



SPACE TO GROUND

1
00:00:04,789 --> 00:00:02,950
houston station on space to ground

2
00:00:06,309 --> 00:00:04,799
welcome to space to ground your weekly

3
00:00:08,150 --> 00:00:06,319
look at what's happening on board the

4
00:00:10,310 --> 00:00:08,160
international space station i'm dan

5
00:00:12,230 --> 00:00:10,320
hewitt in case you missed it this week

6
00:00:14,390 --> 00:00:12,240
we took a big step towards getting ready

7
00:00:17,109 --> 00:00:14,400
for the journey to mars how

8
00:00:19,189 --> 00:00:17,119
space lettuce for the first time ever

9
00:00:22,150 --> 00:00:19,199
station astronauts ate lettuce that was

10
00:00:24,310 --> 00:00:22,160
grown entirely in space on monday the

11
00:00:26,310 --> 00:00:24,320
crew harvested the latest crop of red

12
00:00:28,070 --> 00:00:26,320
romaine from the veggie experiment and

13
00:00:30,150 --> 00:00:28,080

were given the go to eat

14

00:00:31,669 --> 00:00:30,160

being able to grow food to supplement

15

00:00:33,590 --> 00:00:31,679

astronaut diets will be a big

16

00:00:35,910 --> 00:00:33,600

nutritional benefit to future missions

17

00:00:37,670 --> 00:00:35,920

to mars not to mention a welcome piece

18

00:00:40,790 --> 00:00:37,680

of planet earth for humans spending

19

00:00:42,549 --> 00:00:40,800

months or years in metallic spacecraft

20

00:00:44,229 --> 00:00:42,559

and they made sure to save some of that

21

00:00:46,790 --> 00:00:44,239

fresh food for their russian colleagues

22

00:00:48,950 --> 00:00:46,800

who are busy outside with the space walk

23

00:00:51,910 --> 00:00:48,960

cosmonauts gennady padalka and mikhail

24

00:00:54,470 --> 00:00:51,920

kornenko completed a five-hour 31-minute

25

00:00:56,150 --> 00:00:54,480

spacewalk on monday the pair installed

26
00:00:58,150 --> 00:00:56,160
some equipment to make it easier to get

27
00:01:00,389 --> 00:00:58,160
around outside the russian segment

28
00:01:02,549 --> 00:01:00,399
worked on a few external experiments

29
00:01:04,549 --> 00:01:02,559
took a photo survey and even tossed an

30
00:01:06,149 --> 00:01:04,559
old antenna overboard to burn up in

31
00:01:07,910 --> 00:01:06,159
earth's atmosphere

32
00:01:10,230 --> 00:01:07,920
also over on the russian segment the

33
00:01:12,550 --> 00:01:10,240
progress 58 cargo ship departed on

34
00:01:14,870 --> 00:01:12,560
friday freeing up space for some soyuz

35
00:01:16,390 --> 00:01:14,880
rearranging in the coming weeks

36
00:01:18,070 --> 00:01:16,400
this week's question comes from our

37
00:01:19,510 --> 00:01:18,080
friend aaron on youtube who wants to

38
00:01:22,070 --> 00:01:19,520

know what are the differences between

39

00:01:23,749 --> 00:01:22,080

the u.s and russian space walking suits

40

00:01:25,830 --> 00:01:23,759

well both are designed to operate in

41

00:01:27,109 --> 00:01:25,840

microgravity but there are a few design

42

00:01:29,590 --> 00:01:27,119

differences

43

00:01:32,550 --> 00:01:29,600

one of the biggest is how they're put on

44

00:01:34,149 --> 00:01:32,560

the us emu suit is split into two parts

45

00:01:36,149 --> 00:01:34,159

which means the astronauts put it on

46

00:01:37,270 --> 00:01:36,159

similar to regular clothing shirt and

47

00:01:39,350 --> 00:01:37,280

then pants

48

00:01:41,350 --> 00:01:39,360

meanwhile the russian orlon suit has a

49

00:01:43,109 --> 00:01:41,360

hatch in the back so the cosmonauts can

50

00:01:45,910 --> 00:01:43,119

crawl right into it

51
00:01:49,109 --> 00:01:45,920
astronauts in an emu also are kept at a

52
00:01:52,870 --> 00:01:49,119
lower pressure only 4.3 psi while the

53
00:01:54,389 --> 00:01:52,880
orlon is operated at 5.7 psi

54
00:01:56,230 --> 00:01:54,399
make sure to keep sending us your