



1
00:00:05,590 --> 00:00:03,909
hi i'm mike massimino for the past few

2
00:00:07,829 --> 00:00:05,600
shuttle flights we've taken you behind

3
00:00:09,430 --> 00:00:07,839
the scenes to meet the crews as they

4
00:00:11,270 --> 00:00:09,440
train for their flights and the people

5
00:00:13,190 --> 00:00:11,280
around the country who make those

6
00:00:15,030 --> 00:00:13,200
missions fly but there's a lot of

7
00:00:16,790 --> 00:00:15,040
footage that we haven't shown you yet so

8
00:00:18,870 --> 00:00:16,800
we'd like to take you back to some of

9
00:00:20,790 --> 00:00:18,880
our recent flights and introduce you to

10
00:00:23,750 --> 00:00:20,800
more of the people who do everything at

11
00:00:35,270 --> 00:00:23,760
nasa we hope you enjoy this episode of

12
00:00:39,190 --> 00:00:36,950
we're here in the mission control center

13
00:00:41,990 --> 00:00:39,200

you're supporting sts-131 you're a

14

00:00:43,590 --> 00:00:42,000

two-time shuttle commander and two-time

15

00:00:44,950 --> 00:00:43,600

shuttle pilot so you've flown in space

16

00:00:46,229 --> 00:00:44,960

four times what were you doing here

17

00:00:48,310 --> 00:00:46,239

today though with these guys what was

18

00:00:51,910 --> 00:00:48,320

going on so today i was the asset entry

19

00:00:54,470 --> 00:00:51,920

uh capcom for sts-131 crew and we had

20

00:00:56,790 --> 00:00:54,480

way too many malfunctions uh sim

21

00:00:59,029 --> 00:00:56,800

supervisor really hammered

22

00:01:01,750 --> 00:00:59,039

the crew and a mission control team with

23

00:01:03,910 --> 00:01:01,760

about 11 independent failures but

24

00:01:06,230 --> 00:01:03,920

the team handled it well and the crew

25

00:01:08,310 --> 00:01:06,240

executed all their procedures perfectly

26

00:01:10,630 --> 00:01:08,320

so it was a good day

27

00:01:13,510 --> 00:01:10,640

we're uh handing over to the orbit two

28

00:01:15,429 --> 00:01:13,520

teams and uh and uh we're in good shape

29

00:01:17,510 --> 00:01:15,439

for orbit operations this is one of our

30

00:01:19,429 --> 00:01:17,520

final uh simulations uh before the

31

00:01:20,870 --> 00:01:19,439

actual launch and you'll be here of

32

00:01:23,510 --> 00:01:20,880

course doing your job for the actual

33

00:01:28,950 --> 00:01:26,630

and then it'll be also their capcom for

34

00:01:30,950 --> 00:01:28,960

their their orbit uh i'll be the shuttle

35

00:01:33,670 --> 00:01:30,960

orbit one uh capcom this works out

36

00:01:35,990 --> 00:01:33,680

extremely uh well because uh the

37

00:01:38,109 --> 00:01:36,000

the uh 131 mission is very similar to

38

00:01:41,670 --> 00:01:38,119

the mission we just flew on

39

00:01:43,910 --> 00:01:41,680

sts-128 so i i'm familiar with all their

40

00:01:45,510 --> 00:01:43,920

tasks and ready to uh support uh

41

00:01:47,590 --> 00:01:45,520

anything that might come up with the

42

00:01:49,590 --> 00:01:47,600

promotion that's true and you mentioned

43

00:01:51,749 --> 00:01:49,600

failures when you've been you've been on

44

00:01:53,830 --> 00:01:51,759

the flight deck for as a commander or

45

00:01:54,950 --> 00:01:53,840

pilot for four launches and how many you

46

00:01:58,069 --> 00:01:54,960

know how many times you've been in here

47

00:02:00,310 --> 00:01:58,079

for a launch as a as a capcom

48

00:02:02,230 --> 00:02:00,320

i'm not exactly sure but a lot right

49

00:02:03,670 --> 00:02:02,240

okay so have you ever seen anything on

50

00:02:05,109 --> 00:02:03,680

in flight that's like i mean the sims

51
00:02:08,309 --> 00:02:05,119
are always worse than the flight right

52
00:02:10,389 --> 00:02:08,319
fortunately the sims are so far uh worse

53
00:02:12,390 --> 00:02:10,399
than the flight for the most part and

54
00:02:14,229 --> 00:02:12,400
that's a good thing but uh we do believe

55
00:02:15,750 --> 00:02:14,239
that uh practicing all these uh

56
00:02:19,190 --> 00:02:15,760
malfunctions

57
00:02:21,750 --> 00:02:19,200
is useful uh training to uh get us ready

58
00:02:23,430 --> 00:02:21,760
it stresses the team and the crew and

59
00:02:26,309 --> 00:02:23,440
gets us ready for the real thing we have

60
00:02:28,309 --> 00:02:26,319
had a few malfunctions for real right

61
00:02:30,869 --> 00:02:28,319
and so uh we were well prepared to

62
00:02:33,910 --> 00:02:30,879
handle those all right but there is such

63
00:02:35,509 --> 00:02:33,920

a thing as excess and sometimes some

64

00:02:37,110 --> 00:02:35,519

soups do get a little carried away and

65

00:02:38,790 --> 00:02:37,120

we understand that all right man i know

66

00:02:40,309 --> 00:02:38,800

i know you got to go but if you don't

67

00:02:41,430 --> 00:02:40,319

mind you tell me some interesting stuff

68

00:02:43,030 --> 00:02:41,440

as we would because we're handing over

69

00:02:44,309 --> 00:02:43,040

you were telling me what was going on

70

00:02:46,710 --> 00:02:44,319

you talked about some of the cool stuff

71

00:02:49,750 --> 00:02:46,720

you've done uh earlier we were looking

72

00:02:51,270 --> 00:02:49,760

at the shuttle flying over baja right in

73

00:02:52,869 --> 00:02:51,280

the sim and you mentioned you at one

74

00:02:55,589 --> 00:02:52,879

point in your life you actually raced in

75

00:02:57,430 --> 00:02:55,599

baja i did i was on pit crew

76

00:03:00,229 --> 00:02:57,440

since i was about 15 years old down

77

00:03:01,990 --> 00:03:00,239

there in baja for the goodyear pit crew

78

00:03:04,470 --> 00:03:02,000

yeah and uh

79

00:03:06,229 --> 00:03:04,480

and then i had the opportunity later on

80

00:03:08,710 --> 00:03:06,239

it was part of a racing team and i was a

81

00:03:11,910 --> 00:03:08,720

driver and raced in the uh baja

82

00:03:13,750 --> 00:03:11,920

1000 uh race in the baja 500 and some

83

00:03:14,949 --> 00:03:13,760

other races and then some other desert

84

00:03:17,190 --> 00:03:14,959

races in

85

00:03:19,110 --> 00:03:17,200

california and arizona so it's always

86

00:03:21,430 --> 00:03:19,120

interesting to me when

87

00:03:23,430 --> 00:03:21,440

we fly overhead and the space shuttle to

88

00:03:24,949 --> 00:03:23,440

look down there and see the places where

89

00:03:25,750 --> 00:03:24,959

we chewed up a little dirt down there

90

00:03:27,830 --> 00:03:25,760

yeah

91

00:03:29,030 --> 00:03:27,840

did that get you now you flew f.a teams

92

00:03:30,149 --> 00:03:29,040

and then you flew space so i know you

93

00:03:31,589 --> 00:03:30,159

feel a lot of other stuff too but did

94

00:03:33,350 --> 00:03:31,599

that racing you can get you ready for

95

00:03:35,110 --> 00:03:33,360

what you're going fast in those other

96

00:03:38,949 --> 00:03:35,120

vehicles yeah you know there's a lot of

97

00:03:41,270 --> 00:03:38,959

uh racers have to improvise uh uh you

98

00:03:43,030 --> 00:03:41,280

know you have a plan for the race but

99

00:03:45,589 --> 00:03:43,040

things always happen with the with the

100

00:03:46,390 --> 00:03:45,599

race cars uh with the pits and so you

101
00:03:49,350 --> 00:03:46,400
have to

102
00:03:51,589 --> 00:03:49,360
improvise and adapt and overcome and uh

103
00:03:53,589 --> 00:03:51,599
so i think racing prepared me very well

104
00:03:56,949 --> 00:03:53,599
for a service in the marine corps

105
00:03:59,030 --> 00:03:56,959
and also for at nasa to uh fly uh on the

106
00:04:00,470 --> 00:03:59,040
space shuttle cool stuff man it's all

107
00:04:02,949 --> 00:04:00,480
good all right you're the flight

108
00:04:05,110 --> 00:04:02,959
director for this sts-131 crew what do

109
00:04:07,190 --> 00:04:05,120
you think of these guys and gals it's a

110
00:04:08,949 --> 00:04:07,200
mixed crew we've got guys in yours

111
00:04:11,830 --> 00:04:08,959
crew discovery is awesome looking

112
00:04:13,509 --> 00:04:11,840
forward to work with uh dex and the rest

113
00:04:15,589 --> 00:04:13,519

of discovery

114

00:04:18,150 --> 00:04:15,599

this is going to be one of the

115

00:04:19,430 --> 00:04:18,160

the big logistics flights to round out

116

00:04:20,629 --> 00:04:19,440

station before the end of the shuttle

117

00:04:22,310 --> 00:04:20,639

program and i know these guys are ready

118

00:04:23,590 --> 00:04:22,320

to go do it all right so with the clocks

119

00:04:25,590 --> 00:04:23,600

and and you come right down here to work

120

00:04:28,629 --> 00:04:25,600

or did you do something else i uh well i

121

00:04:30,629 --> 00:04:28,639

grew up on a dairy farm all right uh so

122

00:04:33,110 --> 00:04:30,639

i guess i basically grew up into a job

123

00:04:34,950 --> 00:04:33,120

there family-owned farm operation yeah

124

00:04:36,790 --> 00:04:34,960

and uh were you supposed to stay there

125

00:04:38,150 --> 00:04:36,800

and work the farm yeah and you you're

126

00:04:39,430 --> 00:04:38,160

screwing around by coming over here is

127

00:04:41,030 --> 00:04:39,440

that what happened my dad was mad as

128

00:04:42,790 --> 00:04:41,040

hell wanted to really go to engineering

129

00:04:44,469 --> 00:04:42,800

school yeah and my brother and i left

130

00:04:46,469 --> 00:04:44,479

the farm and moved down here but i went

131

00:04:48,469 --> 00:04:46,479

to engineering school at clarkson got a

132

00:04:50,390 --> 00:04:48,479

bachelor's yeah while i was there i did

133

00:04:51,830 --> 00:04:50,400

an internship uh

134

00:04:53,990 --> 00:04:51,840

with the johnson space center here in

135

00:04:54,830 --> 00:04:54,000

houston and yeah working on shuttle

136

00:04:57,030 --> 00:04:54,840

flight

137

00:04:58,469 --> 00:04:57,040

software cool to have stuff and uh just

138

00:05:00,550 --> 00:04:58,479

kind of came down here and fell in love

139

00:05:03,029 --> 00:05:00,560

with the uh the people in the work and

140

00:05:04,950 --> 00:05:03,039

it's been 16 years wow and you said your

141

00:05:07,350 --> 00:05:04,960

brother now i know your brother is a

142

00:05:09,189 --> 00:05:07,360

diver out at the pool right he works as

143

00:05:11,590 --> 00:05:09,199

a doctor he claims that you dragged him

144

00:05:14,310 --> 00:05:11,600

down here is that true uh

145

00:05:16,870 --> 00:05:14,320

to make a long story short i was

146

00:05:18,550 --> 00:05:16,880

looking forward to coming down here and

147

00:05:21,510 --> 00:05:18,560

he was working as an auto mechanic in

148

00:05:23,510 --> 00:05:21,520

town all right and i basically said one

149

00:05:25,510 --> 00:05:23,520

day i got the job offer i went in at

150

00:05:27,029 --> 00:05:25,520

lunchtime and told him uh hey i'm going

151

00:05:28,230 --> 00:05:27,039

to houston and i jokingly said i could

152

00:05:29,909 --> 00:05:28,240

use a roommate

153

00:05:31,830 --> 00:05:29,919

and he came home at the end of the day

154

00:05:34,230 --> 00:05:31,840

and said i gave my two weeks notice i'm

155

00:05:36,710 --> 00:05:34,240

going to houston with you wow we dumped

156

00:05:38,230 --> 00:05:36,720

that on our parents yeah the same day

157

00:05:39,110 --> 00:05:38,240

they lost both their hard hands on the

158

00:05:40,629 --> 00:05:39,120

farm

159

00:05:42,629 --> 00:05:40,639

we moved to houston i was gonna say city

160

00:05:43,990 --> 00:05:42,639

both of you cut out on the farm so who's

161

00:05:46,950 --> 00:05:44,000

running a farm

162

00:05:49,909 --> 00:05:46,960

uh my parents sold it in 1999 so uh they

163

00:05:51,350 --> 00:05:49,919

ran it themselves for six years oh my

164

00:05:52,390 --> 00:05:51,360

goodness

165

00:05:54,790 --> 00:05:52,400

yeah that's

166

00:05:56,390 --> 00:05:54,800

more than a full-time job and yeah

167

00:05:58,550 --> 00:05:56,400

they live in town now

168

00:06:01,110 --> 00:05:58,560

we're in town yeah richfield springs new

169

00:06:03,670 --> 00:06:01,120

york in new york okay it's like 14 miles

170

00:06:23,830 --> 00:06:03,680

from cooperstown okay and a small town

171

00:06:27,029 --> 00:06:25,189

what are you looking for i'm looking for

172

00:06:30,070 --> 00:06:27,039

a tile damage what's your name dan

173

00:06:31,590 --> 00:06:30,080

keenan ken keenan dan dan yeah i'm a

174

00:06:32,870 --> 00:06:31,600

tile guy

175

00:06:36,629 --> 00:06:32,880

tps engineer

176

00:06:40,469 --> 00:06:38,390

i just had the tile done in my kitchen

177

00:06:42,230 --> 00:06:40,479

oh did you really can you do that too uh

178

00:06:43,670 --> 00:06:42,240

i can do that for you i'll do it yeah

179

00:06:45,510 --> 00:06:43,680

you're good no but what are you doing

180

00:06:49,270 --> 00:06:45,520

here

181

00:06:50,550 --> 00:06:49,280

same so now i have to i found one that

182

00:06:52,070 --> 00:06:50,560

had a little

183

00:06:53,670 --> 00:06:52,080

minor gang and i'm trying to track it

184

00:06:57,110 --> 00:06:53,680

down and find it did you write down the

185

00:06:58,070 --> 00:06:57,120

name geographically okay

186

00:07:00,390 --> 00:06:58,080

all right

187

00:07:03,430 --> 00:07:00,400

you got to be smart for this job then

188

00:07:05,189 --> 00:07:03,440

no i got through that hoop somehow

189

00:07:06,710 --> 00:07:05,199

i've got plenty of film you've got good

190

00:07:07,670 --> 00:07:06,720

eyes

191

00:07:09,909 --> 00:07:07,680

um

192

00:07:11,749 --> 00:07:09,919

i'll find it here shortly

193

00:07:13,110 --> 00:07:11,759

how was things how are things with you

194

00:07:16,710 --> 00:07:13,120

well everything's good man i got no

195

00:07:18,550 --> 00:07:16,720

complaints i'm glad i got open plates

196

00:07:20,870 --> 00:07:18,560

what are these guys doing over here

197

00:07:22,469 --> 00:07:20,880

let's go look

198

00:07:24,070 --> 00:07:22,479

oh they're uh they pulled the carrier

199

00:07:26,150 --> 00:07:24,080

panel off that's a what does he got or

200

00:07:27,909 --> 00:07:26,160

what a carrier panel with bib on it

201
00:07:34,790 --> 00:07:27,919
flexible insulation blanket all right

202
00:07:37,830 --> 00:07:36,629
all right and they got the paper so and

203
00:07:39,749 --> 00:07:37,840
terry white's here so we're should be

204
00:07:41,830 --> 00:07:39,759
here oh jerry's a match so i mean he is

205
00:07:44,230 --> 00:07:41,840
the man he's the mayor of this place at

206
00:07:46,309 --> 00:07:44,240
least i think so all right so what they

207
00:07:48,070 --> 00:07:46,319
did is they pulled it off right here

208
00:07:49,749 --> 00:07:48,080
oh okay

209
00:07:51,589 --> 00:07:49,759
yeah why did they do that what'd they do

210
00:07:53,189 --> 00:07:51,599
terry what happened

211
00:07:55,189 --> 00:07:53,199
that's where we're actually gonna lift

212
00:07:57,350 --> 00:07:55,199
the orbiter when we get into the opf

213
00:07:58,550 --> 00:07:57,360

that's kidding me is that right there it

214

00:07:59,990 --> 00:07:58,560

actually we're going to lift it with the

215

00:08:01,990 --> 00:08:00,000

floor lifts but that's where we attach

216

00:08:03,830 --> 00:08:02,000

it to the big side jacks yeah that's

217

00:08:05,670 --> 00:08:03,840

where the little hole right there yeah

218

00:08:07,110 --> 00:08:05,680

that's a similar zoom in on that one

219

00:08:08,230 --> 00:08:07,120

that's the same with the guys right up

220

00:08:09,510 --> 00:08:08,240

there's a guy going in there what's he

221

00:08:17,189 --> 00:08:09,520

looking for birds

222

00:08:21,189 --> 00:08:18,950

before they put this in there and then

223

00:08:23,589 --> 00:08:21,199

we'll actually put the attachment on the

224

00:08:24,950 --> 00:08:23,599

jack into that to support the orbiter

225

00:08:27,270 --> 00:08:24,960

for the next several months while we

226

00:08:28,550 --> 00:08:27,280

work on it my goodness that's the same

227

00:08:30,469 --> 00:08:28,560

thing that's amazing that says right

228

00:08:32,230 --> 00:08:30,479

there how famous i think the point we

229

00:08:34,230 --> 00:08:32,240

used to lift at the vertical assembly

230

00:08:35,990 --> 00:08:34,240

building no no kidding yeah

231

00:08:37,350 --> 00:08:36,000

that's so that's a pretty strong there

232

00:08:39,110 --> 00:08:37,360

if you want to do you want me to get

233

00:08:40,790 --> 00:08:39,120

your permission to go up there

234

00:08:43,670 --> 00:08:40,800

look at it

235

00:08:49,509 --> 00:08:43,680

look at that it looks good to me

236

00:08:52,470 --> 00:08:50,949

look at it climbing up on the space

237

00:08:55,350 --> 00:08:52,480

shuttle can you imagine

238

00:08:57,829 --> 00:08:55,360

look how cool this is

239

00:08:59,750 --> 00:08:57,839

you guys like doing this stuff oh yeah

240

00:09:02,150 --> 00:08:59,760

sometimes you get to see all of it

241

00:09:03,590 --> 00:09:02,160

because the structure yeah yeah exactly

242

00:09:04,949 --> 00:09:03,600

what's gonna happen now you guys are

243

00:09:06,710 --> 00:09:04,959

gonna uh

244

00:09:07,750 --> 00:09:06,720

uh tow it is that right it's gonna get

245

00:09:09,829 --> 00:09:07,760

towed

246

00:09:11,750 --> 00:09:09,839

and then it's gonna get uh picked up uh

247

00:09:13,269 --> 00:09:11,760

over by the slf there by all right that

248

00:09:15,430 --> 00:09:13,279

one's just gonna tow it all the way into

249

00:09:16,710 --> 00:09:15,440

opf oh yeah it goes it doesn't go up on

250

00:09:18,470 --> 00:09:16,720

uh

251
00:09:19,670 --> 00:09:18,480
it'll go in there and then there's three

252
00:09:21,509 --> 00:09:19,680
floor lifts that'll lift it

253
00:09:23,190 --> 00:09:21,519
hydraulically to the maintenance height

254
00:09:24,070 --> 00:09:23,200
we'll attach it here and then we'll

255
00:09:25,990 --> 00:09:24,080
start

256
00:09:28,070 --> 00:09:26,000
disassembling from this flight and get

257
00:09:29,670 --> 00:09:28,080
the last of the astronauts effects out

258
00:09:31,110 --> 00:09:29,680
and the payload customers want their

259
00:09:33,590 --> 00:09:31,120
stuff out then we'll start gaining

260
00:09:35,190 --> 00:09:33,600
access to the vehicle to start taking

261
00:10:03,990 --> 00:09:35,200
you know got to put all the platforms in

262
00:10:08,630 --> 00:10:06,389
it's going so slow you know we went a

263
00:10:10,870 --> 00:10:08,640

few a few hours ago i was going 17 500

264

00:10:12,389 --> 00:10:10,880

miles an hour yeah and now it's just

265

00:10:14,630 --> 00:10:12,399

going uh

266

00:10:16,630 --> 00:10:14,640

that's what it's crawling 33 miles an

267

00:10:19,750 --> 00:10:16,640

hour

268

00:10:22,710 --> 00:10:19,760

it's crawling

269

00:10:25,829 --> 00:10:22,720

well there's atlantis

270

00:10:27,670 --> 00:10:25,839

how many miles i got on it you know

271

00:10:32,310 --> 00:10:27,680

i didn't read it

272

00:10:39,590 --> 00:10:34,630

before this fight

273

00:10:41,590 --> 00:10:39,600

yeah it had 4 451 orbits 114 million

274

00:10:44,310 --> 00:10:41,600

almost 120 now right that'd be about

275

00:10:45,829 --> 00:10:44,320

that 119 100 800

276

00:10:46,790 --> 00:10:45,839

all right

277

00:10:48,949 --> 00:10:46,800

wow