



1  
00:00:01,990 --> 00:00:04,670  
Good day and welcome to  
Mission Control Houston

2  
00:00:04,670 --> 00:00:07,740  
with our Expedition 31  
International Space Station

3  
00:00:07,740 --> 00:00:09,650  
update of day.

4  
00:00:09,650 --> 00:00:13,140  
Today the Expedition 31 crew  
onboard the International Space

5  
00:00:13,140 --> 00:00:16,610  
Station is working through a  
variety of different activities.

6  
00:00:16,610 --> 00:00:19,390  
Three of the crewmembers are  
getting ready to come home.

7  
00:00:19,390 --> 00:00:21,680  
The other three continuing

8  
00:00:21,680 --> 00:00:24,610  
with the research aboard the  
International Space Station.

9  
00:00:24,610 --> 00:00:27,560  
Here in Mission Control, Jerry  
Jason is the flight director

10  
00:00:27,560 --> 00:00:29,200  
in charge of the team today.

11  
00:00:29,200 --> 00:00:31,240  
He's working with

astronaut Jack Fischer

12

00:00:31,240 --> 00:00:35,250  
as he will be the person  
talking to the crew as it works

13

00:00:35,250 --> 00:00:38,320  
through its various  
activities of the day.

14

00:00:38,320 --> 00:00:43,680  
Of course the crew is made up  
of Commander Oleg Kononenko

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00:00:43,680 --> 00:00:47,260  
and his fellow Russian  
colleagues Gennady Padalka

16

00:00:47,260 --> 00:00:50,520  
and Sergei Revin, and  
NASA astronauts Don Pettit

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00:00:50,520 --> 00:00:54,150  
and Joe Acaba and the European  
space agency astronaut Andre

18

00:00:54,150 --> 00:00:57,650  
Kuipers from the Netherlands.

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00:00:57,650 --> 00:00:59,700  
Today the crew has been working

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00:00:59,700 --> 00:01:02,440  
with some interesting  
experiments activities

21

00:01:02,440 --> 00:01:04,270  
with the Robonaut.

22

00:01:04,270 --> 00:01:07,240

This is Robonaut 2 which  
is an on-orbit piece

23

00:01:07,240 --> 00:01:11,660

of equipment that's being  
used to test the capabilities

24

00:01:11,660 --> 00:01:15,070

of the humanoid robot  
in microgravity.

25

00:01:15,070 --> 00:01:17,570

Joe Acaba has been  
doing some set up

26

00:01:17,570 --> 00:01:21,360

and continuing the checkout  
testing of Robonaut.

27

00:01:21,360 --> 00:01:25,220

You can see some video here  
that was recorded earlier

28

00:01:25,220 --> 00:01:29,500

of Robonaut flexing his hands  
as he worked with some switches

29

00:01:29,500 --> 00:01:31,680

in the Destiny laboratory  
module.

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00:01:31,680 --> 00:01:34,290

In addition Don Pettit  
today worked

31

00:01:34,290 --> 00:01:38,190

on cleaning some  
filters associated

32

00:01:38,190 --> 00:01:43,810  
with the thermal control system  
inside the space station.

33

00:01:43,810 --> 00:01:47,700  
The thermal control system  
is made up of a set up pipes

34

00:01:47,700 --> 00:01:50,190  
that are filled with  
primarily water

35

00:01:50,190 --> 00:01:52,080  
at different temperature  
levels that are used

36

00:01:52,080 --> 00:01:54,570  
to control the temperature  
of the different modules.

37

00:01:54,570 --> 00:01:59,280  
And those connect to a  
heat exchanger that goes

38

00:01:59,280 --> 00:02:01,500  
to an ammonia based system  
on the outside that runs

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00:02:01,500 --> 00:02:02,870  
through radiators  
and it gets rid

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00:02:02,870 --> 00:02:05,030  
of the excess heat  
on the space station.

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00:02:05,030 --> 00:02:09,390  
Although it's alternately  
hot and cold in space,

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00:02:09,390 --> 00:02:12,870

all of the electricity's that  
used for running computers

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00:02:12,870 --> 00:02:15,140

and scientific devices  
and of course put

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00:02:15,140 --> 00:02:18,080

out by humans increases heat  
output inside the station,

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00:02:18,080 --> 00:02:21,850

and so getting rid of that  
excess heat is an important part

46

00:02:21,850 --> 00:02:23,350

of the activities.

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00:02:23,350 --> 00:02:26,430

Today also, the crew members  
that are getting ready to leave,

48

00:02:26,430 --> 00:02:29,040

Oleg Kononenko, Andre  
Kuipers and Don Pettit,

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00:02:29,040 --> 00:02:35,340

are conducting emergency drills  
as they get ready to depart.

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00:02:35,340 --> 00:02:38,810

And they will be also doing  
some additional packing

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00:02:38,810 --> 00:02:40,970

of their gear getting  
ready to get

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00:02:40,970 --> 00:02:44,070

into their Soyuz  
spacecraft and to come home.

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00:02:44,070 --> 00:02:51,500

The Soyuz is scheduled to undock  
on Saturday night US time,

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00:02:51,500 --> 00:02:53,710

Sunday morning Russia time.

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00:02:53,710 --> 00:02:56,280

The three crew members  
are scheduled to climb

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00:02:56,280 --> 00:03:00,900

into their Soyuz TMA-03M  
spacecraft and depart

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00:03:00,900 --> 00:03:03,340

at 11:48 PM central time.

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00:03:03,340 --> 00:03:05,750

Of course prior to that  
we'll have the change

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00:03:05,750 --> 00:03:09,900

of command ceremony on Friday,  
June 29, and that's the command

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00:03:09,900 --> 00:03:14,110

of change ceremony in which  
Oleg Kononenko will hand

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00:03:14,110 --> 00:03:18,070

over the reins of Expedition  
32 to Gennady Padalka.

62

00:03:18,070 --> 00:03:19,930

And then Gennady  
Padalka and Sergei Revin

63

00:03:19,930 --> 00:03:23,060  
and Joel Acaba will spend a  
couple weeks in orbit alone

64

00:03:23,060 --> 00:03:25,380  
until the next group  
of crew members arrive

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00:03:25,380 --> 00:03:27,220  
up to the International  
Space Station

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00:03:27,220 --> 00:03:31,580  
on their Soyuz spacecraft  
scheduled for launch on July 15.

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00:03:31,580 --> 00:03:33,530  
And that'll be Yuri Malenchenko,

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00:03:33,530 --> 00:03:36,980  
Suni Williams and  
Akihiko Hoshide.

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00:03:36,980 --> 00:03:41,650  
Those folks are having a day  
of rest and relaxation today

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00:03:41,650 --> 00:03:45,880  
in Moscow, but this is some  
video of them as they went

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00:03:45,880 --> 00:03:47,900  
through some of the final  
training activities to get ready

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00:03:47,900 --> 00:03:50,010  
for their launch to the  
International Space Station

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00:03:50,010 --> 00:03:55,690  
to round out Expedition 32 and  
make it a full six-person crew.

74

00:03:57,540 --> 00:04:00,190  
All systems on board the space  
station continuing to work well

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00:04:00,190 --> 00:04:03,950  
as it orbits 250 statute  
miles over Indonesia