

A man with short dark hair, wearing a black polo shirt, is speaking against a blue background. He has his hands clasped in front of him. A blue horizontal bar is overlaid at the bottom of the frame, containing his name and title in white text.

Reid Wiseman
Expedition 40 Flight Engineer

1
00:00:06,470 --> 00:00:03,669
the new members of the international

2
00:00:08,470 --> 00:00:06,480
space station's expedition 40 crew share

3
00:00:10,870 --> 00:00:08,480
an affinity for exploration on this

4
00:00:13,030 --> 00:00:10,880
planet but they're also eager to take up

5
00:00:16,710 --> 00:00:13,040
the challenge of setting the stage for

6
00:00:18,870 --> 00:00:16,720
future exploration off the planet max

7
00:00:21,429 --> 00:00:18,880
arrive is the son of a soviet air force

8
00:00:23,429 --> 00:00:21,439
officer he was born in chelyabinsk in

9
00:00:25,830 --> 00:00:23,439
the southern ural region of russia north

10
00:00:28,150 --> 00:00:25,840
of kazakhstan but his family moved all

11
00:00:30,070 --> 00:00:28,160
over the country during his childhood

12
00:00:32,709 --> 00:00:30,080
all along he intended to become a

13
00:00:35,190 --> 00:00:32,719

military pilot the idea of becoming a

14

00:00:36,310 --> 00:00:35,200

cosmonaut was just an extension of that

15

00:00:39,510 --> 00:00:36,320

idea

16

00:00:41,830 --> 00:00:39,520

and i thought i'd give it a shot because

17

00:00:44,630 --> 00:00:41,840

the profession of a military pilot is

18

00:00:46,389 --> 00:00:44,640

very similar to that of a cosmonaut

19

00:00:49,350 --> 00:00:46,399

making quick decisions making right

20

00:00:51,510 --> 00:00:49,360

decisions so something risky something

21

00:00:54,150 --> 00:00:51,520

complicated something challenging

22

00:00:56,630 --> 00:00:54,160

something interesting which brings a lot

23

00:00:58,790 --> 00:00:56,640

of pleasure if you manage

24

00:01:01,270 --> 00:00:58,800

after high school in noginsk near star

25

00:01:03,270 --> 00:01:01,280

city sarayev graduated from the kasha

26

00:01:05,509 --> 00:01:03,280

air force pilot school in the crimea

27

00:01:07,109 --> 00:01:05,519

with a specialty in command tactical

28

00:01:08,950 --> 00:01:07,119

fighter aviation

29

00:01:11,190 --> 00:01:08,960

then he went to the zhukovsky air force

30

00:01:13,270 --> 00:01:11,200

academy to specialize in test and

31

00:01:15,510 --> 00:01:13,280

exploitation of aircraft and weapons

32

00:01:17,510 --> 00:01:15,520

systems he applied to the cosmonaut

33

00:01:19,670 --> 00:01:17,520

corps and was selected the year before

34

00:01:22,070 --> 00:01:19,680

he finished at the academy and while

35

00:01:24,149 --> 00:01:22,080

training in star city he also graduated

36

00:01:25,429 --> 00:01:24,159

from the civil service academy of russia

37

00:01:27,429 --> 00:01:25,439

as a lawyer

38

00:01:31,109 --> 00:01:27,439

sarah's first flight was a six-month

39

00:01:33,990 --> 00:01:31,119

tour on expeditions 21 and 22 in 2009

40

00:01:35,190 --> 00:01:34,000

and 2010 during which he completed one

41

00:01:36,950 --> 00:01:35,200

spacewalk

42

00:01:40,230 --> 00:01:36,960

although he retired from the russian air

43

00:01:42,149 --> 00:01:40,240

force as a colonel in 2012 he continues

44

00:01:44,710 --> 00:01:42,159

to work for the cause of human space

45

00:01:47,429 --> 00:01:44,720

exploration

46

00:01:49,590 --> 00:01:47,439

that's why we send humans in space

47

00:01:52,870 --> 00:01:49,600

so that we move forward we may discover

48

00:01:54,630 --> 00:01:52,880

something in the future maybe

49

00:01:57,510 --> 00:01:54,640

maybe not in

50

00:02:00,950 --> 00:01:57,520

so near future but discovering some new

51
00:02:04,230 --> 00:02:02,709
something that will help us develop and

52
00:02:06,950 --> 00:02:04,240
move forward

53
00:02:09,510 --> 00:02:06,960
us navy commander reed wiseman grew up

54
00:02:11,350 --> 00:02:09,520
in the suburbs of baltimore maryland far

55
00:02:13,990 --> 00:02:11,360
enough away from the city to be able to

56
00:02:15,510 --> 00:02:14,000
enjoy nature learn about the world and

57
00:02:17,990 --> 00:02:15,520
make the most of the freedom and

58
00:02:20,309 --> 00:02:18,000
encouragement he got from his parents

59
00:02:22,150 --> 00:02:20,319
and they always had boundaries but

60
00:02:23,510 --> 00:02:22,160
it was exploration from the time i was

61
00:02:24,550 --> 00:02:23,520
born you know going to the lake with my

62
00:02:26,390 --> 00:02:24,560
brother

63
00:02:28,710 --> 00:02:26,400

learning on my own and figuring things

64

00:02:31,030 --> 00:02:28,720

out and and they gave me that that

65

00:02:32,949 --> 00:02:31,040

freedom and it was wonderful

66

00:02:35,350 --> 00:02:32,959

wiseman earned a bachelor's of science

67

00:02:36,790 --> 00:02:35,360

in computer and systems engineering and

68

00:02:40,470 --> 00:02:36,800

a commission in the navy through the

69

00:02:42,309 --> 00:02:40,480

rotc at rensselaer polytechnic institute

70

00:02:44,470 --> 00:02:42,319

after flight training he was assigned to

71

00:02:46,150 --> 00:02:44,480

an f-14 squadron and made two

72

00:02:48,229 --> 00:02:46,160

deployments to the middle east during

73

00:02:50,710 --> 00:02:48,239

operations southern watch enduring

74

00:02:52,390 --> 00:02:50,720

freedom and iraqi freedom during the

75

00:02:54,869 --> 00:02:52,400

second deployment he was picked for the

76

00:02:56,710 --> 00:02:54,879

navy's test pilot school and later while

77

00:02:58,949 --> 00:02:56,720

working at the patuxent river naval air

78

00:03:00,630 --> 00:02:58,959

station he also earned a master's degree

79

00:03:02,869 --> 00:03:00,640

in systems engineering from johns

80

00:03:04,790 --> 00:03:02,879

hopkins wiseman made two more

81

00:03:07,670 --> 00:03:04,800

international deployments before he was

82

00:03:09,270 --> 00:03:07,680

picked for the astronaut program in 2009

83

00:03:12,229 --> 00:03:09,280

and got the chance to resume the

84

00:03:14,550 --> 00:03:12,239

exploration he loved as a child

85

00:03:17,030 --> 00:03:14,560

we are curious we are inquisitive we are

86

00:03:19,670 --> 00:03:17,040

explorers by our very nature and right

87

00:03:23,030 --> 00:03:19,680

now the biggest exploration that a human

88

00:03:25,190 --> 00:03:23,040

can go on is 250 miles up on the space

89

00:03:27,430 --> 00:03:25,200

station so to me there's not even a

90

00:03:29,990 --> 00:03:27,440

question of course it's worth the risk

91

00:03:30,869 --> 00:03:30,000

just to go out there and push humanity

92

00:03:32,869 --> 00:03:30,879

to

93

00:03:35,430 --> 00:03:32,879

further than we've been

94

00:03:38,550 --> 00:03:35,440

that's that's a no-brainer

95

00:03:40,710 --> 00:03:38,560

dr alexander gerst was born in kunzelsau

96

00:03:43,030 --> 00:03:40,720

a small town in rural south central

97

00:03:45,350 --> 00:03:43,040

germany he liked being close to nature

98

00:03:47,030 --> 00:03:45,360

and looking up at the night sky and his

99

00:03:48,949 --> 00:03:47,040

curiosity was piqued when his

100

00:03:51,830 --> 00:03:48,959

grandfather talked to people all over

101
00:03:55,270 --> 00:03:51,840
the world on his amateur radio one day

102
00:03:56,949 --> 00:03:55,280
he somehow managed to adjust his antenna

103
00:03:58,229 --> 00:03:56,959
such that it would actually broadcast to

104
00:03:59,190 --> 00:03:58,239
the moon

105
00:04:02,470 --> 00:03:59,200
and

106
00:04:05,429 --> 00:04:02,480
speak

107
00:04:07,190 --> 00:04:05,439
a few words into the radio they would

108
00:04:09,270 --> 00:04:07,200
bounce back from the surface of the moon

109
00:04:12,550 --> 00:04:09,280
and about two and a half seconds later i

110
00:04:14,869 --> 00:04:12,560
would hear my own words in the radio

111
00:04:17,830 --> 00:04:14,879
knowing as a six-year-old that they were

112
00:04:20,469 --> 00:04:17,840
just on the moon so it was impossible

113
00:04:22,790 --> 00:04:20,479

for me to grasp in the beginning

114

00:04:25,110 --> 00:04:22,800

gerst started his exploration focused on

115

00:04:26,950 --> 00:04:25,120

this planet and earned a diploma in

116

00:04:29,510 --> 00:04:26,960

geophysics from the university of

117

00:04:31,749 --> 00:04:29,520

karlsruhe in germany while also getting

118

00:04:34,230 --> 00:04:31,759

his masters in earth sciences from

119

00:04:36,390 --> 00:04:34,240

victoria university in new zealand while

120

00:04:38,790 --> 00:04:36,400

working there developing new volcano

121

00:04:40,950 --> 00:04:38,800

monitoring techniques he made four

122

00:04:43,030 --> 00:04:40,960

scientific missions to study volcanoes

123

00:04:45,350 --> 00:04:43,040

in antarctica while working on his

124

00:04:47,030 --> 00:04:45,360

doctorate in natural sciences at the

125

00:04:49,270 --> 00:04:47,040

institute of geophysics at the

126
00:04:51,350 --> 00:04:49,280
university of hamburg and during that

127
00:04:53,670 --> 00:04:51,360
time he made good on a promise to

128
00:04:56,469 --> 00:04:53,680
himself that he would make at least one

129
00:04:58,310 --> 00:04:56,479
sincere effort to become an astronaut he

130
00:05:01,430 --> 00:04:58,320
was selected for the astronaut corps by

131
00:05:03,990 --> 00:05:01,440
the european space agency in 2009

132
00:05:06,150 --> 00:05:04,000
finished his phd the following year and

133
00:05:08,310 --> 00:05:06,160
has been focused ever since on his

134
00:05:09,590 --> 00:05:08,320
chance to be part of what he calls the

135
00:05:10,469 --> 00:05:09,600
first wave

136
00:05:13,189 --> 00:05:10,479
being

137
00:05:15,909 --> 00:05:13,199
the first well wave of explorers on the

138
00:05:19,590 --> 00:05:15,919

way out exploring the universe

139

00:05:20,629 --> 00:05:19,600

to moon asteroids mars and beyond

140

00:05:23,670 --> 00:05:20,639

that is

141

00:05:24,710 --> 00:05:23,680

for me such an important thing to do for

142

00:05:25,990 --> 00:05:24,720

for