
SpacetoGround

1
00:00:06,869 --> 00:00:04,550
houston station on space to ground

2
00:00:09,509 --> 00:00:06,879
welcome to the 400th episode of space to

3
00:00:11,270 --> 00:00:09,519
ground i'm leah cheshire mustachio

4
00:00:12,870 --> 00:00:11,280
two japanese space flight participants

5
00:00:14,950 --> 00:00:12,880
arrived at the orbiting laboratory

6
00:00:16,790 --> 00:00:14,960
earlier this week

7
00:00:18,230 --> 00:00:16,800
on wednesday december 8th three people

8
00:00:20,070 --> 00:00:18,240
launched to the international space

9
00:00:21,590 --> 00:00:20,080
station aboard the soyuz ms-20

10
00:00:23,830 --> 00:00:21,600
spacecraft

11
00:00:25,910 --> 00:00:23,840
spaceflight participants usaku mezawa

12
00:00:28,390 --> 00:00:25,920
and yosoharano were led by commander and

13
00:00:30,710 --> 00:00:28,400

roscosmos cosmonaut alexander misurkin

14
00:00:32,630 --> 00:00:30,720
as the spacecraft launched at 2 38 a.m

15
00:00:34,950 --> 00:00:32,640
eastern time and docked just over six

16
00:00:36,630 --> 00:00:34,960
hours later the trio joined the seven

17
00:00:38,630 --> 00:00:36,640
astronauts and cosmonauts living aboard

18
00:00:41,590 --> 00:00:38,640
the space station for a scheduled 11-day

19
00:00:43,910 --> 00:00:41,600
mission before returning to earth

20
00:00:46,150 --> 00:00:43,920
this week nasa announced the 10 newest

21
00:00:48,150 --> 00:00:46,160
astronaut candidates out of 12 000

22
00:00:50,389 --> 00:00:48,160
applicants let's give them a big round

23
00:00:51,750 --> 00:00:50,399
of applause the 2021 nasa astronaut

24
00:00:54,150 --> 00:00:51,760
candidates were announced on monday

25
00:00:55,830 --> 00:00:54,160
december 6th over the next two years

26
00:00:57,510 --> 00:00:55,840
these astronauts will train at nasa's

27
00:00:59,830 --> 00:00:57,520
johnson space center in disciplines like

28
00:01:02,950 --> 00:00:59,840
space station systems russian language

29
00:01:04,710 --> 00:01:02,960
spacewalk training t-38 flying and more

30
00:01:05,990 --> 00:01:04,720
these candidates may someday travel to

31
00:01:07,910 --> 00:01:06,000
the space station commercial

32
00:01:10,390 --> 00:01:07,920
destinations and eventually the moon

33
00:01:12,070 --> 00:01:10,400
with the artemis program

34
00:01:14,950 --> 00:01:12,080
a new facility is finding its home

35
00:01:17,030 --> 00:01:14,960
aboard the orbiting laboratory this week

36
00:01:19,510 --> 00:01:17,040
on tuesday installation began of the

37
00:01:21,109 --> 00:01:19,520
flow boiling and condensation experiment

38
00:01:22,870 --> 00:01:21,119

the goal of this new facility is to

39
00:01:25,109 --> 00:01:22,880
collect data about two-phase flow and

40
00:01:26,789 --> 00:01:25,119
heat transfer in microgravity we'll need

41
00:01:28,710 --> 00:01:26,799
to generate more power during longer

42
00:01:30,870 --> 00:01:28,720
space missions meaning the heat produced

43
00:01:32,630 --> 00:01:30,880
needs to be dissipated

44
00:01:34,469 --> 00:01:32,640
two-phase thermal management systems

45
00:01:36,710 --> 00:01:34,479
reduce the size and weight of the system

46
00:01:38,550 --> 00:01:36,720
and make heat removal more efficient

47
00:01:40,310 --> 00:01:38,560
this experiment is yet another way the

48
00:01:41,830 --> 00:01:40,320
work being done on the space station

49
00:01:43,670 --> 00:01:41,840
continues to prepare us for future

50
00:01:46,550 --> 00:01:43,680
destinations deeper into the solar

51
00:01:57,300 --> 00:01:48,230
that's all for today on space to ground

52
00:01:57,310 --> 00:02:01,030
[Music]

53
00:02:09,830 --> 00:02:03,710
subscribe for more space