



Space**to**Ground

1
00:00:07,349 --> 00:00:05,030
houston station on space to ground

2
00:00:10,150 --> 00:00:07,359
welcome to space to ground i'm kayla

3
00:00:12,390 --> 00:00:10,160
lafrance from science experiments and

4
00:00:14,470 --> 00:00:12,400
in-flight maintenance the crew on board

5
00:00:18,470 --> 00:00:14,480
the space station has been hard at work

6
00:00:21,349 --> 00:00:18,480
this week jaxa astronaut aki hoshide

7
00:00:23,509 --> 00:00:21,359
donned a bio monitor earlier this week

8
00:00:27,109 --> 00:00:23,519
to be a participant in the canadian

9
00:00:29,589 --> 00:00:27,119
space agency's vascular aging study the

10
00:00:32,310 --> 00:00:29,599
biomonitor is a wearable technology

11
00:00:35,030 --> 00:00:32,320
system designed to look and feel as

12
00:00:37,910 --> 00:00:35,040
comfortable as a typical snug t-shirt

13
00:00:40,549 --> 00:00:37,920

but in reality it is actually monitoring

14

00:00:42,869 --> 00:00:40,559

the wearer's heart rate activity level

15

00:00:45,430 --> 00:00:42,879

and breathing rate the data gathered

16

00:00:47,990 --> 00:00:45,440

from the biomonitor along with data from

17

00:00:50,229 --> 00:00:48,000

ultrasounds and blood tests will be sent

18

00:00:52,790 --> 00:00:50,239

back to researchers as part of the

19

00:00:54,790 --> 00:00:52,800

vascular aging experiment which is the

20

00:00:57,510 --> 00:00:54,800

third of a series of scientific

21

00:00:59,590 --> 00:00:57,520

experiments that studies the effects of

22

00:01:01,750 --> 00:00:59,600

weightlessness on astronauts blood

23

00:01:03,750 --> 00:01:01,760

vessels and hearts on board the

24

00:01:06,390 --> 00:01:03,760

international space station

25

00:01:08,950 --> 00:01:06,400

the vascular aging study is looking at

26
00:01:11,190 --> 00:01:08,960
issues known to pose risks to astronauts

27
00:01:12,390 --> 00:01:11,200
health like radiation and insulin

28
00:01:14,230 --> 00:01:12,400
resistance

29
00:01:16,789 --> 00:01:14,240
studying the responses of the

30
00:01:19,429 --> 00:01:16,799
cardiovascular system in space better

31
00:01:21,270 --> 00:01:19,439
equips us to understand how our arteries

32
00:01:24,149 --> 00:01:21,280
age here on earth

33
00:01:27,190 --> 00:01:24,159
on monday nasa announced the fourth and

34
00:01:31,270 --> 00:01:27,200
final member for the upcoming nasa

35
00:01:33,910 --> 00:01:31,280
spacex crew 3 mission to the iss

36
00:01:36,310 --> 00:01:33,920
nasa astronaut caleb barron was selected

37
00:01:38,710 --> 00:01:36,320
to serve as a mission specialist for the

38
00:01:41,990 --> 00:01:38,720

crew 3 mission which is targeted to

39

00:01:44,630 --> 00:01:42,000

launch as early as october 23rd

40

00:01:47,830 --> 00:01:44,640

baron will be joining crew members nasa

41

00:01:49,670 --> 00:01:47,840

astronauts raja chari and tom marshburn

42

00:01:52,389 --> 00:01:49,680

as the mission's commander pilot

43

00:01:55,270 --> 00:01:52,399

respectively and european space agency

44

00:01:57,749 --> 00:01:55,280

astronaut matthias maurer who will also

45

00:01:59,670 --> 00:01:57,759

serve as a mission specialist

46

00:02:02,230 --> 00:01:59,680

this will be the first space flight for

47

00:02:05,270 --> 00:02:02,240

baron who became a nasa astronaut in

48

00:02:06,870 --> 00:02:05,280

january 2020 after completing two years

49

00:02:09,749 --> 00:02:06,880

of training

50

00:02:12,309 --> 00:02:09,759

this week's question comes from ashlynn

51
00:02:13,430 --> 00:02:12,319
a fifth grader from new york who wanted

52
00:02:17,030 --> 00:02:13,440
to know

53
00:02:19,670 --> 00:02:17,040
what happens to garbage on the iss

54
00:02:22,390 --> 00:02:19,680
that is a great question there is no

55
00:02:24,869 --> 00:02:22,400
trash pickup in space which means that

56
00:02:27,270 --> 00:02:24,879
the crew has to store their trash in

57
00:02:28,390 --> 00:02:27,280
special bags called jettison stowage

58
00:02:30,309 --> 00:02:28,400
bags

59
00:02:32,790 --> 00:02:30,319
after a cargo vehicle arrives at the

60
00:02:35,110 --> 00:02:32,800
station the crew will load it with all

61
00:02:37,270 --> 00:02:35,120
of their trash bags foam cushions and

62
00:02:39,750 --> 00:02:37,280
other items to be removed

63
00:02:42,710 --> 00:02:39,760

these vehicles will depart filled with

64

00:02:44,869 --> 00:02:42,720

thousands of pounds of disposable items

65

00:02:47,750 --> 00:02:44,879

ultimately burning up in the atmosphere

66

00:02:50,070 --> 00:02:47,760

during re-entry the nanoracks bishop

67

00:02:52,949 --> 00:02:50,080

airlock which was recently installed on

68

00:02:55,750 --> 00:02:52,959

station also has the ability to jettison

69

00:02:58,470 --> 00:02:55,760

trash right from the orbiting lab to be

70

00:03:00,550 --> 00:02:58,480

burned up in the atmosphere

71

00:03:02,630 --> 00:03:00,560

and that's face to ground for this week

72

00:03:11,110 --> 00:03:02,640

thanks for watching we'll see you next

73

00:03:19,910 --> 00:03:13,840

subscribe for more space