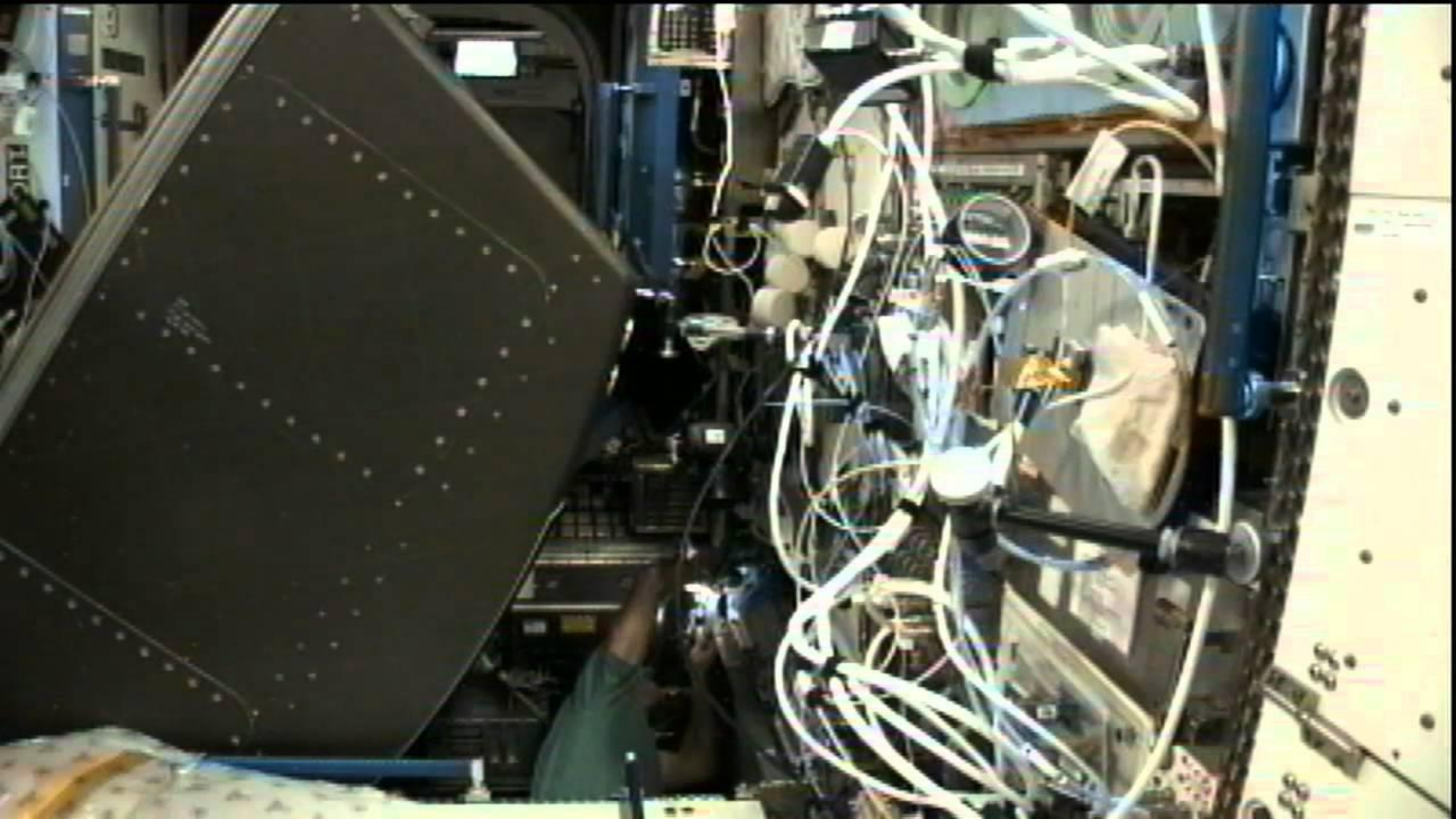

1
00:00:01,326 --> 00:00:04,096
Good Friday morning from
NASA's Johnson Space Center.

2
00:00:04,096 --> 00:00:05,756
This is Mission Control Houston.

3
00:00:05,756 --> 00:00:10,246
You're looking at the International
Space Station flight control room.

4
00:00:10,446 --> 00:00:16,546
From the front left of the room looking
across the consoles of flight controllers

5
00:00:16,546 --> 00:00:20,456
that are overseeing all of the systems
on board the International Space Station.

6
00:00:21,366 --> 00:00:27,236
The team has been on console since about
seven o'clock this morning, Friday morning,

7
00:00:27,236 --> 00:00:32,236
Central time, and today once again
as with the entire week has been led

8
00:00:32,656 --> 00:00:36,746
by flight director Royce Renfrew
who you see standing there.

9
00:00:36,746 --> 00:00:39,806
He is the flight director
for this shift all week.

10
00:00:40,246 --> 00:00:45,436
He's joined to his right by Hal Getzelman
who's serving as the spacecraft communicator,

11

00:00:45,436 --> 00:00:50,046
the communications link between the
flight control team and the crew

12
00:00:50,046 --> 00:00:52,276
on board the International Space Station.

13
00:00:52,736 --> 00:00:59,436
The ISS is currently tracking
southeasterly toward the coast of Mauritania,

14
00:00:59,946 --> 00:01:04,826
having made a pass across the North
Atlantic and now headed down across portions

15
00:01:04,826 --> 00:01:10,706
of Africa before moving into an orbital
sunset in about 30 minutes or so.

16
00:01:10,706 --> 00:01:14,666
From this vantage point of
240 miles above the Earth,

17
00:01:15,046 --> 00:01:21,216
the station is circling the Earth every hour
and a half or so, offering an orbital sunrise

18
00:01:21,216 --> 00:01:31,416
and sunset every 45 minutes as the station
circles around the globe with the crew members

19
00:01:31,416 --> 00:01:38,456
on board serving as the Expedition 30 crew,
continuing in their Friday which began

20
00:01:38,456 --> 00:01:39,906
about one o'clock in the morning.

21
00:01:40,346 --> 00:01:45,936
That crew consists of Commander Dan Burbank

who is a U.S. astronaut that launched

22
00:01:45,936 --> 00:01:49,246
with two Russian colleagues - Anton Shkaplerov

23
00:01:49,246 --> 00:01:53,246
and Anatoly Ivanishin - back
in November of 2011.

24
00:01:53,786 --> 00:01:57,676
Those three crew members are slated
to return home at the end of April.

25
00:01:58,236 --> 00:02:04,436
The other three crew members on board joining
them are Oleg Kononenko, Andre Kuipers who is

26
00:02:04,436 --> 00:02:07,796
from the Netherlands and
U.S. astronaut Don Pettit.

27
00:02:08,166 --> 00:02:12,406
They launched and joined the other
three crew members in late December,

28
00:02:12,746 --> 00:02:16,346
and they're scheduled to
return home in early July.

29
00:02:16,776 --> 00:02:21,346
The first three crew members enjoying
their 125th day in space today,

30
00:02:21,626 --> 00:02:24,936
123 of those aboard the International
Space Station.

31
00:02:25,926 --> 00:02:34,016
The quote youngest three of the six - Kononenko,
Kuipers and Pettit - are in their 87th day

32
00:02:34,016 --> 00:02:38,206
in space, 85 of those aboard
the International Space Station.

33
00:02:39,086 --> 00:02:45,186
Burbank Friday has spent almost exclusively
his time working with cable routing associated

34
00:02:45,186 --> 00:02:47,296
with the high rate communication system.

35
00:02:47,966 --> 00:02:54,136
This procedure routes KU communications
to a joint station local area network

36
00:02:54,516 --> 00:02:58,626
and a secondary KU communications
unit avionics power cable,

37
00:02:58,996 --> 00:03:02,956
along with two multiplexer/demultiplexer
cables on board as well.

38
00:03:03,466 --> 00:03:08,036
These are located behind one of the avionics
racks in the Destiny lab, requiring the rack

39
00:03:08,036 --> 00:03:10,286
to be rotated forward for access.

40
00:03:11,176 --> 00:03:16,356
Pettit spent more time with investigations
into how flames are controlled.

41
00:03:16,356 --> 00:03:22,266
He did most of that on Thursday, wrapping up
all of that activity which helps investigators

42

00:03:22,266 --> 00:03:26,106
on the ground lead to improvements
and technologies aimed

43
00:03:26,106 --> 00:03:30,356
at reducing pollution emissions, while
also improving burning efficiency

44
00:03:30,356 --> 00:03:32,336
for a wide variety of industries.

45
00:03:32,936 --> 00:03:35,416
Kuipers has been working on stowage in

46
00:03:35,416 --> 00:03:38,356
and around the Leonardo Permanent
Multipurpose Module.

47
00:03:38,666 --> 00:03:43,386
He's also used the onboard ham
radio equipment to make contact

48
00:03:43,386 --> 00:03:45,956
with middle school students in Belgium.

49
00:03:47,286 --> 00:03:52,856
Russian crew members conducted research
and housekeeping chores that included work

50
00:03:52,856 --> 00:03:56,516
in the Zvezda service module on
its ventilation system cleaning.

51
00:03:57,016 --> 00:04:00,256
They've been collecting periodic
routine air samples as well,

52
00:04:00,596 --> 00:04:04,766
and they've also conducted some Earth
observation as part of their timeline,

53
00:04:05,436 --> 00:04:08,976
which is part of an experiment
to record color bloom patterns

54
00:04:09,366 --> 00:04:12,226
in the waters of the central eastern Atlantic.

55
00:04:13,706 --> 00:04:16,296
This weekend the crew will
essentially be off duty

56
00:04:16,296 --> 00:04:21,876
but will conduct routine housekeeping chores,
exercise, they'll check some autonomous payloads

57
00:04:21,876 --> 00:04:27,416
on board to ensure they're operating properly,
and they'll also have time to talk and visit

58
00:04:27,416 --> 00:04:30,876
with their family and friends
back here on Earth.

59
00:04:34,726 --> 00:04:39,196
While all of that's going on on orbit, down
here on the ground preparations for launch

60
00:04:39,196 --> 00:04:42,986
of the third Automated Transfer Vehicle
are continuing down in South America

61
00:04:42,986 --> 00:04:45,456
at the Arianespace facility in Kourou.

62
00:04:46,186 --> 00:04:50,976
The "Edoardo Amaldi" as it's named
currently is set for launch next Thursday -

63

00:04:51,876 --> 00:04:54,336
Thursday night Central time - pending completion

64
00:04:54,336 --> 00:04:58,486
of the ongoing Launch Readiness
Review, which should wrap up Friday.

65
00:04:59,516 --> 00:05:05,786
Launch at 11:34 p.m. Central time, March 22
leads to rendezvous and docking with the station

66
00:05:06,176 --> 00:05:13,056
at 5:34 p.m. Central time Wednesday, March
28, delivering supplies and logistics

67
00:05:13,056 --> 00:05:15,626
to the station's Expedition 30 crew.

68
00:05:16,286 --> 00:05:19,106
So that's all the activities that are ongoing,

69
00:05:19,106 --> 00:05:26,696
and that'll keep the crew busy throughout the
rest of Friday as the team of flight controllers

70
00:05:26,696 --> 00:05:30,326
around the world watch over
the crew throughout the day.

71
00:05:31,116 --> 00:05:36,206
It's been a very busy week aboard
the ISS for the six-member crew.

72
00:05:36,586 --> 00:05:41,926
Crew members spread throughout
the 13,000-cubic-foot facility,

73
00:05:42,276 --> 00:05:45,106
conducting science investigations,
housekeeping chores,

74
00:05:45,106 --> 00:05:48,246
internal robotic ops and Earth observations.

75
00:05:48,246 --> 00:05:55,846
Following last week's Robotic Refueling Mission
work by the station's Dexter robot on the end

76
00:05:55,846 --> 00:06:01,516
of the robotic arm outside, internal the
seventh crew member of the station, Robonaut 2,

77
00:06:01,516 --> 00:06:06,906
demonstrated its own dexterity by
signing, "Hello world," to the earth below.

78
00:06:06,986 --> 00:06:12,026
R2 also proved useful later in the week in
grasping an instrument used periodically

79
00:06:12,026 --> 00:06:15,206
to measure air ventilation
within the Destiny laboratory.

80
00:06:15,646 --> 00:06:19,976
It was the first time R2 conducted a task
that wasn't considered a checkout item.

81
00:06:20,566 --> 00:06:26,676
R2 will rest for a while as ground engineers
plan his next moves on orbit aboard the station.

82
00:06:27,326 --> 00:06:32,526
Quite a bit of Don Pettit's week was
devoted to the flame experiment on board,

83
00:06:32,876 --> 00:06:38,576
investigating the nature of flames
in microgravity and how they progress

84
00:06:38,576 --> 00:06:45,076
as experimenters can evaluate that data
for development of systems on the ground.

85
00:06:45,526 --> 00:06:50,636
Andre Kuipers was busy this week with
cardiovascular equipment on board,

86
00:06:50,636 --> 00:06:56,976
an experiment that develops countermeasures
to help crew maintain their health on board.

87
00:06:57,446 --> 00:07:01,756
He also worked with the fluid physics
experiment facility on the station.

88
00:07:02,226 --> 00:07:07,516
The Russian crew members also worked
with experiments and investigations

89
00:07:07,516 --> 00:07:12,296
on board the station as well as
Earth observations and also some work

90
00:07:12,296 --> 00:07:15,886
with the communications systems in
one of the Russian segment modules.

91
00:07:16,446 --> 00:07:21,796
Commander Dan Burbank also worked
with the U.S. space suits this week,

92
00:07:22,136 --> 00:07:24,476
checking them out to make sure
they're in good working order

93
00:07:24,476 --> 00:07:27,196
in the event a spacewalk is needed on board.

94

00:07:27,516 --> 00:07:30,876
There are no plans for an EVA,
or extravehicular activity,

95
00:07:30,876 --> 00:07:34,016
until Expedition 32 and 33 later in the year.

96
00:07:36,356 --> 00:07:41,086
Midweek Burbank and Pettit, flanked
by their seventh crew member Robonaut,

97
00:07:41,086 --> 00:07:44,726
talked about their mission with Fox
News channel's "America's Newsroom,"

98
00:07:45,046 --> 00:07:48,616
and they also have some additional media
interviews scheduled next week ahead

99
00:07:48,616 --> 00:07:51,356
of the Automated Transfer Vehicle launch.

100
00:07:51,876 --> 00:07:54,636
So, it's been a busy week in space with teams

101
00:07:54,636 --> 00:07:58,056
around the world assisting the
crew from here on the ground.

102
00:07:58,056 --> 00:08:03,606
This weekend the crew will essentially be
off duty but will conduct some routine chores

103
00:08:03,606 --> 00:08:09,616
on board, exercise, check some payloads and
also talk with their friends and family.

104
00:08:10,886 --> 00:08:14,436
We'll be back again next week
with another week of coverage

105
00:08:14,436 --> 00:08:18,536
of Expedition 30's voyage aboard
the International Space Station.