

EXPEDITION 31



**ANDRÉ KUIPERS**

Flight Engineer

1  
00:00:01,466 --> 00:00:04,756  
Good morning and welcome  
to Mission Control Houston

2  
00:00:04,756 --> 00:00:06,406  
and the International  
Space Station update.

3  
00:00:07,476 --> 00:00:10,956  
Onboard the International Space  
Station, the Expedition 31 crew,

4  
00:00:11,476 --> 00:00:14,826  
Commander Oleg Kononenko and  
U.S. Flight Engineers Don Pettit

5  
00:00:14,826 --> 00:00:16,036  
and Joe Acaba, as well

6  
00:00:16,036 --> 00:00:18,226  
as European Flight  
Engineers Andre Kuipers

7  
00:00:18,856 --> 00:00:21,056  
and Russian Flight  
Engineers Gennady Padalka

8  
00:00:21,206 --> 00:00:24,346  
and Sergei Revin are now more  
than halfway through their day

9  
00:00:24,346 --> 00:00:27,406  
which started at 1  
a.m. Central time.

10  
00:00:28,156 --> 00:00:30,166  
Flight Engineer Don  
Pettit is about halfway

11

00:00:30,166 --> 00:00:32,816  
through a four-hour long  
project that he's working

12  
00:00:32,816 --> 00:00:35,006  
on with the Amine  
Swingbed experiment.

13  
00:00:35,006 --> 00:00:36,626  
It's an experiment that's aimed

14  
00:00:36,626 --> 00:00:40,836  
at determining whether a vacuum  
regenerated amine system can

15  
00:00:40,836 --> 00:00:44,046  
effectively remove carbon  
dioxide from the station's air.

16  
00:00:45,046 --> 00:00:48,626  
Its control unit power handler  
circuit board has blown a fuse

17  
00:00:48,626 --> 00:00:50,216  
and Pettit is repairing  
that today

18  
00:00:50,216 --> 00:00:52,516  
by soldering a new  
fuse into place.

19  
00:00:52,896 --> 00:00:55,746  
Flight Engineer Joe Acaba  
is participating again

20  
00:00:55,746 --> 00:00:58,226  
in the Integrated  
Cardiovascular experiment

21  
00:00:58,226 --> 00:01:00,246

and the Pro K diet experiment.

22

00:01:01,166 --> 00:01:06,226

The first looks at the bodies' reaction to being in space,

23

00:01:06,226 --> 00:01:08,546

particularly its cardiovascular systems reaction.

24

00:01:09,016 --> 00:01:11,366

And the second is an experiment that looks

25

00:01:11,366 --> 00:01:15,326

at whether dietary countermeasures will help lessen

26

00:01:15,326 --> 00:01:18,356

the bone loss astronauts often experience during long-duration

27

00:01:18,356 --> 00:01:22,526

missions Flight Engineer Andre Kuipers finally wrapped

28

00:01:22,526 --> 00:01:24,766

up his work with a Ryutai repair that he

29

00:01:24,766 --> 00:01:26,766

and Pettit had been working on for the past week.

30

00:01:26,916 --> 00:01:29,716

That's a Japanese experiment rack in the Kibo laboratory

31

00:01:30,176 --> 00:01:35,176

and its power supply for its

image processing unit had a

32

00:01:35,176 --> 00:01:36,956

short circuit several  
months ago.

33

00:01:37,176 --> 00:01:39,906

Pettit and Kuipers  
have taken turns

34

00:01:39,906 --> 00:01:41,916

over the past several days  
working on that repair.

35

00:01:41,916 --> 00:01:45,886

And Kuipers installed the  
newly repaired unit back

36

00:01:45,886 --> 00:01:47,406

into the Ryutai rack yesterday

37

00:01:47,676 --> 00:01:50,416

and today hooked the rack's  
hoses and power cables back

38

00:01:50,416 --> 00:01:51,546

up to get it up and running.

39

00:01:52,746 --> 00:01:55,856

Kuipers also took some time  
out today of his task to talk

40

00:01:55,886 --> 00:01:59,416

with Dutch broadcasters from  
Amsterdam in his hometown

41

00:01:59,416 --> 00:02:02,496

and answer questions about  
life on the space station.

42

00:02:03,406 --> 00:02:04,706

On the Russian side  
of the station,

43

00:02:04,786 --> 00:02:07,216

Commander Oleg Kononenko  
was also working

44

00:02:07,216 --> 00:02:08,546

on science experiments.

45

00:02:08,606 --> 00:02:11,006

In particular, the  
Identification experiment

46

00:02:11,006 --> 00:02:13,736

which is aimed at identifying  
sources of vibration

47

00:02:14,106 --> 00:02:17,126

that disrupt the microgravity  
conditions on the space station.

48

00:02:17,706 --> 00:02:20,876

And Flight Engineer Gennady  
Padalka was again working

49

00:02:20,876 --> 00:02:23,116

on the Kulonovskiy  
Crystal experiment

50

00:02:23,956 --> 00:02:25,846

which studies the  
effect of microgravity

51

00:02:26,356 --> 00:02:29,406

on charged particles  
in a magnetic field.

52

00:02:30,606 --> 00:02:33,756  
Kononenko, Kuipers and Pettit  
have just a little more time

53  
00:02:34,066 --> 00:02:36,666  
left to fit in their work  
on the space station.

54  
00:02:36,666 --> 00:02:38,406  
They've been at the  
station since December.

55  
00:02:38,996 --> 00:02:42,276  
And with 169 days  
in space and 167

56  
00:02:42,276 --> 00:02:44,186  
at the space station  
they're coming up on the end

57  
00:02:44,186 --> 00:02:47,056  
of their stay and will be  
returning to Earth on July 1.

58  
00:02:48,206 --> 00:02:51,986  
Their crewmates, Acaba, Padalka  
and Revin, still have most

59  
00:02:51,986 --> 00:02:53,036  
of their mission  
in front of them.

60  
00:02:53,036 --> 00:02:55,846  
They only arrived at  
the station last month

61  
00:02:55,916 --> 00:03:00,206  
and have now spent 23 days in  
space, 21 at the space station.

62

00:03:00,706 --> 00:03:01,426  
They're going to be staying

63  
00:03:01,426 --> 00:03:02,946  
on board the station  
until September.

64  
00:03:03,626 --> 00:03:07,466  
A couple of weeks after their  
crewmates leave, Acaba, Padalka

65  
00:03:07,466 --> 00:03:10,196  
and Revin are going to be joined  
by what will then be the rest

66  
00:03:10,196 --> 00:03:13,506  
of the Expedition 32 crew,  
that's Suni Williams,

67  
00:03:13,606 --> 00:03:15,666  
Yuri Malenchenko  
and Aki Hoshide.

68  
00:03:17,036 --> 00:03:19,716  
Those three are scheduled to  
launch from Baikonur on July 15

69  
00:03:19,746 --> 00:03:21,006  
and they are actually already

70  
00:03:21,046 --> 00:03:22,686  
in Russian preparing  
for their departure.

71  
00:03:22,866 --> 00:03:25,356  
Today they were at the Gagarin  
Cosmonaut Training Center

72  
00:03:25,856 --> 00:03:29,046  
in Star City taking part in

a Russian segment simulation.

73

00:03:30,016 --> 00:03:31,356

That's what's going  
on in space today