
SpacetoGround

1
00:00:07,190 --> 00:00:05,110
houston station on space to ground

2
00:00:09,350 --> 00:00:07,200
welcome to space to ground i'm kayla

3
00:00:11,350 --> 00:00:09,360
lafrance the crew on board the space

4
00:00:14,230 --> 00:00:11,360
station put a lot of miles on their

5
00:00:17,189 --> 00:00:14,240
space walking shoes this week

6
00:00:20,230 --> 00:00:17,199
on sunday june 20th nasa astronaut shane

7
00:00:21,990 --> 00:00:20,240
kimbrough and esa astronaut thomas

8
00:00:24,550 --> 00:00:22,000
set out on the second of three

9
00:00:28,310 --> 00:00:24,560
spacewalks tasked with installing two

10
00:00:31,349 --> 00:00:28,320
new irosa or iss rollout solar arrays

11
00:00:33,750 --> 00:00:31,359
onto the p6 truss to augment power

12
00:00:36,069 --> 00:00:33,760
capability for the orbiting laboratory

13
00:00:38,069 --> 00:00:36,079

at the end of their 6 hour and 28

14
00:00:40,310 --> 00:00:38,079
minutes spacewalk the duo had

15
00:00:42,150 --> 00:00:40,320
successfully completed the solar array

16
00:00:45,350 --> 00:00:42,160
installation and deployment for the

17
00:00:48,310 --> 00:00:45,360
first irosa the array measures 60 feet

18
00:00:51,350 --> 00:00:48,320
long and 15 feet wide and will generate

19
00:00:52,470 --> 00:00:51,360
20 kilowatts of power on the 2b power

20
00:00:54,549 --> 00:00:52,480
channel

21
00:00:57,990 --> 00:00:54,559
five days later brought kimbrough and

22
00:01:00,389 --> 00:00:58,000
pasquet back out to the far reaching p-6

23
00:01:03,510 --> 00:01:00,399
truss to work on the installation of the

24
00:01:05,590 --> 00:01:03,520
second new solar array these two new

25
00:01:09,429 --> 00:01:05,600
solar arrays arrived recently on

26
00:01:12,390 --> 00:01:09,439
spacex's 22nd cargo vehicle and are the

27
00:01:14,469 --> 00:01:12,400
first of six planned arrays when the six

28
00:01:17,910 --> 00:01:14,479
new solar arrays are installed they will

29
00:01:20,070 --> 00:01:17,920
provide up to 120 kilowatts of augmented

30
00:01:22,070 --> 00:01:20,080
power during orbital daytime to the

31
00:01:24,710 --> 00:01:22,080
space station ensuring continued

32
00:01:27,030 --> 00:01:24,720
habitability and science utilization for

33
00:01:28,950 --> 00:01:27,040
many more years to come

34
00:01:31,270 --> 00:01:28,960
science was still in focus this week

35
00:01:32,950 --> 00:01:31,280
despite the crew's busy spacewalking

36
00:01:35,910 --> 00:01:32,960
schedule

37
00:01:38,230 --> 00:01:35,920
jaxa astronaut aki hoshide removed a

38
00:01:40,789 --> 00:01:38,240

sample tray from the sample chamber of

39
00:01:43,190 --> 00:01:40,799
the lyophilization ii experiment

40
00:01:44,510 --> 00:01:43,200
currently in the microgravity science

41
00:01:47,270 --> 00:01:44,520
glovebox

42
00:01:49,109 --> 00:01:47,280
lyophilization or freeze drying is a

43
00:01:51,030 --> 00:01:49,119
common method for formulating

44
00:01:53,469 --> 00:01:51,040
pharmaceuticals to improve their

45
00:01:56,310 --> 00:01:53,479
stability and shelf life the

46
00:01:59,350 --> 00:01:56,320
lyophilization ii experiment is designed

47
00:02:01,510 --> 00:01:59,360
to examine if and how microgravity

48
00:02:03,830 --> 00:02:01,520
affects freeze-dried materials

49
00:02:05,910 --> 00:02:03,840
differently and to understand the

50
00:02:06,870 --> 00:02:05,920
influence of gravity on their physical

51
00:02:09,109 --> 00:02:06,880
state

52
00:02:11,990 --> 00:02:09,119
the phrase drying process has potential

53
00:02:13,990 --> 00:02:12,000
use for long-term storage of medications

54
00:02:15,990 --> 00:02:14,000
and other resources on future

55
00:02:16,949 --> 00:02:16,000
exploration missions to the moon and

56
00:02:19,030 --> 00:02:16,959
mars

57
00:02:21,510 --> 00:02:19,040
improvements in this process could

58
00:02:23,270 --> 00:02:21,520
support efforts to use it to deliver

59
00:02:25,750 --> 00:02:23,280
products with similar physical

60
00:02:28,630 --> 00:02:25,760
properties here on earth as well

61
00:02:31,670 --> 00:02:28,640
the station crew also began to prepare

62
00:02:33,990 --> 00:02:31,680
for a busy week of cargo traffic

63
00:02:36,869 --> 00:02:34,000

make sure to join us on tuesday june

64
00:02:40,309 --> 00:02:36,879
29th to watch the departure of northrup

65
00:02:42,790 --> 00:02:40,319
grumman cygnus on the crs-15 mission

66
00:02:45,190 --> 00:02:42,800
from the international space station and

67
00:02:47,990 --> 00:02:45,200
later from the baikonur cosmodrome the

68
00:02:49,430 --> 00:02:48,000
progress 78 cargo ship will launch to

69
00:02:51,509 --> 00:02:49,440
the space station

70
00:02:55,110 --> 00:02:51,519
you can follow coverage of both events

71
00:02:56,710 --> 00:02:55,120
on nasa tv the agency's website and the

72
00:02:58,630 --> 00:02:56,720
nasa app

73
00:03:00,550 --> 00:02:58,640
and that's space to ground for this week

74
00:03:19,110 --> 00:03:00,560
thanks for watching we'll see you next