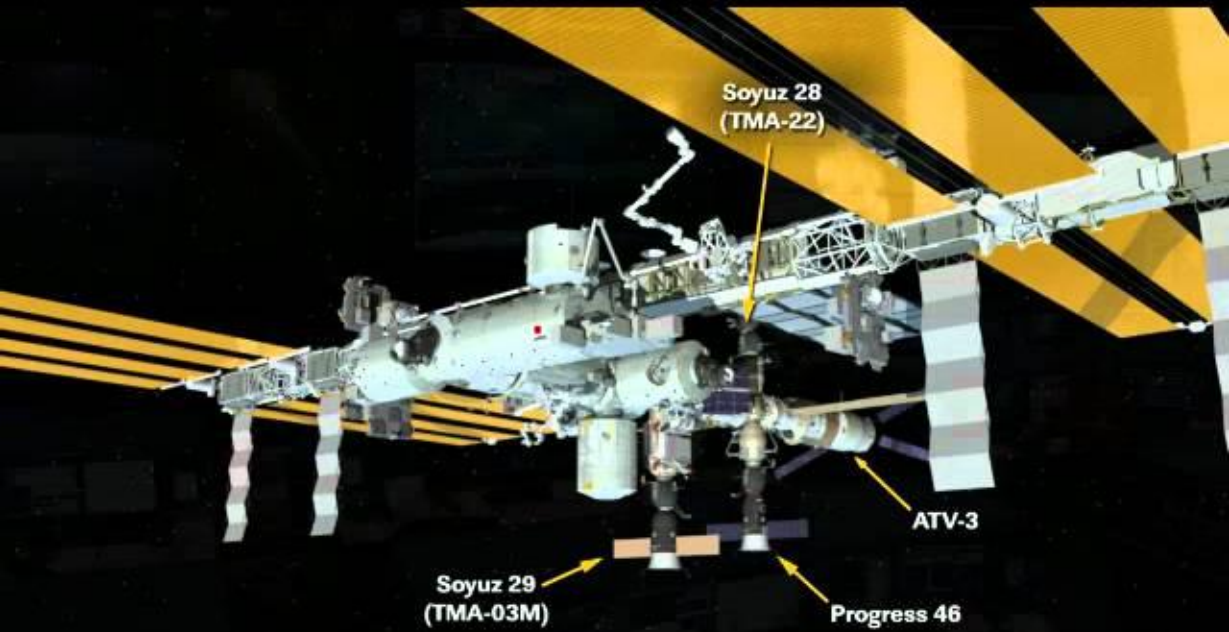
Soyuz 28
(TMA-22)
ATV-3
Soyuz 29
(TMA-03M)
Progress 46

1
00:00:01,390 --> 00:00:03,050
This is Mission Control Houston.

2
00:00:03,050 --> 00:00:05,090
Welcome to today's ISS update.

3
00:00:05,090 --> 00:00:07,860
It is April 11, 2012.

4
00:00:07,860 --> 00:00:08,630
Good Wednesday to you.

5
00:00:08,630 --> 00:00:09,780
You're looking at a live view

6
00:00:09,780 --> 00:00:12,940
of the International Space
Station flight control room here

7
00:00:12,940 --> 00:00:15,120
at the Johnson Space Center in Houston.

8
00:00:15,120 --> 00:00:19,090
This team here today being led
by flight director Ron Spencer.

9
00:00:19,090 --> 00:00:20,320
He is there standing up.

10
00:00:20,320 --> 00:00:24,770
Sitting beside him is today's Capcom the
voice of mission control of the astronauts.

11
00:00:24,770 --> 00:00:26,720
That is Jeremy Hansen.

12
00:00:26,720 --> 00:00:31,240
The Expedition 30 crew onboard orbiting

complex has a pretty busy day today.

13
00:00:31,240 --> 00:00:34,060
They've been working on a variety
of different maintenance activities

14
00:00:34,060 --> 00:00:36,320
and also some experiment work.

15
00:00:36,320 --> 00:00:40,290
Dan Burbank, second from the left there:
he is the commander of Expedition 30.

16
00:00:40,290 --> 00:00:46,050
He's been the working majority of his morning
and also this afternoon on rewiring the motor

17
00:00:46,050 --> 00:00:49,380
of what is called the Amine Swingbed.

18
00:00:49,380 --> 00:00:54,630
This is basically a test model for
what could become the future way

19
00:00:54,630 --> 00:00:59,390
of scrubbing carbon dioxide from the
International Space Station's atmosphere.

20
00:00:59,390 --> 00:01:05,100
Obviously regenerating that atmosphere and
the air inside orbiting complex is important,

21
00:01:05,100 --> 00:01:09,170
so experiments continue onboard
the complex to make those devices

22
00:01:09,170 --> 00:01:13,130
that scrub the air smaller,
more efficient, use less power.

23
00:01:13,130 --> 00:01:18,750
So this Amine Swingbed which are seeing a
video of here is one of those experiments

24
00:01:18,750 --> 00:01:23,190
that the crew is testing out with ground
teams to see if they can make it smaller,

25
00:01:23,190 --> 00:01:26,820
lighter and more efficient for
not only the space station itself

26
00:01:26,820 --> 00:01:29,710
but also future spacecraft as well.

27
00:01:30,940 --> 00:01:34,130
Anton Shkaplerov has been working
in the Russian segment today

28
00:01:34,130 --> 00:01:36,590
on what's called the Typology experiment.

29
00:01:36,590 --> 00:01:39,860
It looks at how the crew members
adapt to living and working in space.

30
00:01:39,860 --> 00:01:45,750
They take a look at the different visual cues
on a laptop computer and report what they see.

31
00:01:45,750 --> 00:01:49,820
This takes a look at their neurology, how their
eyes are working, how their brains are working,

32
00:01:49,820 --> 00:01:52,460
and just measure those changes that happened

33
00:01:52,460 --> 00:01:54,740
to the crew members bodies

while they're up in space.

34
00:01:54,740 --> 00:01:56,950
He is also packing up equipment and supplies

35
00:01:56,950 --> 00:02:00,200
that will come home aboard the
Soyuz at the end of the month.

36
00:02:00,200 --> 00:02:05,370
The crew getting ready to return
home toward the end of April.

37
00:02:08,940 --> 00:02:14,520
Anatoly Ivanishin also working in the Russian
segment, taking some water samples from inside

38
00:02:14,520 --> 00:02:17,420
that particular portion of the
International Space Station.

39
00:02:17,420 --> 00:02:21,260
This is done periodically just to
make sure that the water the crew uses

40
00:02:21,260 --> 00:02:24,610
and that they drink is acceptable,
doesn't have any bacteria

41
00:02:24,610 --> 00:02:26,490
or anything like that growing in its.

42
00:02:26,490 --> 00:02:29,340
So he will take care of that this afternoon.

43
00:02:29,340 --> 00:02:33,940
He is also working on a cardiac
experiment to measure and take a look

44

00:02:33,940 --> 00:02:37,650
at how the crew members' cardiac
systems react to being up in space.

45
00:02:37,650 --> 00:02:41,840
Obviously the human body is one
of the primary investigations

46
00:02:41,840 --> 00:02:46,350
that take place aboard the space station,
learning how our bodies react to being

47
00:02:46,350 --> 00:02:49,800
up in space for up to six months
while the crews are up there.

48
00:02:49,800 --> 00:02:52,880
Those lessons are going to be very
important as humans take a look

49
00:02:52,880 --> 00:02:59,060
at expanding beyond low Earth orbit,
traveling to destinations such as Mars.

50
00:02:59,060 --> 00:03:06,280
Oleg Kononenko also finishing up
some work, packing up the Progress 46

51
00:03:06,280 --> 00:03:09,390
that is currently docked to
the Pirs docking compartment.

52
00:03:09,390 --> 00:03:14,240
That is one of the cargo craft that visit the
International Space Station throughout the year.

53
00:03:14,240 --> 00:03:17,050
That particular Progress
launched back in January.

54

00:03:17,050 --> 00:03:19,250
You see the map of the station
there, the Progress 46,

55
00:03:19,250 --> 00:03:21,780
it's down toward the bottom right hand side.

56
00:03:21,780 --> 00:03:24,820
It launched in January, headed up to the
station, brought up a little bit less

57
00:03:24,820 --> 00:03:29,240
than 3 tons of food, fuel
and supplies for the crew.

58
00:03:29,240 --> 00:03:32,290
Its time aboard the space
station coming to a close.

59
00:03:32,290 --> 00:03:37,010
It's going to be undocked coming up on
April 19, and it will eventually be sent

60
00:03:37,010 --> 00:03:42,140
into a destructive reentry in Earth's
atmosphere packed full of trash and other items

61
00:03:42,140 --> 00:03:44,530
that the crew doesn't need anymore.

62
00:03:48,060 --> 00:03:52,720
Don Pettit and Andre Kuipers have
been busy this week including today.

63
00:03:52,720 --> 00:03:57,060
They kicked off earlier this week
two weeks' worth of onboard training.

64
00:03:57,060 --> 00:04:02,410
All of this is leading up to the SpaceX mission,

which is coming up toward the end of the month.

65
00:04:02,410 --> 00:04:07,310
That launch currently scheduled for
April 30 at 11:22 AM central time,

66
00:04:07,310 --> 00:04:12,680
12:22 PM Eastern time It'll take a couple
of days for the SpaceX Dragon to get

67
00:04:12,680 --> 00:04:16,930
up to the station and to perform
these demonstration maneuvers

68
00:04:16,930 --> 00:04:18,940
as part of this test flight.

69
00:04:18,940 --> 00:04:21,630
This is a look at some of the
onboard training that Pettit

70
00:04:21,630 --> 00:04:24,000
and Kuipers have been doing this week.

71
00:04:24,000 --> 00:04:28,170
Basically they will be running some
simulations inside the Destiny laboratory.

72
00:04:28,170 --> 00:04:31,190
There's two different robotic
workstations onboard the station,

73
00:04:31,190 --> 00:04:33,720
one in Destiny, one down in the cupola.

74
00:04:33,720 --> 00:04:38,470
They've been running these checkouts inside
the Destiny workstation, the US laboratory,

75

00:04:38,470 --> 00:04:42,220
basically practicing the
maneuvers that they will do coming

76
00:04:42,220 --> 00:04:46,070
up once Dragon nears the station
and performs a rendezvous.

77
00:04:46,070 --> 00:04:50,970
They'll be using the station's robotic
arm to reach out and grab onto Dragon,

78
00:04:50,970 --> 00:04:56,640
which you see here is little bit different
than what Progress and the Japanese...

79
00:04:56,640 --> 00:05:00,160
It's very similar to what the Japanese HTV
does, but it's very different from the Progress

80
00:05:00,160 --> 00:05:03,690
and also the European Space Agency's
Automated Transfer Vehicle do,

81
00:05:03,690 --> 00:05:08,040
which is those vehicles actually dock
themselves to the International Space Station.

82
00:05:08,040 --> 00:05:12,370
But Dragon will do something very similar to
what HTV does, which is where it'll just sort

83
00:05:12,370 --> 00:05:16,200
of hang out and loiter away from
the station, a few dozen feet,

84
00:05:16,200 --> 00:05:21,250
and then the crew will use this robotic arm,
taking a look at these laptops you see here,

85

00:05:21,250 --> 00:05:27,460
to reach out and grab onto Dragon, monitoring
the progress of this the entire way.

86
00:05:27,460 --> 00:05:33,470
In addition to all of this the crew had some
crew Earth observation opportunities today.

87
00:05:33,470 --> 00:05:36,900
They will be flying over
Oklahoma City and Los Angeles.

88
00:05:36,900 --> 00:05:41,110
They had a chance to take a look at
those two cities right before sunrise.

89
00:05:41,110 --> 00:05:45,630
They'll also be flying over Swaziland
and finally over St. Helena Island.

90
00:05:45,630 --> 00:05:48,540
Of course if you would like to take
a look at any these photographs,