
VOICE OF
Amiko Kauderer
JOHNSON SPACE CENTER, HOUSTON, TX

1
00:00:02,700 --> 00:00:04,680
Good morning, this is
Mission Control Houston.

2
00:00:04,680 --> 00:00:06,890
Welcome and thank you for
joining us today's edition

3
00:00:06,890 --> 00:00:09,620
of ISS Update this
Tuesday, May 15.

4
00:00:09,620 --> 00:00:11,680
For those of you tuning

5
00:00:11,680 --> 00:00:14,560
in now you're joining us live
inside the International Space

6
00:00:14,560 --> 00:00:15,700
Station Flight Control Room,

7
00:00:15,700 --> 00:00:17,810
where the team has been
monitoring the systems aboard

8
00:00:17,810 --> 00:00:20,180
the station and supporting
today's activities

9
00:00:20,180 --> 00:00:25,150
of the Expedition
31 crew members.

10
00:00:25,150 --> 00:00:26,900
Leading the Orbit 2 Team here

11
00:00:26,900 --> 00:00:29,380
in the station flight control

room today is Flight Director

12
00:00:29,380 --> 00:00:32,130
Jud Freeling, and next
to him is Cathy Bolt,

13
00:00:32,130 --> 00:00:38,540
serving as Capcom relaying all
ground messages up to the crew.

14
00:00:38,540 --> 00:00:41,050
Topping today's news for the
International Space Station,

15
00:00:41,050 --> 00:00:43,450
a successful launch
of a Soyuz rocket

16
00:00:43,450 --> 00:00:46,510
that roared off the launch pad
from the Baikonur Cosmodrome

17
00:00:46,510 --> 00:00:48,840
on a clear desert
day in Kazakhstan.

18
00:00:48,840 --> 00:00:51,650
Last night at 10:01
p.m. CT Soyuz-

19
00:00:51,650 --> 00:00:55,510
TMA04M carrying a crew of three.

20
00:00:55,510 --> 00:00:59,010
Russian cosmonaut Gennady
Padalka and Sergei Revin,

21
00:00:59,010 --> 00:01:02,990
and also U.S. NASA astronaut
Joe Acaba, lifted off on time

22
00:01:02,990 --> 00:01:05,120
and as scheduled from
the Baikonur Cosmodrome

23
00:01:05,120 --> 00:01:06,660
in Kazakhstan.

24
00:01:06,660 --> 00:01:09,870
The three Soyuz crew members
having made it safely to orbit,

25
00:01:09,870 --> 00:01:12,190
are now on their way to the
International Space Station

26
00:01:12,190 --> 00:01:15,430
after a two-day voyage
to the orbiting complex.

27
00:01:15,430 --> 00:01:19,150
The trio is scheduled to
dock to the Poisk module

28
00:01:19,150 --> 00:01:21,500
at the International Space
Station tomorrow night

29
00:01:21,500 --> 00:01:24,210
at 11:39 p.m. CT.

30
00:01:24,210 --> 00:01:25,990
Viewers can watch
the live coverage

31
00:01:25,990 --> 00:01:27,460
of the docking tomorrow
night here

32

00:01:27,460 --> 00:01:34,290
on NASA Television beginning
at 11 p.m. CT, at midnight ET.

33
00:01:36,530 --> 00:01:38,460
Once docked, Padalka, Revin

34
00:01:38,460 --> 00:01:40,640
and Acaba would join
their crewmates aboard the

35
00:01:40,640 --> 00:01:41,980
orbiting complex.

36
00:01:41,980 --> 00:01:44,850
Station Commander
cosmonaut Oleg Kononenko

37
00:01:44,850 --> 00:01:48,300
and Flight Engineers European
Space Agency astronaut Andre

38
00:01:48,300 --> 00:01:52,570
Kuipers and NASA astronaut
Don Pettit, who will be well

39
00:01:52,570 --> 00:01:56,110
in the middle and their
21st week in space.

40
00:01:56,110 --> 00:01:58,640
Commander Kononenko,
Kuipers and Pettit launched

41
00:01:58,640 --> 00:02:01,570
to the orbiting complex
aboard their Soyuz spacecraft

42
00:02:01,570 --> 00:02:04,670
as the Expedition 30 crew

in December of last year.

43
00:02:04,670 --> 00:02:06,590
They docked to the
Rassvet module

44
00:02:06,590 --> 00:02:07,900
of the space station two days

45
00:02:07,900 --> 00:02:10,450
after their launch
on December 23.

46
00:02:10,450 --> 00:02:15,510
Today, that trio will complete
their 147th consecutive day,

47
00:02:15,510 --> 00:02:17,840
five months in space.

48
00:02:19,110 --> 00:02:22,890
Now with another Soyuz bound for
the International Space Station,

49
00:02:22,890 --> 00:02:26,080
crew members aboard the
orbiting complex remains busy

50
00:02:26,080 --> 00:02:29,030
to support ongoing research
into the effects of microgravity

51
00:02:29,030 --> 00:02:32,110
on the human body, biology,
physics and materials,

52
00:02:32,110 --> 00:02:34,340
as well as perform regular
maintenance and upkeep

53
00:02:34,340 --> 00:02:37,960
to the orbital home
away from home.

54
00:02:37,960 --> 00:02:40,920
The space station with its
crew aboard is now flying

55
00:02:40,920 --> 00:02:48,020
at an altitude of about
247 statute miles,

56
00:02:49,450 --> 00:02:52,800
the orbiting facility is
making a north-eastern track,

57
00:02:52,800 --> 00:02:58,040
having just come across
the coast of Australia,

58
00:02:58,040 --> 00:03:03,550
between Australia
and New Zealand.

59
00:03:03,550 --> 00:03:05,960
The Soyuz, now on its
two-day chase to catch

60
00:03:05,960 --> 00:03:08,460
up to the space station, is
making a north-eastern track

61
00:03:08,460 --> 00:03:11,500
across the North Pacific
Ocean, and is heading for path

62
00:03:11,500 --> 00:03:14,540
across the United States.

63

00:03:14,540 --> 00:03:18,700
The expedition crew began
the morning with the first

64
00:03:18,700 --> 00:03:21,280
of two daily planning
conferences a couple hours

65
00:03:21,280 --> 00:03:23,730
after wake up, at 1 a.m. CT.

66
00:03:23,730 --> 00:03:26,140
These planning conferences are
held with ground controllers

67
00:03:26,140 --> 00:03:27,930
at mission control
centers around the world

68
00:03:27,930 --> 00:03:30,060
to review the day's
activities and plan

69
00:03:30,060 --> 00:03:33,720
for the next set of tasks.

70
00:03:37,330 --> 00:03:41,550
Station Commander Oleg Kononenko
was busy conducting a streaming

71
00:03:41,550 --> 00:03:44,700
test using the U.S. KU
band prior to the arrival

72
00:03:44,700 --> 00:03:47,370
of the Soyuz now in
route to the station.

73
00:03:47,370 --> 00:03:51,480
While a Flight Engineer Andre

Kuipers is conducting in-flight

74
00:03:51,480 --> 00:03:55,170
water processing for chemical
and microbial analysis.

75
00:03:55,170 --> 00:03:58,340
While Don Pettit is busy with
housekeeping maintenance,

76
00:03:58,340 --> 00:04:00,480
cleaning filters
in the U.S. segment

77
00:04:00,480 --> 00:04:07,160
and cleaning the air circulation
equipment and the crew quarters.

78
00:04:07,160 --> 00:04:09,940
Earlier this morning, Commander
Kononenko worked with a couple

79
00:04:09,940 --> 00:04:14,050
of Russian experiments, he had
terminated the Sonocard study

80
00:04:14,050 --> 00:04:16,460
and downloaded data
from it to the laptop.

81
00:04:16,460 --> 00:04:19,250
Sonocard aims to
improve the system

82
00:04:19,250 --> 00:04:23,140
that monitors crew
health in real time.

83
00:04:23,140 --> 00:04:26,350
He also spent some time with

the Typology study that looks

84
00:04:26,350 --> 00:04:29,340
at the characteristics
the crew members activity,

85
00:04:29,340 --> 00:04:33,610
assess the actual mental state
during long-term spaceflight.

86
00:04:35,530 --> 00:04:37,360
Kononenko later spent some time

87
00:04:37,360 --> 00:04:40,540
to locate onboard
treadmill hardware that is

88
00:04:40,540 --> 00:04:42,660
to be returned on
the SpaceX Dragon.

89
00:04:42,660 --> 00:04:44,830
This is the first
commercial cargo spacecraft

90
00:04:44,830 --> 00:04:48,490
that is scheduled to launch at
the end of this week, on May 19,

91
00:04:48,490 --> 00:04:53,570
and arrive at the space
station later this month.

92
00:04:53,570 --> 00:04:57,450
Flight Engineer Andre Kuipers
logged his dietary intake

93
00:04:57,450 --> 00:04:59,960
for the day as part of
an ongoing energy study

94
00:04:59,960 --> 00:05:01,620
that evaluates energy balance

95
00:05:01,620 --> 00:05:04,050
of a long-duration
spaceflight crew member.

96
00:05:04,050 --> 00:05:05,340
He spent much of his day working

97
00:05:05,340 --> 00:05:08,830
to collect potable water
supplies, or samples,

98
00:05:08,830 --> 00:05:12,390
conducting analysis using the
Total Organic Carbon Analyzer

99
00:05:12,390 --> 00:05:14,740
to ensure the onboard
potable water supply is safe

100
00:05:14,740 --> 00:05:17,610
for crew consumption,
as well as working

101
00:05:17,610 --> 00:05:20,630
with the Environmental Health
System microbial capture

102
00:05:20,630 --> 00:05:22,700
devices experiment.

103
00:05:24,110 --> 00:05:25,490
Kuipers also participated

104
00:05:25,490 --> 00:05:27,750
in a regular private

medical conference and worked

105
00:05:27,750 --> 00:05:34,520
to transfer supplies and cargo
from the European Space Agency.

106
00:05:34,520 --> 00:05:38,030
The docked automated
transfer vehicle that arrived

107
00:05:38,030 --> 00:05:40,770
at the station on March 28.

108
00:05:40,770 --> 00:05:47,080
Flight Engineer Don Pettit
spent this morning working

109
00:05:47,080 --> 00:05:50,070
with the onboard medical
ultrasound equipment

110
00:05:50,070 --> 00:05:52,920
to perform self scans
of his leg.

111
00:05:52,920 --> 00:05:55,780
This is part of an ongoing
study known as Sprint,

112
00:05:55,780 --> 00:05:58,970
that looks at how exercise
counteracts the negative effects

113
00:05:58,970 --> 00:06:02,060
of microgravity on
the human body.

114
00:06:02,060 --> 00:06:05,270
Pettit provided input to
the ongoing Journals study,

115
00:06:05,270 --> 00:06:07,890
then he worked to
reconfigured the temperature

116
00:06:07,890 --> 00:06:11,130
and humidity control
common cabin air assembly,

117
00:06:11,130 --> 00:06:14,900
also known as the the station's
air conditioner in the lab.

118
00:06:14,900 --> 00:06:20,580
Again, you are getting a live
view inside the International

119
00:06:20,580 --> 00:06:24,000
Space Station, where the
Orbit 2 Team continues

120
00:06:24,000 --> 00:06:25,150
to monitor the systems

121
00:06:25,150 --> 00:06:27,880
and activities aboard the
International Space Station.

122
00:06:27,880 --> 00:06:31,410
At the day's end, each crew
member will have exercise

123
00:06:31,410 --> 00:06:33,450
to maintain his physical fitness

124
00:06:33,450 --> 00:06:34,930
and help mitigate
the negative effects

125

00:06:34,930 --> 00:06:37,180
of microgravity on their bodies.

126
00:06:37,180 --> 00:06:41,250
The Expedition 31 crew members
will do some evening prep work

127
00:06:41,250 --> 00:06:44,740
after or before their evening
meal and I presleep period.

128
00:06:44,740 --> 00:06:46,390
They will also participate

129
00:06:46,390 --> 00:06:48,160
in their final daily
planning conference

130
00:06:48,160 --> 00:06:50,460
with ground controllers
around the world to plan

131
00:06:50,460 --> 00:06:51,970
for the arrival of the Soyuz

132
00:06:51,970 --> 00:06:53,980
that is now carrying
three new crew members

133
00:06:53,980 --> 00:06:56,360
up to the International
Space Station.