
Terry Virts
Expedition 42 Flight Engineer

1
00:00:05,749 --> 00:00:03,909
nasa astronaut terry verse

2
00:00:08,950 --> 00:00:05,759
getting ready to make his second flight

3
00:00:11,270 --> 00:00:08,960
into space a former shuttle uh pilot uh

4
00:00:14,150 --> 00:00:11,280
just earlier this month before he uh

5
00:00:16,710 --> 00:00:14,160
left the guerin um cosmonaut training

6
00:00:18,070 --> 00:00:16,720
center for baikonur

7
00:00:19,910 --> 00:00:18,080
my colleague

8
00:00:21,910 --> 00:00:19,920
nasa public affairs officer brandy dean

9
00:00:23,189 --> 00:00:21,920
got to spend a few minutes with him

10
00:00:24,790 --> 00:00:23,199
so why don't we go ahead and take a look

11
00:00:27,189 --> 00:00:24,800
at that and catch up

12
00:00:28,630 --> 00:00:27,199
with terry just a little while ago as he

13
00:00:30,230 --> 00:00:28,640

was getting ready to head down and get

14
00:00:33,350 --> 00:00:30,240
ready to head up towards the

15
00:00:35,030 --> 00:00:33,360
international space station

16
00:00:36,870 --> 00:00:35,040
okay terry so you have been getting

17
00:00:38,310 --> 00:00:36,880
ready for this day for

18
00:00:40,229 --> 00:00:38,320
i guess at least two years depending on

19
00:00:41,670 --> 00:00:40,239
how you count it what has it been like

20
00:00:42,790 --> 00:00:41,680
traveling around the world training for

21
00:00:45,430 --> 00:00:42,800
this

22
00:00:48,790 --> 00:00:45,440
been

23
00:00:50,069 --> 00:00:48,800
really a culmination of my career

24
00:00:52,229 --> 00:00:50,079
getting to go to the international

25
00:00:53,110 --> 00:00:52,239
partners europe japan canada and of

26
00:00:55,270 --> 00:00:53,120
course

27
00:00:57,110 --> 00:00:55,280
primarily russia

28
00:00:58,549 --> 00:00:57,120
all while being based out of jsc has

29
00:01:00,790 --> 00:00:58,559
been a busy time

30
00:01:02,150 --> 00:01:00,800
it's been lots of travel but it's been

31
00:01:03,270 --> 00:01:02,160
fun it's been

32
00:01:04,950 --> 00:01:03,280
um

33
00:01:07,109 --> 00:01:04,960
probably the most fun

34
00:01:08,710 --> 00:01:07,119
part of my career that i've ever had

35
00:01:12,390 --> 00:01:08,720
but maybe it'll be top soon what's left

36
00:01:13,910 --> 00:01:12,400
to do between now and launch day

37
00:01:16,550 --> 00:01:13,920
well let's see the launch plans right

38
00:01:19,109 --> 00:01:16,560

now are going to be the 24th of november

39
00:01:21,109 --> 00:01:19,119
in kazakhstan 23rd and houston and

40
00:01:22,789 --> 00:01:21,119
between now and then we have a big

41
00:01:24,950 --> 00:01:22,799
ceremonial day tomorrow with a press

42
00:01:26,710 --> 00:01:24,960
conference and a state commission and a

43
00:01:28,149 --> 00:01:26,720
ceremony at red square

44
00:01:30,469 --> 00:01:28,159
once you get to baikonur there's really

45
00:01:32,630 --> 00:01:30,479
two main events there the premierkos are

46
00:01:35,109 --> 00:01:32,640
the fit checks roughly equivalent to the

47
00:01:36,950 --> 00:01:35,119
tcdt that we did on the shuttle and

48
00:01:39,270 --> 00:01:36,960
we'll be going inside the vehicle in our

49
00:01:40,870 --> 00:01:39,280
spacesuits just making sure everything

50
00:01:43,910 --> 00:01:40,880
fits making sure we know where all the

51
00:01:45,830 --> 00:01:43,920
specific locations of equipment are so

52
00:01:48,069 --> 00:01:45,840
we have these two fit checks inside the

53
00:01:50,789 --> 00:01:48,079
soyuz and then our day-to-day life there

54
00:01:52,710 --> 00:01:50,799
will be going over the checklist that we

55
00:01:54,950 --> 00:01:52,720
have the plans that we have the first

56
00:01:56,870 --> 00:01:54,960
few days schedule

57
00:01:57,749 --> 00:01:56,880
doing just last minute preparations for

58
00:01:59,270 --> 00:01:57,759
launch

59
00:02:02,069 --> 00:01:59,280
well and then can you walk us through

60
00:02:04,389 --> 00:02:02,079
launch day what is that like for you

61
00:02:06,149 --> 00:02:04,399
launch day is a long day it's really

62
00:02:08,630 --> 00:02:06,159
launched two days

63
00:02:09,749 --> 00:02:08,640

it starts it'll start for us

64
00:02:10,710 --> 00:02:09,759
on

65
00:02:13,030 --> 00:02:10,720
um

66
00:02:14,710 --> 00:02:13,040
sunday as a as a normal day

67
00:02:17,350 --> 00:02:14,720
and then they'll give us the afternoon

68
00:02:19,430 --> 00:02:17,360
off to have uh some rest because the

69
00:02:21,430 --> 00:02:19,440
following night we'll be up all night

70
00:02:23,510 --> 00:02:21,440
and then up all day the following day

71
00:02:25,589 --> 00:02:23,520
doing the docking

72
00:02:27,830 --> 00:02:25,599
so the actual wake up will be probably

73
00:02:28,869 --> 00:02:27,840
eight to nine hours before

74
00:02:31,110 --> 00:02:28,879
launch

75
00:02:32,390 --> 00:02:31,120
uh we'll do some medical testing they'll

76
00:02:34,710 --> 00:02:32,400
do some

77
00:02:37,190 --> 00:02:34,720
just the last minute preparations there

78
00:02:39,430 --> 00:02:37,200
eat some meals

79
00:02:41,990 --> 00:02:39,440
walk drive out to the launch pad which

80
00:02:43,990 --> 00:02:42,000
is about a 30 or 45 minute drive away

81
00:02:45,589 --> 00:02:44,000
get suited up in the suit

82
00:02:47,670 --> 00:02:45,599
go out to the spaceship about three

83
00:02:49,830 --> 00:02:47,680
hours before launch and then we'll get

84
00:02:51,830 --> 00:02:49,840
strapped in do all of our comm checks

85
00:02:53,110 --> 00:02:51,840
and start getting the spaceship ready

86
00:02:55,110 --> 00:02:53,120
for launch

87
00:02:56,790 --> 00:02:55,120
and then after launch it's a six hour

88
00:02:58,470 --> 00:02:56,800

trip it's for orbit

89
00:03:00,149 --> 00:02:58,480
rendezvous is the plan

90
00:03:02,070 --> 00:03:00,159
to the space station

91
00:03:04,070 --> 00:03:02,080
um and then once we dock it'll be

92
00:03:05,430 --> 00:03:04,080
another hour a couple hours before we

93
00:03:06,710 --> 00:03:05,440
get the hatches open and we get in the

94
00:03:09,750 --> 00:03:06,720
space station

95
00:03:11,430 --> 00:03:09,760
and so it's just a long long long day

96
00:03:13,830 --> 00:03:11,440
but i think the adrenaline will be going

97
00:03:15,509 --> 00:03:13,840
and uh everybody no i've never heard

98
00:03:17,030 --> 00:03:15,519
anybody complain about that day it's uh

99
00:03:19,030 --> 00:03:17,040
it's gonna be a lot of fun

100
00:03:20,790 --> 00:03:19,040
well once you get on orbit i know you've

101
00:03:22,390 --> 00:03:20,800
got a lot of work planned and one of the

102
00:03:24,070 --> 00:03:22,400
big things of course is science

103
00:03:25,270 --> 00:03:24,080
experiments so are there any science

104
00:03:26,869 --> 00:03:25,280
experiments that you're really looking

105
00:03:28,149 --> 00:03:26,879
forward to

106
00:03:29,830 --> 00:03:28,159
you know there's so many different

107
00:03:32,070 --> 00:03:29,840
science experiments between nasa and

108
00:03:33,270 --> 00:03:32,080
international partners there's over 150

109
00:03:35,110 --> 00:03:33,280
different experiments we're going to be

110
00:03:36,949 --> 00:03:35,120
doing

111
00:03:38,789 --> 00:03:36,959
the one in particular that we won't have

112
00:03:41,110 --> 00:03:38,799
much to do with but i think is just

113
00:03:43,350 --> 00:03:41,120

fascinating is on the outside of the

114
00:03:45,990 --> 00:03:43,360
space station the alpha magnetic

115
00:03:48,390 --> 00:03:46,000
spectrometer is looking for

116
00:03:50,229 --> 00:03:48,400
intergalactic particles and antimatter

117
00:03:52,550 --> 00:03:50,239
and it's trying to figure out what the

118
00:03:55,110 --> 00:03:52,560
universe is made out of and

119
00:03:56,789 --> 00:03:55,120
it's it's just amazing fascinating stuff

120
00:03:58,309 --> 00:03:56,799
that the space station is a perfect

121
00:03:59,350 --> 00:03:58,319
platform for this experiment so

122
00:04:01,270 --> 00:03:59,360
hopefully

123
00:04:03,270 --> 00:04:01,280
in a few years once it gathers all the

124
00:04:05,670 --> 00:04:03,280
data that it needs we'll have a much

125
00:04:07,030 --> 00:04:05,680
clearer picture of the universe i have a

126
00:04:08,149 --> 00:04:07,040
feeling we're just going to have more

127
00:04:09,750 --> 00:04:08,159
questions

128
00:04:11,429 --> 00:04:09,760
at the end of the at the end of this

129
00:04:13,509 --> 00:04:11,439
experiment than we did before it but

130
00:04:15,110 --> 00:04:13,519
that's the the beauty of science is that

131
00:04:17,430 --> 00:04:15,120
the more you learn the more

132
00:04:18,710 --> 00:04:17,440
um the more you know that you didn't

133
00:04:20,229 --> 00:04:18,720
know and the more that you know that you

134
00:04:21,349 --> 00:04:20,239
need to learn in the future

135
00:04:23,189 --> 00:04:21,359
what are some of the other highlights

136
00:04:24,469 --> 00:04:23,199
you're looking forward to

137
00:04:26,950 --> 00:04:24,479
well other

138
00:04:29,110 --> 00:04:26,960

experiments that we'll be doing

139
00:04:30,390 --> 00:04:29,120
one in particular samantha and i will be

140
00:04:32,550 --> 00:04:30,400
going in the airlock and they're going

141
00:04:35,189 --> 00:04:32,560
to partially depressurize it

142
00:04:37,030 --> 00:04:35,199
and they're going to look at our

143
00:04:37,990 --> 00:04:37,040
respiratory system and how our lungs are

144
00:04:40,230 --> 00:04:38,000
working

145
00:04:41,670 --> 00:04:40,240
and hopefully that'll help people on

146
00:04:43,990 --> 00:04:41,680
earth that have

147
00:04:46,070 --> 00:04:44,000
breathing problems and also help the

148
00:04:48,390 --> 00:04:46,080
equipment manufacturers to

149
00:04:49,830 --> 00:04:48,400
build these uh detectors to to see how

150
00:04:51,749 --> 00:04:49,840
people are doing with asthma and other

151
00:04:52,790 --> 00:04:51,759
respiratory problems

152
00:04:55,110 --> 00:04:52,800
um

153
00:04:57,350 --> 00:04:55,120
and there's just a myriad of earth or of

154
00:04:58,469 --> 00:04:57,360
sorry of human physiology experiments

155
00:05:00,790 --> 00:04:58,479
that we're doing

156
00:05:02,230 --> 00:05:00,800
um as far as earth observations goes

157
00:05:03,990 --> 00:05:02,240
that's something that we all look

158
00:05:05,670 --> 00:05:04,000
forward to that's kind of every

159
00:05:06,629 --> 00:05:05,680
astronaut's favorite part is looking

160
00:05:08,550 --> 00:05:06,639
back at

161
00:05:10,710 --> 00:05:08,560
at earth and my astronaut mike fink a

162
00:05:12,790 --> 00:05:10,720
good friend of mine one time i was with

163
00:05:15,029 --> 00:05:12,800

him and some kids were asking him

164
00:05:16,550 --> 00:05:15,039
uh what's your favorite planet

165
00:05:19,110 --> 00:05:16,560
and and he said well some people say

166
00:05:21,270 --> 00:05:19,120
mars some people say jupiter saturn some

167
00:05:22,790 --> 00:05:21,280
people like the moon

168
00:05:24,150 --> 00:05:22,800
but my favorite planet is earth and i

169
00:05:26,230 --> 00:05:24,160
think that's a good astronaut

170
00:05:28,710 --> 00:05:26,240
perspective that we get to see the

171
00:05:29,909 --> 00:05:28,720
space and the heavens and the stars and

172
00:05:32,070 --> 00:05:29,919
planets

173
00:05:34,070 --> 00:05:32,080
which is a pretty unique perspective to

174
00:05:35,430 --> 00:05:34,080
be able to see those from space

175
00:05:36,790 --> 00:05:35,440
but looking back to earth you're always

176
00:05:38,950 --> 00:05:36,800
drawn back to earth it's like this

177
00:05:40,550 --> 00:05:38,960
gigantic magnet in the universe that

178
00:05:43,029 --> 00:05:40,560
people are drawn to it's our planet it's

179
00:05:45,270 --> 00:05:43,039
our home and so i'm really looking

180
00:05:47,590 --> 00:05:45,280
forward to looking at earth from space i

181
00:05:49,110 --> 00:05:47,600
bet um your predecessors have kind of

182
00:05:50,390 --> 00:05:49,120
gotten a reputation for sharing some of

183
00:05:52,550 --> 00:05:50,400
the photos of earth that they've taken

184
00:05:53,749 --> 00:05:52,560
are you going to be doing that as well i

185
00:05:54,950 --> 00:05:53,759
will um

186
00:05:56,710 --> 00:05:54,960
reid weissman's a good friend of mine

187
00:05:58,790 --> 00:05:56,720
actually another fellow baltimore native

188
00:06:01,029 --> 00:05:58,800

from maryland so we have back to back

189
00:06:01,830 --> 00:06:01,039
maryland baltimore astronauts

190
00:06:03,670 --> 00:06:01,840
and

191
00:06:05,590 --> 00:06:03,680
a lot of guys in the past have been just

192
00:06:07,270 --> 00:06:05,600
amazing with twitter and

193
00:06:08,710 --> 00:06:07,280
so i have some pretty big shoes to fill

194
00:06:10,950 --> 00:06:08,720
but i definitely want to share it's an

195
00:06:13,590 --> 00:06:10,960
adventure it's something so unique that

196
00:06:16,629 --> 00:06:13,600
so few people get to do live

197
00:06:17,990 --> 00:06:16,639
off of earth and then come back and so

198
00:06:20,230 --> 00:06:18,000
it's something i really want to share

199
00:06:22,070 --> 00:06:20,240
via twitter and instagram and nasa

200
00:06:23,990 --> 00:06:22,080
interviews like this

201
00:06:25,590 --> 00:06:24,000
other tv and radio you know whenever i

202
00:06:27,670 --> 00:06:25,600
have a chance to share

203
00:06:29,110 --> 00:06:27,680
just as much of the adventure as i can

204
00:06:31,110 --> 00:06:29,120
i'm going to do that

205
00:06:33,510 --> 00:06:31,120
at what point can you say that you would

206
00:06:36,469 --> 00:06:33,520
consider this mission successful or you

207
00:06:38,950 --> 00:06:36,479
will feel you've accomplished it well

208
00:06:41,110 --> 00:06:38,960
i'll be the commander on expedition 43.

209
00:06:42,550 --> 00:06:41,120
so the the things that

210
00:06:44,390 --> 00:06:42,560
will make me

211
00:06:45,670 --> 00:06:44,400
uh satisfied that we've had a successful

212
00:06:48,230 --> 00:06:45,680
mission are

213
00:06:50,710 --> 00:06:48,240

first and foremost have a safe mission

214
00:06:52,950 --> 00:06:50,720
to get all my crew members back to earth

215
00:06:54,230 --> 00:06:52,960
safely that's the top goal

216
00:06:56,230 --> 00:06:54,240
secondly i want to keep the space

217
00:06:57,909 --> 00:06:56,240
station in good working order and i want

218
00:06:59,189 --> 00:06:57,919
to leave it a better place than when we

219
00:07:01,110 --> 00:06:59,199
got there

220
00:07:02,790 --> 00:07:01,120
and then thirdly the reason we have the

221
00:07:04,150 --> 00:07:02,800
space station is to do

222
00:07:05,909 --> 00:07:04,160
science and so

223
00:07:08,150 --> 00:07:05,919
if we can accomplish and fulfill the

224
00:07:09,909 --> 00:07:08,160
science program that we have

225
00:07:11,270 --> 00:07:09,919
from nasa as well as our international

226
00:07:12,790 --> 00:07:11,280
partners

227
00:07:14,230 --> 00:07:12,800
that's really the mission and the whole

228
00:07:16,150 --> 00:07:14,240
purpose of the space station to begin

229
00:07:17,430 --> 00:07:16,160
with well thank you so much for joining

230
00:07:19,430 --> 00:07:17,440
us we really appreciate it and i hope

231
00:07:21,270 --> 00:07:19,440
you have a great launch we look forward

232
00:07:23,110 --> 00:07:21,280
to seeing a lot of your mission while