
KAREN NYBERG
EXPEDITION 37 FLIGHT ENGINEER

1
00:00:15,669 --> 00:00:12,629
good day and welcome to mission control

2
00:00:19,269 --> 00:00:15,679
houston today is wednesday november the

3
00:00:22,070 --> 00:00:19,279
6th 2013 and this is space station live

4
00:00:24,550 --> 00:00:22,080
expedition 37 crew continues to work on

5
00:00:27,109 --> 00:00:24,560
a variety of research and space station

6
00:00:29,269 --> 00:00:27,119
maintenance activities today as well as

7
00:00:32,069 --> 00:00:29,279
to prepare for the launch and same day

8
00:00:34,709 --> 00:00:32,079
arrival of the expedition 38 crews that

9
00:00:36,630 --> 00:00:34,719
will be joining them tomorrow here in

10
00:00:39,830 --> 00:00:36,640
mission control the flight director on

11
00:00:42,790 --> 00:00:39,840
duty today is scott stover and christy

12
00:00:44,389 --> 00:00:42,800
bertles is a spacecraft communicator

13
00:00:47,910 --> 00:00:44,399

talking with the crew along with some

14
00:00:53,189 --> 00:00:49,990
on board the international space station

15
00:00:56,069 --> 00:00:53,199
we have nasa astronauts karen nyberg and

16
00:00:59,270 --> 00:00:56,079
mike hopkins along with the expedition

17
00:01:02,389 --> 00:00:59,280
37 crew commander russian fiora yoshikin

18
00:01:04,310 --> 00:01:02,399
and his russian colleagues ola kotov and

19
00:01:06,950 --> 00:01:04,320
sergey ryazanskiy

20
00:01:09,270 --> 00:01:06,960
also on board is luca parmitano of the

21
00:01:12,149 --> 00:01:09,280
european space agency in the italian

22
00:01:14,789 --> 00:01:12,159
space agency

23
00:01:17,190 --> 00:01:14,799
they are getting ready for the arrival

24
00:01:18,789 --> 00:01:17,200
tomorrow morning of nasa's rick

25
00:01:20,230 --> 00:01:18,799
mastracchio

26
00:01:25,990 --> 00:01:20,240
and

27
00:01:28,070 --> 00:01:26,000
aerospace exploration agencies koichi

28
00:01:29,670 --> 00:01:28,080
wakata who will later become the first

29
00:01:30,870 --> 00:01:29,680
japanese commander of the orbiting

30
00:01:32,870 --> 00:01:30,880
outpost

31
00:01:36,630 --> 00:01:32,880
when they head up to the international

32
00:01:38,870 --> 00:01:36,640
space station and join with the existing

33
00:01:41,830 --> 00:01:38,880
crew members to bring the total number

34
00:01:44,789 --> 00:01:41,840
of humans in orbit to nine for the first

35
00:01:47,109 --> 00:01:44,799
time since october 2009

36
00:01:49,030 --> 00:01:47,119
later tomorrow

37
00:01:52,469 --> 00:01:49,040
crew on board the space station

38
00:01:54,310 --> 00:01:52,479

continuing to prepare for a space walk

39
00:01:56,230 --> 00:01:54,320
that's planned for saturday to make

40
00:01:58,389 --> 00:01:56,240
preparations outside the station for a

41
00:02:00,310 --> 00:01:58,399
future russian research module

42
00:02:02,550 --> 00:02:00,320
and to display an olympic torch that'll

43
00:02:05,510 --> 00:02:02,560
be arriving aboard the soyuz carrying

44
00:02:08,630 --> 00:02:05,520
mastraccio turin in wakata

45
00:02:10,790 --> 00:02:08,640
mike hopkins spent much of his day

46
00:02:13,150 --> 00:02:10,800
working on the body measurements

47
00:02:15,830 --> 00:02:13,160
experiment which is aimed at collecting

48
00:02:18,150 --> 00:02:15,840
anthropometric data using digital still

49
00:02:19,670 --> 00:02:18,160
and video imagery as well as tape

50
00:02:22,390 --> 00:02:19,680
measures and

51
00:02:24,550 --> 00:02:22,400
other devices to measure segmental

52
00:02:26,790 --> 00:02:24,560
length height depth and circumference

53
00:02:29,670 --> 00:02:26,800
data for all of the body parts

54
00:02:31,190 --> 00:02:29,680
both before during and after flight and

55
00:02:33,350 --> 00:02:31,200
he did so with some help from his

56
00:02:36,150 --> 00:02:33,360
colleague karen nyberg

57
00:02:37,670 --> 00:02:36,160
nyberg parmitano and your chicken also

58
00:02:39,030 --> 00:02:37,680
talked with russian flight controllers

59
00:02:40,550 --> 00:02:39,040
on the ground about their upcoming

60
00:02:42,790 --> 00:02:40,560
departure from the international space

61
00:02:45,509 --> 00:02:42,800
station and continued to do a lot of

62
00:02:47,509 --> 00:02:45,519
work packing up the soyuz and

63
00:02:49,030 --> 00:02:47,519

getting all of their last minute items

64
00:02:51,190 --> 00:02:49,040
ready to go home

65
00:02:53,270 --> 00:02:51,200
karen nyberg also worked on the in-space

66
00:02:54,470 --> 00:02:53,280
experiment with the microgravity science

67
00:02:57,670 --> 00:02:54,480
glovebox

68
00:03:01,110 --> 00:02:57,680
that experiment works with colloidal

69
00:03:02,869 --> 00:03:01,120
materials that can be affected by

70
00:03:04,550 --> 00:03:02,879
magnetic fields

71
00:03:06,309 --> 00:03:04,560
colloids are those

72
00:03:08,390 --> 00:03:06,319
types of liquids that have solids

73
00:03:10,070 --> 00:03:08,400
suspended within them

74
00:03:11,830 --> 00:03:10,080
promitano also took part in the

75
00:03:13,190 --> 00:03:11,840
biological rhythms experiment which

76
00:03:15,910 --> 00:03:13,200
studies the effect of long-term

77
00:03:19,750 --> 00:03:15,920
microgravity exposure on the

78
00:03:22,550 --> 00:03:19,760
heart and cardiac autonomic functioning

79
00:03:25,509 --> 00:03:22,560
he was analyzed during a 48 hour long

80
00:03:27,430 --> 00:03:25,519
electrocardio cardiogram

81
00:03:29,750 --> 00:03:27,440
fyodor chicken nola kotov and sergey

82
00:03:32,869 --> 00:03:29,760
ryazanskiy reviewed the procedures

83
00:03:33,910 --> 00:03:32,879
for the arrival of the soyuz tma-11m

84
00:03:37,270 --> 00:03:33,920
carrying

85
00:03:39,430 --> 00:03:37,280
mastracchioture and wakata

86
00:03:41,030 --> 00:03:39,440
and kotov and ryozansky also reviewed

87
00:03:43,509 --> 00:03:41,040
procedures for their spacewalk on

88
00:03:45,430 --> 00:03:43,519

saturday and took a lot out look out the

89
00:03:47,910 --> 00:03:45,440
windows to review their spacewalk

90
00:03:50,789 --> 00:03:47,920
translation paths and work zones as they

91
00:03:52,630 --> 00:03:50,799
get ready for that excursion

92
00:03:54,789 --> 00:03:52,640
meanwhile in kazakhstan on their last

93
00:03:56,229 --> 00:03:54,799
day before launch mastrakia okata and

94
00:03:58,470 --> 00:03:56,239
turin attended the russian crew

95
00:04:01,030 --> 00:03:58,480
readiness state commission ceremony and

96
00:04:03,270 --> 00:04:01,040
participated in a final press conference

97
00:04:05,429 --> 00:04:03,280
they're going to be awakened about 1 45

98
00:04:07,350 --> 00:04:05,439
p.m central time today to begin their

99
00:04:10,070 --> 00:04:07,360
launch day activities with launch

100
00:04:12,869 --> 00:04:10,080
scheduled for 10 14 p.m central time

101
00:04:16,069 --> 00:04:12,879
tonight which will actually be 10 14 a.m

102
00:04:17,830 --> 00:04:16,079
baikonur time on thursday

103
00:04:19,749 --> 00:04:17,840
we have a full set of nasa television

104
00:04:21,830 --> 00:04:19,759
coverage coming up today and tomorrow

105
00:04:24,390 --> 00:04:21,840
for that launch launch coverage begins

106
00:04:26,310 --> 00:04:24,400
at 9 15 p.m and a launch course expected

107
00:04:28,950 --> 00:04:26,320
at 10 14 p.m

108
00:04:31,110 --> 00:04:28,960
on thursday at 3 45 a.m we'll begin our

109
00:04:33,430 --> 00:04:31,120
soyuz docking coverage uh with docking

110
00:04:35,110 --> 00:04:33,440
planned at 4 31 a.m

111
00:04:38,150 --> 00:04:35,120
and then we'll begin our soyuz hatch

112
00:04:41,350 --> 00:04:38,160
opening coverage at 6 15 a.m with the

113
00:04:44,150 --> 00:04:41,360

soyuz hatch opening expected at 6 40 a.m

114
00:04:46,230 --> 00:04:44,160
and then our expedition 38 docking and

115
00:04:47,909 --> 00:04:46,240
hatch opening video file will be coming

116
00:04:50,150 --> 00:04:47,919
to you at 8 00 a.m

117
00:04:51,670 --> 00:04:50,160
and then we'll revamp

118
00:04:54,629 --> 00:04:51,680
take another look at all of that

119
00:04:56,629 --> 00:04:54,639
activity tomorrow at 10 a.m central time

120
00:05:00,629 --> 00:04:56,639
on our regular space station live

121
00:05:04,230 --> 00:05:02,469
with that everything going is going on

122
00:05:06,310 --> 00:05:04,240
very well aboard the international space

123
00:05:08,950 --> 00:05:06,320
station the crew very busy

124
00:05:11,670 --> 00:05:08,960
the station continuing to orbit 250

125
00:05:15,430 --> 00:05:11,680
miles above the surface of the planet

126
00:05:17,830 --> 00:05:15,440
traveling at 17 500 miles an hour