



SPACE TO GROUND

1
00:00:04,150 --> 00:00:02,790
houston station on space to ground

2
00:00:05,910 --> 00:00:04,160
welcome to space to ground your weekly

3
00:00:07,749 --> 00:00:05,920
look at what's happening aboard the iss

4
00:00:09,190 --> 00:00:07,759
i'm josh meyerley three new crew members

5
00:00:11,589 --> 00:00:09,200
have arrived at the station to become

6
00:00:13,350 --> 00:00:11,599
part of expedition 39. the crew launched

7
00:00:15,270 --> 00:00:13,360
from the baikonur cosmodrome on tuesday

8
00:00:16,870 --> 00:00:15,280
afternoon u.s time and took about a nine

9
00:00:17,750 --> 00:00:16,880
minute trip into orbit

10
00:00:18,710 --> 00:00:17,760
three

11
00:00:19,510 --> 00:00:18,720
and

12
00:00:21,109 --> 00:00:19,520
one

13
00:00:23,509 --> 00:00:21,119

ignition

14

00:00:25,509 --> 00:00:23,519

and we have a lift off liftoff of steve

15

00:00:27,509 --> 00:00:25,519

swanson oligarchy and alexander

16

00:00:29,429 --> 00:00:27,519

schwartzoff to the international space

17

00:00:30,950 --> 00:00:29,439

station the three had quite a busy day

18

00:00:32,950 --> 00:00:30,960

leading up to launch after waking up

19

00:00:34,549 --> 00:00:32,960

they signed their hotel room doors and

20

00:00:36,389 --> 00:00:34,559

then headed to the launch site for suit

21

00:00:38,229 --> 00:00:36,399

up after saying farewell to their

22

00:00:40,229 --> 00:00:38,239

families and friends they waved goodbye

23

00:00:41,430 --> 00:00:40,239

and boarded their soyuz rocket

24

00:00:42,869 --> 00:00:41,440

the space station crew actually got the

25

00:00:44,389 --> 00:00:42,879

chance to see the launch take place as

26
00:00:45,910 --> 00:00:44,399
they were flying directly above baikonur

27
00:00:47,590 --> 00:00:45,920
when the rocket lifted off rick

28
00:00:48,869 --> 00:00:47,600
mastracchio captured this remarkable

29
00:00:50,630 --> 00:00:48,879
image where you can actually see the

30
00:00:53,110 --> 00:00:50,640
flare of the soyuz engines lighting up

31
00:00:56,549 --> 00:00:53,120
the entire launch complex the station

32
00:00:58,549 --> 00:00:56,559
was 260 miles high and traveling at 17

33
00:01:00,069 --> 00:00:58,559
500 miles per hour when rick took this

34
00:01:01,189 --> 00:01:00,079
photo it took a little longer than

35
00:01:02,869 --> 00:01:01,199
originally planned for the new crew

36
00:01:04,390 --> 00:01:02,879
members to get to the station docking

37
00:01:06,390 --> 00:01:04,400
was supposed to take place on tuesday

38
00:01:08,149 --> 00:01:06,400

about six hours after the launch but one

39

00:01:10,550 --> 00:01:08,159

of the engine burns didn't take place as

40

00:01:12,630 --> 00:01:10,560

planned so the soyuz defaulted to a two

41

00:01:14,710 --> 00:01:12,640

day trip to the iss docking on thursday

42

00:01:17,030 --> 00:01:14,720

night to join the onboard crew of rick

43

00:01:18,070 --> 00:01:17,040

mastracchio mikhail turin and koichi

44

00:01:19,350 --> 00:01:18,080

wakata

45

00:01:21,270 --> 00:01:19,360

this week's twitter question is why

46

00:01:23,510 --> 00:01:21,280

aren't there any refrigerators on iss

47

00:01:24,950 --> 00:01:23,520

well there are just not for food there

48

00:01:27,030 --> 00:01:24,960

are several freezers on board the

49

00:01:30,149 --> 00:01:27,040

station called melfis which stands for

50

00:01:32,149 --> 00:01:30,159

-80 laboratory freezer for iss these

51
00:01:34,550 --> 00:01:32,159
freezers store experiment samples as low

52
00:01:36,789 --> 00:01:34,560
as you guessed it minus 80 degrees

53
00:01:38,310 --> 00:01:36,799
celsius this allows these samples to be

54
00:01:40,149 --> 00:01:38,320
stored long term until they're ready to

55
00:01:42,069 --> 00:01:40,159
come back to earth so why don't we store

56
00:01:44,069 --> 00:01:42,079
food in the freezers well refrigerated

57
00:01:46,389 --> 00:01:44,079
food will spoil over time and

58
00:01:48,149 --> 00:01:46,399
refrigerators require a lot of power so

59
00:01:50,469 --> 00:01:48,159
it's better to fly freeze-dried foods

60
00:01:51,590 --> 00:01:50,479
that have a long shelf life make sure to

61
00:01:53,590 --> 00:01:51,600
keep sending us your questions and