
SpacetoGround

1
00:00:07,190 --> 00:00:05,190
houston station on space to ground

2
00:00:09,990 --> 00:00:07,200
welcome to space to ground i'm nella for

3
00:00:12,230 --> 00:00:10,000
ramji a soyuz relocation the return of

4
00:00:14,310 --> 00:00:12,240
the 23rd spacex commercial resupply

5
00:00:16,230 --> 00:00:14,320
mission and working to remove carbon

6
00:00:18,470 --> 00:00:16,240
dioxide from the atmosphere on a

7
00:00:20,790 --> 00:00:18,480
spacecraft what a busy week aboard the

8
00:00:23,670 --> 00:00:20,800
international space station

9
00:00:25,910 --> 00:00:23,680
on tuesday september 28th nasa astronaut

10
00:00:28,470 --> 00:00:25,920
mark vande high and russian cosmonauts

11
00:00:31,189 --> 00:00:28,480
oleg novitskiy and piotr duprov will

12
00:00:33,190 --> 00:00:31,199
take a short trek on the soyuz ms-18

13
00:00:35,830 --> 00:00:33,200

spacecraft relocating it from the

14
00:00:38,389 --> 00:00:35,840
rassvet module to the noka multi-purpose

15
00:00:41,190 --> 00:00:38,399
laboratory module undocking will take

16
00:00:43,270 --> 00:00:41,200
place at 8 20 am eastern you can watch

17
00:00:45,990 --> 00:00:43,280
live coverage on nasa television the

18
00:00:48,310 --> 00:00:46,000
agency's website and the nasa app

19
00:00:50,630 --> 00:00:48,320
a few days later on september 30th

20
00:00:52,470 --> 00:00:50,640
spacex's cargo dragon undocks from the

21
00:00:54,709 --> 00:00:52,480
international space station as it brings

22
00:00:56,790 --> 00:00:54,719
home samples from scientific experiments

23
00:00:58,630 --> 00:00:56,800
aboard the orbiting laboratory live

24
00:01:01,670 --> 00:00:58,640
coverage of the departure will begin at

25
00:01:03,910 --> 00:01:01,680
8 45 a.m eastern don't forget to follow

26
00:01:05,429 --> 00:01:03,920
iss underscore research on twitter for

27
00:01:07,910 --> 00:01:05,439
all of the latest on the science

28
00:01:10,310 --> 00:01:07,920
experiments on their way home

29
00:01:12,149 --> 00:01:10,320
as we turn to science the 4 bed co2

30
00:01:15,590 --> 00:01:12,159
scrubber is being put to the test for

31
00:01:17,429 --> 00:01:15,600
removing carbon dioxide on a spacecraft

32
00:01:19,510 --> 00:01:17,439
based on the current exploration

33
00:01:21,270 --> 00:01:19,520
environmental control and life support

34
00:01:23,749 --> 00:01:21,280
systems and lessons learned from its

35
00:01:25,670 --> 00:01:23,759
nearly 20 years of operation the 4 bed

36
00:01:27,990 --> 00:01:25,680
co2 scrubber includes mechanical

37
00:01:30,230 --> 00:01:28,000
upgrades and an improved longer-lasting

38
00:01:32,469 --> 00:01:30,240

absorbent that reduces erosion and dust

39
00:01:34,230 --> 00:01:32,479
formation this technology could improve

40
00:01:36,550 --> 00:01:34,240
the reliability and performance of

41
00:01:38,550 --> 00:01:36,560
carbon dioxide removal systems in future

42
00:01:40,310 --> 00:01:38,560
spacecraft helping to maintain the

43
00:01:41,749 --> 00:01:40,320
health of crews and ensure mission

44
00:01:43,670 --> 00:01:41,759
success

45
00:01:45,429 --> 00:01:43,680
did you know that alternative reality

46
00:01:47,830 --> 00:01:45,439
and virtual reality serve as helping

47
00:01:49,830 --> 00:01:47,840
hands aboard the space station here on

48
00:01:51,590 --> 00:01:49,840
earth experts are lending a hand to the

49
00:01:53,429 --> 00:01:51,600
astronauts

50
00:01:55,429 --> 00:01:53,439
both virtual reality and augmented

51
00:01:57,590 --> 00:01:55,439
reality serve as support for various

52
00:02:00,310 --> 00:01:57,600
activities aboard the space station one

53
00:02:02,550 --> 00:02:00,320
of these is t2ar which uses augmented

54
00:02:04,550 --> 00:02:02,560
reality to help crew members inspect and

55
00:02:06,789 --> 00:02:04,560
maintain the space station's t2

56
00:02:09,350 --> 00:02:06,799
treadmill acting as a smart assistant

57
00:02:11,110 --> 00:02:09,360
the ar application runs on tablets or

58
00:02:12,949 --> 00:02:11,120
headsets interpreting what the camera

59
00:02:15,350 --> 00:02:12,959
sees and what the crew member does and

60
00:02:17,589 --> 00:02:15,360
suggests the next step to perform

61
00:02:19,670 --> 00:02:17,599
time perception is an ongoing issa

62
00:02:21,990 --> 00:02:19,680
experiment to investigate the perception

63
00:02:23,990 --> 00:02:22,000

of time to humans during space flight

64
00:02:26,229 --> 00:02:24,000
crew members wear a head-mounted vr

65
00:02:28,150 --> 00:02:26,239
display listen to instructions and use a

66
00:02:30,790 --> 00:02:28,160
finger track ball connected to a laptop

67
00:02:32,949 --> 00:02:30,800
to respond to learn more about the use

68
00:02:34,710 --> 00:02:32,959
of alternative and virtual reality

69
00:02:36,550 --> 00:02:34,720
aboard the space station head over to

70
00:02:38,229 --> 00:02:36,560
nasa.gov

71
00:02:39,990 --> 00:02:38,239
that's spacetogram for this week thanks

72
00:02:41,360 --> 00:02:40,000
so much for watching we'll see you next

73
00:02:50,949 --> 00:02:41,370
week