

SpaceX

Space to Ground



1
00:00:05,889 --> 00:00:02,790
foreign

2
00:00:08,810 --> 00:00:05,899
[Music]

3
00:00:10,610 --> 00:00:08,820
I'm Kayla LaFrance as the newest

4
00:00:13,310 --> 00:00:10,620
residents of the orbiting laboratory

5
00:00:15,650 --> 00:00:13,320
adjust to their new home another crew

6
00:00:17,930 --> 00:00:15,660
said its goodbyes to space and headed

7
00:00:21,230 --> 00:00:17,940
home for a warm welcome

8
00:00:23,510 --> 00:00:21,240
after 157 days in orbit the

9
00:00:26,390 --> 00:00:23,520
international crew of four that made up

10
00:00:28,790 --> 00:00:26,400
NASA's SpaceX crew 5 splashed down

11
00:00:31,609 --> 00:00:28,800
safely in their dragon spacecraft off

12
00:00:34,549 --> 00:00:31,619
the coast of Tampa Florida on Saturday

13
00:00:37,130 --> 00:00:34,559

the members of crew 5 NASA astronauts

14

00:00:40,130 --> 00:00:37,140

Nicole Mann and Josh Cassida along with

15

00:00:42,830 --> 00:00:40,140

JAXA astronaut Koichi Wakada and Ross

16

00:00:45,830 --> 00:00:42,840

Cosmos Cosmonaut Anna Kerkina traveled

17

00:00:48,610 --> 00:00:45,840

over 66 and a half million miles during

18

00:00:51,770 --> 00:00:48,620

their mission and completed 2

19

00:00:54,110 --> 00:00:51,780

512 orbits around the Earth all while

20

00:00:56,150 --> 00:00:54,120

contributing to a host of Science and

21

00:00:57,770 --> 00:00:56,160

maintenance activities and Technology

22

00:01:00,350 --> 00:00:57,780

demonstrations

23

00:01:02,750 --> 00:01:00,360

while one crew is back on Earth the work

24

00:01:05,149 --> 00:01:02,760

aboard the space station continues with

25

00:01:08,990 --> 00:01:05,159

the arrival of the latest cargo resupply

26
00:01:11,090 --> 00:01:09,000
Mission and liftoff of Sierra 27 go

27
00:01:14,210 --> 00:01:11,100
falcon go dragon

28
00:01:17,630 --> 00:01:14,220
SpaceX cargo Mission 27th launched this

29
00:01:20,149 --> 00:01:17,640
week from complex 39a at NASA's Kennedy

30
00:01:22,609 --> 00:01:20,159
Space Center the following day the cargo

31
00:01:24,710 --> 00:01:22,619
Dragon approached and docked to the

32
00:01:26,870 --> 00:01:24,720
space station at the forward docking

33
00:01:31,310 --> 00:01:26,880
port of the harmony module

34
00:01:33,469 --> 00:01:31,320
aboard crs-27 is over 9 000 pounds of

35
00:01:35,990 --> 00:01:33,479
cargo including new crew Provisions

36
00:01:39,050 --> 00:01:36,000
replacement hardware and new science

37
00:01:41,630 --> 00:01:39,060
payloads some such payloads are two

38
00:01:44,330 --> 00:01:41,640

heart related investigations as part of

39

00:01:45,890 --> 00:01:44,340

the tissue chips in space program a

40

00:01:48,830 --> 00:01:45,900

collaboration between the national

41

00:01:51,410 --> 00:01:48,840

Center for translational Sciences at the

42

00:01:53,870 --> 00:01:51,420

National Institute of Health and the ISS

43

00:01:55,490 --> 00:01:53,880

National Laboratory Cardinal heart 2

44

00:01:58,190 --> 00:01:55,500

will build on the Cardinal heart

45

00:02:00,109 --> 00:01:58,200

investigation a study which earlier

46

00:02:02,749 --> 00:02:00,119

affirmed the hypothesis that

47

00:02:05,389 --> 00:02:02,759

microgravity can adversely influence

48

00:02:07,910 --> 00:02:05,399

engineered heart muscle tissues Cardinal

49

00:02:10,550 --> 00:02:07,920

heart 2 aims to test whether clinically

50

00:02:12,949 --> 00:02:10,560

approved drugs can mitigate the signs of

51
00:02:16,190 --> 00:02:12,959
the abnormal effects seen from the first

52
00:02:18,470 --> 00:02:16,200
study this follow-up study could provide

53
00:02:20,990 --> 00:02:18,480
a deeper understanding of how major

54
00:02:23,809 --> 00:02:21,000
heart cell types respond to drugs in the

55
00:02:25,790 --> 00:02:23,819
space environment and lead to new

56
00:02:28,309 --> 00:02:25,800
Innovations in drug development

57
00:02:31,190 --> 00:02:28,319
strategies on Earth to treat patients

58
00:02:34,550 --> 00:02:31,200
with diseases such as heart failure

59
00:02:37,070 --> 00:02:34,560
also comment on SpaceX 27 is engineered

60
00:02:39,650 --> 00:02:37,080
heart tissues 2 building upon the first

61
00:02:41,990 --> 00:02:39,660
study which investigated changes at the

62
00:02:43,970 --> 00:02:42,000
cellular and tissue level that could

63
00:02:47,150 --> 00:02:43,980

provide early indication of the

64

00:02:49,250 --> 00:02:47,160

development of cardiac disease this new

65

00:02:51,290 --> 00:02:49,260

study will test whether new therapies

66

00:02:53,809 --> 00:02:51,300

can prevent negative effects from

67

00:02:55,970 --> 00:02:53,819

occurring these studies could also help

68

00:02:59,030 --> 00:02:55,980

patients at risk of developing heart

69

00:03:00,890 --> 00:02:59,040

disease back home on Earth as well

70

00:03:03,290 --> 00:03:00,900

and that's face to ground for this week

71

00:03:06,050 --> 00:03:03,300

thanks for watching be sure to join us

72

00:03:08,270 --> 00:03:06,060

on April 3rd when NASA and the Canadian

73

00:03:10,430 --> 00:03:08,280

space agency will announce the crew

74

00:03:13,070 --> 00:03:10,440

they'll take us back to lunar orbit on

75

00:03:14,930 --> 00:03:13,080

Artemis 2. that mission will be the

76

00:03:17,509 --> 00:03:14,940

first crude flight test towards

77

00:03:20,550 --> 00:03:17,519

establishing a long-term presence in

78

00:03:27,070 --> 00:03:20,560

deep space we'll see you next week