it out to make sure that roman i

105
00:03:39,270 --> 00:03:36,480
could operate that piece of equipment

106
00:03:41,030 --> 00:03:39,280
inside the station

107
00:03:43,110 --> 00:03:41,040
parmitano also worked with nyberg this

108
00:03:44,390 --> 00:03:43,120
week on the ocular health study this is

109
00:03:46,710 --> 00:03:44,400
the thing you've heard us talk about

110
00:03:48,550 --> 00:03:46,720
several times here on nasa tv

111
00:03:50,470 --> 00:03:48,560
one of the more recent discoveries was

112
00:03:51,990 --> 00:03:50,480
that the astronauts eyes tend to change

113
00:03:53,990 --> 00:03:52,000

the longer they're up in space so this

114
00:03:55,350 --> 00:03:54,000
ocular health study and something called

115
00:03:57,350 --> 00:03:55,360
a fundoscope

116
00:03:59,270 --> 00:03:57,360
is being used to take ultrasound images

117
00:04:01,350 --> 00:03:59,280
of the eyes to monitor the pressure

118
00:04:03,830 --> 00:04:01,360
inside and the changes that happen

119
00:04:05,110 --> 00:04:03,840
and to correlate that to the astronauts

120
00:04:06,949 --> 00:04:05,120
physiology

121
00:04:08,550 --> 00:04:06,959
to help predict and determine what could

122
00:04:10,949 --> 00:04:08,560
possibly cause

123
00:04:12,710 --> 00:04:10,959
those effects

124
00:04:14,470 --> 00:04:12,720
parmitano also worked with chris cassidy

125
00:04:15,509 --> 00:04:14,480
this week on the spinal ultrasound this

126
00:04:17,030 --> 00:04:15,519
is another

127
00:04:19,030 --> 00:04:17,040
experiment on board to take a look at

128
00:04:21,110 --> 00:04:19,040
how the spine is affected with the

129
00:04:22,550 --> 00:04:21,120
astronauts and cosmonauts they tend to

130
00:04:24,230 --> 00:04:22,560
get a little bit taller in space which

131
00:04:26,070 --> 00:04:24,240
of course is something that

132
00:04:28,230 --> 00:04:26,080
sounds good to most of us but can

133
00:04:30,629 --> 00:04:28,240
actually actually cause some discomfort

134
00:04:32,070 --> 00:04:30,639
for the crew so the spinal ultrasound is

135
00:04:35,110 --> 00:04:32,080
designed to take a look at those effects

136
00:04:37,670 --> 00:04:35,120
what causes it and again what uh are

137
00:04:39,270 --> 00:04:37,680
some of the effects of that as the crew

138
00:04:40,870 --> 00:04:39,280

stays up in space

139
00:04:42,070 --> 00:04:40,880
for extended periods of time of course

140
00:04:45,590 --> 00:04:42,080
for all the latest just log on to the

141
00:04:47,749 --> 00:04:45,600
nasa website go to www.nasa.gov

142
00:04:49,350 --> 00:04:47,759
station to learn all about the