SpacetoGround

1
00:00:03,040 --> 00:00:05,170
"HOUSTON, STATION ON SPACE TO GROUND."

2
00:00:05,170 --> 00:00:08,029
WELCOME TO SPACE TO GROUND, I AM KAYLA LAFRANCE.

3
00:00:08,029 --> 00:00:10,230
FROM A SUCCESSFUL 2ND SPACEWALK

4
00:00:10,230 --> 00:00:12,330
TO THE FIRST HARVEST OF THE YEAR,

5
00:00:12,330 --> 00:00:16,049
IT WAS A BUSY WEEK ONBOARD THE SPACE STATION.

6
00:00:16,049 --> 00:00:18,640
THIS WEEK NASA ASTRONAUTS VICTOR GLOVER

7
00:00:18,640 --> 00:00:20,250
AND MIKE HOPKINS COMPLETED

8
00:00:20,250 --> 00:00:22,930
THE SECOND SPACEWALK OF THE YEAR.

9
00:00:22,930 --> 00:00:25,410
THE DUO SPENT 5 HOURS AND 20 MINUTES

10
00:00:25,410 --> 00:00:27,890
OUTSIDE THE ORBITING LABORATORY TO COMPLETE

11
00:00:27,890 --> 00:00:30,950
THE WORK REQUIRED TO FINISH BATTERY UPGRADES

12
00:00:30,950 --> 00:00:34,620
THAT PROVIDE POWER FOR THE STATION'S SOLAR
ARRAYS.

13

00:00:34,620 --> 00:00:36,050
THEY ALSO REPLACED SEVERAL

14
00:00:36,050 --> 00:00:38,540
OF THE STATION'S EXTERNAL CAMERAS.

15
00:00:38,540 --> 00:00:41,110
THIS SPACEWALK CONCLUDES A FOUR-YEAR EFFORT

16
00:00:41,110 --> 00:00:42,750
TO UPGRADE THE BATTERIES OF

17
00:00:42,750 --> 00:00:45,850
THE INTERNATIONAL SPACE STATION'S POWER
SYSTEM,

18
00:00:45,850 --> 00:00:48,070
REPLACING ALL 48 NICKEL-HYDROGEN BATTERIES

19
00:00:48,070 --> 00:00:51,240
WITH 24 NEW LITHIUM-ION BATTERIES.

20
00:00:51,240 --> 00:00:53,030
TWO ADDITIONAL SPACEWALKS

21
00:00:53,030 --> 00:00:54,900
ARE PLANNED FOR THE EARLY SPRING.

22
00:00:54,900 --> 00:00:57,010
DURING THE NEXT SPACEWALK, VICTOR GLOVER

23
00:00:57,010 --> 00:01:00,230
WILL BE JOINED BY NASA ASTRONAUT KATE RUBINS,

24
00:01:00,230 --> 00:01:02,440
AND THE PAIR WILL PREPARE THE STATION

25
00:01:02,440 --> 00:01:03,850

FOR THE FUTURE INSTALLATION

26
00:01:03,850 --> 00:01:06,250
OF NEW SOLAR ARRAYS TO INCREASE

27
00:01:06,250 --> 00:01:09,260
THE STATION'S EXISTING POWER SUPPLY.

28
00:01:09,260 --> 00:01:11,710
NASA AND SPACEX ARE TARGETING

29
00:01:11,710 --> 00:01:14,070
NO EARLIER THAN APRIL 20,

30
00:01:14,070 --> 00:01:18,990
FOR NASA'S SPACEX CREW-2 MISSION TO THE
SPACE STATION.

31
00:01:18,990 --> 00:01:21,070
NASA ASTRONAUTS SHANE KIMBROUGH

32
00:01:21,070 --> 00:01:23,650
AND MEGAN MCARTHUR WILL SERVE AS SPACECRAFT

33
00:01:23,650 --> 00:01:26,240
COMMANDER AND PILOT, RESPECTIVELY.

34
00:01:26,240 --> 00:01:28,420
JAXA ASTRONAUT AKI HOSHIDE,

35
00:01:28,420 --> 00:01:31,510
AND ESA ASTRONAUT THOMAS PESQUET

36
00:01:31,510 --> 00:01:34,140
WILL JOIN AS MISSION SPECIALISTS.

37
00:01:34,140 --> 00:01:36,680
CREW-2 ALSO IS EXPECTED TO ARRIVE

38
00:01:36,680 --> 00:01:38,640
AT THE SPACE STATION TO OVERLAP

39
00:01:38,640 --> 00:01:40,251
WITH THE ASTRONAUTS THAT FLEW TO

40
00:01:40,251 --> 00:01:42,940
THE STATION AS PART OF THE AGENCY'S

41
00:01:42,940 --> 00:01:45,000
SPACEX CREW-1 MISSION.

42
00:01:45,000 --> 00:01:47,420
THE RETURN OF CREW-1 IS CURRENTLY SCHEDULED

43
00:01:47,420 --> 00:01:49,689
FOR LATE APRIL OR EARLY MAY.

44
00:01:49,689 --> 00:01:54,080
CREW-2 ASTRONAUTS ARE SET TO RETURN THIS
FALL.

45
00:01:54,080 --> 00:01:56,020
THIS WEEK WAS ALSO HARVEST TIME

46
00:01:56,020 --> 00:01:57,950
ON THE ORBITING LABORATORY FOR

47
00:01:57,950 --> 00:02:00,770
THE ON-GOING VEGETABLE PRODUCTION SYSTEM,

48
00:02:00,770 --> 00:02:03,270
OR VEGGIE PAYLOAD.

49
00:02:03,270 --> 00:02:06,369
THE CREW ONBOARD TAKE TURNS GROWING AND CULTIVATING

50
00:02:06,369 --> 00:02:08,509
THE SCIENTIFIC PAYLOAD AIMED AT

51
00:02:08,509 --> 00:02:10,759
GROWING PLANTS IN MICRO-GRAVITY.

52
00:02:10,759 --> 00:02:12,840
ASTRONAUT MIKE HOPKINS NOTICED

53
00:02:12,840 --> 00:02:14,260
THAT SOME OF THE PLANTS WERE

54
00:02:14,260 --> 00:02:15,841
STRUGGLING TO THRIVE.

55
00:02:15,841 --> 00:02:17,299
OUT OF THE DIFFERENT VARIETIES

56
00:02:17,299 --> 00:02:19,519
OF MUSTARDS AND LETTUCES GROWING

57
00:02:19,519 --> 00:02:21,510
IN SPECIAL “PILLOWS” CONTAINING

58
00:02:21,510 --> 00:02:24,249
CLAY-BASED GROWTH MEDIA AND FERTILIZER,

59
00:02:24,249 --> 00:02:26,439
TWO PLANT PILLOWS CONTAINING

60
00:02:26,439 --> 00:02:28,239
‘OUTREDGEOUS’ RED ROMAINE AND

61
00:02:28,239 --> 00:02:31,829
‘DRAGOON’ LETTUCE SEEDS WERE GERMINATING
SLOWLY,

62

00:02:31,829 --> 00:02:34,790
GROWING WELL BEHIND THE OTHER PLANTS.

63
00:02:34,790 --> 00:02:37,340
IN MID JANUARY, IT WAS DECIDED THAT

64
00:02:37,340 --> 00:02:41,928
THE CREW WOULD PERFORM THE FIRST EVER SPACE
TRANSPLANT,

65
00:02:41,928 --> 00:02:43,849
TRANSFERRING EXTRA SPROUTS

66
00:02:43,849 --> 00:02:46,409
FROM THRIVING PLANT PILLOWS INTO

67
00:02:46,409 --> 00:02:48,943
TWO OF THE STRUGGLING PILLOWS.

68
00:02:48,943 --> 00:02:51,200
ON EARTH THIS TECHNIQUE WOULD BE RISKY

69
00:02:51,200 --> 00:02:53,590
FOR PLANTS IN THAT DELICATE STATE,

70
00:02:53,590 --> 00:02:57,530
HOWEVER, THIS FIRST COSMIC TRANSPLANT WAS
SUCCESSFUL,

71
00:02:57,530 --> 00:03:02,569
AND ALL OF THE SPROUTS WERE HEALTHY AND READY
FOR THIS WEEK'S HARVEST.

72
00:03:02,569 --> 00:03:04,784
AND THAT'S SPACE TO GROUND FOR THIS WEEK.