
PAO

1
00:00:01,376 --> 00:00:06,666
>> We were talking with the fifth grade
students of Berry Elementary in Houston, Texas.

2
00:00:07,246 --> 00:00:10,606
Hi kids, welcome to the International
Space Station Flight Control Room.

3
00:00:10,606 --> 00:00:14,566
I understand you guys have a lot of questions
about flying in space and it's a good thing

4
00:00:14,566 --> 00:00:17,956
because today we have astronaut
Mike Foreman here with us.

5
00:00:17,956 --> 00:00:23,556
He has flown twice in space, aboard the
space shuttle on the STS-123 and 129.

6
00:00:23,616 --> 00:00:25,076
Welcome and thank you for joining us.

7
00:00:25,446 --> 00:00:26,476
>> Great to be here Amiko.

8
00:00:27,466 --> 00:00:28,896
>> Hello, my name is Eric [phonetic].

9
00:00:29,076 --> 00:00:33,246
My question is what's the most dangerous
job in NASA and why do you do it?

10
00:00:34,606 --> 00:00:38,126
>> Eric, I'm not sure what the
most dangerous job at NASA is.

11
00:00:38,126 --> 00:00:44,026
You know, people-- some people might say that

astronauts have a dangerous job and I think,

12
00:00:44,026 --> 00:00:49,446
you know, NASA does a really good job of
making sure that our jobs are safe as possible.

13
00:00:49,936 --> 00:00:55,516
So we do as much as we can, when were flying
the space shuttle, we did as much as we can

14
00:00:55,516 --> 00:00:59,776
to make those vehicles safe to fly and
we did a great job I think at that.

15
00:00:59,776 --> 00:01:03,516
We have some really smart people here at NASA
that take really good care of the astronauts.

16
00:01:04,046 --> 00:01:08,066
So there's probably some more dangerous
jobs at NASA than the astronauts.

17
00:01:09,386 --> 00:01:12,076
>> Okay. Thank you.

18
00:01:12,976 --> 00:01:14,706
>> Hello, my name is Christian [phonetic].

19
00:01:15,366 --> 00:01:18,016
My question is how does a space suit works?

20
00:01:19,046 --> 00:01:21,336
>> How do the spaces work?

21
00:01:22,736 --> 00:01:24,376
>> Yes. Space suit.

22
00:01:24,376 --> 00:01:25,326
>> I'm not sure I follow.

23
00:01:26,476 --> 00:01:27,526
Oh, space suits?

24
00:01:28,576 --> 00:01:28,776
>> Yup.

25
00:01:28,776 --> 00:01:28,996
>> Yes.

26
00:01:29,336 --> 00:01:31,206
>> Okay. That's a good question Christian.

27
00:01:31,206 --> 00:01:34,526
Okay, we have a couple of different
kinds of space suits that we wear.

28
00:01:34,976 --> 00:01:40,586
When we launch, whether it be on the space
shuttle or the Soyuz capsule launching

29
00:01:40,586 --> 00:01:44,696
from Russia to the space station, our
astronauts wear a suit that protects them

30
00:01:44,696 --> 00:01:50,886
in case we lose the pressure inside
the space capsule or space shuttle.

31
00:01:51,506 --> 00:01:55,526
So those suits are to protect us
while we launch and when we can back.

32
00:01:56,086 --> 00:02:00,696
Now, if we go outside the space station
and the space shuttle on a space walk,

33
00:02:01,056 --> 00:02:06,436
then we wear completely different suit and

that's what we call an EMU which stands

34
00:02:06,476 --> 00:02:08,676
for Extravehicular Mobility Unit.

35
00:02:08,956 --> 00:02:15,006
Big long word for space suit but that suit is
like a one person spaceship because you get

36
00:02:15,006 --> 00:02:18,746
in that suit and you go outside
the spaceship that you're--

37
00:02:18,886 --> 00:02:23,866
you came up in, and it gives you oxygen and
it can keeps you cool, and it protects you

38
00:02:23,866 --> 00:02:25,866
from the environment outside the spaceship.

39
00:02:25,866 --> 00:02:30,266
So that's how the space-- that's a little
bit about space suits that we wear.

40
00:02:31,896 --> 00:02:32,286
>> Thank you.

41
00:02:33,516 --> 00:02:38,756
[Pause]

42
00:02:39,256 --> 00:02:40,496
>> Hi, my name is Guillermo [phonetic].

43
00:02:40,556 --> 00:02:44,346
My question is do you need
to exercise a lot on space?

44
00:02:45,976 --> 00:02:50,726
>> We do exercise a lot both down here

on Earth when we're preparing to go

45
00:02:50,726 --> 00:02:52,446
to space and while we're in space.

46
00:02:52,976 --> 00:02:57,896
And the reason that we exercise a
lot in space is because we're living

47
00:02:57,896 --> 00:03:01,656
in a weightless environment up there which
means, you know, there is no gravity.

48
00:03:02,026 --> 00:03:07,516
We don't get the same-- our bones don't get the
same workout that they do down here on Earth.

49
00:03:07,516 --> 00:03:12,206
When we're walking around today, our
bones are getting a little bit of workout

50
00:03:12,206 --> 00:03:15,816
because they have to support our
body weight because of the gravity.

51
00:03:15,816 --> 00:03:20,566
But in space, we don't have that gravity
so we need to exercise our muscles

52
00:03:20,566 --> 00:03:26,786
to keep our bones rebuilding themselves and
make sure the bones stay strong as they were

53
00:03:26,786 --> 00:03:30,366
when we left for a space 'cause we
don't come back and have a weaker bone.

54
00:03:30,366 --> 00:03:33,056
So astronauts spend about two and a half days--

55
00:03:33,516 --> 00:03:37,546
two and a half hours a day while
they're in space, exercising everyday.

56
00:03:37,546 --> 00:03:41,366
>> And they have several
ways to do that exercise.

57
00:03:41,366 --> 00:03:44,396
There are several different pieces
of equipment in that space gym.

58
00:03:44,396 --> 00:03:45,216
You want to about that?

59
00:03:45,726 --> 00:03:48,166
>> Yeah, they actually have a couple
of different ways to exercise.

60
00:03:48,166 --> 00:03:52,016
They have a tread, you know, which
is kind of funny because a treadmill,

61
00:03:52,096 --> 00:03:57,236
you have to run on a treadmill but if there's no
gravity, you'd just float off of the treadmill

62
00:03:57,236 --> 00:04:01,256
but they have a harness that connects them down
to the treadmill so that they don't float away

63
00:04:01,256 --> 00:04:02,446
from it while they're running on it.

64
00:04:03,096 --> 00:04:05,816
They have an exercise bike so
they can exercise that way.

65
00:04:05,816 --> 00:04:11,786

And they also we have a resistive exercise
device which is like lifting weight

66
00:04:11,786 --> 00:04:16,496
so they can't lift weight in space because
the weights won't weigh anything either

67
00:04:16,496 --> 00:04:21,386
but they have an exercise device that's
sort of like rubber bands almost.

68
00:04:21,756 --> 00:04:26,816
You push against it and the rubber bands provide
the resistance that exercise your muscles.

69
00:04:27,336 --> 00:04:29,466
>> We have another question?

70
00:04:30,046 --> 00:04:31,936
>> No, thank you.

71
00:04:33,516 --> 00:04:37,086
[Pause]

72
00:04:37,586 --> 00:04:39,046
>> Hello, my name is Guadalupe [phonetic].

73
00:04:39,046 --> 00:04:43,046
And my question is how do you control
the spaceship without the buttons to go

74
00:04:43,046 --> 00:04:47,506
at the right distance to the right place?

75
00:04:47,616 --> 00:04:51,086
>> Well, we have really smart people at
NASA that figure out where we need to go

76
00:04:51,086 --> 00:04:53,176

on our spaceship to get to the space station.

77
00:04:53,596 --> 00:04:57,446
So they figure that all out and
they put it into the computer

78
00:04:57,446 --> 00:04:59,766
and the computer kind of knows how we get there.

79
00:05:00,036 --> 00:05:04,176
And when we get close enough, when we can
see the space station, then we can take over

80
00:05:04,176 --> 00:05:06,726
and fly the spaceship in to a docking.

81
00:05:07,186 --> 00:05:11,726
>> And a lot of those smart people
here in this room right now.

82
00:05:11,726 --> 00:05:14,326
This is again the International
Space Station Flight Control Room

83
00:05:14,326 --> 00:05:17,996
where the team is monitoring the
systems aboard the space station

84
00:05:18,366 --> 00:05:20,976
on a daily basis, 24/7, next question.

85
00:05:21,516 --> 00:05:26,196
[Pause]

86
00:05:26,696 --> 00:05:27,956
>> Hi, my name is Amber [phonetic].

87
00:05:27,956 --> 00:05:33,056
My question is how do you keep track of

those space shuttles while they're in space?

88
00:05:33,416 --> 00:05:36,116
>> How do we keep track of them?

89
00:05:36,206 --> 00:05:42,016
Well, we have those smart people at NASA
that keep tracking where they are so it's--

90
00:05:42,016 --> 00:05:46,706
we couldn't get lost in space because
we have smart people down here at NASA,

91
00:05:46,706 --> 00:05:49,956
they taking care of us and making sure
we're going in the right direction

92
00:05:49,956 --> 00:05:51,516
and we're getting to where we need to go.

93
00:05:52,306 --> 00:05:56,246
And the people here in this Mission Control
Room are controlling the space station right now

94
00:05:56,246 --> 00:05:58,346
that's going around the Earth every 90 minutes.

95
00:05:58,806 --> 00:06:02,896
So they're making sure that the space
station stays at the right altitude,

96
00:06:03,006 --> 00:06:05,776
keeping it up the size it needs
to be to stay in that orbit

97
00:06:06,086 --> 00:06:08,946
and keeping-- going in the right direction.

98
00:06:09,696 --> 00:06:14,246

>> And if you look just behind us, you can see
a map that is the map where we can keep track

99
00:06:14,246 --> 00:06:16,486
of where that space station
is at any given time.

100
00:06:16,956 --> 00:06:20,076
Next question.

101
00:06:20,396 --> 00:06:21,986
>> Hi, my name is Jose Gonzales [phonetic].

102
00:06:21,986 --> 00:06:24,746
My question is how do you eat
in space if everything floats?

103
00:06:25,716 --> 00:06:26,916
>> How do we eat in space?

104
00:06:26,916 --> 00:06:28,936
Well, we have to be careful.

105
00:06:29,006 --> 00:06:33,086
We have really good food that
they send along with us to space

106
00:06:33,086 --> 00:06:35,926
so it's a good thing when we get to eat.

107
00:06:36,856 --> 00:06:41,446
We open the packages very carefully so that
we don't shake the food and it float out.

108
00:06:41,446 --> 00:06:47,156
So-- but mostly it stays in the package
pretty well if you don't shake it around

109
00:06:47,156 --> 00:06:52,866

and then you can use a fork or a spoon to reach
in and get a bite at a time and eat it that way.

110
00:06:53,536 --> 00:06:59,446
I know on my first space shuttle mission, I
had some granola and you know what granola is.

111
00:06:59,446 --> 00:07:07,566
Granola is kind of crumbly and it's mixed
little chunks of bran and things like that

112
00:07:07,596 --> 00:07:12,586
that I got tired of that because every
time I opened that, it seemed like some

113
00:07:12,586 --> 00:07:15,556
of it would float out and I would have
a mess and I would have to clean up.

114
00:07:15,556 --> 00:07:22,366
So I didn't take granola on my second
mission because it was too messy.

115
00:07:22,896 --> 00:07:23,346
>> Thank you.

116
00:07:24,516 --> 00:07:32,196
[Pause]

117
00:07:32,696 --> 00:07:34,076
>> Hi, my name is Zoren [phonetic].

118
00:07:34,076 --> 00:07:37,496
And my question is, how do you keep
your food and supplies from going bad

119
00:07:37,496 --> 00:07:39,386
without a refrigerator or cooking it?

120

00:07:40,646 --> 00:07:42,196
>> Well, we do cook it.

121
00:07:42,196 --> 00:07:43,156
We have an oven.

122
00:07:43,356 --> 00:07:49,926
We don't have a refrigerator so it has
to be food that won't go bad in space.

123
00:07:49,926 --> 00:07:51,606
Some of it is dehydrated.

124
00:07:51,606 --> 00:07:57,916
So, the dehydrated food, we keep dry in
the package until we are ready to eat it.

125
00:07:57,916 --> 00:08:02,756
And then we would add water and if we
needed to heat it up, say it was oatmeal,

126
00:08:03,196 --> 00:08:09,576
you add water to make it oatmeal and then you
heat it up so that it's warm like you're used

127
00:08:09,576 --> 00:08:12,516
to eating oatmeal and then we would eat it.

128
00:08:12,576 --> 00:08:18,876
But some food that we take is we
call shelf stable which means it's--

129
00:08:19,706 --> 00:08:25,766
has a preservatives that keep it from going
bad inside the package and some of it is

130
00:08:25,766 --> 00:08:28,866
like the food that our troops
eat in Afghanistan and in Iraq.

131
00:08:28,866 --> 00:08:31,336
And we call those meals ready to eat.

132
00:08:31,336 --> 00:08:32,626
That's what the soldiers carry.

133
00:08:33,086 --> 00:08:37,366
And we would eat the same kind of food
they eat which is also really good.

134
00:08:37,846 --> 00:08:41,496
Typically, we would just put it in the oven
for a while to heat it up and then eat it.

135
00:08:42,516 --> 00:08:53,796
[Pause]

136
00:08:54,296 --> 00:08:55,736
>> Hello, my name is Rebecca [phonetic].

137
00:08:56,006 --> 00:09:01,006
And my question is how do you feel after a
long trip in space when you return to Earth?

138
00:09:01,116 --> 00:09:06,136
>> Well after a trip space, I think long or
short, you're always happy to get back to Earth

139
00:09:06,136 --> 00:09:11,146
because there are some things that you miss
in space like we don't get to take a shower

140
00:09:11,146 --> 00:09:15,276
in space so when you come back from
space you're ready to take a shower.

141
00:09:15,276 --> 00:09:20,266
And we don't have-- we have good food but we
don't have things like hamburgers or pizza, so,

142
00:09:21,006 --> 00:09:26,266
you know, you want to have some regular food
again, you want to have a hamburger or a pizza.

143
00:09:26,626 --> 00:09:30,866
So it's always good to be back,
so everybody is happy to be back.

144
00:09:31,406 --> 00:09:37,286
The way you feel when you get back is, at first
because you are used to living with no gravity

145
00:09:37,286 --> 00:09:41,806
up in space, when you come back, you first feel
very heavy because your body is getting used

146
00:09:41,806 --> 00:09:43,626
to gravity down here on Earth again.

147
00:09:44,206 --> 00:09:46,396
But that goes away pretty fast.

148
00:09:46,746 --> 00:09:52,866
What doesn't go away as fast is your
sense of balance because we have a thing

149
00:09:52,866 --> 00:09:57,496
in our inner ear called a neurovestibular
system and that's what tells us, you know,

150
00:09:57,766 --> 00:10:02,146
right now that I'm tipping over because there's
a little sensor in there that sends a signal

151
00:10:02,146 --> 00:10:04,706
to my brain and tells it, you know, I'm tilted.

152
00:10:05,206 --> 00:10:09,766

But in space, since there's no gravity for
that sensor to use to tell where it's--

153
00:10:09,866 --> 00:10:15,956
where it is, our brains don't get that
signal for a while and we come back and then

154
00:10:16,056 --> 00:10:21,126
that neurovestibular system sort of
has to turn back on, and takes a couple

155
00:10:21,126 --> 00:10:23,976
of days before our sense of
balance is back to 100 percent.

156
00:10:24,516 --> 00:10:33,016
[Pause]

157
00:10:33,516 --> 00:10:35,666
>> Hello, my name is Ariella [phonetic].

158
00:10:35,966 --> 00:10:38,996
My question is how can you
repair equipment in space?

159
00:10:41,246 --> 00:10:46,136
>> Well, we train quite a bit here at NASA
to be able to repair equipment in space

160
00:10:46,636 --> 00:10:48,456
and we know that things are going break.

161
00:10:48,916 --> 00:10:53,666
And so, we take spare parts
up to the space station

162
00:10:53,666 --> 00:10:56,316
to have them ready in case something breaks.

163

00:10:56,316 --> 00:10:58,706
And then when something does break,

164
00:10:58,706 --> 00:11:02,276
our astronauts can get a little
refresher course from the ground.

165
00:11:02,276 --> 00:11:04,816
People here in Mission Control
will tell them how

166
00:11:04,816 --> 00:11:07,976
to repair what's broken and they can fix things.

167
00:11:08,516 --> 00:11:11,816
And we did a lot of that in my
missions to the space shuttle--

168
00:11:12,046 --> 00:11:15,926
on the space shuttle to the space station, we
went outside and repaired the space station

169
00:11:16,296 --> 00:11:18,706
and actually helped to build
the space station at that point.

170
00:11:20,656 --> 00:11:21,306
>> Thank you.

171
00:11:22,516 --> 00:11:28,086
[Pause]

172
00:11:28,586 --> 00:11:29,866
>> Hello, my name is Ermond [phonetic].

173
00:11:29,866 --> 00:11:36,536
My question is do you have to go
to college and what do you study?

174

00:11:36,536 --> 00:11:41,656
>> To become an astronaut, you do need to have
a bachelor's degree at least from college.

175
00:11:41,656 --> 00:11:44,446
It's even better if you have
advanced college degrees.

176
00:11:44,956 --> 00:11:50,856
So, I went at the US Naval Academy and I studied
aerospace engineering as an undergraduate

177
00:11:50,856 --> 00:11:52,576
and got a bachelor of science in that.

178
00:11:52,916 --> 00:11:58,256
And then I went to further school and got
a masters degree in aeronautic engineering

179
00:11:58,776 --> 00:12:01,816
and I'm also a test pilot from the navy.

180
00:12:01,816 --> 00:12:04,656
So I've been to a lot of college.

181
00:12:04,756 --> 00:12:12,316
And most the astronauts you'll find have
a lot of college in their background.

182
00:12:12,566 --> 00:12:17,596
This takes a lot of training and so many people
want to be astronauts that it's very competitive

183
00:12:17,596 --> 00:12:21,636
to become an astronaut, so
people with more education

184
00:12:21,636 --> 00:12:25,606
and more training usually have a little
bit of a leg up on the people that don't.

185
00:12:26,516 --> 00:12:31,796
[Pause]

186
00:12:32,296 --> 00:12:33,336
>> Hi, my name is [inaudible].

187
00:12:33,496 --> 00:12:36,726
My question is what are you-- what
do you like to do in the space?

188
00:12:38,136 --> 00:12:42,306
>> Well, I like to look outside the
window and see the Earth down below us.

189
00:12:42,306 --> 00:12:44,966
It's amazing to see the Earth from that high up.

190
00:12:44,966 --> 00:12:47,716
And we're going around the
Earth every 90 minutes,

191
00:12:47,716 --> 00:12:49,806
so we're really going fast around the Earth.

192
00:12:49,806 --> 00:12:52,426
We're going 17,500 miles an hour.

193
00:12:52,956 --> 00:12:57,996
So the Earth goes by really fast and you get to
see a lot of different parts of the world just

194
00:12:58,086 --> 00:13:01,826
from a short look out the
window, so that's a lot of fun.

195
00:13:01,826 --> 00:13:08,826
And of course, since we're floating up there,
we can do summersaults and we can play kind

196
00:13:08,826 --> 00:13:11,986
of games with M&M's and things like that.

197
00:13:11,986 --> 00:13:16,176
So we work pretty hard up there but occasionally
we have a little bit of time to look

198
00:13:16,176 --> 00:13:21,196
out the window and take a break and
play some astronaut games I guess.

199
00:13:21,656 --> 00:13:23,466
>> Thank you.

200
00:13:23,556 --> 00:13:26,706
>> Hi, my name is Jesus [phonetic].

201
00:13:27,196 --> 00:13:35,966
My question is it true that there will-- in
2030, there were be a one way trip to Mars?

202
00:13:36,266 --> 00:13:43,516
>> Well, we hope it-- in the
2030's, let's see you guys will be

203
00:13:43,516 --> 00:13:48,806
about probably what, 29, 30 years old by then.

204
00:13:49,236 --> 00:13:55,926
We're hoping that we'll have a trip to Mars
planned and that will send people to Mars

205
00:13:55,926 --> 00:14:02,046
and bring them back and actually start
to explore Mars, have humans go there.

206
00:14:02,466 --> 00:14:05,896
So maybe somebody in the room there will

be one of the first people to go to Mars.

207
00:14:05,896 --> 00:14:08,816
Wouldn't that be cool?

208
00:14:08,816 --> 00:14:09,196
>> Yeah.

209
00:14:09,196 --> 00:14:09,806
>> Yes.

210
00:14:11,326 --> 00:14:11,846
>> Thank you.

211
00:14:12,516 --> 00:14:18,266
[Noise]

212
00:14:18,766 --> 00:14:20,006
>> Hello, my name is [inaudible].

213
00:14:20,006 --> 00:14:25,276
My question is how many space shuttles does
NASA have and how many people can it fit?

214
00:14:26,586 --> 00:14:29,456
>> I heard the first part, it's how
many space shuttles does NASA have,

215
00:14:29,456 --> 00:14:30,486
what was the second part?

216
00:14:31,726 --> 00:14:33,636
>> How many people can it fit inside one?

217
00:14:34,326 --> 00:14:36,216
>> How many people can fit inside one?

218
00:14:36,216 --> 00:14:40,796

Well, right now NASA has three space
shuttles that actually went to space.

219
00:14:40,796 --> 00:14:41,636
And then we have a four.

220
00:14:41,636 --> 00:14:49,306
Space Shuttle Enterprise that we use to practice
landings when we first design space shuttle.

221
00:14:49,756 --> 00:14:52,716
They weren't sure exactly how it was
going to come back and land on Earth

222
00:14:53,196 --> 00:14:59,146
so they built Enterprise and that's what they
did the practice landings in way back when.

223
00:14:59,746 --> 00:15:04,636
So right now-- yesterday, they
delivered the Space Shuttle Discovery

224
00:15:04,636 --> 00:15:08,026
to the Smithsonian Institution
in Washington, DC.

225
00:15:08,026 --> 00:15:12,676
So if you take a field trip or a vacation
to Washington, DC, you can actually go

226
00:15:12,676 --> 00:15:16,806
to the Smithsonian Museum and
see the Space Shuttle Discovery.

227
00:15:17,466 --> 00:15:23,916
The Space Shuttle Enterprise which was at
the Smithsonian is on its way to New York.

228
00:15:23,916 --> 00:15:27,306
So if you ever take a trip to New

York, you'll be able to see Enterprise

229
00:15:27,616 --> 00:15:29,276
up in New York, in New York City.

230
00:15:29,926 --> 00:15:37,046
And eventually, Space Shuttle Endeavor which is
the first one that I flew on will be transferred

231
00:15:37,046 --> 00:15:40,166
out to Los Angeles, California
to a museum out there.

232
00:15:40,646 --> 00:15:45,106
So if your travels take you to Los Angeles,
eventually, you'll be able to see Endeavor

233
00:15:45,556 --> 00:15:48,296
which will be pretty cool for me
because since I flew on the space

234
00:15:48,296 --> 00:15:51,076
on that space shuttle, I'd like to see it again.

235
00:15:51,856 --> 00:15:53,886
And then finally, the fourth one Atlantis,

236
00:15:54,326 --> 00:15:58,876
Atlantis was the space shuttle I flew my second
mission on and that space shuttle is going

237
00:15:58,876 --> 00:16:01,186
to stay down in Florida at
the Kennedy Space Center.

238
00:16:01,186 --> 00:16:05,526
So if you ever go to Florida to visit the
Kenney Space Center, you'll be able to Atlantis

239

00:16:05,526 --> 00:16:10,036
down there, so this-- since we're not
flying these space shuttles anymore,

240
00:16:10,246 --> 00:16:13,536
it's great that we're putting them in
museums around the country so a lot

241
00:16:13,536 --> 00:16:15,206
of people will be able to see them

242
00:16:15,276 --> 00:16:18,566
and appreciate what a space
shuttle looks like up close.

243
00:16:19,156 --> 00:16:21,176
>> Okay, thank you.

244
00:16:22,516 --> 00:16:32,406
[Pause]

245
00:16:32,906 --> 00:16:34,646
>> Hello my name is [inaudible].

246
00:16:34,646 --> 00:16:43,586
And my question is how old do
you need to be to go to space?

247
00:16:43,776 --> 00:16:49,656
>> How old do you need to be?

248
00:16:51,416 --> 00:16:51,536
>> Yes.

249
00:16:51,736 --> 00:16:59,426
>> Well, there's no minimum age for going to
space but for our astronaut program, typically,

250
00:16:59,426 --> 00:17:04,406

people are in their 30s when they get selected
to be an astronaut because of all the training

251
00:17:04,406 --> 00:17:08,776
that we talked about in the earlier
question about college requirements.

252
00:17:09,216 --> 00:17:12,476
Usually, people that become
astronauts are in their 30s already.

253
00:17:12,476 --> 00:17:18,466
And then they come to NASA and they might train
for two to five years before they go to space.

254
00:17:18,466 --> 00:17:24,276
So typically, astronauts that go to space are
in their mid to late 30s for the first time.

255
00:17:24,276 --> 00:17:31,896
So, you guys have a little bit of time to
get all of your school done and go to college

256
00:17:31,896 --> 00:17:34,646
and get some experience before
you get to go to Mars.

257
00:17:37,926 --> 00:17:38,376
>> Thank you.

258
00:17:39,516 --> 00:17:43,726
[Pause]

259
00:17:44,226 --> 00:17:45,686
>> Hello my name is Crystal [phonetic].

260
00:17:45,686 --> 00:17:49,916
My question is why are kids
not able to travel to the moon?

261
00:17:50,386 --> 00:17:52,746
>> Why are kids not able to
travel to the moon, Crystal?

262
00:17:53,976 --> 00:17:54,156
>> Yeah.

263
00:17:55,276 --> 00:17:58,886
>> Well, traveling in space is still dangerous.

264
00:17:59,456 --> 00:18:05,966
Maybe sometime in the future, it will be so safe
and it will so routine, it will be like getting

265
00:18:05,966 --> 00:18:08,906
on in an airliner and flying
from here to California.

266
00:18:09,536 --> 00:18:18,786
But right now, it's still considered fairly
dangerous so we wouldn't be very good parents

267
00:18:18,786 --> 00:18:22,436
if we let our kids fly on a space
shuttle to the moon or spaceship

268
00:18:22,436 --> 00:18:24,776
to the moon or to anywhere in space.

269
00:18:24,926 --> 00:18:28,516
So that's the reason, primary reason.

270
00:18:28,896 --> 00:18:35,436
And since we can only launch a certain number
of people into space, we try to get people

271
00:18:35,436 --> 00:18:39,746
that know how to work all the experiments
and have a lot of training first,

272
00:18:40,096 --> 00:18:44,776
so it'll be a while before we probably
start sending kids to the space.

273
00:18:45,356 --> 00:18:49,246
>> And I've got another answer for that and
it is, because kids need to stay is school

274
00:18:49,556 --> 00:18:51,356
and if you stay in school
that will take to the moon.

275
00:18:51,926 --> 00:18:52,606
Next question?

276
00:18:53,516 --> 00:18:57,926
[Pause]

277
00:18:58,426 --> 00:19:00,016
>> Hello my name is Tia [phonetic].

278
00:19:00,016 --> 00:19:03,056
My question is who was the
first man on the moon?

279
00:19:03,056 --> 00:19:06,206
>> Who was the first man on the moon?

280
00:19:06,206 --> 00:19:07,206
Neil Armstrong.

281
00:19:07,246 --> 00:19:09,296
Do you know where Neil Armstrong grew up?

282
00:19:09,786 --> 00:19:12,086
In Ohio, and you know where I grew up?

283

00:19:12,296 --> 00:19:13,446
I grew up in Ohio.

284
00:19:14,156 --> 00:19:16,106
So Neil Armstrong [laughter] is one of my--

285
00:19:16,656 --> 00:19:20,526
Neil Armstrong was one of my heroes
when I was a kid growing up in Ohio.

286
00:19:20,526 --> 00:19:21,956
That's why I wanted to be an astronaut.

287
00:19:22,516 --> 00:19:27,566
[Noise]

288
00:19:28,066 --> 00:19:28,756
>> Thank you.

289
00:19:31,996 --> 00:19:32,966
>> Hello, my name is--

290
00:19:33,516 --> 00:19:38,859
[Noise]

291
00:19:39,359 --> 00:19:44,702
[Laughter]

292
00:19:45,202 --> 00:19:50,545
[Inaudible Discussion]

293
00:19:51,046 --> 00:19:52,066
>> Say it again.

294
00:19:52,066 --> 00:19:52,133
[Inaudible Remark]

295
00:19:52,133 --> 00:19:58,716

>> Hi this is Patricia at-- in the Digital Learning Network, can you guys hear me?

296
00:19:59,116 --> 00:20:02,166
>> Yeah, we can hear you.

297
00:20:02,166 --> 00:20:02,256
>> Yes.

298
00:20:02,296 --> 00:20:02,766
>> Okay, all right.

299
00:20:03,416 --> 00:20:09,706
Looks like we've lost the audio, we lost the picture from Mission Control so--

300
00:20:10,076 --> 00:20:15,566
all right, so it looks-- it appears as though that you may have to cut out a little early,

301
00:20:15,606 --> 00:20:17,896
hold on just a second and I'm going to see what happen, okay?

302
00:20:18,516 --> 00:20:33,046
[Inaudible Discussion]

303
00:20:33,546 --> 00:20:34,896
>> Hi kids.

304
00:20:35,356 --> 00:20:40,646
Hi kids, this is Amiko Kauderer here, Public Affairs Officer with Astronaut Mike Foreman

305
00:20:40,646 --> 00:20:43,466
in the International Space Station Flight Control Room, can you hear us?

306
00:20:44,776 --> 00:20:44,946

>> Yes.

307
00:20:44,946 --> 00:20:47,046
>> Here we go.

308
00:20:47,046 --> 00:20:48,496
Okay, do we have another question?

309
00:20:49,046 --> 00:20:49,846
>> Yeah, me.

310
00:20:52,676 --> 00:20:54,186
>> Hello, my name is Daniella [phonetic].

311
00:20:54,536 --> 00:21:00,106
My question is what do you study at NASA
and what kinds of things that you do there?

312
00:21:00,106 --> 00:21:03,736
>> What do I do in my job here at NASA?

313
00:21:05,026 --> 00:21:05,276
>> Yes.

314
00:21:07,036 --> 00:21:12,916
>> Well, aside from training to fly
to space, I also have a job here

315
00:21:12,916 --> 00:21:14,846
on the ground when I'm not training.

316
00:21:15,376 --> 00:21:18,326
And right now, I'll just give
you a little bit of background.

317
00:21:18,676 --> 00:21:23,906
NASA is working with some companies in United
States to help them build the next rocket.

318
00:21:23,906 --> 00:21:26,786
It is going to take our astronauts
to the space station.

319
00:21:26,786 --> 00:21:31,866
Because right now, the guys that are up on the
space station got there on a Russian rocket

320
00:21:31,946 --> 00:21:34,136
and Russia is the only country
that has a rocket.

321
00:21:34,136 --> 00:21:36,786
It can take our astronauts to the space station.

322
00:21:37,236 --> 00:21:41,076
And we would like to have a rocket from
the United States to do that job as well

323
00:21:41,076 --> 00:21:46,026
so we're working with companies in United
States to help them build a new rocket

324
00:21:46,376 --> 00:21:49,346
and I work with a company called Boeing.

325
00:21:49,776 --> 00:21:53,866
Boeing is one of the competitors
that was working on a new rocket.

326
00:21:54,316 --> 00:21:59,526
And so, I help Boeing by providing them some
of my background and experience here at NASA

327
00:21:59,986 --> 00:22:03,466
to help them build the next rocket to
take our astronaut to the space station.

328
00:22:03,876 --> 00:22:07,266

So even that is really cool
job, I really like that.

329
00:22:07,266 --> 00:22:14,486
I enjoy spending time with all the smart people
at Boeing and listening to them as they work

330
00:22:14,486 --> 00:22:17,366
to design the next rocket to
take our astronauts to space.

331
00:22:18,736 --> 00:22:19,496
>> Thank you.

332
00:22:21,516 --> 00:22:27,816
[Pause]

333
00:22:28,316 --> 00:22:31,396
>> All right, that is all
of our planned questions.

334
00:22:31,396 --> 00:22:35,386
I know one other student did have a question
that he would like to ask, is that okay?

335
00:22:36,056 --> 00:22:36,566
>> Sure.

336
00:22:37,516 --> 00:22:44,046
[Pause]

337
00:22:44,546 --> 00:22:45,306
>> My name [inaudible].

338
00:22:45,306 --> 00:22:50,936
My question is have you ever
been in a meteor shower?

339
00:22:52,286 --> 00:22:55,566

>> Well, sort of.

340
00:22:55,566 --> 00:23:02,636
In space, sometimes you see more meteors coming
through our atmosphere-- up our atmosphere.

341
00:23:02,946 --> 00:23:07,656
It seems like-- than when we're down here
on Earth, maybe because we're up there

342
00:23:07,656 --> 00:23:11,226
and we're looking at the
window more and we see them.

343
00:23:11,676 --> 00:23:16,936
But I can also tell you that since I've been
outside the space station doing space walks

344
00:23:17,296 --> 00:23:23,096
and the space station is mostly made of
metal, you see a lot of little pit marks,

345
00:23:23,096 --> 00:23:27,386
little dents in the outside of the space
station from where micrometeorites have hit.

346
00:23:27,956 --> 00:23:32,286
So we know that there's a lot of
things up there that come back

347
00:23:32,286 --> 00:23:34,716
and actually hit the space
station on the outside.

348
00:23:34,716 --> 00:23:39,836
They're really tiny but they're going
really fast so they make a little mark.

349
00:23:40,376 --> 00:23:46,096
So yes, I've been inside a meteor shower I guess

by living in the space station for a few weeks.

350
00:23:47,476 --> 00:23:48,126
>> Thank you.

351
00:23:48,126 --> 00:23:48,886
>> Good question.

352
00:23:48,886 --> 00:23:51,416
And I think that is all the time we have today.

353
00:23:51,756 --> 00:23:53,566
We really appreciate you guys.

354
00:23:53,566 --> 00:23:55,486
We're glad you were able
to come and join us here

355
00:23:55,486 --> 00:23:57,706
in the International Space
Station Flight Control Room.

356
00:23:57,706 --> 00:23:59,156
Again, thank you Mike for coming.

357
00:23:59,516 --> 00:24:04,516
You heard it here that the best job in
the world and off the world so study hard.

358
00:24:04,956 --> 00:24:06,756
Thank your teachers and eat your veggies.

359
00:24:06,816 --> 00:24:08,506
This is Mission Control Houston.

360
00:24:09,066 --> 00:24:09,586
>> Thank you.

361

00:24:09,586 --> 00:24:10,746
>> Bye kids.

362
00:24:10,876 --> 00:24:12,096
>> Bye.

363
00:24:12,746 --> 00:24:13,616
>> Thank you Mr. Mike.

364
00:24:15,016 --> 00:24:14,546
>> Thank you.

365
00:24:15,016 --> 00:24:15,976
>> Nice to see you.