



EXPEDITION 33

YURI MALENCHENKO

Flight Engineer

1
00:00:01,046 --> 00:00:03,056
This is Mission Control Houston.

2
00:00:03,906 --> 00:00:07,106
The crew is very busy today
with that successful docking

3
00:00:07,106 --> 00:00:08,466
of the SpaceX capsule.

4
00:00:09,056 --> 00:00:13,276
It was grappled with the space
station's robotic arm earlier

5
00:00:13,276 --> 00:00:15,986
this morning at 5:56
a.m. central time.

6
00:00:16,486 --> 00:00:19,126
The crew then got a little bit
ahead of schedule and managed

7
00:00:19,126 --> 00:00:21,116
to berth it to the
International Space Station

8
00:00:21,116 --> 00:00:22,786
at 8:03 a.m. central.

9
00:00:23,686 --> 00:00:26,956
This being SpaceX's first
commercial resupply mission

10
00:00:26,956 --> 00:00:29,526
to the International Space
Station which launched back

11
00:00:29,526 --> 00:00:32,776
on Sunday from the Cape

Canaveral Air Force Station

12

00:00:33,306 --> 00:00:36,386
delivering a total
882 pounds of supplies

13

00:00:36,386 --> 00:00:39,976
to this orbiting laboratory,
including over 390 pounds

14

00:00:39,976 --> 00:00:41,566
of scientific research
equipment.

15

00:00:42,536 --> 00:00:46,656
Meanwhile, onboard the station
Sunni Williams began her day

16

00:00:47,176 --> 00:00:50,036
doing a quick check out
and routing some cables

17

00:00:50,036 --> 00:00:51,346
for the crew command panel

18

00:00:51,856 --> 00:00:55,636
which she used throughout
the final SpaceX approach

19

00:00:55,636 --> 00:00:59,206
to maintain communication with
the vehicle and also the ability

20

00:00:59,206 --> 00:01:02,616
to send commands both during
this berthing and then later

21

00:01:02,616 --> 00:01:04,856
on during the departure phase.

22

00:01:05,606 --> 00:01:09,066

She was also monitoring the Dragon spacecraft throughout its

23

00:01:09,066 --> 00:01:10,866

entire approach and then capturing it

24

00:01:10,866 --> 00:01:12,596

with the space station robotic arm.

25

00:01:13,606 --> 00:01:17,356

Following that she sat back for a few moments along

26

00:01:17,356 --> 00:01:21,046

with Aki Hoshida while ground robotics controllers maneuvered

27

00:01:21,046 --> 00:01:24,326

the spacecraft into its preinstall position before

28

00:01:24,326 --> 00:01:25,596

finally taking back over

29

00:01:25,596 --> 00:01:27,346

and then berthing the Dragon spacecraft.

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00:01:27,866 --> 00:01:30,806

Here we can see her doing what'll take up much of the rest

31

00:01:30,806 --> 00:01:34,696

of her day preparing the hatchway in the Harmony module

32

00:01:34,696 --> 00:01:38,676
for its initial opening before
the astronauts can enter inside

33

00:01:38,676 --> 00:01:40,386
and start unloading
some of that cargo.

34

00:01:41,396 --> 00:01:44,466
She's joined right now by
Japanese astronaut Aki Hoshide

35

00:01:45,106 --> 00:01:47,876
who is working in tandem
with Williams throughout many

36

00:01:47,876 --> 00:01:52,246
of these activities throughout
the day, also taking the reins

37

00:01:52,246 --> 00:01:55,836
at the robotic arm controls
for some of the operations

38

00:01:56,246 --> 00:01:59,366
and helping to monitor the
spacecraft throughout its

39

00:01:59,366 --> 00:02:00,306
entire approach.

40

00:02:00,746 --> 00:02:03,226
He's also been doing a lot
of work on the vestibule,

41

00:02:03,226 --> 00:02:06,126
the connection between these
two spacecraft, the Dragon

42

00:02:06,126 --> 00:02:07,516

and the International
Space Station.

43

00:02:07,826 --> 00:02:09,076
And he'll continue to work

44

00:02:09,076 --> 00:02:10,606
on that throughout
the rest of the day.

45

00:02:11,506 --> 00:02:15,536
Then our third Expedition
33 crew member,

46

00:02:15,536 --> 00:02:17,316
Russian cosmonaut
Yuri Malenchenko,

47

00:02:17,836 --> 00:02:21,586
has been doing a few
research experiments onboard

48

00:02:21,586 --> 00:02:22,566
in the Russian segment.

49

00:02:23,046 --> 00:02:25,266
He spent a few hours
today working

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00:02:25,266 --> 00:02:28,736
on the Typologia experiment
which is a Russian assessment

51

00:02:28,736 --> 00:02:31,746
of the mental state and the
prediction and correction

52

00:02:32,346 --> 00:02:35,146
of quality of work of
these astronauts --

53

00:02:35,206 --> 00:02:38,996

basically just a look into how
their cognitive functions are

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00:02:38,996 --> 00:02:41,076

affected by long-duration
spaceflight.

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00:02:41,076 --> 00:02:43,656

They go through series
of exercises they need

56

00:02:43,656 --> 00:02:45,686

to test out those functions.

57

00:02:45,686 --> 00:02:48,056

He was also continuing
some work he's been doing

58

00:02:48,056 --> 00:02:49,986

on the Kulonovskiy
Crystal experiment,

59

00:02:49,986 --> 00:02:51,226

something he started yesterday.

60

00:02:51,726 --> 00:02:58,806

It's research into microscopic
particles being suspended

61

00:02:58,806 --> 00:03:01,206

in an electromagnetic trap.

62

00:03:01,736 --> 00:03:04,056

So a pretty complex
physics experiment --

63

00:03:04,056 --> 00:03:05,306

one of many of a suite

64

00:03:05,306 --> 00:03:07,506

of physics experiments
taking advantage

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00:03:07,506 --> 00:03:09,076

of that microgravity environment

66

00:03:09,076 --> 00:03:10,506

of the International
Space Station.

67

00:03:11,056 --> 00:03:15,256

He was also doing some prepack
work for a Freon leak analyzer

68

00:03:15,256 --> 00:03:18,136

which will be returned on
this Dragon spacecraft,

69

00:03:18,506 --> 00:03:21,826

part of the over 1600 pounds of
supplies it'll be bringing back

70

00:03:21,876 --> 00:03:23,136

down to the Earth's surface.

71

00:03:23,346 --> 00:03:26,156

He was also doing
some measurements

72

00:03:26,156 --> 00:03:29,646

of harmful contaminants using
the countermeasure system inside

73

00:03:29,646 --> 00:03:32,996

of the Russian Zvezda
service module and some

74

00:03:32,996 --> 00:03:35,946
of the routine replacement work
also on the toilet will take

75

00:03:35,946 --> 00:03:37,866
up some of his time
later in the afternoon.

76

00:03:38,466 --> 00:03:42,166
Again all eyes on the
successful capture and berthing

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00:03:42,166 --> 00:03:43,516
of the Dragon spacecraft.

78

00:03:44,096 --> 00:03:46,246
The station configuration
as you can see you now

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00:03:46,246 --> 00:03:48,886
with the Dragon all the way
on the left there docked

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00:03:48,886 --> 00:03:50,826
to the Earth-facing
side of Harmony.

81

00:03:51,226 --> 00:03:53,276
The other two vehicles
which have been on,

82

00:03:53,956 --> 00:03:57,716
attached to station for some
time, the Soyuz 31 craft

83

00:03:57,716 --> 00:03:59,416
which carried these
three astronauts

84

00:03:59,416 --> 00:04:01,736
to the International Space
Station back in July,

85

00:04:02,246 --> 00:04:05,246
also the Progress 48, the
unmanned Russian cargo ship,