



W I S E M A N
COMMANDER

1
00:00:27,000 --> 00:00:33,040

ready

2
00:00:33,050 --> 00:01:23,109

[Music]

3
00:01:28,789 --> 00:01:26,450

Artemis is building on an already solid

4
00:01:31,070 --> 00:01:28,799

Legacy if we look backwards in time just

5
00:01:33,170 --> 00:01:31,080

a little bit right now our crews are on

6
00:01:35,810 --> 00:01:33,180

the International Space Station learning

7
00:01:37,609 --> 00:01:35,820

how to truly work off of the planet how

8
00:01:39,170 --> 00:01:37,619

does the human body perform how do we

9
00:01:41,270 --> 00:01:39,180

resupply this International Space

10
00:01:43,190 --> 00:01:41,280

Station these are lessons that will be

11
00:01:45,050 --> 00:01:43,200

critical on the moon and as we look

12
00:01:46,969 --> 00:01:45,060

forward and then if you step back in

13
00:01:48,590 --> 00:01:46,979

time how do we build a large Cadence

14

00:01:49,969 --> 00:01:48,600

like we had in the space shuttle to

15

00:01:52,609 --> 00:01:49,979

service things in low earth orbit

16

00:01:54,649 --> 00:01:52,619

looking back from that to Skylab our

17

00:01:57,350 --> 00:01:54,659

first efforts to live off of the planet

18

00:01:59,510 --> 00:01:57,360

and then Apollo of course Apollo to me

19

00:02:01,429 --> 00:01:59,520

changed the entire direction of our

20

00:02:03,649 --> 00:02:01,439

nation and in many ways of the entire

21

00:02:06,530 --> 00:02:03,659

world just achieving the truly

22

00:02:10,609 --> 00:02:06,540

Unthinkable in the 19 60s Apollo

23

00:02:14,390 --> 00:02:12,710

when we think about Artemis we focus a

24

00:02:15,589 --> 00:02:14,400

lot on the moon but I just want

25

00:02:17,930 --> 00:02:15,599

everybody in the room and everybody

26
00:02:19,850 --> 00:02:17,940
watching to remember our sights are not

27
00:02:22,250 --> 00:02:19,860
set on the moon our sights are set

28
00:02:23,390 --> 00:02:22,260
clearly on Mars and everything that

29
00:02:24,830 --> 00:02:23,400
you're thinking about today everything

30
00:02:26,750 --> 00:02:24,840
that we're going to do in Artemis 1

31
00:02:28,309 --> 00:02:26,760
Artemis one leads to Artemis 2 which

32
00:02:30,290 --> 00:02:28,319
leads to Artemis 3 when we hope to have

33
00:02:32,449 --> 00:02:30,300
humans on the surface of the Moon but

34
00:02:34,010 --> 00:02:32,459
Artemis 3 is leading to the rest of the

35
00:02:36,229 --> 00:02:34,020
Artemis program

36
00:02:37,910 --> 00:02:36,239
the first woman the first person of

37
00:02:39,830 --> 00:02:37,920
color on the surface of the Moon and

38
00:02:41,690 --> 00:02:39,840

then the first humans tracking out to

39

00:02:43,009 --> 00:02:41,700

Mars and putting our footsteps and

40

00:02:45,830 --> 00:02:43,019

building science Laboratories and

41

00:02:48,530 --> 00:02:45,840

inhabiting another another planet to me

42

00:02:50,509 --> 00:02:48,540

it's just the most awe-inspiring moment

43

00:02:51,770 --> 00:02:50,519

that we have had here at Nasa and I love

44

00:02:54,320 --> 00:02:51,780

working here right now it's it's an

45

00:02:57,410 --> 00:02:54,330

honor to get to do so

46

00:02:57,410 --> 00:02:57,420

[Applause]

47

00:03:03,830 --> 00:02:59,800

are you good or you want to get higher

48

00:03:27,890 --> 00:03:03,840

[Music]

49

00:03:33,350 --> 00:03:31,009

and lift off lift off of Reed Wiseman

50

00:03:35,149 --> 00:03:33,360

Max rayev and Alexander Gerst the

51
00:03:41,510 --> 00:03:35,159
international crew on their way to the

52
00:03:41,520 --> 00:04:17,830
[Music]

53
00:04:29,390 --> 00:04:21,349
yaw and half a degree for Beach

54
00:04:35,770 --> 00:04:31,670
foreign

55
00:04:43,550 --> 00:04:39,830
contact and capture confirmed at 8 44 PM

56
00:05:01,689 --> 00:04:44,749
good

57
00:05:07,550 --> 00:05:05,450
the B cat is a binary colloidal alloy

58
00:05:10,730 --> 00:05:07,560
test that studies nanoscale particles

59
00:05:26,749 --> 00:05:10,740
dispersed in liquid known as a colloidal

60
00:05:30,650 --> 00:05:28,969
we spent about uh I don't know probably

61
00:05:32,029 --> 00:05:30,660
a quarter of our time looking in

62
00:05:33,710 --> 00:05:32,039
ourselves and what is going on with the

63
00:05:35,510 --> 00:05:33,720

human body right there I'm looking at my

64

00:05:37,189 --> 00:05:35,520

calf muscle on the ultrasound really

65

00:05:38,930 --> 00:05:37,199

neat to watch my calf go from the back

66

00:05:40,249 --> 00:05:38,940

of my leg and it kind of regrew on the

67

00:05:54,110 --> 00:05:40,259

front of my leg because I was just using

68

00:05:58,550 --> 00:05:56,090

every astronaut's dream is to get to do

69

00:05:59,990 --> 00:05:58,560

a spacewalk and so uh come about October

70

00:06:01,909 --> 00:06:00,000

we got the chance to go out and do two

71

00:06:03,890 --> 00:06:01,919

spacewalks uh first one was with Alex

72

00:06:05,450 --> 00:06:03,900

Gerst and that was great two rookies

73

00:06:06,890 --> 00:06:05,460

going out the door first time in the

74

00:06:08,870 --> 00:06:06,900

space station program we had done that

75

00:06:11,390 --> 00:06:08,880

and if you want to up the gains and up

76

00:06:14,029 --> 00:06:11,400

the nerves a good bit uh that was it for

77

00:06:15,950 --> 00:06:14,039

me but uh I'm kind of scared Heights you

78

00:06:17,570 --> 00:06:15,960

can see me there on the bottom I'm stuck

79

00:06:19,969 --> 00:06:17,580

out on one of these things Alex took

80

00:06:21,409 --> 00:06:19,979

this picture with a fisheye lens 10.5

81

00:06:22,909 --> 00:06:21,419

millimeter so the Earth isn't quite that

82

00:06:25,670 --> 00:06:22,919

curved you can see it's a little bent

83

00:06:27,050 --> 00:06:25,680

but man what a fascinating what a

84

00:06:28,430 --> 00:06:27,060

fascinating view we're outside for about

85

00:06:30,409 --> 00:06:28,440

six and a half hours you got a little

86

00:06:32,450 --> 00:06:30,419

little drink bag of water and before we

87

00:06:34,550 --> 00:06:32,460

even go out the hatch it's four hours in

88

00:06:35,570 --> 00:06:34,560

that suit so it's a very long day this

89

00:06:36,950 --> 00:06:35,580

is the hardest thing I've ever done

90

00:06:38,090 --> 00:06:36,960

mentally physically it doesn't matter

91

00:06:40,490 --> 00:06:38,100

this is the hardest thing I've ever done

92

00:06:42,770 --> 00:06:40,500

I've landed on a Navy ship over 500

93

00:06:45,650 --> 00:06:42,780

times a bunch of them at night but this

94

00:06:47,450 --> 00:06:45,660

takes the cake for difficulty and also

95

00:08:00,170 --> 00:06:47,460

takes cake for just ridiculously cool

96

00:08:03,890 --> 00:08:02,029

I I think they saved the best for last

97

00:08:05,570 --> 00:08:03,900

if you're a roller coaster Enthusiast

98

00:08:07,850 --> 00:08:05,580

they definitely saved the best for last

99

00:08:09,650 --> 00:08:07,860

uh we get in our little spacecraft and

100

00:08:10,969 --> 00:08:09,660

you undock from the space station and we

101
00:08:13,909 --> 00:08:10,979
look out the window and there's just

102
00:08:15,650 --> 00:08:13,919
stuff coming off of it like crazy and I

103
00:08:17,270 --> 00:08:15,660
was like that's amazing to look out

104
00:08:18,110 --> 00:08:17,280
there it was part of our spacecraft a

105
00:08:20,089 --> 00:08:18,120
few minutes ago and now it's

106
00:08:21,170 --> 00:08:20,099
disintegrating and then as you really

107
00:08:23,450 --> 00:08:21,180
start hitting the thick part of the

108
00:08:25,610 --> 00:08:23,460
atmosphere the window turns from pink to

109
00:08:27,409 --> 00:08:25,620
Red to maroon and eventually to Black

110
00:08:29,809 --> 00:08:27,419
you can't see anything anymore and so

111
00:08:31,010 --> 00:08:29,819
really amazing and uh and then the

112
00:08:32,870 --> 00:08:31,020
parachute comes out you're still

113
00:08:34,730 --> 00:08:32,880

supersonic uh you've just been at about

114

00:08:36,889 --> 00:08:34,740

five G's and then the parachute comes

115

00:08:37,909 --> 00:08:36,899

out and then it's just crazy Mayhem and

116

00:08:39,529 --> 00:08:37,919

you feel like you're tumbling and

117

00:08:40,850 --> 00:08:39,539

flipping around and you are tumbling and

118

00:08:42,889 --> 00:08:40,860

flipping around and spinning around and

119

00:08:43,969 --> 00:08:42,899

then it all starts to quiet down and

120

00:08:45,889 --> 00:08:43,979

you're just kind of coming down under

121

00:08:48,410 --> 00:08:45,899

parachutes real nice and you ride your

122

00:08:50,750 --> 00:08:48,420

way down and uh and then the last hit is

123

00:09:01,790 --> 00:08:50,760

the The Landing in Kazakhstan and it's a

124

00:09:06,170 --> 00:09:04,430

the rescue forces open our hatch almost

125

00:09:08,329 --> 00:09:06,180

immediately you feel this cold air of

126

00:09:09,470 --> 00:09:08,339

Kazakhstan come in great feeling and

127

00:09:10,970 --> 00:09:09,480

then they start pulling you out one by

128

00:09:12,650 --> 00:09:10,980

one I was the last one to get pulled out

129

00:09:13,790 --> 00:09:12,660

and you get as you're going out like I

130

00:09:15,530 --> 00:09:13,800

wanted to touch the outside of that

131

00:09:17,269 --> 00:09:15,540

spacecraft and get my hands all charred

132

00:09:19,009 --> 00:09:17,279

and black from all that so I did that

133

00:09:20,690 --> 00:09:19,019

and then they put you in a seat and

134

00:09:22,070 --> 00:09:20,700

there's more adrenaline than you could

135

00:09:23,630 --> 00:09:22,080

ever imagine right there in that moment

136

00:09:25,310 --> 00:09:23,640

so there's I mean they probably could