



EVERYTHING

ABOUT LIVING IN SPACE

1
00:00:00,000 --> 00:00:07,980
Hey NASA astronaut Reid Wiseman. Hey. Do you

2
00:00:07,980 --> 00:00:08,970
think you have a few minutes to answer

3
00:00:08,970 --> 00:00:10,740
everything about living in space? I got

4
00:00:10,740 --> 00:00:11,849
all the time in the world.

5
00:00:11,849 --> 00:00:14,250
awesome well where are we? We are in the

6
00:00:14,250 --> 00:00:16,230
space vehicle mock-up facility it's a

7
00:00:16,230 --> 00:00:18,240
gigantic building at the Johnson Space

8
00:00:18,240 --> 00:00:19,890
Center in Houston Texas and this is

9
00:00:19,890 --> 00:00:21,359
where astronauts spend the bulk of their

10
00:00:21,359 --> 00:00:23,130
time training for spaceflight. Is this

11
00:00:23,130 --> 00:00:24,150
the window where you have all those

12
00:00:24,150 --> 00:00:25,529
really cool pictures of Earth? This is

13
00:00:25,529 --> 00:00:27,150

the Cupola, it's a series of seven windows

14

00:00:27,150 --> 00:00:28,439

that look down on the Earth.

15

00:00:28,439 --> 00:00:30,150

Nice. How big is the International Space

16

00:00:30,150 --> 00:00:31,830

Station? They say it's about the size of

17

00:00:31,830 --> 00:00:33,510

a five-bedroom house. It's kind of hard

18

00:00:33,510 --> 00:00:35,730

for me to conceptualize, in reality it's

19

00:00:35,730 --> 00:00:38,399

just really narrow and really long. How

20

00:00:38,399 --> 00:00:39,750

long did you have to train before going

21

00:00:39,750 --> 00:00:41,879

to the ISS? About five years. And how many

22

00:00:41,879 --> 00:00:44,100

told days have you spend space? 165

23

00:00:44,100 --> 00:00:45,510

What's the record?

24

00:00:45,510 --> 00:00:48,480

Jeff Williams... He has the U.S. record 534

25

00:00:48,480 --> 00:00:50,520

days in space but Russian cosmonaut

26
00:00:50,520 --> 00:00:52,890
Gennady Padalka almost a thousand. Wow

27
00:00:52,890 --> 00:00:54,690
what's a groundbreaking experiment that

28
00:00:54,690 --> 00:00:57,090
you completed aboard the ISS? I survived.

29
00:00:57,090 --> 00:00:59,070
I heard you age faster in space. Maybe a

30
00:00:59,070 --> 00:00:59,760
little bit.

31
00:00:59,760 --> 00:01:01,410
Is there a maximum height or age that

32
00:01:01,410 --> 00:01:03,120
you have to be to become an astronaut?

33
00:01:03,120 --> 00:01:05,640
We used to have restrictions on that but

34
00:01:05,640 --> 00:01:07,770
now it's pretty much come one come all.

35
00:01:07,770 --> 00:01:10,680
Is there Wi-Fi? There is but it's not as

36
00:01:10,680 --> 00:01:11,760
good as it is on Earth.

37
00:01:11,760 --> 00:01:13,049
How do you get in contact with people on

38
00:01:13,049 --> 00:01:15,390

the ground? We have space-to-ground

39

00:01:15,390 --> 00:01:17,009

communications systems. It's basically a

40

00:01:17,009 --> 00:01:19,320

radio or a walkie-talkie and we just

41

00:01:19,320 --> 00:01:21,479

call on this and say hi to Houston.

42

00:01:21,479 --> 00:01:23,280

Is there a delay? Almost none.

43

00:01:23,280 --> 00:01:25,799

How did you get to the station? A rocket.

44

00:01:25,799 --> 00:01:27,180

How long did it take for you to get from

45

00:01:27,180 --> 00:01:28,680

Earth to the space station? Takes about

46

00:01:28,680 --> 00:01:30,600

six hours. And how long to take for you

47

00:01:30,600 --> 00:01:31,200

to get back?

48

00:01:31,200 --> 00:01:32,610

That's a crazy ride it's about three

49

00:01:32,610 --> 00:01:36,630

hours long. Any jet lag? Horrible jet lag.

50

00:01:36,630 --> 00:01:38,159

How often do you get to talk to your

51
00:01:38,159 --> 00:01:39,869
family? You get to talk to them once a week.

52
00:01:39,869 --> 00:01:42,540
Ever prank call anyone? Of course you prank

53
00:01:42,540 --> 00:01:44,369
call people. Ever get homesick?

54
00:01:44,369 --> 00:01:46,020
Yeah you get homesick a little bit. So

55
00:01:46,020 --> 00:01:48,869
are the beds comfy? There are no beds.

56
00:01:48,869 --> 00:01:49,920
I heard you have to be strapped to a

57
00:01:49,920 --> 00:01:51,270
wall. You do. Are you claustrophobic?

58
00:01:51,270 --> 00:01:53,369
A little bit. What else can you do in your

59
00:01:53,369 --> 00:01:55,140
room besides sleep? You could read,

60
00:01:55,140 --> 00:01:58,950
watch TV, do some work, whatever you want.

61
00:01:58,950 --> 00:02:01,110
Do you have a bed time? Everybody has a

62
00:02:01,110 --> 00:02:04,350
bedtime. Do you have alarm clocks? I use my watch.

63
00:02:04,350 --> 00:02:06,750

How many crew members do you have? It was me

64

00:02:06,750 --> 00:02:08,490

and five others. Were there any language

65

00:02:08,490 --> 00:02:10,470

barriers? Da, kenyeshna. Of course their

66

00:02:10,470 --> 00:02:12,120

are language barriers. Ever get sick of your

67

00:02:12,120 --> 00:02:13,830

roommates? You always... No, you never get

68

00:02:13,830 --> 00:02:14,640

sick your roommates.

69

00:02:14,640 --> 00:02:16,590

What did you do in your free time? Oh, you

70

00:02:16,590 --> 00:02:18,090

look out the window. What's the typical

71

00:02:18,090 --> 00:02:20,670

breakfast aboard the space station? It was

72

00:02:20,670 --> 00:02:22,590

very much like a breakfast on Earth so I

73

00:02:22,590 --> 00:02:24,780

liked eggs, occasional oatmeal, maybe even a

74

00:02:24,780 --> 00:02:27,660

waffle. Was the food any good? I actually

75

00:02:27,660 --> 00:02:29,010

thought the food was pretty good.

76

00:02:29,010 --> 00:02:31,350

What's your favorite meal on the station?

77

00:02:31,350 --> 00:02:32,460

I love chocolate pudding cake.

78

00:02:32,460 --> 00:02:34,260

How do you cook your food? You can either

79

00:02:34,260 --> 00:02:36,030

inject it with hot water or put it in a

80

00:02:36,030 --> 00:02:36,690

food warmer.

81

00:02:36,690 --> 00:02:37,860

What's the first thing that you ate when

82

00:02:37,860 --> 00:02:40,050

you got back to Earth. I really wanted a

83

00:02:40,050 --> 00:02:42,840

pizza but I saw salad and went for it.

84

00:02:42,840 --> 00:02:45,450

So did you have to work out? You work out twice

85

00:02:45,450 --> 00:02:47,940

a day for about 2.5 hours. And

86

00:02:47,940 --> 00:02:50,850

what kind of exercises? Primarily you're

87

00:02:50,850 --> 00:02:51,960

lifting weights or running on the

88

00:02:51,960 --> 00:02:54,090

treadmill. Our treadmill is attached to

89

00:02:54,090 --> 00:02:55,560

the wall and so when you're on it you're

90

00:02:55,560 --> 00:02:57,240

running straight down towards Earth. Very

91

00:02:57,240 --> 00:02:58,860

weird feeling. So how do you stay on the

92

00:02:58,860 --> 00:03:00,150

treadmill without floating away?

93

00:03:00,150 --> 00:03:02,220

Bungee cords? So do you burn the same

94

00:03:02,220 --> 00:03:03,960

amount of calories as you do on Earth

95

00:03:03,960 --> 00:03:04,950

I think you burn a little bit more

96

00:03:04,950 --> 00:03:06,870

because your brain is always active. I

97

00:03:06,870 --> 00:03:08,700

heard that in microgravity sweat sticks

98

00:03:08,700 --> 00:03:10,740

to you. It does if you have hair kind of

99

00:03:10,740 --> 00:03:11,940

builds up in your hair and you get this

100

00:03:11,940 --> 00:03:13,590

big sweat bubble on your head.

101

00:03:13,590 --> 00:03:15,180

How do you shower? We have soap

102

00:03:15,180 --> 00:03:16,980

impregnated towels. How do you pee in space?

103

00:03:16,980 --> 00:03:21,690

Ooo... We have a funnel. Where does your

104

00:03:21,690 --> 00:03:24,060

pee go after you flush? A little bit of

105

00:03:24,060 --> 00:03:25,590

processing and then right back into the

106

00:03:25,590 --> 00:03:26,610

drinking water.

107

00:03:26,610 --> 00:03:29,070

How do you pee in a spacesuit? We have a

108

00:03:29,070 --> 00:03:29,700

diaper.

109

00:03:29,700 --> 00:03:31,110

How much water do you have to drink each

110

00:03:31,110 --> 00:03:33,300

day? You drink just about the same that

111

00:03:33,300 --> 00:03:34,830

you what on Earth. Do you ever run out of

112

00:03:34,830 --> 00:03:35,520

anything?

113

00:03:35,520 --> 00:03:38,400

Free time. How do you get more supplies?

114

00:03:38,400 --> 00:03:41,220

We have cargo ships. We have great

115

00:03:41,220 --> 00:03:43,980

companies like SpaceX, Orbital we have

116

00:03:43,980 --> 00:03:45,840

Russian resupply vehicles and also

117

00:03:45,840 --> 00:03:48,120

Japanese HTV spacecraft. What'd you miss

118

00:03:48,120 --> 00:03:50,370

most on Earth? Awe, my wife and kids.

119

00:03:50,370 --> 00:03:51,750

What personal items did you take with

120

00:03:51,750 --> 00:03:54,510

you? Photos of my wife and kids.

121

00:03:54,510 --> 00:03:56,610

Did you bring any space souvenirs home? You

122

00:03:56,610 --> 00:03:58,200

always have to bring souvenirs home for

123

00:03:58,200 --> 00:04:00,090

your kids. So I have to ask, what's your

124

00:04:00,090 --> 00:04:03,150

favorite planet? Oh, it used to be Saturn

125

00:04:03,150 --> 00:04:05,520

until I saw Earth from space. And if you

126

00:04:05,520 --> 00:04:06,600

were to travel anywhere in the solar

127

00:04:06,600 --> 00:04:08,870

system where would you go?

128

00:04:08,870 --> 00:04:10,400

I work at NASA we all want to go to Mars.

129

00:04:10,400 --> 00:04:12,890

Does the space station ever get too hot or

130

00:04:12,890 --> 00:04:13,760

too cold?

131

00:04:13,760 --> 00:04:16,579

Oh we keep it a balmy 72 all year round.

132

00:04:16,579 --> 00:04:18,350

Nice how about the temperature of space?

133

00:04:18,350 --> 00:04:21,769

Plus 200 F to minus 200 F. What about the

134

00:04:21,769 --> 00:04:23,960

temperature inside the spacesuit? It's

135

00:04:23,960 --> 00:04:25,610

actually pretty warm pretty nice pretty

136

00:04:25,610 --> 00:04:27,020

comfortable because there's many layers

137

00:04:27,020 --> 00:04:28,130

of thermal protection.

138

00:04:28,130 --> 00:04:30,560

How much is a spacesuit weight? Oh it's really

139

00:04:30,560 --> 00:04:32,240

heavy i think it's about 300 pounds.

140

00:04:32,240 --> 00:04:34,850

How do your laundry? We throw it out. Do you

141

00:04:34,850 --> 00:04:37,310

have to clean the spacesuits? Of course

142

00:04:37,310 --> 00:04:38,240

you gotta clean the spacesuits

143

00:04:38,240 --> 00:04:40,250

especially after a spacewalk. How long

144

00:04:40,250 --> 00:04:41,210

does it take for you to put on a

145

00:04:41,210 --> 00:04:43,669

spacesuit? About 45 minutes. Can you put

146

00:04:43,669 --> 00:04:45,320

it on by yourself? If you're in a pinch

147

00:04:45,320 --> 00:04:46,699

you can put it on by yourself.

148

00:04:46,699 --> 00:04:48,320

How long does a space walk normally take?

149

00:04:48,320 --> 00:04:49,639

We train for about six and a half hours.

150

00:04:49,639 --> 00:04:51,229

And what's the max amount of time a

151
00:04:51,229 --> 00:04:53,270
spacewalk can last? The maximum is about

152
00:04:53,270 --> 00:04:54,949
nine hours i think eight hours and 54

153
00:04:54,949 --> 00:04:55,940
minutes is our record.

154
00:04:55,940 --> 00:04:58,280
How's the view? Awesome. What's the

155
00:04:58,280 --> 00:05:00,050
hardest thing about a spacewalk? Just

156
00:05:00,050 --> 00:05:01,760
knowing that you're outside and if you

157
00:05:01,760 --> 00:05:02,900
mess anything up

158
00:05:02,900 --> 00:05:04,190
you've destroyed a hundred billion

159
00:05:04,190 --> 00:05:05,990
dollar spacecraft. And what's most

160
00:05:05,990 --> 00:05:07,490
rewarding? Coming back.

161
00:05:07,490 --> 00:05:09,080
Sounds awesome well I'm sure there are a

162
00:05:09,080 --> 00:05:10,250
lot more questions but I know you're

163
00:05:10,250 --> 00:05:11,750

busy so we'll save this for another time.

164

00:05:11,750 --> 00:05:12,560

Sounds good.

165

00:05:12,560 --> 00:05:17,940

Awesome thanks have a good. See ya.

166

00:05:17,940 --> 00:05:19,590

I think what's interesting about the space program

167

00:05:19,590 --> 00:05:21,090

and the space station is that sometimes you have these