



Spaceto**Ground**

1
00:00:06,950 --> 00:00:05,030
houston station on space to ground

2
00:00:09,589 --> 00:00:06,960
welcome to space to ground i'm sandra

3
00:00:11,430 --> 00:00:09,599
jones with crew 3 now safely back on

4
00:00:13,589 --> 00:00:11,440
earth following their six-month mission

5
00:00:15,430 --> 00:00:13,599
to the international space station

6
00:00:17,590 --> 00:00:15,440
science continues aboard the orbital

7
00:00:19,269 --> 00:00:17,600
laboratory and preps are underway for a

8
00:00:20,550 --> 00:00:19,279
new vehicle to arrive to the space

9
00:00:23,109 --> 00:00:20,560
station

10
00:00:25,509 --> 00:00:23,119
crew 3 which includes nasa astronauts

11
00:00:27,509 --> 00:00:25,519
raja chari tom marshburn kayla barron

12
00:00:29,509 --> 00:00:27,519
and european space agency astronaut

13
00:00:31,669 --> 00:00:29,519

matthias maurer splash down off the

14

00:00:34,069 --> 00:00:31,679

coast of tampa florida in the wee hours

15

00:00:35,990 --> 00:00:34,079

on may 6th wrapping up their mission and

16

00:00:36,790 --> 00:00:36,000

bringing science samples back to planet

17

00:00:38,790 --> 00:00:36,800

earth

18

00:00:40,630 --> 00:00:38,800

riding alongside the astronauts were

19

00:00:42,069 --> 00:00:40,640

samples from the space biofilms

20

00:00:44,310 --> 00:00:42,079

investigation

21

00:00:46,869 --> 00:00:44,320

microbes can join to form what is called

22

00:00:48,630 --> 00:00:46,879

biofilm which can form on surfaces and

23

00:00:50,950 --> 00:00:48,640

cause issues with equipment like

24

00:00:52,869 --> 00:00:50,960

spacesuits and water recycling units

25

00:00:54,630 --> 00:00:52,879

they can also increase the risk of human

26

00:00:56,389 --> 00:00:54,640

illnesses so we need to better

27

00:00:59,110 --> 00:00:56,399

understand them to enable safe

28

00:01:01,270 --> 00:00:59,120

long-duration human space exploration

29

00:01:03,590 --> 00:01:01,280

astronauts grew biofilms on surface

30

00:01:06,070 --> 00:01:03,600

samples like stainless steel a titanium

31

00:01:08,230 --> 00:01:06,080

alloy silicon as well as a surface that

32

00:01:10,149 --> 00:01:08,240

was treated with a new lubricant to see

33

00:01:13,109 --> 00:01:10,159

if it affects the formation or growth of

34

00:01:15,190 --> 00:01:13,119

biomolds biofilm formation also poses a

35

00:01:16,870 --> 00:01:15,200

health hazard on earth what we learned

36

00:01:18,630 --> 00:01:16,880

from this experiment could also have

37

00:01:20,550 --> 00:01:18,640

applications for protecting the health

38

00:01:23,109 --> 00:01:20,560

of people on the ground

39

00:01:25,109 --> 00:01:23,119

crew 3 participated in hundreds of other

40

00:01:26,950 --> 00:01:25,119

science investigations and technology

41

00:01:29,190 --> 00:01:26,960

demonstrations during their mission

42

00:01:31,190 --> 00:01:29,200

including five independent plant growth

43

00:01:33,030 --> 00:01:31,200

experiments and a first of its kind

44

00:01:35,429 --> 00:01:33,040

archaeological study of the space

45

00:01:37,350 --> 00:01:35,439

station this valuable research will help

46

00:01:39,510 --> 00:01:37,360

to prepare humans for future space

47

00:01:41,590 --> 00:01:39,520

exploration missions while generating

48

00:01:43,109 --> 00:01:41,600

innovations and benefits for humanity

49

00:01:45,190 --> 00:01:43,119

here on earth

50

00:01:47,749 --> 00:01:45,200

coming soon to the international space

51
00:01:49,109 --> 00:01:47,759
station boeing's operational flight test

52
00:01:50,870 --> 00:01:49,119
2.

53
00:01:53,030 --> 00:01:50,880
earlier this week the nasa and boeing

54
00:01:55,749 --> 00:01:53,040
team participated in a flight readiness

55
00:01:57,429 --> 00:01:55,759
review ahead of boeing's oft2 test

56
00:01:59,429 --> 00:01:57,439
flight which is slated to launch from

57
00:02:01,270 --> 00:01:59,439
the kennedy space center in florida no

58
00:02:03,030 --> 00:02:01,280
earlier than may 19th

59
00:02:05,030 --> 00:02:03,040
you can hear more about this test flight

60
00:02:07,350 --> 00:02:05,040
on this week's episode of houston we

61
00:02:09,990 --> 00:02:07,360
have a podcast where boeing starliner

62
00:02:11,510 --> 00:02:10,000
project engineer amy como discussed the

63
00:02:14,470 --> 00:02:11,520

mission in detail

64

00:02:18,229 --> 00:02:14,480

check it out on nasa.gov podcasts apple

65

00:02:20,309 --> 00:02:18,239

podcast google podcast and soundcloud

66

00:02:21,830 --> 00:02:20,319

and that's space to ground for this week

67

00:02:22,100 --> 00:02:21,840

thanks for watching we'll see you next

68

00:02:34,229 --> 00:02:22,110

week

69

00:02:36,890 --> 00:02:34,239

[Music]