

2022

Space**to**Ground

1
00:00:05,530 --> 00:00:02,790
foreign

2
00:00:08,870 --> 00:00:05,540
[Music]

3
00:00:10,910 --> 00:00:08,880
I'm Dan Hewitt 2022 is another

4
00:00:13,009 --> 00:00:10,920
transformational year on the

5
00:00:14,930 --> 00:00:13,019
International Space Station we broke

6
00:00:17,570 --> 00:00:14,940
some records welcomed some new space

7
00:00:20,570 --> 00:00:17,580
Travelers and took a major step at

8
00:00:23,570 --> 00:00:20,580
expanding our space Fleet which is never

9
00:00:25,490 --> 00:00:23,580
not going to be cool to say

10
00:00:28,070 --> 00:00:25,500
touchdown

11
00:00:31,130 --> 00:00:28,080
Mark Vande hi and Peoria dubarov back

12
00:00:33,709 --> 00:00:31,140
home one year after leaving the planet

13
00:00:36,350 --> 00:00:33,719

NASA's Mark vandehei broke the record

14

00:00:39,049 --> 00:00:36,360

for the longest single space flight in

15

00:00:42,110 --> 00:00:39,059

history by an American when he came home

16

00:00:45,830 --> 00:00:42,120

in March of this year mark and Cosmonaut

17

00:00:48,889 --> 00:00:45,840

pyoto dubrov spent an astonishing 355

18

00:00:50,869 --> 00:00:48,899

days in space giving researchers on

19

00:00:53,510 --> 00:00:50,879

Earth the chance to observe the effects

20

00:00:56,150 --> 00:00:53,520

of living and working in space for a

21

00:00:58,729 --> 00:00:56,160

really long time we have more than 20

22

00:01:01,189 --> 00:00:58,739

years worth of data on dozens of humans

23

00:01:03,529 --> 00:01:01,199

living in microgravity for six months at

24

00:01:05,750 --> 00:01:03,539

a time but only a handful of data points

25

00:01:08,090 --> 00:01:05,760

for periods longer than that with

26
00:01:10,969 --> 00:01:08,100
round-trip missions to Mars expected to

27
00:01:13,310 --> 00:01:10,979
last years space station continues to

28
00:01:15,410 --> 00:01:13,320
serve as a vital Proving Ground to make

29
00:01:17,450 --> 00:01:15,420
sure that we'll be ready to take care of

30
00:01:19,789 --> 00:01:17,460
those first explorers

31
00:01:22,070 --> 00:01:19,799
this spring also had some historical

32
00:01:24,710 --> 00:01:22,080
firsts including the first ever private

33
00:01:26,810 --> 00:01:24,720
astronaut Mission with ax1

34
00:01:29,330 --> 00:01:26,820
axiom's first space flight brought a

35
00:01:31,310 --> 00:01:29,340
crew of four aboard spacex's Dragon to

36
00:01:34,370 --> 00:01:31,320
spend 16 days living on the station

37
00:01:36,890 --> 00:01:34,380
conducting research and Outreach and

38
00:01:38,929 --> 00:01:36,900

this was another major step in NASA's

39

00:01:41,090 --> 00:01:38,939

role to kick-start an economy in low

40

00:01:43,789 --> 00:01:41,100

earth orbit with new infrastructure and

41

00:01:46,730 --> 00:01:43,799

services offered by Private Industry to

42

00:01:48,710 --> 00:01:46,740

open up space to more and more people

43

00:01:50,990 --> 00:01:48,720

and something I got hyped for personally

44

00:01:53,210 --> 00:01:51,000

Boeing Starliner made its first

45

00:01:53,990 --> 00:01:53,220

successful trip to the station and Back

46

00:01:56,569 --> 00:01:54,000

Again

47

00:01:58,910 --> 00:01:56,579

the orbital flight Test 2 mission was an

48

00:02:01,190 --> 00:01:58,920

end-to-end test of Starliner providing

49

00:02:04,249 --> 00:02:01,200

critical data on operating this brand

50

00:02:06,289 --> 00:02:04,259

new spacecraft in outer space everything

51
00:02:08,510 --> 00:02:06,299
we learned from it from launch to

52
00:02:09,949 --> 00:02:08,520
docking to Landing will help make the

53
00:02:11,990 --> 00:02:09,959
next flight which will carry our

54
00:02:16,910 --> 00:02:12,000
astronauts on board for the very first

55
00:02:18,949 --> 00:02:16,920
time as safe and successful as possible

56
00:02:21,170 --> 00:02:18,959
and those highlights happen just in the

57
00:02:22,850 --> 00:02:21,180
first half of this year if you know

58
00:02:25,550 --> 00:02:22,860
space station you know the work didn't

59
00:02:30,250 --> 00:02:25,560
stop and is actually still going as we

60
00:02:35,210 --> 00:02:33,290
throughout we saw five food launches fly

61
00:02:38,270 --> 00:02:35,220
to the space stations but between the

62
00:02:40,309 --> 00:02:38,280
SpaceX dragon and the Russian soyuz 10

63
00:02:43,250 --> 00:02:40,319

NASA astronauts eight gross Cosmos

64

00:02:44,990 --> 00:02:43,260

cosmonauts two Issa one jaxa four

65

00:02:46,790 --> 00:02:45,000

private astronauts and a partridge in

66

00:02:49,610 --> 00:02:46,800

the pear tree called the station home

67

00:02:52,309 --> 00:02:49,620

this year our Expedition crews are on

68

00:02:54,530 --> 00:02:52,319

track to perform 14 space walks this

69

00:02:56,750 --> 00:02:54,540

year and a lot of that work was

70

00:02:58,670 --> 00:02:56,760

installing upgraded solar arrays to

71

00:03:01,130 --> 00:02:58,680

continue generating electricity through

72

00:03:03,050 --> 00:03:01,140

the station for years to come and doing

73

00:03:05,869 --> 00:03:03,060

some major reconfiguration on the

74

00:03:08,030 --> 00:03:05,879

Russian segment they also welcomed five

75

00:03:10,190 --> 00:03:08,040

cargo vehicles from Russia north of

76
00:03:12,710 --> 00:03:10,200
Grumman and SpaceX with commercial

77
00:03:15,649 --> 00:03:12,720
resupply missions enabling more than 100

78
00:03:18,170 --> 00:03:15,659
new U.S science investigations and

79
00:03:20,509 --> 00:03:18,180
Technology demonstrations continuing to

80
00:03:22,550 --> 00:03:20,519
improve on our capabilities for the

81
00:03:25,790 --> 00:03:22,560
Artemis missions to our moon and

82
00:03:28,309 --> 00:03:25,800
directly benefiting life back on Earth

83
00:03:30,229 --> 00:03:28,319
and with Artemis 1 successfully complete

84
00:03:32,270 --> 00:03:30,239
the work we're doing on stations to

85
00:03:33,830 --> 00:03:32,280
develop the capabilities needed for

86
00:03:36,890 --> 00:03:33,840
those future missions to address

87
00:03:39,229 --> 00:03:36,900
everything from food and water supply to

88
00:03:41,149 --> 00:03:39,239

materials like cement needed for surface

89

00:03:43,850 --> 00:03:41,159

infrastructure to refining Medical

90

00:03:46,009 --> 00:03:43,860

Treatments for remote patients continues

91

00:03:48,289 --> 00:03:46,019

to make sure we're ready when human

92

00:03:49,910 --> 00:03:48,299

boots are leaving trails in lunar regula

93

00:03:52,490 --> 00:03:49,920

once more

94

00:03:55,490 --> 00:03:52,500

foreign

95

00:03:57,770 --> 00:03:55,500

take a breath you might think everything

96

00:04:00,470 --> 00:03:57,780

would start to feel routine after more

97

00:04:02,990 --> 00:04:00,480

than two decades but 2023 will be

98

00:04:04,910 --> 00:04:03,000

anything but

99

00:04:07,250 --> 00:04:04,920

we'll hit the ground running in January

100

00:04:09,530 --> 00:04:07,260

with more space walks continuing to

101
00:04:12,050 --> 00:04:09,540
prepare for the final set of new solar

102
00:04:13,789 --> 00:04:12,060
arrays and continued outfitting on the

103
00:04:15,289 --> 00:04:13,799
Russian segment

104
00:04:17,270 --> 00:04:15,299
we're going to be working with Boeing

105
00:04:19,009 --> 00:04:17,280
the first flight went two NASA

106
00:04:21,409 --> 00:04:19,019
astronauts Butch Wilmore and sunny

107
00:04:23,870 --> 00:04:21,419
Williams put Starliner through the paces

108
00:04:25,909 --> 00:04:23,880
in its first crude launch

109
00:04:28,370 --> 00:04:25,919
after that it'll be in line to join

110
00:04:30,409 --> 00:04:28,380
spacex's dragon in regular flights of

111
00:04:33,110 --> 00:04:30,419
crew to the space station with Dragons

112
00:04:35,749 --> 00:04:33,120
set to do just that in February when we

113
00:04:37,790 --> 00:04:35,759

launch Cruise 6 and welcome crew 5 home

114

00:04:39,469 --> 00:04:37,800

and then later down the road when we

115

00:04:42,890 --> 00:04:39,479

have the second private astronaut

116

00:04:44,930 --> 00:04:42,900

Mission ax2 taking flight

117

00:04:46,909 --> 00:04:44,940

we'll have plenty of cargo missions

118

00:04:49,610 --> 00:04:46,919

including the first planned flight of

119

00:04:52,490 --> 00:04:49,620

Sierra spaces Dream Chaser the newest

120

00:04:55,129 --> 00:04:52,500

entrant in our cargo Fleet and amidst

121

00:04:57,830 --> 00:04:55,139

all of that the usual slate of research

122

00:04:59,810 --> 00:04:57,840

benefiting you back on Earth and putting

123

00:05:02,330 --> 00:04:59,820

new technologies through the ringer to

124

00:05:08,270 --> 00:05:02,340

support our deep space exploration of

125

00:05:13,909 --> 00:05:12,170

that will do it for us in 2022 thanks to

126

00:05:15,770 --> 00:05:13,919

everyone around the world that makes the

127

00:05:18,650 --> 00:05:15,780

work done on the space station possible

128

00:05:20,870 --> 00:05:18,660

you just closed out another year packed

129

00:05:23,390 --> 00:05:20,880

from start to finish and as always

130

00:05:25,850 --> 00:05:23,400

thanks to you the viewer for watching

131

00:05:27,409 --> 00:05:25,860

keep tuning in as we continue what is

132

00:05:30,110 --> 00:05:27,419

shaping up to be one of the most

133

00:05:34,120 --> 00:05:30,120

incredible decades in human space flight

134

00:05:44,650 --> 00:05:44,040

[Music]