1
00:00:05,670 --> 00:00:01,510
station this is houston are you ready

2
00:00:05,680 --> 00:00:09,310
i'm ready for the event

3
00:00:21,349 --> 00:00:12,390
wtmj tv this is mission control houston

4
00:00:25,830 --> 00:00:24,790
station this is charles benson with wtmj

5
00:00:29,990 --> 00:00:25,840
tv

6
00:00:40,229 --> 00:00:31,990
hello charles jeff here and i have you

7
00:00:44,389 --> 00:00:41,990
well good morning jeff williams from

8
00:00:49,190 --> 00:00:44,399
milwaukee wisconsin how are we looking

9
00:00:52,790 --> 00:00:50,790
well it's been a few days since i've

10
00:00:54,869 --> 00:00:52,800
seen wisconsin since we've passed over

11
00:00:57,110 --> 00:00:54,879
in the daytime but the last pass you

12
00:00:58,389 --> 00:00:57,120
looked great it was a

13
00:01:00,069 --> 00:00:58,399

late spring

14
00:01:01,670 --> 00:01:00,079
morning and

15
00:01:09,590 --> 00:01:01,680
the weather was clear i don't know how

16
00:01:14,149 --> 00:01:11,109
it's actually a beautiful morning in

17
00:01:16,149 --> 00:01:14,159
wisconsin i want to ask you on monday

18
00:01:19,990 --> 00:01:16,159
you made history by going inside the

19
00:01:21,910 --> 00:01:20,000
world's first inflatable living room in

20
00:01:24,550 --> 00:01:21,920
space i think they officially call it

21
00:01:25,590 --> 00:01:24,560
the beam it looked like the ultimate

22
00:01:28,469 --> 00:01:25,600
tent

23
00:01:32,870 --> 00:01:28,479
what is it and why is it important to

24
00:01:37,830 --> 00:01:35,510
well it's new technology as you

25
00:01:39,830 --> 00:01:37,840
mentioned the inflatable module

26
00:01:41,109 --> 00:01:39,840
is something new to us

27
00:01:42,870 --> 00:01:41,119
it's something that brings a lot of

28
00:01:44,550 --> 00:01:42,880
efficiency with a lot of potential in

29
00:01:47,190 --> 00:01:44,560
the future because you can launch

30
00:01:49,350 --> 00:01:47,200
something with that's smaller in volume

31
00:01:51,030 --> 00:01:49,360
on perhaps a smaller rocket and then

32
00:01:52,710 --> 00:01:51,040
inflate it to get the volume that we

33
00:01:54,789 --> 00:01:52,720
need the space station is very big and

34
00:01:58,389 --> 00:01:54,799
we use the the entire volume it's the

35
00:02:01,190 --> 00:01:58,399
size of a 5 000 square foot house

36
00:02:04,149 --> 00:02:01,200
so it's it's and it took almost 40 space

37
00:02:06,149 --> 00:02:04,159
shuttle flights 37 i think and equal

38
00:02:08,630 --> 00:02:06,159

number of russian rocket launches to get

39
00:02:10,869 --> 00:02:08,640
it into orbit so to be able to have

40
00:02:13,430 --> 00:02:10,879
something volumetrically more efficient

41
00:02:15,110 --> 00:02:13,440
to get into space is very promising and

42
00:02:16,550 --> 00:02:15,120
that's the purpose of the international

43
00:02:18,390 --> 00:02:16,560
space station to

44
00:02:20,470 --> 00:02:18,400
one of the purposes anyway is to prove

45
00:02:28,710 --> 00:02:20,480
out new technologies for future

46
00:02:33,030 --> 00:02:30,869
i think you described it as being cold

47
00:02:38,710 --> 00:02:33,040
inside how could that be for a guy who

48
00:02:43,830 --> 00:02:41,030
well cold is always relative it was when

49
00:02:46,229 --> 00:02:43,840
i came in or went into the b module it

50
00:02:50,470 --> 00:02:46,239
was cooler than the station

51
00:02:53,509 --> 00:02:50,480
we are very much climate controlled here

52
00:02:55,670 --> 00:02:53,519
but it had no heaters on it and it had

53
00:02:57,190 --> 00:02:55,680
no climate control before i went into it

54
00:02:59,030 --> 00:02:57,200
so it was more of a comment actually it

55
00:03:00,869 --> 00:02:59,040
was a little refreshing it was like a

56
00:03:09,670 --> 00:03:00,879
nice fall

57
00:03:15,990 --> 00:03:11,670
give me a sense of where you are now

58
00:03:19,910 --> 00:03:17,910
well i'm in one of the laboratory

59
00:03:23,110 --> 00:03:19,920
modules on board this is the japanese

60
00:03:25,110 --> 00:03:23,120
module uh so i'm at the very forward end

61
00:03:27,830 --> 00:03:25,120
and if if we were we're heading in this

62
00:03:30,149 --> 00:03:27,840
direction so i'm kind of the left wing

63
00:03:32,229 --> 00:03:30,159

at the forward end of the space station

64
00:03:34,710 --> 00:03:32,239
uh and if i were to go behind the camera

65
00:03:37,589 --> 00:03:34,720
and take a right turn i could go uh

66
00:03:39,509 --> 00:03:37,599
almost 300 feet uh through the station

67
00:03:42,390 --> 00:03:39,519
down through different modules the us

68
00:03:43,830 --> 00:03:42,400
laboratory um a couple of other us

69
00:03:46,070 --> 00:03:43,840
modules

70
00:03:47,990 --> 00:03:46,080
and then get into the russian segment in

71
00:03:56,710 --> 00:03:48,000
the russian laboratory modules as well

72
00:04:01,429 --> 00:03:58,710
the space station has traveled roughly

73
00:04:03,350 --> 00:04:01,439
2.6 billion miles it's orbited the earth

74
00:04:05,350 --> 00:04:03,360
more than a hundred times

75
00:04:07,990 --> 00:04:05,360
what's the future for the space station

76
00:04:11,350 --> 00:04:08,000
what new things can we learn from the

77
00:04:14,550 --> 00:04:13,110
well i think we'll continue to learn the

78
00:04:17,749 --> 00:04:14,560
things that were that we've been

79
00:04:18,949 --> 00:04:17,759
endeavored to study here for already

80
00:04:21,830 --> 00:04:18,959
many years

81
00:04:22,629 --> 00:04:21,840
over 15 years

82
00:04:25,990 --> 00:04:22,639
the

83
00:04:28,070 --> 00:04:26,000
space station affords us a very unique

84
00:04:29,670 --> 00:04:28,080
laboratory environment in a weightless

85
00:04:31,990 --> 00:04:29,680
environment so

86
00:04:33,990 --> 00:04:32,000
we've got science experiments across the

87
00:04:36,150 --> 00:04:34,000
spectrum of the different science

88
00:04:37,270 --> 00:04:36,160

disciplines that have been going on for

89
00:04:40,629 --> 00:04:37,280
the life of the station and will

90
00:04:42,550 --> 00:04:40,639
continue to go on well into the 2020s

91
00:04:45,030 --> 00:04:42,560
according to the current plan

92
00:04:47,030 --> 00:04:45,040
also we have like we met we talked about

93
00:04:49,830 --> 00:04:47,040
the beam a couple minutes ago proven out

94
00:04:51,670 --> 00:04:49,840
technologies for future exploration this

95
00:04:55,430 --> 00:04:51,680
is a great platform to be able to do

96
00:04:58,550 --> 00:04:55,440
that and finally i would offer um

97
00:05:00,870 --> 00:04:58,560
that we don't understand completely the

98
00:05:02,469 --> 00:05:00,880
impacts in the human body uh in this

99
00:05:03,510 --> 00:05:02,479
weightless environment the environment

100
00:05:05,749 --> 00:05:03,520
of space

101
00:05:07,590 --> 00:05:05,759
so we are guinea pigs ourselves while

102
00:05:09,830 --> 00:05:07,600
we're up here so many of the experiments

103
00:05:12,070 --> 00:05:09,840
that we're conducting are on ourselves

104
00:05:13,909 --> 00:05:12,080
to try to understand the impacts in this

105
00:05:16,310 --> 00:05:13,919
environment on the human body and to

106
00:05:18,870 --> 00:05:16,320
mitigate those adverse impacts

107
00:05:20,790 --> 00:05:18,880
again to support future exploration out

108
00:05:31,430 --> 00:05:20,800
of low earth orbit whether whether it be

109
00:05:35,350 --> 00:05:33,430
what's it like to be weightless it's fun

110
00:05:37,430 --> 00:05:35,360
to watch you there as the microphone can

111
00:05:42,070 --> 00:05:37,440
be floating you're floating how long

112
00:05:46,150 --> 00:05:44,629
well you acclimate very quickly in a few

113
00:05:47,909 --> 00:05:46,160

days but i would say it takes most

114
00:05:49,990 --> 00:05:47,919
people on their first flight their first

115
00:05:52,230 --> 00:05:50,000
time here about six weeks to get very

116
00:05:54,629 --> 00:05:52,240
comfortable working in the environment

117
00:05:57,189 --> 00:05:54,639
where the logical up or down is no

118
00:05:59,189 --> 00:05:57,199
longer up or down you can turn sideways

119
00:06:01,510 --> 00:05:59,199
you can turn upside down and make

120
00:06:04,230 --> 00:06:01,520
anything illogical up and down

121
00:06:07,110 --> 00:06:04,240
the challenges of course

122
00:06:09,270 --> 00:06:07,120
come with losing things very easily like

123
00:06:11,270 --> 00:06:09,280
you said i can let go of this microphone

124
00:06:13,670 --> 00:06:11,280
and continue talking but it can drift

125
00:06:14,710 --> 00:06:13,680
away and it's soon out of sight and i

126
00:06:16,550 --> 00:06:14,720
can tell you

127
00:06:19,029 --> 00:06:16,560
over the the length of time that i've

128
00:06:20,870 --> 00:06:19,039
been here the multiple flights i've lost

129
00:06:23,510 --> 00:06:20,880
many things thankfully you eventually

130
00:06:25,990 --> 00:06:23,520
find them they usually drift into an

131
00:06:27,430 --> 00:06:26,000
inlet filter in the ventilation system

132
00:06:29,110 --> 00:06:27,440
and they're caught by a filter and

133
00:06:37,749 --> 00:06:29,120
that's where we usually go look for lost

134
00:06:41,270 --> 00:06:39,749
that sounds very cool give me a sense

135
00:06:43,189 --> 00:06:41,280
are you allowed to bring any personal

136
00:06:47,430 --> 00:06:43,199
items from home and if so did you bring

137
00:06:51,749 --> 00:06:50,309
we do bring some personal items i

138
00:06:54,070 --> 00:06:51,759

bring of course

139
00:06:55,909 --> 00:06:54,080
photographs

140
00:06:58,309 --> 00:06:55,919
of family

141
00:07:00,230 --> 00:06:58,319
and a few close friends

142
00:07:02,469 --> 00:07:00,240
little trinket kind of things i've

143
00:07:04,710 --> 00:07:02,479
brought jewelry up here for my wife and

144
00:07:06,629 --> 00:07:04,720
my daughters-in-law

145
00:07:09,510 --> 00:07:06,639
and other things like that

146
00:07:12,309 --> 00:07:09,520
i bought brought flags u.s flags

147
00:07:15,110 --> 00:07:12,319
wisconsin flags u.s army flags i spent

148
00:07:17,510 --> 00:07:15,120
my whole career in the army

149
00:07:19,510 --> 00:07:17,520
so things like that it's not a whole lot

150
00:07:23,430 --> 00:07:19,520
we're we're limited to

151
00:07:25,430 --> 00:07:23,440
1.5 kilograms on the soyuz soyuz as you

152
00:07:28,230 --> 00:07:25,440
probably know is very small

153
00:07:29,110 --> 00:07:28,240
so we don't have a lot of room to put

154
00:07:32,070 --> 00:07:29,120
things

155
00:07:39,670 --> 00:07:32,080
so logically it limits us

156
00:07:42,870 --> 00:07:41,350
jeff we have people on facebook

157
00:07:44,950 --> 00:07:42,880
listening to this right now we had a

158
00:07:50,309 --> 00:07:44,960
question from meredith who want to know

159
00:07:55,189 --> 00:07:52,950
well let's see we're not any closer to

160
00:07:57,350 --> 00:07:55,199
the moon than you are really where we

161
00:08:00,710 --> 00:07:57,360
orbit the earth and our altitude above

162
00:08:02,550 --> 00:08:00,720
the earth is a roughly 250 miles

163
00:08:05,029 --> 00:08:02,560

and as i recall the moon is something

164
00:08:06,629 --> 00:08:05,039
like 240 000 miles away i might have

165
00:08:10,230 --> 00:08:06,639
that number wrong but that's what my

166
00:08:12,070 --> 00:08:10,240
memory uh recalls at the moment uh so

167
00:08:14,070 --> 00:08:12,080
it's it's uh you know orders of

168
00:08:16,150 --> 00:08:14,080
magnitude beyond where we are right now

169
00:08:17,430 --> 00:08:16,160
we're very close to the earth we can go

170
00:08:19,270 --> 00:08:17,440
to the window we can see the entire

171
00:08:21,670 --> 00:08:19,280
globe but uh

172
00:08:23,270 --> 00:08:21,680
you uh you you very close you can see

173
00:08:24,469 --> 00:08:23,280
the details on the earth and of course

174
00:08:26,150 --> 00:08:24,479
i've sent down

175
00:08:28,469 --> 00:08:26,160
uh and we've all set down much

176
00:08:30,950 --> 00:08:28,479
photography showing the details of the

177
00:08:37,990 --> 00:08:30,960
earth so really not any closer than you

178
00:08:42,310 --> 00:08:39,909
we have about 30 seconds left give me a

179
00:08:44,149 --> 00:08:42,320
sense of that spectacular view of mother

180
00:08:46,070 --> 00:08:44,159
earth that you see every day and the

181
00:08:50,949 --> 00:08:46,080
sheer beauty must be amazing but is it

182
00:08:55,910 --> 00:08:53,350
oh it's uh incredibly moving to be able

183
00:08:59,110 --> 00:08:55,920
to view the part of god's creation we

184
00:09:01,190 --> 00:08:59,120
call earth which is our home and to see

185
00:09:03,190 --> 00:09:01,200
that it is habitable that it is

186
00:09:05,430 --> 00:09:03,200
inhabited you see all kinds of details

187
00:09:07,110 --> 00:09:05,440
like i said natural features as well as

188
00:09:08,470 --> 00:09:07,120

man-made features so i spent a lot of

189
00:09:09,590 --> 00:09:08,480
time in the window

190
00:09:11,750 --> 00:09:09,600
with

191
00:09:13,269 --> 00:09:11,760
things like this a camera

192
00:09:14,470 --> 00:09:13,279
trying to capture

193
00:09:16,310 --> 00:09:14,480
that view

194
00:09:18,630 --> 00:09:16,320
for the people on earth to be able to

195
00:09:19,990 --> 00:09:18,640
virtually bring everybody to this this

196
00:09:28,389 --> 00:09:20,000
orbital outpost we call the

197
00:09:31,829 --> 00:09:29,829
jeff williams i can't thank you enough

198
00:09:33,670 --> 00:09:31,839
for your time i really appreciate it

199
00:09:37,430 --> 00:09:33,680
safe travels and

200
00:09:38,790 --> 00:09:37,440
again thank you very much

201
00:09:45,430 --> 00:09:38,800
thank you it's great to be with you