



SPACE TO GROUND

1
00:00:06,230 --> 00:00:03,909
houston station on space to ground

2
00:00:09,190 --> 00:00:06,240
another out of this world view of a

3
00:00:11,110 --> 00:00:09,200
massive storm

4
00:00:13,669 --> 00:00:11,120
welcome to space to ground i'm dan

5
00:00:15,829 --> 00:00:13,679
hewitt the station trained its cameras

6
00:00:18,310 --> 00:00:15,839
on hurricane matthew this week from over

7
00:00:20,550 --> 00:00:18,320
250 miles above

8
00:00:22,470 --> 00:00:20,560
the orbiting lab flew over the storm

9
00:00:23,590 --> 00:00:22,480
multiple times as it churned through the

10
00:00:25,429 --> 00:00:23,600
caribbean

11
00:00:27,990 --> 00:00:25,439
capturing video using the newly

12
00:00:30,470 --> 00:00:28,000
installed hd cameras the powerful

13
00:00:33,110 --> 00:00:30,480

category 4 hurricane was observed as it

14

00:00:35,350 --> 00:00:33,120

passed over haiti and cuba and slowly

15

00:00:38,229 --> 00:00:35,360

continued north towards the southeastern

16

00:00:40,790 --> 00:00:38,239

united states packing winds in excess of

17

00:00:43,510 --> 00:00:40,800

140 miles per hour it was another

18

00:00:45,510 --> 00:00:43,520

spectacular if sobering view of the

19

00:00:47,670 --> 00:00:45,520

power of mother nature

20

00:00:50,709 --> 00:00:47,680

the next resupply mission from orbital

21

00:00:53,029 --> 00:00:50,719

atk has a new launch date the company's

22

00:00:55,750 --> 00:00:53,039

sixth cargo flight is now scheduled to

23

00:00:58,229 --> 00:00:55,760

launch on october 13th packed with more

24

00:01:00,470 --> 00:00:58,239

than 5 thousand pounds of experiments

25

00:01:03,029 --> 00:01:00,480

and supplies it will be the first flight

26
00:01:05,990 --> 00:01:03,039
on a newly upgraded antares rocket since

27
00:01:08,149 --> 00:01:06,000
the launch failure in october 2014. on

28
00:01:10,149 --> 00:01:08,159
board the station kate rubins and takuya

29
00:01:11,990 --> 00:01:10,159
onishi spent the week brushing up on

30
00:01:14,310 --> 00:01:12,000
their robotic skills as they'll be

31
00:01:15,749 --> 00:01:14,320
responsible for capturing cygnus once it

32
00:01:17,910 --> 00:01:15,759
arrives

33
00:01:20,310 --> 00:01:17,920
this week twitter user jay wanted to

34
00:01:22,950 --> 00:01:20,320
know why progress docks itself while

35
00:01:24,070 --> 00:01:22,960
cygnus and dragon have to be captured

36
00:01:26,630 --> 00:01:24,080
well let's look at some of the

37
00:01:28,789 --> 00:01:26,640
differences between docking and berthing

38
00:01:31,350 --> 00:01:28,799

a spacecraft docking is essentially a

39

00:01:33,270 --> 00:01:31,360

controlled collision and requires extra

40

00:01:35,109 --> 00:01:33,280

infrastructure like a docking port to

41

00:01:36,789 --> 00:01:35,119

happen something rose cosmos has

42

00:01:39,510 --> 00:01:36,799

historically developed for both their

43

00:01:41,670 --> 00:01:39,520

soyuz and progress spacecraft to make

44

00:01:43,910 --> 00:01:41,680

the first generation of commercial cargo

45

00:01:45,830 --> 00:01:43,920

a little easier spacecraft were designed

46

00:01:48,469 --> 00:01:45,840

to attach to the common berthing

47

00:01:50,710 --> 00:01:48,479

mechanisms already on the us station

48

00:01:53,350 --> 00:01:50,720

modules the same ports that are used to

49

00:01:56,069 --> 00:01:53,360

link each module together future

50

00:01:57,910 --> 00:01:56,079

spacecraft under the crs2 contract will

51
00:02:00,069 --> 00:01:57,920
have the option to dock to the new

52
00:02:02,550 --> 00:02:00,079
international docking adapter or

53
00:02:04,789 --> 00:02:02,560
continue the capture and berthing method

54
00:02:07,190 --> 00:02:04,799
one advantage of berthing is you get the

55
00:02:09,350 --> 00:02:07,200
full diameter of the hatch to move cargo

56
00:02:11,350 --> 00:02:09,360
in and out since the docking mechanism

57
00:02:13,430 --> 00:02:11,360
makes that space smaller

58
00:02:15,910 --> 00:02:13,440
keep sending us your questions using the