



# Space to Ground

1  
00:00:07,430 --> 00:00:05,430

[Music]

2  
00:00:10,629 --> 00:00:07,440

welcome to space to ground i'm kayla

3  
00:00:12,870 --> 00:00:10,639

lafrance as 2022 reaches its halfway

4  
00:00:14,629 --> 00:00:12,880

mark we are taking a look at all the

5  
00:00:17,109 --> 00:00:14,639

exciting events on the orbiting

6  
00:00:19,429 --> 00:00:17,119

laboratory from logistics to science

7  
00:00:21,590 --> 00:00:19,439

exploration record-breaking and

8  
00:00:23,670 --> 00:00:21,600

history-making missions this is our

9  
00:00:25,349 --> 00:00:23,680

half-time report

10  
00:00:27,589 --> 00:00:25,359

have you been following along with us

11  
00:00:30,390 --> 00:00:27,599

this year if you have you would have

12  
00:00:32,950 --> 00:00:30,400

seen that russian american italian and

13  
00:00:36,150 --> 00:00:32,960

german astronauts have traveled to or

14

00:00:38,150 --> 00:00:36,160

from the station a total of 18 people

15

00:00:39,750 --> 00:00:38,160

have called the orbiting laboratory home

16

00:00:41,510 --> 00:00:39,760

so far this year

17

00:00:43,990 --> 00:00:41,520

three different crews have launched to

18

00:00:46,150 --> 00:00:44,000

the station including the axiom 1

19

00:00:48,950 --> 00:00:46,160

mission the first fully private

20

00:00:50,869 --> 00:00:48,960

astronaut mission to the iss the crews

21

00:00:53,189 --> 00:00:50,879

joined their fellow flyers aboard the

22

00:00:55,350 --> 00:00:53,199

station working together to continue the

23

00:00:56,869 --> 00:00:55,360

mission of scientific research and

24

00:00:59,270 --> 00:00:56,879

microgravity

25

00:01:01,830 --> 00:00:59,280

these crews have participated in a total

26

00:01:03,510 --> 00:01:01,840

of five evas in support of station

27

00:01:05,670 --> 00:01:03,520

operations this year

28

00:01:08,469 --> 00:01:05,680

two u.s spacewalks were part of the

29

00:01:11,270 --> 00:01:08,479

installation of irosa the continuing

30

00:01:13,510 --> 00:01:11,280

upgrade of the station solar arrays and

31

00:01:15,590 --> 00:01:13,520

three russian spacewalks in support of

32

00:01:18,710 --> 00:01:15,600

the new nyoka module and the

33

00:01:21,270 --> 00:01:18,720

installation of the european robotic arm

34

00:01:24,469 --> 00:01:21,280

the crews have also greeted three cargo

35

00:01:27,190 --> 00:01:24,479

vehicles which brought over 14 000

36

00:01:28,469 --> 00:01:27,200

pounds of food equipment and science to

37

00:01:30,630 --> 00:01:28,479

the iss

38

00:01:33,670 --> 00:01:30,640

and speaking of science here are some of

39

00:01:36,550 --> 00:01:33,680

the standout moments so far this year

40

00:01:38,870 --> 00:01:36,560

recent scientific investigations include

41

00:01:41,990 --> 00:01:38,880

skin aging and tumor cells

42

00:01:44,469 --> 00:01:42,000

test of technology for oxygen production

43

00:01:45,910 --> 00:01:44,479

batteries and growing plants in the

44

00:01:47,990 --> 00:01:45,920

space environment

45

00:01:50,469 --> 00:01:48,000

earlier this year the lambda vision

46

00:01:53,350 --> 00:01:50,479

research team was able to manufacture a

47

00:01:54,469 --> 00:01:53,360

200 layer film for the first time aboard

48

00:01:56,709 --> 00:01:54,479

the station

49

00:01:59,190 --> 00:01:56,719

this serves as an important step towards

50

00:02:02,149 --> 00:01:59,200

the creation of artificial retinas in

51  
00:02:04,230 --> 00:02:02,159  
microgravity the 12 express racks that

52  
00:02:05,990 --> 00:02:04,240  
support many of the science experiments

53  
00:02:09,350 --> 00:02:06,000  
on the space station reached an

54  
00:02:12,390 --> 00:02:09,360  
accumulated 1 million hours of total

55  
00:02:15,030 --> 00:02:12,400  
power run time while the acme series of

56  
00:02:18,630 --> 00:02:15,040  
combustion investigations was retired

57  
00:02:20,949 --> 00:02:18,640  
after lighting more than 1500 flames and

58  
00:02:22,670 --> 00:02:20,959  
taking a page from science fiction we

59  
00:02:26,150 --> 00:02:22,680  
learned that the technology of

60  
00:02:28,949 --> 00:02:26,160  
holoportation was used to teleport 3d

61  
00:02:29,990 --> 00:02:28,959  
holograms of doctors onto the space

62  
00:02:31,830 --> 00:02:30,000  
station

63  
00:02:34,150 --> 00:02:31,840

the first half of the year has ushered

64

00:02:36,949 --> 00:02:34,160

in several new history making moments

65

00:02:39,350 --> 00:02:36,959

and milestones for the space station

66

00:02:41,350 --> 00:02:39,360

astronaut mark vande high set a new

67

00:02:43,470 --> 00:02:41,360

record for longest continuous space

68

00:02:46,949 --> 00:02:43,480

flight by an american

69

00:02:49,110 --> 00:02:46,959

355 days what we learn from his extended

70

00:02:51,509 --> 00:02:49,120

mission will help us keep astronauts

71

00:02:52,949 --> 00:02:51,519

safe and healthy on future deep space

72

00:02:55,670 --> 00:02:52,959

missions

73

00:02:56,790 --> 00:02:55,680

and liftoff starliner is headed back to

74

00:02:59,190 --> 00:02:56,800

space

75

00:03:02,710 --> 00:02:59,200

we also saw the successful test flight

76  
00:03:05,110 --> 00:03:02,720  
of starliner the boeing oft2 mission was

77  
00:03:08,309 --> 00:03:05,120  
the latest step on the way to the first

78  
00:03:11,110 --> 00:03:08,319  
crewed flight of the new spacecraft

79  
00:03:13,589 --> 00:03:11,120  
the second half of 2022 will be just as

80  
00:03:15,910 --> 00:03:13,599  
packed with exciting new events

81  
00:03:18,949 --> 00:03:15,920  
we'll see the return to earth of spacex

82  
00:03:21,190 --> 00:03:18,959  
crew 4 the launch of crew 5 from florida

83  
00:03:23,670 --> 00:03:21,200  
and the launch of a new soyuz crew

84  
00:03:26,070 --> 00:03:23,680  
beginning their journey to the iss

85  
00:03:28,470 --> 00:03:26,080  
several spacewalks are also on the book

86  
00:03:31,190 --> 00:03:28,480  
through the fall as well as more cargo

87  
00:03:34,070 --> 00:03:31,200  
vehicles from both spacex and northrop

88  
00:03:37,190 --> 00:03:34,080

grumman follow us on social media or

89

00:03:39,509 --> 00:03:37,200

head over to nasa tv the nasa app or the

90

00:03:41,430 --> 00:03:39,519

agency's website for what should be an

91

00:03:43,350 --> 00:03:41,440

exciting six months

92

00:03:45,270 --> 00:03:43,360

and that's space to ground for this week

93

00:03:46,040 --> 00:03:45,280

thanks for watching we'll see you next