



**Soyuz 31
(TMA-05M)**

Progress 48

ATV-3

1
00:00:02,040 --> 00:00:04,070
This is mission control Houston.

2
00:00:04,070 --> 00:00:08,310
The Expedition 33 crew onboard
the International Space Station

3
00:00:08,310 --> 00:00:12,470
has been focused on science and
maintenance as they look forward

4
00:00:12,470 --> 00:00:16,410
to an upcoming undocking
of a European cargo ship

5
00:00:16,410 --> 00:00:20,850
after the decision was made that
the space station did not need

6
00:00:20,850 --> 00:00:23,530
to dodge any space debris.

7
00:00:23,530 --> 00:00:24,700
Ground teams here

8
00:00:24,700 --> 00:00:26,950
in the International
Space Station control room

9
00:00:26,950 --> 00:00:29,130
in Houston had been
tracking a piece

10
00:00:29,130 --> 00:00:31,250
of Russian Cosmos satellite

11
00:00:31,250 --> 00:00:34,100
that was thought it would
pass too close to the station

12

00:00:34,100 --> 00:00:36,510
on Thursday morning,
as well as a piece

13

00:00:36,510 --> 00:00:39,920
of exploded Indian rocket
body that was on course

14

00:00:39,920 --> 00:00:42,330
to pass too close
on Friday morning.

15

00:00:42,330 --> 00:00:45,470
They had been planning for
a Debris Avoidance Maneuver,

16

00:00:45,470 --> 00:00:48,700
but additional tracking data
received Wednesday and on

17

00:00:48,700 --> 00:00:51,780
into Thursday morning gave
confidence that neither

18

00:00:51,780 --> 00:00:54,910
of those objects presented
a concern for a conjunction

19

00:00:54,910 --> 00:00:57,740
and hence no maneuver
was conducted.

20

00:00:57,740 --> 00:01:00,390
Russian teams are planning
for another attempt

21

00:01:00,390 --> 00:01:04,460
to undock the European
Automated Transfer Vehicle,

22

00:01:04,460 --> 00:01:06,190
which is located at the aft end

23

00:01:06,190 --> 00:01:08,200
of the International
Space Station.

24

00:01:08,200 --> 00:01:11,380
Mission managers are meeting
to decide when they would

25

00:01:11,380 --> 00:01:15,090
like to make another
attempt to undock the ATV.

26

00:01:15,090 --> 00:01:18,390
The earliest opportunity
is Friday afternoon.

27

00:01:18,390 --> 00:01:22,580
The Tuesday undocking attempt
was aborted just minutes before

28

00:01:22,580 --> 00:01:26,800
the undocking when a
command to the hooks to open

29

00:01:26,800 --> 00:01:29,410
in the ATV did not go through.

30

00:01:29,410 --> 00:01:33,820
If a decision is made to try
to undock on Friday afternoon

31

00:01:33,820 --> 00:01:38,360
that undocking would happen
at 4:46 PM Houston time

32

00:01:38,360 --> 00:01:42,380
with NASA TV coverage of
the event to begin at 4:30.

33
00:01:42,380 --> 00:01:45,900
On Thursday morning station
Commander Suni Williams worked

34
00:01:45,900 --> 00:01:49,260
on human life sciences
investigations taking

35
00:01:49,260 --> 00:01:53,530
measurements for the VO2Max
experiment, which is a gauge

36
00:01:53,530 --> 00:01:57,870
of an astronaut's maximum
oxygen uptake on orbit,

37
00:01:57,870 --> 00:02:01,160
combined with the
European investigation,

38
00:02:01,160 --> 00:02:04,550
known as Thermolab,
which is studying changes

39
00:02:04,550 --> 00:02:07,490
in a body's core
temperature before,

40
00:02:07,490 --> 00:02:11,970
during and after exercise as
a way to measure adaptation

41
00:02:11,970 --> 00:02:14,120
to the space environment.

42
00:02:14,120 --> 00:02:17,480

Flight Engineer Yuri Malenchenko
devoted the early portion

43

00:02:17,480 --> 00:02:20,880
of his day to cleaning
ventilation system components

44

00:02:20,880 --> 00:02:25,390
in the Zvezda module while
Aki Hoshide did maintenance

45

00:02:25,390 --> 00:02:28,400
on air sampling equipment
in Kibo

46

00:02:28,400 --> 00:02:31,590
and on the Advanced
Resistive Exercise Device

47

00:02:31,590 --> 00:02:34,320
in the station's Node 3.

48

00:02:34,320 --> 00:02:38,830
In the afternoon Malenchenko
moved on to transfers into

49

00:02:38,830 --> 00:02:43,660
and out of the Russian
Progress vehicle while Williams

50

00:02:43,660 --> 00:02:49,110
and Hoshide spent time training
for their rendezvous and capture

51

00:02:49,110 --> 00:02:51,390
of the Dragon spacecraft,

52

00:02:51,390 --> 00:02:54,420
the commercial cargo vehicle
that's targeted to launch

53

00:02:54,420 --> 00:02:59,390
to the space station on October
7 and arrive on October 10.

54

00:02:59,390 --> 00:03:02,360
They conducted computer-based
training

55

00:03:02,360 --> 00:03:05,730
of how they will use the
station's robotic arm

56

00:03:05,730 --> 00:03:09,740
to grapple the Dragon spacecraft
when it nears the station

57

00:03:09,740 --> 00:03:12,250
and then use the
arm to attach it

58

00:03:12,250 --> 00:03:17,240
to the International Space
Station's Node number two.

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00:03:17,240 --> 00:03:19,680
Crew members are
also looking ahead

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00:03:19,680 --> 00:03:23,920
to a planned routine emergency
evacuation drill to take place

61

00:03:23,920 --> 00:03:28,020
on Friday morning before they
would be monitoring a potential