



HOUSTON
WE HAVE A
PODCAST

1
00:00:23,750 --> 00:00:08,150

[Music]

2
00:00:25,589 --> 00:00:23,760

hey everyone thanks for joining us for a

3
00:00:27,990 --> 00:00:25,599

live episode of houston we have a

4
00:00:29,669 --> 00:00:28,000

podcast on nasa's gary jordan we're

5
00:00:31,509 --> 00:00:29,679

getting together in front of the cameras

6
00:00:34,790 --> 00:00:31,519

this time to record this episode live

7
00:00:36,470 --> 00:00:34,800

because because it is our 200th episode

8
00:00:37,590 --> 00:00:36,480

of houston we have a podcast so we

9
00:00:38,709 --> 00:00:37,600

thought we'd do something special we're

10
00:00:40,229 --> 00:00:38,719

going to make this interactive we're

11
00:00:41,910 --> 00:00:40,239

going to take some questions we were

12
00:00:43,910 --> 00:00:41,920

looking for some special guests to get

13
00:00:45,990 --> 00:00:43,920

on our show none of them are available

14

00:00:47,190 --> 00:00:46,000

so we do have dan hewitt here as our

15

00:00:48,790 --> 00:00:47,200

special guest today dan thanks for

16

00:00:49,830 --> 00:00:48,800

joining yeah like i said it's uh it's

17

00:00:51,830 --> 00:00:49,840

always great to be the bottom of the

18

00:00:54,229 --> 00:00:51,840

barrel so thanks for letting me back in

19

00:00:55,830 --> 00:00:54,239

gary we actually did really want you to

20

00:00:58,630 --> 00:00:55,840

uh to come on this show because you

21

00:01:00,310 --> 00:00:58,640

kicked us off with episode one and uh

22

00:01:01,750 --> 00:01:00,320

today's episode theme is going to be

23

00:01:02,950 --> 00:01:01,760

talking about what you have been doing

24

00:01:04,710 --> 00:01:02,960

since you've been doing a lot of work

25

00:01:06,469 --> 00:01:04,720

with nasa tv and building up the mission

26
00:01:07,750 --> 00:01:06,479
coverage for a commercial crew so we're

27
00:01:09,510 --> 00:01:07,760
going to learn a bit a little bit about

28
00:01:11,109 --> 00:01:09,520
that we'll talk about the podcast and of

29
00:01:13,190 --> 00:01:11,119
course we'll be answering your questions

30
00:01:15,190 --> 00:01:13,200
live just comment uh right below on the

31
00:01:17,030 --> 00:01:15,200
facebook live stream so let's get right

32
00:01:19,109 --> 00:01:17,040
into it dan uh the first question i have

33
00:01:20,710 --> 00:01:19,119
is last time we had you on the show as a

34
00:01:22,230 --> 00:01:20,720
guest was four years ago you were the

35
00:01:24,149 --> 00:01:22,240
international space station public

36
00:01:26,390 --> 00:01:24,159
affairs officer what have you been up to

37
00:01:29,109 --> 00:01:26,400
since it's funny i mean we recorded

38
00:01:31,510 --> 00:01:29,119

episode one like 10 feet over there just

39

00:01:33,749 --> 00:01:31,520

sitting at a table thinking hey let's

40

00:01:35,670 --> 00:01:33,759

try it if it if it sounds terrible we

41

00:01:37,910 --> 00:01:35,680

just won't put it out but here we are

42

00:01:41,670 --> 00:01:37,920

200 episodes later that's right you know

43

00:01:43,990 --> 00:01:41,680

you and the whole team wow thanks uh but

44

00:01:45,510 --> 00:01:44,000

yeah back then i was i was the pao or

45

00:01:47,830 --> 00:01:45,520

the public affairs officer for space

46

00:01:50,230 --> 00:01:47,840

station and still do a lot of work with

47

00:01:52,630 --> 00:01:50,240

space station but it's expanded i work i

48

00:01:54,389 --> 00:01:52,640

get to work with you every day now on

49

00:01:55,590 --> 00:01:54,399

everything space station we have leah

50

00:01:57,270 --> 00:01:55,600

cheshire

51
00:01:59,990 --> 00:01:57,280
people who have watched nasa tv have

52
00:02:02,389 --> 00:02:00,000
definitely seen her and we cover

53
00:02:05,190 --> 00:02:02,399
kind of everything happening here at jsc

54
00:02:07,749 --> 00:02:05,200
with space station and commercial crew

55
00:02:09,270 --> 00:02:07,759
commercial the commercial crew program

56
00:02:11,350 --> 00:02:09,280
if you've followed human space flight at

57
00:02:13,190 --> 00:02:11,360
all you're very aware of it

58
00:02:15,350 --> 00:02:13,200
over the last couple of years we've been

59
00:02:17,510 --> 00:02:15,360
working and just last year

60
00:02:18,869 --> 00:02:17,520
started flying humans from america again

61
00:02:20,150 --> 00:02:18,879
for the first time since the end of the

62
00:02:23,110 --> 00:02:20,160
shuttle so

63
00:02:25,589 --> 00:02:23,120

really just diving in head first into

64

00:02:28,309 --> 00:02:25,599

all of that i mean it's a big team at

65

00:02:30,070 --> 00:02:28,319

nasa that works on that here in houston

66

00:02:31,589 --> 00:02:30,080

teams of florida

67

00:02:33,670 --> 00:02:31,599

people up at nasa headquarters in

68

00:02:35,430 --> 00:02:33,680

washington but

69

00:02:37,270 --> 00:02:35,440

that's pretty much eaten my lunch for

70

00:02:38,790 --> 00:02:37,280

the last couple of years

71

00:02:40,390 --> 00:02:38,800

well that's really what i want to get

72

00:02:41,750 --> 00:02:40,400

into is describing all that work that

73

00:02:43,509 --> 00:02:41,760

you've been doing

74

00:02:45,270 --> 00:02:43,519

really nasa tv if you're looking at the

75

00:02:47,430 --> 00:02:45,280

mission coverage it looks very different

76

00:02:48,790 --> 00:02:47,440

from how we've done it historically but

77

00:02:50,229 --> 00:02:48,800

i want to start there i want to start

78

00:02:51,430 --> 00:02:50,239

with understanding just how we've done

79

00:02:53,270 --> 00:02:51,440

it in the past and how it is different

80

00:02:55,190 --> 00:02:53,280

so take us through what nasa tv and our

81

00:02:57,910 --> 00:02:55,200

mission coverage used to look like yeah

82

00:02:58,949 --> 00:02:57,920

i mean nasa tv has been around

83

00:03:02,390 --> 00:02:58,959

forever

84

00:03:04,949 --> 00:03:02,400

essentially every every nasa mission

85

00:03:06,630 --> 00:03:04,959

we have covered live in some manner for

86

00:03:08,550 --> 00:03:06,640

the public and i mean

87

00:03:10,630 --> 00:03:08,560

uh i showed up at the very end of

88

00:03:13,270 --> 00:03:10,640

shuttle and by that point they've been

89

00:03:15,830 --> 00:03:13,280

flying shuttle for about 30 years it was

90

00:03:18,710 --> 00:03:15,840

a pretty well oiled machine you got

91

00:03:21,990 --> 00:03:18,720

wall-to-wall coverage for weeks at a

92

00:03:24,550 --> 00:03:22,000

time during shuttle missions um so it

93

00:03:26,550 --> 00:03:24,560

was definitely pretty exhaustive

94

00:03:28,710 --> 00:03:26,560

for for trying to just cover every

95

00:03:29,670 --> 00:03:28,720

moment of a mission

96

00:03:31,509 --> 00:03:29,680

but

97

00:03:33,589 --> 00:03:31,519

it was i mean you were you were in the

98

00:03:35,589 --> 00:03:33,599

very early stages of high definition

99

00:03:36,949 --> 00:03:35,599

television at that point really becoming

100

00:03:39,430 --> 00:03:36,959

widespread

101
00:03:41,750 --> 00:03:39,440
uh and social media was still pretty

102
00:03:43,990 --> 00:03:41,760
fledgling so that wasn't a huge part of

103
00:03:45,030 --> 00:03:44,000
of the live coverage yet

104
00:03:47,910 --> 00:03:45,040
and

105
00:03:49,670 --> 00:03:47,920
i mean just think about all of the ways

106
00:03:51,430 --> 00:03:49,680
in the last 10 years we've developed

107
00:03:54,149 --> 00:03:51,440
just to talk to people

108
00:03:56,949 --> 00:03:54,159
and it's it's been how can we try to

109
00:03:59,030 --> 00:03:56,959
work that into every kind of facet of

110
00:04:01,190 --> 00:03:59,040
covering human space flight

111
00:04:02,630 --> 00:04:01,200
and that's what we've been doing just

112
00:04:04,390 --> 00:04:02,640
gradually over the years because i mean

113
00:04:07,270 --> 00:04:04,400

we're still covering the space station

114

00:04:09,270 --> 00:04:07,280

people are still flying 24 hours a day

115

00:04:11,190 --> 00:04:09,280

so we still have we still have a job to

116

00:04:13,350 --> 00:04:11,200

do to cover that but

117

00:04:14,789 --> 00:04:13,360

transitioning from shuttle which we

118

00:04:17,270 --> 00:04:14,799

ended up taking

119

00:04:19,430 --> 00:04:17,280

a lot of those lessons in terms of you

120

00:04:21,030 --> 00:04:19,440

know how did we cover it when people

121

00:04:23,350 --> 00:04:21,040

were launching from here just because i

122

00:04:25,110 --> 00:04:23,360

mean for us in the us we know there's

123

00:04:27,270 --> 00:04:25,120

always going to be more interest when

124

00:04:29,749 --> 00:04:27,280

they're launching from florida yeah

125

00:04:32,710 --> 00:04:29,759

and so it was just getting ready for

126

00:04:35,030 --> 00:04:32,720

kind of that crush of attention that you

127

00:04:36,710 --> 00:04:35,040

hadn't really had except for a couple of

128

00:04:37,670 --> 00:04:36,720

moments since the end of the shuttle

129

00:04:40,550 --> 00:04:37,680

program

130

00:04:41,749 --> 00:04:40,560

did so i came into nasa after shuttle

131

00:04:42,790 --> 00:04:41,759

unfortunately i didn't get to see a

132

00:04:44,870 --> 00:04:42,800

shuttle launch i didn't get to work a

133

00:04:46,550 --> 00:04:44,880

shuttle mission for those that got to do

134

00:04:47,909 --> 00:04:46,560

it what was that like what were you know

135

00:04:49,670 --> 00:04:47,919

if you were doing commentary if you were

136

00:04:52,150 --> 00:04:49,680

working on broadcast what was that like

137

00:04:54,230 --> 00:04:52,160

yeah i as i said i came in at the very

138

00:04:56,390 --> 00:04:54,240

end yeah i started i was a it was a

139

00:04:58,870 --> 00:04:56,400

student like you and did the did the

140

00:05:00,710 --> 00:04:58,880

internship and then i started full-time

141

00:05:02,790 --> 00:05:00,720

the month before the final shuttle

142

00:05:05,029 --> 00:05:02,800

mission launched so i got to i got to

143

00:05:07,350 --> 00:05:05,039

see some of what they were doing and i

144

00:05:09,830 --> 00:05:07,360

it would be you know wall-to-wall

145

00:05:12,550 --> 00:05:09,840

coverage with a bunch of kind of the

146

00:05:13,749 --> 00:05:12,560

traditional at the desk briefings built

147

00:05:15,510 --> 00:05:13,759

in as well

148

00:05:16,790 --> 00:05:15,520

and then you're doing press releases and

149

00:05:18,550 --> 00:05:16,800

stuff like that but in terms of just

150

00:05:21,110 --> 00:05:18,560

like the television coverage it would

151
00:05:23,430 --> 00:05:21,120
start a couple hours before launch you

152
00:05:25,430 --> 00:05:23,440
would have team kennedy cover and

153
00:05:28,390 --> 00:05:25,440
everything and pretty much just one

154
00:05:30,310 --> 00:05:28,400
person here in houston who would then be

155
00:05:32,870 --> 00:05:30,320
ready to provide what we call the ascent

156
00:05:34,790 --> 00:05:32,880
coverage so after it launches um and you

157
00:05:37,189 --> 00:05:34,800
would usually only have one or two

158
00:05:38,790 --> 00:05:37,199
people at kennedy providing all that

159
00:05:39,909 --> 00:05:38,800
kind of that pre-launch countdown and

160
00:05:41,909 --> 00:05:39,919
everything

161
00:05:44,550 --> 00:05:41,919
and there were a couple of beats that

162
00:05:46,390 --> 00:05:44,560
you would always try to show which

163
00:05:48,469 --> 00:05:46,400

really helped guide what we ended up

164

00:05:50,310 --> 00:05:48,479

doing with commercial crew where you get

165

00:05:52,150 --> 00:05:50,320

to see the crew suit up you know the

166

00:05:54,150 --> 00:05:52,160

iconic getting in the orange suits and

167

00:05:56,390 --> 00:05:54,160

those big leather chairs walking to the

168

00:05:58,870 --> 00:05:56,400

elevator coming out of the doors that

169

00:06:00,790 --> 00:05:58,880

stuff that you know people

170

00:06:02,629 --> 00:06:00,800

if you if you thought about you know

171

00:06:04,230 --> 00:06:02,639

humans launching from florida those are

172

00:06:06,790 --> 00:06:04,240

the images that usually popped into your

173

00:06:08,629 --> 00:06:06,800

mind aside from the smoke and fire and

174

00:06:10,710 --> 00:06:08,639

so that that was all covered during

175

00:06:13,510 --> 00:06:10,720

shuttle and then they would lift off and

176
00:06:15,110 --> 00:06:13,520
then you would be 24 hours a day for the

177
00:06:16,070 --> 00:06:15,120
duration of the mission so you would

178
00:06:17,430 --> 00:06:16,080
have

179
00:06:20,150 --> 00:06:17,440
at least for us in houston you would

180
00:06:22,550 --> 00:06:20,160
have one person go into mission control

181
00:06:24,710 --> 00:06:22,560
and they'd be on about an eight to eight

182
00:06:26,790 --> 00:06:24,720
and a half hour shift where you're just

183
00:06:28,710 --> 00:06:26,800
providing coverage the whole time and so

184
00:06:30,710 --> 00:06:28,720
for two of those shifts the crew's awake

185
00:06:32,550 --> 00:06:30,720
one the crew's asleep so you can do

186
00:06:34,150 --> 00:06:32,560
things like interview flight controllers

187
00:06:35,909 --> 00:06:34,160
playback highlights things like that

188
00:06:37,670 --> 00:06:35,919

which again

189

00:06:39,110 --> 00:06:37,680

that helped to kind of really guide us

190

00:06:40,950 --> 00:06:39,120

what we ended up doing for a commercial

191

00:06:43,029 --> 00:06:40,960

crew we were able to pick out all the

192

00:06:45,189 --> 00:06:43,039

stuff that worked really really well for

193

00:06:47,350 --> 00:06:45,199

shuttle and then build it into all the

194

00:06:49,830 --> 00:06:47,360

stuff we ended up doing anyways so you

195

00:06:51,749 --> 00:06:49,840

got to sit in with some of those some of

196

00:06:53,830 --> 00:06:51,759

those uh broadcast them right you get to

197

00:06:56,150 --> 00:06:53,840

kind of understand and pull into some of

198

00:06:58,710 --> 00:06:56,160

the knowledge of what we used to do yeah

199

00:07:01,189 --> 00:06:58,720

i got to as a student i got to sit in a

200

00:07:03,189 --> 00:07:01,199

couple of times their their

201

00:07:04,870 --> 00:07:03,199

our office is pretty good about

202

00:07:06,790 --> 00:07:04,880

especially when you're a student get you

203

00:07:08,629 --> 00:07:06,800

getting you in there to kind of see see

204

00:07:11,270 --> 00:07:08,639

what it's like kind of soak up that

205

00:07:12,710 --> 00:07:11,280

information and it was cool to to sit

206

00:07:14,790 --> 00:07:12,720

with i mean

207

00:07:17,029 --> 00:07:14,800

the people that were doing it at that

208

00:07:19,189 --> 00:07:17,039

point i mean you had everybody knows rob

209

00:07:21,189 --> 00:07:19,199

navies he was he was the the asset

210

00:07:23,589 --> 00:07:21,199

commentator for 135

211

00:07:24,629 --> 00:07:23,599

uh but then i mean you had people in our

212

00:07:25,430 --> 00:07:24,639

office

213

00:07:29,830 --> 00:07:25,440

um

214

00:07:31,430 --> 00:07:29,840

friend josh you remember him i got to

215

00:07:33,990 --> 00:07:31,440

sit in with him a couple of times got to

216

00:07:36,390 --> 00:07:34,000

sit in for like a space walk

217

00:07:37,990 --> 00:07:36,400

and it was just really cool and you that

218

00:07:40,550 --> 00:07:38,000

was the first time

219

00:07:42,870 --> 00:07:40,560

i kind of got exposed to just

220

00:07:44,390 --> 00:07:42,880

how much you have to know

221

00:07:46,710 --> 00:07:44,400

to do that job

222

00:07:48,710 --> 00:07:46,720

to the point where i mean

223

00:07:51,110 --> 00:07:48,720

rob could probably still quote a page

224

00:07:52,629 --> 00:07:51,120

number in a shuttle reference manual or

225

00:07:54,869 --> 00:07:52,639

something if i asked him a question

226

00:07:57,670 --> 00:07:54,879

about it like the just the level of

227

00:07:59,830 --> 00:07:57,680

knowledge you had to just acquire

228

00:08:02,150 --> 00:07:59,840

and either know off the cuff or know

229

00:08:04,710 --> 00:08:02,160

exactly where to find it just to be that

230

00:08:07,029 --> 00:08:04,720

person who's kind of guiding the what

231

00:08:09,029 --> 00:08:07,039

the heck is happening right now so that

232

00:08:10,790 --> 00:08:09,039

was really cool and that was definitely

233

00:08:13,749 --> 00:08:10,800

eye opening

234

00:08:15,909 --> 00:08:13,759

all right well i want to get into how

235

00:08:17,430 --> 00:08:15,919

you pulled all of that knowledge and

236

00:08:19,589 --> 00:08:17,440

turned it into what we're seeing for

237

00:08:21,189 --> 00:08:19,599

commercial crew today but i do want to

238

00:08:22,710 --> 00:08:21,199

make sure we are doing an interactive

239

00:08:24,469 --> 00:08:22,720

broadcast we're getting questions coming

240

00:08:25,909 --> 00:08:24,479

in uh and we have chelsea over here

241

00:08:27,909 --> 00:08:25,919

that's filtering some of these questions

242

00:08:30,710 --> 00:08:27,919

so thanks to chelsea i got this first

243

00:08:32,630 --> 00:08:30,720

question from calvin calvin is asking

244

00:08:34,310 --> 00:08:32,640

what happened to the space station live

245

00:08:36,310 --> 00:08:34,320

program for nasa tv now this was a

246

00:08:37,670 --> 00:08:36,320

program we used to do um this was this

247

00:08:38,949 --> 00:08:37,680

was even post shuttle we used to

248

00:08:40,389 --> 00:08:38,959

continue it on so so what was that

249

00:08:42,310 --> 00:08:40,399

program and what happened to it yeah we

250

00:08:44,149 --> 00:08:42,320

used to do that for for the space

251
00:08:45,590 --> 00:08:44,159
station and we did it even when shuttle

252
00:08:48,070 --> 00:08:45,600
was flying and we did it afterwards we

253
00:08:50,470 --> 00:08:48,080
used to so five days a week

254
00:08:51,190 --> 00:08:50,480
we would do an hour long show

255
00:08:53,590 --> 00:08:51,200
some

256
00:08:55,670 --> 00:08:53,600
eventually down to 30 minutes but when i

257
00:08:56,790 --> 00:08:55,680
showed up it was an hour long show

258
00:08:58,470 --> 00:08:56,800
where

259
00:08:59,910 --> 00:08:58,480
you basically do a live update of

260
00:09:01,590 --> 00:08:59,920
everything happening on the station so

261
00:09:03,750 --> 00:09:01,600
we would do it at a point when the crew

262
00:09:05,509 --> 00:09:03,760
was awake and you'd replay any video

263
00:09:07,509 --> 00:09:05,519

from earlier in the day and show kind of

264

00:09:09,030 --> 00:09:07,519

the live stuff that's happening

265

00:09:11,269 --> 00:09:09,040

and then you could interview people and

266

00:09:13,030 --> 00:09:11,279

things like that

267

00:09:14,949 --> 00:09:13,040

it was great on days when there was a

268

00:09:17,190 --> 00:09:14,959

lot happening

269

00:09:19,030 --> 00:09:17,200

then i mean we would still do it five

270

00:09:20,550 --> 00:09:19,040

days a week so your crew would have an

271

00:09:22,630 --> 00:09:20,560

off day or the crew wouldn't have much

272

00:09:24,630 --> 00:09:22,640

going on you would have no video

273

00:09:26,949 --> 00:09:24,640

and the show was a little bit less

274

00:09:28,150 --> 00:09:26,959

interesting to say the least so uh it

275

00:09:32,870 --> 00:09:28,160

was

276

00:09:34,310 --> 00:09:32,880

teaching tool especially for new people

277

00:09:36,070 --> 00:09:34,320

like the first time i ever was ever

278

00:09:37,350 --> 00:09:36,080

doing the nasa commentary i think you

279

00:09:39,269 --> 00:09:37,360

too that's how i learned yeah it was on

280

00:09:41,750 --> 00:09:39,279

space station that's how we learned it

281

00:09:43,670 --> 00:09:41,760

was definitely a much kind of lower risk

282

00:09:45,190 --> 00:09:43,680

learning than you know

283

00:09:48,070 --> 00:09:45,200

your first commentary when somebody's

284

00:09:49,990 --> 00:09:48,080

doing a spacewalker or something

285

00:09:51,750 --> 00:09:50,000

and when i go back and listen to my

286

00:09:55,030 --> 00:09:51,760

early episodes i

287

00:09:57,509 --> 00:09:55,040

am i was so bad i was so bad so it was

288

00:09:59,670 --> 00:09:57,519

it was good that i was you know it was

289

00:10:02,150 --> 00:09:59,680

kind of a lower risk environment but i

290

00:10:03,430 --> 00:10:02,160

mean is anybody that's done live tv

291

00:10:05,910 --> 00:10:03,440

knows

292

00:10:07,590 --> 00:10:05,920

tv productions are really resource

293

00:10:09,990 --> 00:10:07,600

intensive

294

00:10:11,750 --> 00:10:10,000

and as the years went by we realized

295

00:10:14,389 --> 00:10:11,760

more and more people were just consuming

296

00:10:16,630 --> 00:10:14,399

things on demand and at the same time so

297

00:10:18,630 --> 00:10:16,640

it fulfilled a need to

298

00:10:19,990 --> 00:10:18,640

show people video from the space station

299

00:10:21,829 --> 00:10:20,000

and also just tell people what's

300

00:10:23,509 --> 00:10:21,839

happening well

301

00:10:25,350 --> 00:10:23,519

thanks to social media and just the

302

00:10:27,190 --> 00:10:25,360

prevalence of all the different tools we

303

00:10:29,910 --> 00:10:27,200

have to communicate with people you can

304

00:10:31,350 --> 00:10:29,920

do that just via a blog update and put

305

00:10:33,190 --> 00:10:31,360

out a tweet put out a short post

306

00:10:35,350 --> 00:10:33,200

somewhere and

307

00:10:37,350 --> 00:10:35,360

then i don't need a 30 minute tv program

308

00:10:39,430 --> 00:10:37,360

just to get that kind of information out

309

00:10:41,750 --> 00:10:39,440

and there are so many platforms for

310

00:10:44,150 --> 00:10:41,760

sharing video now we just had kind of

311

00:10:46,389 --> 00:10:44,160

more effective ways to get that out

312

00:10:49,750 --> 00:10:46,399

there to people than just just a

313

00:10:51,350 --> 00:10:49,760

terrestrial television station so

314

00:10:54,310 --> 00:10:51,360

we transitioned away from doing space

315

00:10:56,710 --> 00:10:54,320

station live um definitely had some some

316

00:10:58,790 --> 00:10:56,720

really great qualities to it but we just

317

00:11:00,630 --> 00:10:58,800

kind of made the call to go in another

318

00:11:02,069 --> 00:11:00,640

direction yeah yeah it's a more modern

319

00:11:03,430 --> 00:11:02,079

approach now people are consuming more

320

00:11:05,030 --> 00:11:03,440

bite-sized chunks and everything this is

321

00:11:07,110 --> 00:11:05,040

a really good question calvin thanks for

322

00:11:08,630 --> 00:11:07,120

for uh submitting and if you want to ask

323

00:11:09,750 --> 00:11:08,640

more questions keep them coming i'm

324

00:11:11,430 --> 00:11:09,760

going to be reading them throughout

325

00:11:13,430 --> 00:11:11,440

today's broadcast i also wanted to try

326

00:11:14,710 --> 00:11:13,440

something um it's a it's a pull feature

327

00:11:16,870 --> 00:11:14,720

on facebook live we're gonna see if it

328

00:11:19,509 --> 00:11:16,880

works if not just please comment um

329

00:11:21,269 --> 00:11:19,519

below uh but i wanted to throw in some

330

00:11:22,710 --> 00:11:21,279

polls for the podcast itself since we

331

00:11:25,350 --> 00:11:22,720

both started with the podcast so this

332

00:11:27,750 --> 00:11:25,360

first question is what kind of houston

333

00:11:29,829 --> 00:11:27,760

we have a podcast episode do you prefer

334

00:11:32,310 --> 00:11:29,839

so this is one of them right we're on tv

335

00:11:34,550 --> 00:11:32,320

we do a live broadcast it's very similar

336

00:11:36,150 --> 00:11:34,560

i think to how we do the normal um

337

00:11:37,750 --> 00:11:36,160

houston podcast episode sit down

338

00:11:39,910 --> 00:11:37,760

interview this one's about a particular

339

00:11:41,350 --> 00:11:39,920

topic which is which is mission coverage

340

00:11:43,110 --> 00:11:41,360

but we do all kinds of topics do you

341

00:11:45,350 --> 00:11:43,120

like those do you like our normal

342

00:11:46,949 --> 00:11:45,360

interview shows we've done panels so

343

00:11:48,630 --> 00:11:46,959

you've gotten to sit with gates mcfadden

344

00:11:50,949 --> 00:11:48,640

at comic palooza we did those live

345

00:11:53,269 --> 00:11:50,959

panels i did a stage show

346

00:11:55,190 --> 00:11:53,279

with another podcast

347

00:11:56,870 --> 00:11:55,200

writing excuses was the podcast i did it

348

00:11:59,269 --> 00:11:56,880

with and then we've done some narrative

349

00:12:00,550 --> 00:11:59,279

types so of those polls uh which which

350

00:12:02,710 --> 00:12:00,560

are of those different types of shows

351
00:12:04,389 --> 00:12:02,720
which one do you like uh go ahead and

352
00:12:05,910 --> 00:12:04,399
and put it in the poll feature it seems

353
00:12:06,949 --> 00:12:05,920
like it's it's actually working yeah i

354
00:12:08,870 --> 00:12:06,959
know

355
00:12:10,710 --> 00:12:08,880
i mean on this side of it the panel was

356
00:12:12,710 --> 00:12:10,720
a lot of fun it was cool to have like

357
00:12:14,790 --> 00:12:12,720
the crowd reaction and everything

358
00:12:17,030 --> 00:12:14,800
because normally it's just you know us

359
00:12:19,590 --> 00:12:17,040
sitting in a room really quiet so we

360
00:12:20,550 --> 00:12:19,600
don't make alex mad with bad noise

361
00:12:21,750 --> 00:12:20,560
um

362
00:12:23,590 --> 00:12:21,760
so that was really cool and then the

363
00:12:27,190 --> 00:12:23,600

narrative i think the the entire thing

364

00:12:29,269 --> 00:12:27,200

that pat did um over the over the apollo

365

00:12:31,509 --> 00:12:29,279

uh anniversaries and everything was just

366

00:12:34,150 --> 00:12:31,519

it was fascinating and it

367

00:12:36,870 --> 00:12:34,160

it really does give you an opportunity

368

00:12:38,710 --> 00:12:36,880

for just really dense content to just

369

00:12:40,629 --> 00:12:38,720

give it the time it deserves to like

370

00:12:42,069 --> 00:12:40,639

breathe that was i really liked that

371

00:12:44,389 --> 00:12:42,079

heroes behind the heroes was that

372

00:12:46,230 --> 00:12:44,399

episode and it was about restoring this

373

00:12:47,590 --> 00:12:46,240

obsolete piece of hardware that had the

374

00:12:49,750 --> 00:12:47,600

ability to

375

00:12:51,670 --> 00:12:49,760

pull back some taped audio and then we

376

00:12:53,430 --> 00:12:51,680

were able to digitize it because it was

377

00:12:54,870 --> 00:12:53,440

that whole process of recovering this

378

00:12:56,629 --> 00:12:54,880

piece of hardware super interesting

379

00:12:57,829 --> 00:12:56,639

story it's a four part series so yeah is

380

00:12:58,949 --> 00:12:57,839

that one of the things you like or do

381

00:13:00,790 --> 00:12:58,959

you like or do you like some of the

382

00:13:01,990 --> 00:13:00,800

other stuff or maybe a combination of

383

00:13:03,670 --> 00:13:02,000

each of these

384

00:13:05,350 --> 00:13:03,680

all right getting back into the mission

385

00:13:06,710 --> 00:13:05,360

coverage stuff so we

386

00:13:08,470 --> 00:13:06,720

were talking a little bit about the

387

00:13:09,829 --> 00:13:08,480

historic part of things how we used to

388

00:13:11,990 --> 00:13:09,839

do the coverage

389

00:13:14,150 --> 00:13:12,000

then you get the assignment hey hey dan

390

00:13:16,550 --> 00:13:14,160

we want to do something grandiose for

391

00:13:18,069 --> 00:13:16,560

this new uh era in human spaceflight

392

00:13:20,069 --> 00:13:18,079

we're going to be working together with

393

00:13:21,910 --> 00:13:20,079

commercial companies how did you first

394

00:13:23,829 --> 00:13:21,920

start approaching it yeah and i want to

395

00:13:26,310 --> 00:13:23,839

make it abundantly clear this was not

396

00:13:28,310 --> 00:13:26,320

just dan doing this this was the work of

397

00:13:29,509 --> 00:13:28,320

so many people

398

00:13:32,629 --> 00:13:29,519

um

399

00:13:34,069 --> 00:13:32,639

so i obviously need to say that uh but

400

00:13:35,750 --> 00:13:34,079

our initial thought when we were going

401

00:13:37,509 --> 00:13:35,760

in is we we knew it had to be a little

402

00:13:38,870 --> 00:13:37,519

bit different well we knew it had to be

403

00:13:40,949 --> 00:13:38,880

more than a little bit different it had

404

00:13:43,750 --> 00:13:40,959

to be different for shuttle

405

00:13:45,509 --> 00:13:43,760

you're talking it was a nasa spacecraft

406

00:13:46,710 --> 00:13:45,519

nasa astronauts along with international

407

00:13:47,829 --> 00:13:46,720

partners and a couple of others

408

00:13:49,990 --> 00:13:47,839

especially when we were flying to the

409

00:13:51,590 --> 00:13:50,000

space station but it was very much a

410

00:13:52,550 --> 00:13:51,600

nasa thing

411

00:13:54,710 --> 00:13:52,560

um

412

00:13:56,310 --> 00:13:54,720

we you would find other people to bring

413

00:13:58,710 --> 00:13:56,320

in sometimes but i mean this is this was

414

00:14:01,269 --> 00:13:58,720

the nasa show when it came to commercial

415

00:14:02,790 --> 00:14:01,279

crew we we now know we were we were

416

00:14:05,750 --> 00:14:02,800

going to be working with

417

00:14:07,670 --> 00:14:05,760

two companies spacex and boeing that

418

00:14:09,189 --> 00:14:07,680

they own the hardware they're flying the

419

00:14:11,829 --> 00:14:09,199

missions we're essentially giving them

420

00:14:13,750 --> 00:14:11,839

our astronauts to to bring to the space

421

00:14:16,710 --> 00:14:13,760

station and come home so obviously they

422

00:14:19,269 --> 00:14:16,720

have a humongous peace in that and they

423

00:14:21,590 --> 00:14:19,279

have their own identities as companies

424

00:14:23,189 --> 00:14:21,600

they have their own priorities and so we

425

00:14:23,990 --> 00:14:23,199

knew that anything that we were going to

426

00:14:26,629 --> 00:14:24,000

do

427

00:14:27,590 --> 00:14:26,639

it had to be together we never wanted it

428

00:14:29,110 --> 00:14:27,600

to be

429

00:14:30,949 --> 00:14:29,120

here's the nasa show and here's the

430

00:14:32,550 --> 00:14:30,959

spacex show or here's the nasa show and

431

00:14:35,189 --> 00:14:32,560

here's the boeing show we wanted it to

432

00:14:38,389 --> 00:14:35,199

be here's the human space flight show

433

00:14:40,629 --> 00:14:38,399

and so it was a lot of work in in the

434

00:14:42,470 --> 00:14:40,639

initial years which we had a couple

435

00:14:44,230 --> 00:14:42,480

years where we knew this was

436

00:14:47,509 --> 00:14:44,240

at least this is what we wanted to try

437

00:14:50,150 --> 00:14:47,519

and do and boeing and spacex were pretty

438

00:14:52,470 --> 00:14:50,160

much of the exact same mind so that made

439

00:14:54,310 --> 00:14:52,480

everything a whole lot easier

440

00:14:56,310 --> 00:14:54,320

just with everybody with that same goal

441

00:14:58,150 --> 00:14:56,320

we all everybody's inevitably going to

442

00:14:59,509 --> 00:14:58,160

have different ways to get to that goal

443

00:15:00,710 --> 00:14:59,519

but knowing that we have the same

444

00:15:03,350 --> 00:15:00,720

ultimate goal

445

00:15:05,350 --> 00:15:03,360

that like right there was like oh all

446

00:15:06,870 --> 00:15:05,360

right we're good we're good

447

00:15:09,670 --> 00:15:06,880

um so

448

00:15:11,189 --> 00:15:09,680

we we knew that it was going to be joint

449

00:15:13,590 --> 00:15:11,199

we knew that you were going to have

450

00:15:15,590 --> 00:15:13,600

different locations involved

451
00:15:17,670 --> 00:15:15,600
even between the different providers you

452
00:15:19,269 --> 00:15:17,680
have a couple of common ones like

453
00:15:21,110 --> 00:15:19,279
both are launching from kennedy

454
00:15:23,189 --> 00:15:21,120
different pads different facilities to

455
00:15:25,350 --> 00:15:23,199
actually launch but we have some pretty

456
00:15:27,350 --> 00:15:25,360
established stuff down at ksc the

457
00:15:28,949 --> 00:15:27,360
kennedy space center so we knew we were

458
00:15:30,550 --> 00:15:28,959
going to be able to use that

459
00:15:32,389 --> 00:15:30,560
they're both going to the international

460
00:15:34,069 --> 00:15:32,399
space station so we knew that we were

461
00:15:35,910 --> 00:15:34,079
going to be using mission control here

462
00:15:39,430 --> 00:15:35,920
in houston

463
00:15:41,509 --> 00:15:39,440

but then you have the the kind of the

464

00:15:43,749 --> 00:15:41,519

one of the main separators is spacex

465

00:15:45,749 --> 00:15:43,759

controlling dragon everything from

466

00:15:47,350 --> 00:15:45,759

hawthorne in california

467

00:15:49,189 --> 00:15:47,360

and then boeing controlling from one of

468

00:15:51,350 --> 00:15:49,199

the control rooms here in houston so

469

00:15:52,949 --> 00:15:51,360

that was something a little bit more

470

00:15:55,829 --> 00:15:52,959

we had already done we knew how to do

471

00:15:57,509 --> 00:15:55,839

the spacex one was just a wholly new

472

00:16:00,389 --> 00:15:57,519

how the heck are we going to integrate

473

00:16:01,749 --> 00:16:00,399

all of these different places together

474

00:16:03,670 --> 00:16:01,759

i mean so that was a challenge but it

475

00:16:06,069 --> 00:16:03,680

was a fun challenge

476

00:16:07,990 --> 00:16:06,079

and again it wasn't really difficult to

477

00:16:09,590 --> 00:16:08,000

get everybody on board this is what we

478

00:16:11,829 --> 00:16:09,600

wanted to go do

479

00:16:14,069 --> 00:16:11,839

so you got to spend way more time just

480

00:16:15,910 --> 00:16:14,079

solving like the technical problems and

481

00:16:17,350 --> 00:16:15,920

things like that which

482

00:16:18,550 --> 00:16:17,360

you had you had all those different

483

00:16:19,670 --> 00:16:18,560

locations

484

00:16:21,829 --> 00:16:19,680

and then

485

00:16:22,949 --> 00:16:21,839

it will get into this but then you had

486

00:16:23,829 --> 00:16:22,959

the added

487

00:16:25,670 --> 00:16:23,839

uh

488

00:16:27,110 --> 00:16:25,680

luxury of trying to figure out how the

489

00:16:29,910 --> 00:16:27,120

heck are we going to get signals from

490

00:16:31,509 --> 00:16:29,920

all of these different landing zones

491

00:16:33,509 --> 00:16:31,519

drastic you have drastically different

492

00:16:36,150 --> 00:16:33,519

return profiles one splashes down in the

493

00:16:37,590 --> 00:16:36,160

ocean one's in the middle of one of

494

00:16:39,110 --> 00:16:37,600

several deserts

495

00:16:40,710 --> 00:16:39,120

how the heck are we going to show people

496

00:16:42,710 --> 00:16:40,720

that because you know we're going to

497

00:16:44,790 --> 00:16:42,720

want to see it and we've we've found

498

00:16:46,949 --> 00:16:44,800

some really kind of creative ways to be

499

00:16:48,389 --> 00:16:46,959

able to to get views back so it's been

500

00:16:51,269 --> 00:16:48,399

fun it's been fun but it sounds like

501
00:16:52,470 --> 00:16:51,279
it's it's a it's a mix of challenges you

502
00:16:55,110 --> 00:16:52,480
have the

503
00:16:56,949 --> 00:16:55,120
the piece of working with not just nasa

504
00:16:58,470 --> 00:16:56,959
as you said before it was nasa telling

505
00:17:00,230 --> 00:16:58,480
nasa's story you know we're gonna we're

506
00:17:01,670 --> 00:17:00,240
gonna do our thing now you have to get

507
00:17:03,670 --> 00:17:01,680
other priorities in there and then

508
00:17:06,309 --> 00:17:03,680
there's this whole technical challenge

509
00:17:08,230 --> 00:17:06,319
we want to tell the story from front to

510
00:17:10,309 --> 00:17:08,240
end we want to pull in all of these

511
00:17:12,870 --> 00:17:10,319
different locations literally two

512
00:17:14,870 --> 00:17:12,880
opposite ends of the united states put

513
00:17:16,789 --> 00:17:14,880

them together including the ocean now

514

00:17:18,230 --> 00:17:16,799

we're in the ocean too the desert uh

515

00:17:20,470 --> 00:17:18,240

we're in all these different interesting

516

00:17:22,710 --> 00:17:20,480

areas so it's a combination of these

517

00:17:25,510 --> 00:17:22,720

these diplomatic challenges and the

518

00:17:27,909 --> 00:17:25,520

technical challenges yeah and

519

00:17:30,150 --> 00:17:27,919

i mean you i always had more fun with

520

00:17:31,990 --> 00:17:30,160

the technical stuff just because trying

521

00:17:33,590 --> 00:17:32,000

to figure out how to get a signal from

522

00:17:35,029 --> 00:17:33,600

you know the middle middle of the ocean

523

00:17:36,789 --> 00:17:35,039

in the middle of the desert like that

524

00:17:38,870 --> 00:17:36,799

was that was really cool

525

00:17:40,870 --> 00:17:38,880

and again that's something that

526

00:17:42,950 --> 00:17:40,880

technology especially over the last

527

00:17:43,750 --> 00:17:42,960

couple of years has really helped

528

00:17:44,950 --> 00:17:43,760

with

529

00:17:45,830 --> 00:17:44,960

um

530

00:17:47,990 --> 00:17:45,840

where

531

00:17:50,549 --> 00:17:48,000

i mean you have instead of having to

532

00:17:52,310 --> 00:17:50,559

like rent a massive satellite dish and

533

00:17:54,310 --> 00:17:52,320

drive it into the desert we have a

534

00:17:56,549 --> 00:17:54,320

pretty small pop-up one that the boeing

535

00:17:59,669 --> 00:17:56,559

team has that were able to get a signal

536

00:18:01,029 --> 00:17:59,679

from literally the middle of nowhere

537

00:18:03,029 --> 00:18:01,039

because that's where you want to try and

538

00:18:04,390 --> 00:18:03,039

land your spacecraft

539

00:18:06,549 --> 00:18:04,400

and

540

00:18:08,310 --> 00:18:06,559

i i just i just love what we've been

541

00:18:11,430 --> 00:18:08,320

able to do with with the boeing return

542

00:18:14,070 --> 00:18:11,440

stuff that's probably my favorite like

543

00:18:15,909 --> 00:18:14,080

aspect of these missions is like going

544

00:18:17,110 --> 00:18:15,919

out in the desert and doing those like

545

00:18:20,070 --> 00:18:17,120

it's

546

00:18:21,750 --> 00:18:20,080

develop

547

00:18:25,270 --> 00:18:21,760

we did a lot of work

548

00:18:26,710 --> 00:18:25,280

uh you know prior to ever flying where

549

00:18:28,470 --> 00:18:26,720

you go out to the desert you kind of

550

00:18:31,029 --> 00:18:28,480

rehearsed landing and everything there

551
00:18:33,110 --> 00:18:31,039
was almost like a mad max vibe to it

552
00:18:35,190 --> 00:18:33,120
where everybody was lined up in a giant

553
00:18:36,630 --> 00:18:35,200
convoy and everyone's wearing big

554
00:18:38,710 --> 00:18:36,640
goggles and everything because it was

555
00:18:40,710 --> 00:18:38,720
110 degrees out and the sun was trying

556
00:18:43,190 --> 00:18:40,720
to destroy you

557
00:18:44,630 --> 00:18:43,200
but it was just so much fun

558
00:18:45,990 --> 00:18:44,640
didn't you go out when it was cold too

559
00:18:49,350 --> 00:18:46,000
was it like super cold in the morning

560
00:18:50,310 --> 00:18:49,360
yeah oft of t's landing was at white

561
00:18:52,630 --> 00:18:50,320
sands

562
00:18:54,950 --> 00:18:52,640
and it's a desert so daytime usually a

563
00:18:58,150 --> 00:18:54,960

little warm nighttime really cold yeah

564

00:19:00,070 --> 00:18:58,160

it was a nighttime landing and

565

00:19:01,750 --> 00:19:00,080

we've gone to really cold places in this

566

00:19:03,110 --> 00:19:01,760

job we've been to kazakhstan when it's

567

00:19:04,870 --> 00:19:03,120

you know snowing and everything for

568

00:19:06,870 --> 00:19:04,880

whatever reason that was

569

00:19:10,470 --> 00:19:06,880

like the coldest i've ever felt like my

570

00:19:12,390 --> 00:19:10,480

feet hurt the entire time but everything

571

00:19:13,909 --> 00:19:12,400

worked the equipment was awesome we were

572

00:19:16,870 --> 00:19:13,919

able to do some

573

00:19:19,350 --> 00:19:16,880

kind of reporter in the car in the chase

574

00:19:21,270 --> 00:19:19,360

vehicle heading to the landing site i

575

00:19:23,190 --> 00:19:21,280

remember standing outside and

576

00:19:25,430 --> 00:19:23,200

everybody's freezing but

577

00:19:27,029 --> 00:19:25,440

you you kind of saw the the capsule

578

00:19:28,870 --> 00:19:27,039

coming down under the parachutes and

579

00:19:31,590 --> 00:19:28,880

just a very like silhouette like

580

00:19:34,470 --> 00:19:31,600

backdropped against the night sky

581

00:19:37,029 --> 00:19:34,480

and you know just this roar went up of

582

00:19:38,710 --> 00:19:37,039

just let's go like just everybody just

583

00:19:39,990 --> 00:19:38,720

so excited and like it was it was

584

00:19:41,750 --> 00:19:40,000

phenomenal and

585

00:19:44,230 --> 00:19:41,760

we were able to you know talk to some of

586

00:19:46,150 --> 00:19:44,240

the team members live on tv and then we

587

00:19:48,310 --> 00:19:46,160

got out to the landing zone we were able

588

00:19:50,710 --> 00:19:48,320

to you know show show the entire

589

00:19:52,470 --> 00:19:50,720

recovery talk to some of the astronauts

590

00:19:54,870 --> 00:19:52,480

that were there sunny williams named the

591

00:19:56,549 --> 00:19:54,880

spacecraft while we were out there and

592

00:19:59,029 --> 00:19:56,559

it's just

593

00:20:00,710 --> 00:19:59,039

we're able to bring people in closer to

594

00:20:02,710 --> 00:20:00,720

a mission than i think we've ever been

595

00:20:05,029 --> 00:20:02,720

able to before yeah and that's what's

596

00:20:06,390 --> 00:20:05,039

really exciting about it well i think

597

00:20:07,590 --> 00:20:06,400

people are really excited about this

598

00:20:09,990 --> 00:20:07,600

because i'm seeing a lot of questions

599

00:20:13,270 --> 00:20:10,000

coming in so um this one this one from

600

00:20:15,350 --> 00:20:13,280

george uh from ukraine is asking about

601
00:20:18,789 --> 00:20:15,360
the collaboration specifically between

602
00:20:21,669 --> 00:20:18,799
uh how nasa works with um nasa tv and

603
00:20:23,110 --> 00:20:21,679
then spacex um well i mean historically

604
00:20:24,950 --> 00:20:23,120
i know we used to do like different

605
00:20:27,190 --> 00:20:24,960
broadcasts and everything so so how's

606
00:20:28,710 --> 00:20:27,200
that collaboration work yeah and that i

607
00:20:30,950 --> 00:20:28,720
mean that's something that evolved over

608
00:20:33,029 --> 00:20:30,960
time too um any anybody that follows

609
00:20:35,029 --> 00:20:33,039
spacex you know that they they do their

610
00:20:35,830 --> 00:20:35,039
their own webcasts

611
00:20:38,549 --> 00:20:35,840
and

612
00:20:40,549 --> 00:20:38,559
they had a a very different style a very

613
00:20:43,029 --> 00:20:40,559

different approach than what nasa did

614

00:20:44,710 --> 00:20:43,039

and so it was fun to to work with them

615

00:20:47,029 --> 00:20:44,720

understand what works really well for

616

00:20:49,430 --> 00:20:47,039

them share what works really well for us

617

00:20:51,430 --> 00:20:49,440

and come out what i really do think was

618

00:20:54,470 --> 00:20:51,440

the best of both worlds with what we

619

00:20:56,789 --> 00:20:54,480

ended up doing with these broadcasts um

620

00:20:58,950 --> 00:20:56,799

our work with spacex it's the exact same

621

00:21:01,990 --> 00:20:58,960

with our work with boeing where it's

622

00:21:03,350 --> 00:21:02,000

literally you're you're side by side in

623

00:21:05,190 --> 00:21:03,360

pretty much every single decision that

624

00:21:07,750 --> 00:21:05,200

gets made about how to how to do these

625

00:21:14,630 --> 00:21:10,789

the spacex team is incredible

626

00:21:17,510 --> 00:21:14,640

in both their technical prowess and

627

00:21:20,630 --> 00:21:17,520

just their ability to make stuff look

628

00:21:21,590 --> 00:21:20,640

really compelling and look really good

629

00:21:23,669 --> 00:21:21,600

um

630

00:21:26,549 --> 00:21:23,679

and we get we get to do pretty much all

631

00:21:28,789 --> 00:21:26,559

that with boeing too so like it's

632

00:21:31,510 --> 00:21:28,799

it's a great place to be in um they're

633

00:21:32,870 --> 00:21:31,520

both and i think i already said this

634

00:21:35,029 --> 00:21:32,880

with both of these companies you're

635

00:21:37,350 --> 00:21:35,039

working with people who are just giant

636

00:21:39,190 --> 00:21:37,360

space nerds who are just who live and

637

00:21:41,909 --> 00:21:39,200

breathe it every single day yeah and so

638

00:21:43,990 --> 00:21:41,919

it's really easy to then work on a giant

639

00:21:45,909 --> 00:21:44,000

space nerd show for people when you have

640

00:21:47,430 --> 00:21:45,919

all of that common ground between you

641

00:21:49,190 --> 00:21:47,440

exactly yeah

642

00:21:51,750 --> 00:21:49,200

um we got another one this is a

643

00:21:54,390 --> 00:21:51,760

technical question um from eric who's

644

00:21:56,149 --> 00:21:54,400

asking how do you address time delays uh

645

00:21:57,430 --> 00:21:56,159

in the signals coming from multiple

646

00:22:00,789 --> 00:21:57,440

locations

647

00:22:02,870 --> 00:22:00,799

that's that's a good question because

648

00:22:04,870 --> 00:22:02,880

it varies kind of depending on where you

649

00:22:07,510 --> 00:22:04,880

are luckily

650

00:22:09,750 --> 00:22:07,520

most of your locations are pretty pretty

651
00:22:11,830 --> 00:22:09,760
non-delayed for the most part that we

652
00:22:13,430 --> 00:22:11,840
don't do we try to do as little kind of

653
00:22:14,470 --> 00:22:13,440
point-to-point to point jumping as

654
00:22:16,630 --> 00:22:14,480
possible

655
00:22:19,270 --> 00:22:16,640
um and one of the things that we usually

656
00:22:21,110 --> 00:22:19,280
focus on is you know whoever is actually

657
00:22:22,630 --> 00:22:21,120
kind of switching and punching the final

658
00:22:23,909 --> 00:22:22,640
broadcast that's where all your sources

659
00:22:25,669 --> 00:22:23,919
are so you're not

660
00:22:28,230 --> 00:22:25,679
you don't have like six links in the

661
00:22:30,950 --> 00:22:28,240
chain to either add delay or complexity

662
00:22:33,430 --> 00:22:30,960
or the risk of losing a feed

663
00:22:36,470 --> 00:22:33,440

so we don't really have many delays um

664

00:22:37,990 --> 00:22:36,480

nasa tv is not on a delay and so you're

665

00:22:40,789 --> 00:22:38,000

pretty much seeing everything that we're

666

00:22:43,430 --> 00:22:40,799

showing you you're seeing it the

667

00:22:45,510 --> 00:22:43,440

the real time that we're seeing yeah um

668

00:22:47,909 --> 00:22:45,520

so that's going to change though when

669

00:22:49,909 --> 00:22:47,919

you start going to the moon you'll have

670

00:22:51,510 --> 00:22:49,919

a little bit more delay and then

671

00:22:54,149 --> 00:22:51,520

i don't know how the heck we're going to

672

00:22:56,310 --> 00:22:54,159

do anything from mars with that delay

673

00:22:58,149 --> 00:22:56,320

when people are there uh that's going to

674

00:22:59,830 --> 00:22:58,159

be a really fun problem to try and

675

00:23:01,669 --> 00:22:59,840

address we're not quite there yet we'll

676

00:23:03,830 --> 00:23:01,679

think about we'll think about that in

677

00:23:06,149 --> 00:23:03,840

you know a little while but we got some

678

00:23:07,750 --> 00:23:06,159

time yeah we got some time good good

679

00:23:09,669 --> 00:23:07,760

um yeah these questions that are coming

680

00:23:11,190 --> 00:23:09,679

in are awesome i wanted to pause and do

681

00:23:13,270 --> 00:23:11,200

another poll though uh because it seems

682

00:23:15,830 --> 00:23:13,280

that that that function is working so

683

00:23:18,310 --> 00:23:15,840

i'm going to jump back to the poll about

684

00:23:19,750 --> 00:23:18,320

houston we have a podcast um how often

685

00:23:21,510 --> 00:23:19,760

do you listen to

686

00:23:23,669 --> 00:23:21,520

a podcast episode we come out every

687

00:23:25,510 --> 00:23:23,679

friday so are you a person that listens

688

00:23:27,270 --> 00:23:25,520

once a week every friday you listen to

689

00:23:29,190 --> 00:23:27,280

it do you listen every so often do you

690

00:23:30,710 --> 00:23:29,200

only listen to episodes that sound

691

00:23:32,070 --> 00:23:30,720

pretty interesting to you so if you see

692

00:23:33,750 --> 00:23:32,080

an episode you're like ooh i want

693

00:23:35,669 --> 00:23:33,760

to do that one or do you want more do

694

00:23:37,590 --> 00:23:35,679

you want less we'll put up a poll and

695

00:23:39,430 --> 00:23:37,600

you can answer one of those questions

696

00:23:40,950 --> 00:23:39,440

uh i see some more questions coming in

697

00:23:43,750 --> 00:23:40,960

leah cheshire

698

00:23:45,269 --> 00:23:43,760

that name sounds pretty unfamiliar

699

00:23:47,190 --> 00:23:45,279

uh i feel like i've heard that that's

700

00:23:49,190 --> 00:23:47,200

the word yeah i lost it but she but

701
00:23:51,269 --> 00:23:49,200
she's asking um who is your favorite

702
00:23:52,549 --> 00:23:51,279
podcast guest which i think is an unfair

703
00:23:54,390 --> 00:23:52,559
question because

704
00:23:56,710 --> 00:23:54,400
i've had so many different guests i've

705
00:23:58,310 --> 00:23:56,720
had historians i've had filmmakers

706
00:23:59,590 --> 00:23:58,320
astronauts engineers scientists

707
00:24:01,909 --> 00:23:59,600
programming i've had a bunch of

708
00:24:04,470 --> 00:24:01,919
different people um i always pick on

709
00:24:07,190 --> 00:24:04,480
though uh jennifer rosnell who is our

710
00:24:08,870 --> 00:24:07,200
local historian um i really enjoy

711
00:24:10,710 --> 00:24:08,880
working with her she's been on the

712
00:24:13,990 --> 00:24:10,720
podcast a couple of times

713
00:24:16,470 --> 00:24:14,000

and she's uh she comes in super prepared

714

00:24:18,390 --> 00:24:16,480

we did one for the apollo anniversary

715

00:24:19,669 --> 00:24:18,400

apollo 11 anniversary

716

00:24:20,470 --> 00:24:19,679

and um

717

00:24:21,830 --> 00:24:20,480

she

718

00:24:23,350 --> 00:24:21,840

uh put together all these different

719

00:24:24,789 --> 00:24:23,360

stories i wanted to talk about some of

720

00:24:26,230 --> 00:24:24,799

the lesser-known things so she put a

721

00:24:27,510 --> 00:24:26,240

collection she literally did a bunch of

722

00:24:30,310 --> 00:24:27,520

research put a collection of the

723

00:24:32,230 --> 00:24:30,320

lesser-known stories of apollo

724

00:24:34,070 --> 00:24:32,240

that were happening around apollo 11.

725

00:24:36,470 --> 00:24:34,080

and that's the end of being the episode

726

00:24:38,149 --> 00:24:36,480

that we put out um one of my favorites

727

00:24:39,750 --> 00:24:38,159

to to this day and actually it's one of

728

00:24:41,750 --> 00:24:39,760

our more popular episodes then i don't

729

00:24:43,669 --> 00:24:41,760

know if you have a favorite guest i'm

730

00:24:45,990 --> 00:24:43,679

like sitting here typing furiously

731

00:24:47,909 --> 00:24:46,000

trying to remember his name i think it

732

00:24:50,230 --> 00:24:47,919

was scott smith but it was it was one of

733

00:24:52,710 --> 00:24:50,240

our nutritionists and he talked about

734

00:24:54,230 --> 00:24:52,720

the nutrition yeah um

735

00:24:57,510 --> 00:24:54,240

just some of the different links between

736

00:24:59,110 --> 00:24:57,520

nutrition and just the the crazy chaos

737

00:25:01,190 --> 00:24:59,120

that that can play with your body that

738

00:25:02,149 --> 00:25:01,200

you don't even think about

739

00:25:04,230 --> 00:25:02,159

i mean

740

00:25:06,470 --> 00:25:04,240

everybody obviously you have to eat well

741

00:25:08,230 --> 00:25:06,480

here on earth to expect to be healthy

742

00:25:09,830 --> 00:25:08,240

all the time but when when you go into

743

00:25:10,950 --> 00:25:09,840

microgravity

744

00:25:13,510 --> 00:25:10,960

and

745

00:25:15,430 --> 00:25:13,520

you get the added stresses of your body

746

00:25:18,070 --> 00:25:15,440

adapting to all that just how much

747

00:25:21,269 --> 00:25:18,080

bigger of a role that that plays it was

748

00:25:23,029 --> 00:25:21,279

really i like eye opening yeah to listen

749

00:25:24,789 --> 00:25:23,039

to all that so that one was really cool

750

00:25:26,950 --> 00:25:24,799

i really enjoyed that one too

751

00:25:28,390 --> 00:25:26,960

uh we got another one from aaron anthony

752

00:25:30,710 --> 00:25:28,400

another name we definitely don't

753

00:25:32,789 --> 00:25:30,720

recognize uh who's asking what stories

754

00:25:34,789 --> 00:25:32,799

we hope to tell in the next 200 episodes

755

00:25:36,630 --> 00:25:34,799

um i really do hope to keep this one

756

00:25:38,710 --> 00:25:36,640

going um one of the things i'm really

757

00:25:41,110 --> 00:25:38,720

looking forward to is telling is talking

758

00:25:42,710 --> 00:25:41,120

more about artemis big time

759

00:25:44,549 --> 00:25:42,720

when we start doing moon missions we're

760

00:25:46,630 --> 00:25:44,559

going to start really having a better

761

00:25:48,470 --> 00:25:46,640

understanding of how i put how all these

762

00:25:50,789 --> 00:25:48,480

different pieces come together and i

763

00:25:53,110 --> 00:25:50,799

cannot wait to do deep dives into each

764

00:25:54,470 --> 00:25:53,120

and every one of those intricate pieces

765

00:25:56,870 --> 00:25:54,480

of a moon mission i think that's going

766

00:25:59,430 --> 00:25:56,880

to be so exciting yeah i'm

767

00:26:01,190 --> 00:25:59,440

exact same page yeah like everything

768

00:26:04,710 --> 00:26:01,200

artemis over the next couple years is

769

00:26:06,789 --> 00:26:04,720

just gonna get cooler and cooler um and

770

00:26:09,190 --> 00:26:06,799

we're fortunate that a bunch of it is

771

00:26:11,990 --> 00:26:09,200

here at jsc i mean i

772

00:26:15,029 --> 00:26:12,000

just on another project got to meet the

773

00:26:16,470 --> 00:26:15,039

teams that are designing the tools

774

00:26:19,029 --> 00:26:16,480

for the moon missions and they're

775

00:26:20,070 --> 00:26:19,039

already testing them in our fake moon

776

00:26:21,029 --> 00:26:20,080

yard

777

00:26:26,470 --> 00:26:21,039

over

778

00:26:28,870 --> 00:26:26,480

that that works happening right now

779

00:26:30,870 --> 00:26:28,880

it makes it all feel that much more real

780

00:26:32,549 --> 00:26:30,880

and so i can't wait until we're we're

781

00:26:35,750 --> 00:26:32,559

really doing yeah like you said the deep

782

00:26:37,830 --> 00:26:35,760

dives into into because i mean any

783

00:26:39,750 --> 00:26:37,840

a lot of space stuff is cool it gets

784

00:26:42,230 --> 00:26:39,760

ratcheted up when it's being done on the

785

00:26:43,669 --> 00:26:42,240

moon yeah absolutely

786

00:26:45,190 --> 00:26:43,679

this is so awesome i want to jump back

787

00:26:47,269 --> 00:26:45,200

into our commercial crew topics though

788

00:26:49,830 --> 00:26:47,279

so we were talking about the um you were

789

00:26:52,470 --> 00:26:49,840

talking about preparing um so let's talk

790

00:26:54,149 --> 00:26:52,480

about now what it looks like so we've

791

00:26:55,350 --> 00:26:54,159

done it you did all the planning you got

792

00:26:58,310 --> 00:26:55,360

everyone together you got all the

793

00:26:59,750 --> 00:26:58,320

technical stuff all the bugs uh fixed we

794

00:27:01,190 --> 00:26:59,760

are ready to go

795

00:27:03,190 --> 00:27:01,200

if you're tuning in to some of our

796

00:27:05,430 --> 00:27:03,200

coverage what what can you see all the

797

00:27:07,110 --> 00:27:05,440

way leading through you know that moment

798

00:27:08,470 --> 00:27:07,120

of smoking fire yeah i was gonna say we

799

00:27:10,230 --> 00:27:08,480

still haven't fixed all the bugs we're

800

00:27:12,390 --> 00:27:10,240

actively fixing bugs even as you're

801
00:27:13,990 --> 00:27:12,400
watching stuff so that never ends but

802
00:27:15,750 --> 00:27:14,000
sure it's

803
00:27:16,950 --> 00:27:15,760
we've we've been able to do a couple of

804
00:27:17,750 --> 00:27:16,960
missions now

805
00:27:18,549 --> 00:27:17,760
um

806
00:27:20,950 --> 00:27:18,559
we've

807
00:27:24,070 --> 00:27:20,960
had three crude launches within the last

808
00:27:26,389 --> 00:27:24,080
year which is wild to think about um the

809
00:27:28,870 --> 00:27:26,399
the i mean the m2 last year feels like

810
00:27:30,630 --> 00:27:28,880
10 years ago but i think we all aged a

811
00:27:33,590 --> 00:27:30,640
lot in 2020

812
00:27:35,830 --> 00:27:33,600
um but i mean nowadays it

813
00:27:37,830 --> 00:27:35,840

we're getting to kind of a pretty nice

814

00:27:40,389 --> 00:27:37,840

cadence where we're never going to stop

815

00:27:42,070 --> 00:27:40,399

tweaking and changing things just as you

816

00:27:43,750 --> 00:27:42,080

kind of find things that work well or

817

00:27:44,789 --> 00:27:43,760

things that don't yeah

818

00:27:46,389 --> 00:27:44,799

but

819

00:27:48,230 --> 00:27:46,399

we're we're in a pretty good rhythm now

820

00:27:50,389 --> 00:27:48,240

you're you're going to see uh you're

821

00:27:53,190 --> 00:27:50,399

gonna see a lot of the crew and the

822

00:27:55,350 --> 00:27:53,200

couple of months before we

823

00:27:57,110 --> 00:27:55,360

we lose access to the crew very

824

00:27:58,789 --> 00:27:57,120

understandably they have to you know do

825

00:28:00,230 --> 00:27:58,799

their final preparation for space so

826

00:28:02,870 --> 00:28:00,240

they don't always have time to talk to

827

00:28:04,149 --> 00:28:02,880

us and so we we have to kind of find

828

00:28:05,830 --> 00:28:04,159

time with them

829

00:28:08,389 --> 00:28:05,840

where we can really help people kind of

830

00:28:10,149 --> 00:28:08,399

get to know them and you and the team do

831

00:28:12,230 --> 00:28:10,159

a great job of putting together like

832

00:28:13,990 --> 00:28:12,240

interviews with them and everything

833

00:28:16,149 --> 00:28:14,000

and then we always try to do kind of a

834

00:28:17,269 --> 00:28:16,159

final we call it a crew news conference

835

00:28:19,029 --> 00:28:17,279

it's

836

00:28:22,149 --> 00:28:19,039

typically about a month before they

837

00:28:24,389 --> 00:28:22,159

actually launch uh and i mean this is a

838

00:28:26,149 --> 00:28:24,399

clip from when we did the the crew 2

839

00:28:27,350 --> 00:28:26,159

astronauts yeah

840

00:28:29,590 --> 00:28:27,360

and

841

00:28:32,070 --> 00:28:29,600

this this one was

842

00:28:34,149 --> 00:28:32,080

it looks like this because in addition

843

00:28:36,389 --> 00:28:34,159

to kind of evolving with all the new

844

00:28:38,389 --> 00:28:36,399

technology we had to

845

00:28:40,470 --> 00:28:38,399

do all of these first crude missions in

846

00:28:41,990 --> 00:28:40,480

the midst of the pandemics right you had

847

00:28:44,710 --> 00:28:42,000

to rethink how you were doing these

848

00:28:46,630 --> 00:28:44,720

opportunities um so i mean this it's

849

00:28:48,549 --> 00:28:46,640

literally them in four different offices

850

00:28:50,549 --> 00:28:48,559

in our building next door

851
00:28:52,230 --> 00:28:50,559
so we could have them kind of all like

852
00:28:53,830 --> 00:28:52,240
on camera

853
00:28:56,070 --> 00:28:53,840
make sure we weren't violating mask

854
00:28:58,070 --> 00:28:56,080
mandates or anything like that

855
00:29:00,389 --> 00:28:58,080
but we try to get every opportunity

856
00:29:01,190 --> 00:29:00,399
possible to to get people to know the

857
00:29:02,389 --> 00:29:01,200
crew

858
00:29:03,510 --> 00:29:02,399
because they

859
00:29:05,029 --> 00:29:03,520
they always say they're the tip of the

860
00:29:07,269 --> 00:29:05,039
spear but these are

861
00:29:08,710 --> 00:29:07,279
always incredibly interesting incredibly

862
00:29:11,510 --> 00:29:08,720
talented people

863
00:29:14,549 --> 00:29:11,520

um so any opportunity we can get to help

864

00:29:16,870 --> 00:29:14,559

people know them and then we do kind of

865

00:29:18,630 --> 00:29:16,880

the typical the nasa

866

00:29:20,789 --> 00:29:18,640

where you're doing news conferences with

867

00:29:21,990 --> 00:29:20,799

managers giving people overviews of the

868

00:29:23,830 --> 00:29:22,000

mission

869

00:29:26,070 --> 00:29:23,840

and we produce a lot of like the

870

00:29:30,149 --> 00:29:26,080

on-demand video content to help explain

871

00:29:32,789 --> 00:29:30,159

things and you have a huge web presence

872

00:29:35,750 --> 00:29:32,799

but you do a lot and then

873

00:29:37,590 --> 00:29:35,760

i mean the months before it's it's

874

00:29:39,669 --> 00:29:37,600

basically outlining what a show is going

875

00:29:42,149 --> 00:29:39,679

to look like you get a basic show

876

00:29:44,230 --> 00:29:42,159

outline you divvy up who's going to be

877

00:29:45,750 --> 00:29:44,240

covering what everybody's got your kind

878

00:29:47,590 --> 00:29:45,760

of different jobs

879

00:29:50,230 --> 00:29:47,600

for us who are in kind of the more

880

00:29:53,190 --> 00:29:50,240

operational commentary role it's a lot

881

00:29:54,950 --> 00:29:53,200

of studying it's a lot of going to sims

882

00:29:57,909 --> 00:29:54,960

flight control teams

883

00:29:59,909 --> 00:29:57,919

so you know if anything bad ever happens

884

00:30:03,110 --> 00:29:59,919

you're prepared for it you know what's

885

00:30:05,909 --> 00:30:03,120

actually happening um that part's been

886

00:30:09,029 --> 00:30:05,919

probably my favorite because learning

887

00:30:11,590 --> 00:30:09,039

we've gotten a chance to basically learn

888

00:30:13,350 --> 00:30:11,600

brand new spacecraft and along the way

889

00:30:15,510 --> 00:30:13,360

you get a little bit smarter about just

890

00:30:17,110 --> 00:30:15,520

general space operations

891

00:30:19,029 --> 00:30:17,120

but the learning about brand new

892

00:30:20,310 --> 00:30:19,039

spaceships like that's that's really

893

00:30:22,470 --> 00:30:20,320

cool yeah

894

00:30:24,549 --> 00:30:22,480

so that's been a lot of fun uh and then

895

00:30:26,870 --> 00:30:24,559

it's just it's working with spacex or

896

00:30:28,470 --> 00:30:26,880

boeing um and the entire nasa team

897

00:30:29,190 --> 00:30:28,480

putting everything together

898

00:30:31,190 --> 00:30:29,200

uh

899

00:30:33,110 --> 00:30:31,200

maybe doing a couple of practices and

900

00:30:34,310 --> 00:30:33,120

then you're off and running um i mean

901
00:30:36,149 --> 00:30:34,320
for us

902
00:30:37,029 --> 00:30:36,159
the spacex ones are fun we get to do

903
00:30:39,430 --> 00:30:37,039
them

904
00:30:42,230 --> 00:30:39,440
uh from spacex headquarters in hawthorne

905
00:30:43,750 --> 00:30:42,240
uh so this i mean this is leah and jesse

906
00:30:46,070 --> 00:30:43,760
uh i'm

907
00:30:47,669 --> 00:30:46,080
guessing maybe this was crew one i'm not

908
00:30:49,590 --> 00:30:47,679
sure i think it was i think this was

909
00:30:51,190 --> 00:30:49,600
crew one uh they yeah they were on for

910
00:30:54,470 --> 00:30:51,200
the crew one launch

911
00:30:55,990 --> 00:30:54,480
um and we do that because that's where

912
00:30:57,669 --> 00:30:56,000
the mission's controlled from right

913
00:30:59,269 --> 00:30:57,679

behind them that's that's hawthorne

914

00:31:01,190 --> 00:30:59,279

mission control that's where the spacex

915

00:31:03,029 --> 00:31:01,200

flight controllers are oh and right on

916

00:31:04,230 --> 00:31:03,039

cue there it is

917

00:31:07,110 --> 00:31:04,240

that's where the mission's controlled

918

00:31:09,190 --> 00:31:07,120

from and that's been kind of one of the

919

00:31:11,590 --> 00:31:09,200

the driving philosophies that we've

920

00:31:13,750 --> 00:31:11,600

always had with mission coverage as you

921

00:31:15,669 --> 00:31:13,760

if you're going to really deliver the

922

00:31:17,909 --> 00:31:15,679

best information the most up-to-date

923

00:31:19,509 --> 00:31:17,919

information you need to be where all

924

00:31:21,190 --> 00:31:19,519

that's being listened to all of that's

925

00:31:23,269 --> 00:31:21,200

being decided

926

00:31:25,590 --> 00:31:23,279

and so that's why for the spacex ones

927

00:31:26,870 --> 00:31:25,600

you see us out there in hawthorne a lot

928

00:31:29,029 --> 00:31:26,880

for the boeing ones we're here in

929

00:31:31,509 --> 00:31:29,039

houston because this is this is where

930

00:31:34,870 --> 00:31:31,519

starliner is being commanded and flown

931

00:31:36,389 --> 00:31:34,880

monitored and everything um so

932

00:31:38,710 --> 00:31:36,399

we get to travel around a little bit for

933

00:31:40,950 --> 00:31:38,720

both of them uh but the

934

00:31:42,149 --> 00:31:40,960

the the again the like the end goal of

935

00:31:44,230 --> 00:31:42,159

all of them is

936

00:31:46,070 --> 00:31:44,240

uh it's not just a nasa show it's not

937

00:31:47,830 --> 00:31:46,080

just a spacex it's not just a boeing

938

00:31:50,470 --> 00:31:47,840

show it's the human space flight show so

939

00:31:53,269 --> 00:31:50,480

we're always wanting to be side by side

940

00:31:54,950 --> 00:31:53,279

talking about the mission together um

941

00:31:56,870 --> 00:31:54,960

because it is our mission it's our joint

942

00:31:58,470 --> 00:31:56,880

mission together yeah you know what's

943

00:32:00,389 --> 00:31:58,480

cool is um

944

00:32:02,149 --> 00:32:00,399

when we did this for the first time you

945

00:32:04,230 --> 00:32:02,159

were you were over there you were

946

00:32:05,430 --> 00:32:04,240

where leah was standing as as the nasa

947

00:32:07,750 --> 00:32:05,440

person for

948

00:32:10,230 --> 00:32:07,760

for demo two um we got to experience a

949

00:32:11,590 --> 00:32:10,240

little bit with with demo one as well so

950

00:32:14,149 --> 00:32:11,600

all this hard work that you're talking

951
00:32:15,990 --> 00:32:14,159
about got put into demo one demo one

952
00:32:16,870 --> 00:32:16,000
didn't you win like an emmy or something

953
00:32:18,070 --> 00:32:16,880
like that

954
00:32:19,909 --> 00:32:18,080
nah

955
00:32:22,950 --> 00:32:19,919
what was it yeah yeah we

956
00:32:24,710 --> 00:32:22,960
yeah we won the the emmy for demo one um

957
00:32:27,269 --> 00:32:24,720
which that one was a blast because that

958
00:32:30,070 --> 00:32:27,279
was that was the first one that was the

959
00:32:32,149 --> 00:32:30,080
first joint coverage that we did

960
00:32:34,549 --> 00:32:32,159
and i was fortunate to be the one that

961
00:32:37,190 --> 00:32:34,559
got to go out to spacex and do that

962
00:32:38,389 --> 00:32:37,200
one of my most vivid memories from that

963
00:32:40,149 --> 00:32:38,399

was

964

00:32:42,230 --> 00:32:40,159

and anybody that's watched a spacex

965

00:32:44,070 --> 00:32:42,240

broadcast you know that they usually

966

00:32:46,070 --> 00:32:44,080

will have a big group of their their

967

00:32:47,110 --> 00:32:46,080

employees that gather on mission control

968

00:32:49,990 --> 00:32:47,120

to watch

969

00:32:52,470 --> 00:32:50,000

and can get pretty enthusiastic

970

00:32:54,710 --> 00:32:52,480

and we did demo one from kind of

971

00:32:57,190 --> 00:32:54,720

literally right in front and so we were

972

00:32:58,149 --> 00:32:57,200

just in a big crowd of people

973

00:33:00,070 --> 00:32:58,159

and

974

00:33:02,230 --> 00:33:00,080

aside from actually watching a rocket

975

00:33:05,029 --> 00:33:02,240

launch that was easily like the most

976
00:33:06,789 --> 00:33:05,039
hype i've ever been in a moment but at

977
00:33:08,549 --> 00:33:06,799
the same time

978
00:33:10,710 --> 00:33:08,559
it was really cool but all that was

979
00:33:12,630 --> 00:33:10,720
going through my head is i can't hear a

980
00:33:14,630 --> 00:33:12,640
single thing that's happening oh yeah

981
00:33:17,029 --> 00:33:14,640
and so that was one of the things we

982
00:33:19,750 --> 00:33:17,039
learned was all right well once we put

983
00:33:21,430 --> 00:33:19,760
people in the stakes are way up and if

984
00:33:22,950 --> 00:33:21,440
something were to go wrong we need to be

985
00:33:25,029 --> 00:33:22,960
able to hear it and we need to know

986
00:33:26,870 --> 00:33:25,039
what's happening and so we adjusted a

987
00:33:28,789 --> 00:33:26,880
little bit and you see us kind of up on

988
00:33:30,950 --> 00:33:28,799

their their mezzanine now

989

00:33:32,470 --> 00:33:30,960

um where you can you can definitely hear

990

00:33:34,710 --> 00:33:32,480

and that's that's one thing that a lot

991

00:33:37,269 --> 00:33:34,720

of people might not always understand is

992

00:33:39,430 --> 00:33:37,279

anytime you see us talking on the air

993

00:33:41,269 --> 00:33:39,440

we're listening to usually three or four

994

00:33:43,590 --> 00:33:41,279

different conversations in our ear so

995

00:33:45,430 --> 00:33:43,600

you might have your tv producer talking

996

00:33:47,509 --> 00:33:45,440

to you you're listening to flight

997

00:33:48,950 --> 00:33:47,519

control loops you're listening to any of

998

00:33:50,549 --> 00:33:48,960

the conversations between the crew and

999

00:33:52,310 --> 00:33:50,559

the ground so you're kind of juggling a

1000

00:33:54,310 --> 00:33:52,320

lot of different things so if you ever

1001
00:33:55,990 --> 00:33:54,320
see us suddenly go like completely

1002
00:33:58,070 --> 00:33:56,000
stone-faced and stop talking

1003
00:34:00,710 --> 00:33:58,080
mid-sentence we're probably listening to

1004
00:34:02,870 --> 00:34:00,720
something very actively we try not to uh

1005
00:34:05,590 --> 00:34:02,880
but we try not to just go stone-faced

1006
00:34:07,750 --> 00:34:05,600
but uh we're always listening yeah

1007
00:34:09,030 --> 00:34:07,760
definitely now we're getting a sense of

1008
00:34:11,030 --> 00:34:09,040
especially from the commentators

1009
00:34:12,310 --> 00:34:11,040
perspective what we're doing on camera

1010
00:34:13,669 --> 00:34:12,320
we're all in these different places

1011
00:34:15,750 --> 00:34:13,679
we're representing different centers

1012
00:34:18,069 --> 00:34:15,760
we're together in

1013
00:34:19,190 --> 00:34:18,079

in hawthorne and in uh in the kennedy

1014

00:34:21,430 --> 00:34:19,200

space center and everything you're

1015

00:34:23,109 --> 00:34:21,440

showing this this collaboration what's

1016

00:34:24,470 --> 00:34:23,119

happening from the

1017

00:34:26,790 --> 00:34:24,480

behind the scenes from the production

1018

00:34:28,950 --> 00:34:26,800

rooms about the you know who's executing

1019

00:34:30,710 --> 00:34:28,960

the show saying cut here do this yeah

1020

00:34:32,629 --> 00:34:30,720

and that's

1021

00:34:35,270 --> 00:34:32,639

those are easily the people that have to

1022

00:34:38,230 --> 00:34:35,280

do the most work yeah

1023

00:34:39,909 --> 00:34:38,240

because again you're you're tying in

1024

00:34:42,069 --> 00:34:39,919

broadcast locations from around the

1025

00:34:44,869 --> 00:34:42,079

country sometimes from extremely remote

1026
00:34:47,109 --> 00:34:44,879
areas with us we're taking in feeds from

1027
00:34:48,710 --> 00:34:47,119
outer space

1028
00:34:52,069 --> 00:34:48,720
and so the amount of technical

1029
00:34:54,310 --> 00:34:52,079
coordination goes in is nothing short of

1030
00:34:56,790 --> 00:34:54,320
enormous and

1031
00:34:59,990 --> 00:34:56,800
again we're blessed to have just an

1032
00:35:01,990 --> 00:35:00,000
incredibly dedicated team at nasa

1033
00:35:04,069 --> 00:35:02,000
uh and then we get to work with an

1034
00:35:07,589 --> 00:35:04,079
equally dedicated and skilled team at

1035
00:35:09,910 --> 00:35:07,599
spacex and at boeing um where

1036
00:35:12,310 --> 00:35:09,920
it's it's a lot of

1037
00:35:13,750 --> 00:35:12,320
we get the question how the how do we do

1038
00:35:15,670 --> 00:35:13,760

this

1039

00:35:18,150 --> 00:35:15,680

the question mark question mark question

1040

00:35:19,910 --> 00:35:18,160

mark and you know people don't ever go

1041

00:35:22,550 --> 00:35:19,920

we can't do that they immediately think

1042

00:35:25,109 --> 00:35:22,560

of new solutions and sometimes it's

1043

00:35:27,030 --> 00:35:25,119

it's patchwork last minute you know this

1044

00:35:29,670 --> 00:35:27,040

feed just went down completely how the

1045

00:35:31,670 --> 00:35:29,680

heck do we do this now and somehow we

1046

00:35:34,230 --> 00:35:31,680

always find a way

1047

00:35:36,390 --> 00:35:34,240

so we have an incredibly talented group

1048

00:35:39,109 --> 00:35:36,400

of people that are able to do that

1049

00:35:40,540 --> 00:35:39,119

camera operators especially uh everyone

1050

00:35:43,349 --> 00:35:40,550

knows they're the true heroes

1051
00:35:46,550 --> 00:35:43,359

[Laughter]

1052
00:35:48,069 --> 00:35:46,560

but and it's and it's it's a lot too

1053
00:35:51,109 --> 00:35:48,079

because again you're you're bouncing

1054
00:35:53,670 --> 00:35:51,119

between different areas uh you have a

1055
00:35:56,550 --> 00:35:53,680

mix of live video the pre-launch show

1056
00:35:58,550 --> 00:35:56,560

has packages and is just timed out to a

1057
00:36:00,950 --> 00:35:58,560

tee and then every single time we time

1058
00:36:03,349 --> 00:36:00,960

it out to a t we get into the real thing

1059
00:36:05,589 --> 00:36:03,359

and it gets thrown completely off script

1060
00:36:06,790 --> 00:36:05,599

and you're just adjusting in real time

1061
00:36:08,630 --> 00:36:06,800

and

1062
00:36:11,030 --> 00:36:08,640

i mean the end product is always

1063
00:36:13,190 --> 00:36:11,040

something that we're proud of that's a

1064

00:36:15,030 --> 00:36:13,200

as i think is uh is another key piece

1065

00:36:16,310 --> 00:36:15,040

right there was all you have all of

1066

00:36:17,829 --> 00:36:16,320

these different pieces coming together

1067

00:36:19,190 --> 00:36:17,839

you have the technical coordination

1068

00:36:21,990 --> 00:36:19,200

everybody's got to be studied they got

1069

00:36:23,670 --> 00:36:22,000

to be ready but at any moment you can

1070

00:36:25,510 --> 00:36:23,680

take all of this planning that you've

1071

00:36:26,950 --> 00:36:25,520

done and you just have to throw it out

1072

00:36:29,030 --> 00:36:26,960

the window oh yeah because we have to

1073

00:36:30,390 --> 00:36:29,040

stick with the story that's being told

1074

00:36:31,670 --> 00:36:30,400

if something's going differently from

1075

00:36:33,750 --> 00:36:31,680

how we're predicting it's going to go we

1076

00:36:35,910 --> 00:36:33,760

have to stick with it and in in the

1077

00:36:38,310 --> 00:36:35,920

moment we do it in the aftermath you

1078

00:36:41,109 --> 00:36:38,320

think man we spent six months putting

1079

00:36:43,430 --> 00:36:41,119

that piece together on this and then

1080

00:36:45,589 --> 00:36:43,440

you know crew one they had to reopen the

1081

00:36:47,349 --> 00:36:45,599

hatch so we had to follow that before

1082

00:36:49,349 --> 00:36:47,359

before they left off so i mean you had

1083

00:36:51,990 --> 00:36:49,359

big chunks here your plan show that

1084

00:36:54,630 --> 00:36:52,000

you're like nope nope nope

1085

00:36:57,109 --> 00:36:54,640

and i mean that's just the reality of

1086

00:37:00,630 --> 00:36:57,119

live tv right you get to audible in real

1087

00:37:02,630 --> 00:37:00,640

time um but again that's where

1088

00:37:04,790 --> 00:37:02,640

nasa has a lot of experience kind of

1089

00:37:07,750 --> 00:37:04,800

doing that we we've been doing

1090

00:37:10,150 --> 00:37:07,760

live mission coverage for decades um and

1091

00:37:12,150 --> 00:37:10,160

we've been lucky to attract a lot of

1092

00:37:13,670 --> 00:37:12,160

people that

1093

00:37:15,829 --> 00:37:13,680

come in and come in with that very

1094

00:37:17,510 --> 00:37:15,839

diverse skill set and

1095

00:37:18,550 --> 00:37:17,520

that adaptability

1096

00:37:20,470 --> 00:37:18,560

um

1097

00:37:23,589 --> 00:37:20,480

i mean it definitely sucks in the moment

1098

00:37:24,950 --> 00:37:23,599

to to go on sorry interviewer who's been

1099

00:37:26,550 --> 00:37:24,960

standing or interviewee that's been

1100

00:37:28,550 --> 00:37:26,560

standing there for an hour um we're

1101

00:37:30,150 --> 00:37:28,560

skipping you yes but

1102

00:37:32,550 --> 00:37:30,160

sometimes it happens

1103

00:37:33,750 --> 00:37:32,560

my favorite moment though is um

1104

00:37:35,670 --> 00:37:33,760

launch

1105

00:37:37,910 --> 00:37:35,680

you put all this work together right and

1106

00:37:39,190 --> 00:37:37,920

and a lot of times when we come on we're

1107

00:37:41,750 --> 00:37:39,200

on you know we've done all the

1108

00:37:43,750 --> 00:37:41,760

rehearsals we've studied we've done sims

1109

00:37:45,430 --> 00:37:43,760

we've practiced contingency scenarios

1110

00:37:47,430 --> 00:37:45,440

and we and even at the time of launch

1111

00:37:48,870 --> 00:37:47,440

we've been on for hours

1112

00:37:50,950 --> 00:37:48,880

and then that moment comes where

1113

00:37:52,870 --> 00:37:50,960

everything everything's working and we

1114

00:37:54,870 --> 00:37:52,880

get to see this thing lift off and as

1115

00:37:57,829 --> 00:37:54,880

you said you got to hear cheers behind

1116

00:37:59,109 --> 00:37:57,839

you during this moment and i i got to

1117

00:38:00,470 --> 00:37:59,119

hear it too

1118

00:38:02,470 --> 00:38:00,480

i got to be a part of it and it's just

1119

00:38:04,710 --> 00:38:02,480

you have your hearts pumping during this

1120

00:38:05,589 --> 00:38:04,720

moment uh when you're seeing this and

1121

00:38:07,750 --> 00:38:05,599

you're just

1122

00:38:09,670 --> 00:38:07,760

you're watching it but you're actively

1123

00:38:11,510 --> 00:38:09,680

thinking about and listening to

1124

00:38:13,030 --> 00:38:11,520

everything that's going on i have

1125

00:38:14,870 --> 00:38:13,040

something i want to say but i'm actively

1126
00:38:15,829 --> 00:38:14,880
listening they're pitching downrange

1127
00:38:17,750 --> 00:38:15,839
vehicle

1128
00:38:19,750 --> 00:38:17,760
is stable and nominal i'm listening to

1129
00:38:21,270 --> 00:38:19,760
all of that as it's going through just

1130
00:38:24,230 --> 00:38:21,280
making sure that the story that we're

1131
00:38:25,750 --> 00:38:24,240
telling real time as my heart is racing

1132
00:38:28,390 --> 00:38:25,760
is is the accurate story that we're

1133
00:38:30,310 --> 00:38:28,400
telling yeah it's and the the crew

1134
00:38:31,910 --> 00:38:30,320
launches i mean the way that we do them

1135
00:38:34,230 --> 00:38:31,920
you you start your show like you said

1136
00:38:36,150 --> 00:38:34,240
we're on for hours so we start the show

1137
00:38:37,430 --> 00:38:36,160
i think about four hours before launch

1138
00:38:39,589 --> 00:38:37,440

because that's when the crew is starting

1139

00:38:42,390 --> 00:38:39,599

to get suited up and everything

1140

00:38:43,910 --> 00:38:42,400

and it's it's tough to because you know

1141

00:38:45,589 --> 00:38:43,920

you know that this is the day that i'm

1142

00:38:47,510 --> 00:38:45,599

gonna go and you know we're going to

1143

00:38:48,630 --> 00:38:47,520

launch we're going to do everything

1144

00:38:50,550 --> 00:38:48,640

and then

1145

00:38:52,069 --> 00:38:50,560

you start and the adrenaline hits right

1146

00:38:54,230 --> 00:38:52,079

as you start the show

1147

00:38:55,270 --> 00:38:54,240

and then you sit down for an hour

1148

00:38:56,630 --> 00:38:55,280

and

1149

00:38:59,270 --> 00:38:56,640

then you have another couple of minutes

1150

00:39:01,910 --> 00:38:59,280

and then you sit down for an hour and so

1151
00:39:04,790 --> 00:39:01,920
and then once you get really into kind

1152
00:39:06,550 --> 00:39:04,800
of that final 30 minutes is when it all

1153
00:39:08,310 --> 00:39:06,560
like it all hits

1154
00:39:09,670 --> 00:39:08,320
and it all really starts to feel real

1155
00:39:11,430 --> 00:39:09,680
and you're going back through everything

1156
00:39:13,430 --> 00:39:11,440
in your head and you're and you're

1157
00:39:15,750 --> 00:39:13,440
praying that the weather doesn't turn i

1158
00:39:17,750 --> 00:39:15,760
still remember the second attempt on dm2

1159
00:39:19,670 --> 00:39:17,760
where we all showed up after scrubbing

1160
00:39:21,349 --> 00:39:19,680
the first day and like there's no way

1161
00:39:22,390 --> 00:39:21,359
we're gonna go today

1162
00:39:24,150 --> 00:39:22,400
and then

1163
00:39:26,150 --> 00:39:24,160

like an hour before launch like the

1164

00:39:28,069 --> 00:39:26,160

skies opened up and it's like oh no

1165

00:39:30,230 --> 00:39:28,079

we're actually doing this i actually

1166

00:39:32,470 --> 00:39:30,240

have to do this now yeah

1167

00:39:34,150 --> 00:39:32,480

and you go through the full gamut of

1168

00:39:36,470 --> 00:39:34,160

emotions where i mean it's always a

1169

00:39:37,430 --> 00:39:36,480

little bit scary

1170

00:39:39,990 --> 00:39:37,440

it's

1171

00:39:41,030 --> 00:39:40,000

really exciting yeah your heart's going

1172

00:39:42,870 --> 00:39:41,040

but

1173

00:39:46,150 --> 00:39:42,880

fortunately i think we do a pretty good

1174

00:39:48,230 --> 00:39:46,160

job of just kind of preparing people um

1175

00:39:48,950 --> 00:39:48,240

so

1176

00:39:55,670 --> 00:39:48,960

i

1177

00:39:57,430 --> 00:39:55,680

gotta have to go back and

1178

00:39:59,750 --> 00:39:57,440

and watch again because it is just

1179

00:40:03,109 --> 00:39:59,760

something like you're so in the moment

1180

00:40:05,190 --> 00:40:03,119

um but it's it's really exciting yeah

1181

00:40:07,349 --> 00:40:05,200

um i know the astronauts whenever we we

1182

00:40:09,109 --> 00:40:07,359

get to talk to them i i just recently

1183

00:40:10,069 --> 00:40:09,119

when i interviewed uh shane kimbrough i

1184

00:40:11,349 --> 00:40:10,079

said what's it what's going to be your

1185

00:40:13,190 --> 00:40:11,359

favorite part of the mission he says

1186

00:40:15,750 --> 00:40:13,200

return it home because that's the end of

1187

00:40:17,190 --> 00:40:15,760

the mission right and so um even there

1188

00:40:18,550 --> 00:40:17,200

you said there was challenges technical

1189

00:40:19,750 --> 00:40:18,560

challenges you said earlier you said

1190

00:40:21,750 --> 00:40:19,760

we'll talk about them later but the

1191

00:40:23,349 --> 00:40:21,760

challenges specifically for i mean we

1192

00:40:24,630 --> 00:40:23,359

talked a little bit about the desert you

1193

00:40:26,630 --> 00:40:24,640

said how fun that was for boeing

1194

00:40:28,069 --> 00:40:26,640

missions for spacex missions when you're

1195

00:40:29,750 --> 00:40:28,079

landing in the ocean that presents a

1196

00:40:31,990 --> 00:40:29,760

whole different type of technical

1197

00:40:34,390 --> 00:40:32,000

challenge yeah when it comes to you know

1198

00:40:37,750 --> 00:40:34,400

what was hard technically though the

1199

00:40:39,589 --> 00:40:37,760

return stuff is probably the hardest at

1200

00:40:41,349 --> 00:40:39,599

least just from everything that i was

1201
00:40:44,309 --> 00:40:41,359
involved in because it was a lot of your

1202
00:40:46,630 --> 00:40:44,319
you're basically starting from scratch

1203
00:40:48,309 --> 00:40:46,640
with launch you we already have so much

1204
00:40:49,430 --> 00:40:48,319
infrastructure for covering to launch

1205
00:40:51,990 --> 00:40:49,440
just because we've been doing it for a

1206
00:40:53,030 --> 00:40:52,000
very long time and then with these shows

1207
00:40:55,109 --> 00:40:53,040
you had

1208
00:40:56,870 --> 00:40:55,119
two companies two spacecraft landing in

1209
00:40:59,109 --> 00:40:56,880
two completely different environments

1210
00:41:01,910 --> 00:40:59,119
one in the ocean off the coast of

1211
00:41:04,710 --> 00:41:01,920
florida and then one at one of several

1212
00:41:07,349 --> 00:41:04,720
deserts and so

1213
00:41:09,990 --> 00:41:07,359

it's it's still in this day and age not

1214

00:41:12,309 --> 00:41:10,000

easy to get a video signal it's doable

1215

00:41:14,309 --> 00:41:12,319

but it's not easy to get a video signal

1216

00:41:16,870 --> 00:41:14,319

let alone something really high def and

1217

00:41:19,109 --> 00:41:16,880

pretty um from somewhere that's so

1218

00:41:21,910 --> 00:41:19,119

remote where you're almost entirely

1219

00:41:22,710 --> 00:41:21,920

relying on a satellite uplink capability

1220

00:41:24,870 --> 00:41:22,720

which

1221

00:41:26,470 --> 00:41:24,880

anybody who's ever used a sat phone or

1222

00:41:29,030 --> 00:41:26,480

tried to set up their own kind of

1223

00:41:31,109 --> 00:41:29,040

broadcast it can be pretty finicky sure

1224

00:41:32,790 --> 00:41:31,119

and if it stops working all of a sudden

1225

00:41:35,910 --> 00:41:32,800

you're out of options

1226

00:41:38,230 --> 00:41:35,920

um but it's it's been fun to kind of to

1227

00:41:40,150 --> 00:41:38,240

to figure those out uh with the spacex

1228

00:41:42,069 --> 00:41:40,160

ones we've got like an uplink that we're

1229

00:41:43,750 --> 00:41:42,079

able to use

1230

00:41:47,109 --> 00:41:43,760

for a bunch of the missions we've also

1231

00:41:49,030 --> 00:41:47,119

used uh the the wb-57 it's nasa's high

1232

00:41:50,870 --> 00:41:49,040

altitude research plane

1233

00:41:52,390 --> 00:41:50,880

to get some of the the parachute events

1234

00:41:53,829 --> 00:41:52,400

and everything but i mean it's it's

1235

00:41:55,270 --> 00:41:53,839

worth it when you see that on your

1236

00:41:57,109 --> 00:41:55,280

screen and especially this

1237

00:41:59,349 --> 00:41:57,119

capsule's coming down and you see four

1238

00:42:00,710 --> 00:41:59,359

good shoots or splashing down in the

1239

00:42:02,710 --> 00:42:00,720

water

1240

00:42:04,630 --> 00:42:02,720

so we've we've got some pretty great

1241

00:42:06,150 --> 00:42:04,640

capability now and again there's there's

1242

00:42:08,150 --> 00:42:06,160

a team at kennedy

1243

00:42:10,550 --> 00:42:08,160

a guy by the name of mike downs and his

1244

00:42:13,030 --> 00:42:10,560

whole group who've done just phenomenal

1245

00:42:15,270 --> 00:42:13,040

work to be able to get that signal out

1246

00:42:17,910 --> 00:42:15,280

uh from the spacex splashdowns and then

1247

00:42:20,309 --> 00:42:17,920

the boeing ones which

1248

00:42:23,430 --> 00:42:20,319

again those are probably my favorite

1249

00:42:25,109 --> 00:42:23,440

part that we do right now just because

1250

00:42:27,829 --> 00:42:25,119

when you're on the boat you're a lot

1251

00:42:29,430 --> 00:42:27,839

more space and personnel limited

1252

00:42:32,069 --> 00:42:29,440

so that's one thing that landing in the

1253

00:42:33,910 --> 00:42:32,079

desert helps just like from purely

1254

00:42:35,750 --> 00:42:33,920

showing people the mission

1255

00:42:37,349 --> 00:42:35,760

we have a little bit more capability

1256

00:42:38,870 --> 00:42:37,359

where and

1257

00:42:40,630 --> 00:42:38,880

one of my favorite things about the

1258

00:42:43,510 --> 00:42:40,640

boeing ones is we're actually part of

1259

00:42:45,910 --> 00:42:43,520

the operational team for this we go out

1260

00:42:47,990 --> 00:42:45,920

and set up a camera that provides

1261

00:42:49,990 --> 00:42:48,000

situational awareness the entire landing

1262

00:42:52,069 --> 00:42:50,000

zone back to the flight control team in

1263

00:42:53,670 --> 00:42:52,079

mission control so we're right in there

1264

00:42:55,109 --> 00:42:53,680

with the convoy

1265

00:42:56,470 --> 00:42:55,119

we're able to get everything set up and

1266

00:42:58,230 --> 00:42:56,480

again it's

1267

00:42:59,510 --> 00:42:58,240

it was a boeing guy by the name of tom

1268

00:43:01,990 --> 00:42:59,520

rule who

1269

00:43:03,990 --> 00:43:02,000

kind of is the the godfather of all of

1270

00:43:05,750 --> 00:43:04,000

that that hardware that goes out there

1271

00:43:08,470 --> 00:43:05,760

and him and his him and his guys and

1272

00:43:11,109 --> 00:43:08,480

girls are just wizards at at being able

1273

00:43:13,510 --> 00:43:11,119

to get us as many different options as

1274

00:43:15,430 --> 00:43:13,520

possible and we're we're able to bring

1275

00:43:17,589 --> 00:43:15,440

people just you're you're embedded

1276

00:43:19,510 --> 00:43:17,599

inside the team that's bringing them out

1277

00:43:21,270 --> 00:43:19,520

bring you right up to the hatch

1278

00:43:23,990 --> 00:43:21,280

when we start taking crew members out

1279

00:43:24,870 --> 00:43:24,000

and everything and it's really fun

1280

00:43:26,309 --> 00:43:24,880

and

1281

00:43:28,550 --> 00:43:26,319

they've they've got really cool

1282

00:43:30,950 --> 00:43:28,560

solutions to get video back from there

1283

00:43:33,109 --> 00:43:30,960

over here to houston uh where we're able

1284

00:43:35,670 --> 00:43:33,119

to to mix it in and punch it out to the

1285

00:43:38,150 --> 00:43:35,680

whole world um it's

1286

00:43:40,150 --> 00:43:38,160

it was cool like getting to start from a

1287

00:43:41,430 --> 00:43:40,160

blank slate and figuring out how to do

1288

00:43:43,510 --> 00:43:41,440

all this and

1289

00:43:45,829 --> 00:43:43,520

you're bouncing around between two very

1290

00:43:47,109 --> 00:43:45,839

different solutions um for the both of

1291

00:43:49,349 --> 00:43:47,119

them but

1292

00:43:51,349 --> 00:43:49,359

again the the end the end goal is we

1293

00:43:54,390 --> 00:43:51,359

want to show people we want to show you

1294

00:43:55,829 --> 00:43:54,400

everything as much as we possibly can

1295

00:43:57,349 --> 00:43:55,839

um

1296

00:44:00,309 --> 00:43:57,359

i mean i think we've done a pretty good

1297

00:44:01,990 --> 00:44:00,319

job so far yeah honestly it's uh it

1298

00:44:04,309 --> 00:44:02,000

shows i think i think a lot of people

1299

00:44:06,309 --> 00:44:04,319

engage we've had crazy numbers with the

1300

00:44:07,990 --> 00:44:06,319

people that have tuned in and i think i

1301
00:44:09,349 --> 00:44:08,000
think that really shows that the people

1302
00:44:11,109 --> 00:44:09,359
are interested in this stuff and i think

1303
00:44:12,950 --> 00:44:11,119
that's exciting too that people really

1304
00:44:15,190 --> 00:44:12,960
are interested in this stuff

1305
00:44:17,270 --> 00:44:15,200
i want to jump to questions now um we've

1306
00:44:19,030 --> 00:44:17,280
talked a lot about commercial crew and

1307
00:44:21,190 --> 00:44:19,040
and got the inside scoop of what's going

1308
00:44:22,470 --> 00:44:21,200
on so let's dive back into the questions

1309
00:44:24,790 --> 00:44:22,480
thanks because we got we got a lot of

1310
00:44:26,870 --> 00:44:24,800
them actually since since we've uh

1311
00:44:29,829 --> 00:44:26,880
started talking again so this

1312
00:44:31,109 --> 00:44:29,839
once from brad who's asking when media

1313
00:44:32,790 --> 00:44:31,119

will be allowed

1314

00:44:35,349 --> 00:44:32,800

back for in-person

1315

00:44:37,349 --> 00:44:35,359

news conferences so this is this is due

1316

00:44:39,190 --> 00:44:37,359

to covet we've been doing remote

1317

00:44:41,670 --> 00:44:39,200

yeah that's a good question i mean the

1318

00:44:43,349 --> 00:44:41,680

the short answer is hopefully soon uh

1319

00:44:45,270 --> 00:44:43,359

we're going to be following all of the

1320

00:44:47,430 --> 00:44:45,280

cdc guidance and everything else that

1321

00:44:49,990 --> 00:44:47,440

the entire federal government

1322

00:44:51,670 --> 00:44:50,000

is mandated to follow we're we're not

1323

00:44:55,030 --> 00:44:51,680

going to do it until we can make sure

1324

00:44:56,870 --> 00:44:55,040

that we're keeping everybody safe

1325

00:44:58,790 --> 00:44:56,880

things are obviously loosening up a

1326

00:45:00,790 --> 00:44:58,800

little bit more now we're able to if

1327

00:45:02,790 --> 00:45:00,800

you're fully vaccinated

1328

00:45:04,390 --> 00:45:02,800

do a couple more things on site which is

1329

00:45:06,950 --> 00:45:04,400

why gary and i aren't wearing masks

1330

00:45:08,870 --> 00:45:06,960

right yeah um and so i think if things

1331

00:45:10,870 --> 00:45:08,880

continuing to trend good we still see

1332

00:45:14,150 --> 00:45:10,880

good vaccination rates and caseloads

1333

00:45:15,990 --> 00:45:14,160

going down um hopefully soon i couldn't

1334

00:45:18,710 --> 00:45:16,000

give you a date because it'd be wrong

1335

00:45:21,510 --> 00:45:18,720

but hopefully soon sure all right this

1336

00:45:22,950 --> 00:45:21,520

next one's from anita uh she's asking or

1337

00:45:24,390 --> 00:45:22,960

she's saying i love the show the

1338

00:45:26,710 --> 00:45:24,400

highlight on my friday every week thank

1339

00:45:29,510 --> 00:45:26,720

you anita uh will the podcast ever be

1340

00:45:30,309 --> 00:45:29,520

recorded in space one day do you think

1341

00:45:33,430 --> 00:45:30,319

um

1342

00:45:35,349 --> 00:45:33,440

i would really love to record a podcast

1343

00:45:37,510 --> 00:45:35,359

in space so if you would like that

1344

00:45:39,030 --> 00:45:37,520

please let us know because i'll i'll go

1345

00:45:42,150 --> 00:45:39,040

i don't think it's in our budget to send

1346

00:45:44,950 --> 00:45:42,160

gary to space for an episode but we have

1347

00:45:47,190 --> 00:45:44,960

had guests from space you and i did one

1348

00:45:48,309 --> 00:45:47,200

we got to talk to jack fisher yeah that

1349

00:45:51,190 --> 00:45:48,319

was fun

1350

00:45:53,190 --> 00:45:51,200

the most excited astronaut in history he

1351
00:45:54,950 --> 00:45:53,200
was he was really fun to talk to we had

1352
00:45:56,710 --> 00:45:54,960
i think it was like how we set it up was

1353
00:45:57,510 --> 00:45:56,720
we we got on and we were just chatting

1354
00:45:59,589 --> 00:45:57,520
about

1355
00:46:01,190 --> 00:45:59,599
just life in space ahead of the a

1356
00:46:02,790 --> 00:46:01,200
downlink call which we do every once in

1357
00:46:05,510 --> 00:46:02,800
a while we get downlinks and we talk

1358
00:46:07,589 --> 00:46:05,520
with schools universities media whatever

1359
00:46:09,589 --> 00:46:07,599
um but this one we got to chat with jack

1360
00:46:12,309 --> 00:46:09,599
fisher and he was such an awesome guest

1361
00:46:14,390 --> 00:46:12,319
um he between every question he went on

1362
00:46:15,829 --> 00:46:14,400
a different wall if you remember yeah he

1363
00:46:17,589 --> 00:46:15,839

just spontaneously said i'm going to

1364

00:46:19,670 --> 00:46:17,599

flip walls uh every single time you guys

1365

00:46:22,150 --> 00:46:19,680

ask me a question so he was just kind of

1366

00:46:25,109 --> 00:46:22,160

rotating around like a clock he was

1367

00:46:26,470 --> 00:46:25,119

great he was he was so much fun uh we

1368

00:46:28,069 --> 00:46:26,480

did another one too where we talked

1369

00:46:30,150 --> 00:46:28,079

about photography and and just the

1370

00:46:31,829 --> 00:46:30,160

perspective they had uh so we got that's

1371

00:46:34,230 --> 00:46:31,839

i got four astronauts that were on board

1372

00:46:35,990 --> 00:46:34,240

at the same time um i think vanda high

1373

00:46:37,190 --> 00:46:36,000

was one of them vandenheit was one of my

1374

00:46:38,390 --> 00:46:37,200

guests who i got to interview a number

1375

00:46:40,950 --> 00:46:38,400

of times i think i've interviewed him

1376

00:46:42,870 --> 00:46:40,960

four times once from space so

1377

00:46:44,950 --> 00:46:42,880

for the podcast which is pretty cool so

1378

00:46:46,710 --> 00:46:44,960

yeah uh but if you want me to need to go

1379

00:46:48,950 --> 00:46:46,720

please let us know

1380

00:46:51,030 --> 00:46:48,960

uh we got another one from calvin who's

1381

00:46:53,030 --> 00:46:51,040

asking uh what made you come up with

1382

00:46:53,910 --> 00:46:53,040

space to ground short format this is our

1383

00:46:56,069 --> 00:46:53,920

short

1384

00:46:58,150 --> 00:46:56,079

weekly video we put on youtube two

1385

00:46:59,750 --> 00:46:58,160

minutes and we talk about the highlights

1386

00:47:01,990 --> 00:46:59,760

from that week kind of a compressed

1387

00:47:03,589 --> 00:47:02,000

version very compressed version of what

1388

00:47:05,270 --> 00:47:03,599

space station live used to be yeah and

1389

00:47:07,670 --> 00:47:05,280

that was that was part of what it was

1390

00:47:09,109 --> 00:47:07,680

when the decision was made to

1391

00:47:10,470 --> 00:47:09,119

that that came out initially when we

1392

00:47:12,069 --> 00:47:10,480

were going to shorten space station live

1393

00:47:13,750 --> 00:47:12,079

but one thing you would do every single

1394

00:47:15,990 --> 00:47:13,760

friday on space station live is you

1395

00:47:18,069 --> 00:47:16,000

would give a recap of the whole week

1396

00:47:20,150 --> 00:47:18,079

and so the the space station pao at the

1397

00:47:22,549 --> 00:47:20,160

time josh byerly

1398

00:47:23,829 --> 00:47:22,559

came up with space to ground

1399

00:47:26,230 --> 00:47:23,839

and

1400

00:47:30,230 --> 00:47:26,240

it's been like one of our staple

1401

00:47:32,870 --> 00:47:30,240

products for for years now um where

1402

00:47:35,270 --> 00:47:32,880

it's kind of short compact um the

1403

00:47:37,829 --> 00:47:35,280

producer for it right now dexter herbert

1404

00:47:39,670 --> 00:47:37,839

has done an incredible job just kind of

1405

00:47:41,670 --> 00:47:39,680

keeping the look fresh

1406

00:47:43,589 --> 00:47:41,680

and working in uh

1407

00:47:46,069 --> 00:47:43,599

and we've been doing it all remote

1408

00:47:47,990 --> 00:47:46,079

during covid um and so all of our hosts

1409

00:47:50,390 --> 00:47:48,000

have done an incredible job just you

1410

00:47:52,710 --> 00:47:50,400

know filming it in their own homes uh

1411

00:47:54,710 --> 00:47:52,720

and then decks uh editing everything

1412

00:47:57,030 --> 00:47:54,720

together but it's it is that kind of

1413

00:47:59,030 --> 00:47:57,040

that weekly bite size um

1414

00:48:01,910 --> 00:47:59,040

we we really like it's a lot of fun to

1415

00:48:03,829 --> 00:48:01,920

make i still crash the show uh every

1416

00:48:06,549 --> 00:48:03,839

every christmas to give myself an excuse

1417

00:48:08,870 --> 00:48:06,559

to buy a new ugly christmas sweater but

1418

00:48:11,750 --> 00:48:08,880

it's it's a lot of fun and um yeah it

1419

00:48:13,829 --> 00:48:11,760

was just it was another it was

1420

00:48:15,750 --> 00:48:13,839

one of the ways that we thought we could

1421

00:48:17,109 --> 00:48:15,760

kind of more effectively tell people

1422

00:48:18,470 --> 00:48:17,119

what's happening in the station this

1423

00:48:19,270 --> 00:48:18,480

week

1424

00:48:21,750 --> 00:48:19,280

yeah

1425

00:48:23,430 --> 00:48:21,760

um one more from roger weiss another

1426

00:48:26,309 --> 00:48:23,440

name we don't recognize his name

1427

00:48:28,870 --> 00:48:26,319

um hey raj uh any plans to record

1428

00:48:31,190 --> 00:48:28,880

interviews at other nasa centers

1429

00:48:32,309 --> 00:48:31,200

during during covet actually we've same

1430

00:48:34,390 --> 00:48:32,319

thing as space to ground where all of

1431

00:48:35,750 --> 00:48:34,400

our hosts are remote um we record all of

1432

00:48:39,349 --> 00:48:35,760

our guest remote that's what we've been

1433

00:48:41,670 --> 00:48:39,359

doing since since um covet and uh

1434

00:48:43,030 --> 00:48:41,680

because of that we've been having all of

1435

00:48:45,430 --> 00:48:43,040

our interviews over the phone which

1436

00:48:47,030 --> 00:48:45,440

really broadens our reach so lately

1437

00:48:48,230 --> 00:48:47,040

we've been talking with a bunch of

1438

00:48:50,230 --> 00:48:48,240

people from a bunch of different nasa

1439

00:48:53,109 --> 00:48:50,240

centers i've got some episodes coming up

1440

00:48:54,870 --> 00:48:53,119

we're talking with interns um from it's

1441

00:48:56,549 --> 00:48:54,880

going to be me and interns from three

1442

00:48:57,750 --> 00:48:56,559

different nasa centers all at the same

1443

00:48:59,589 --> 00:48:57,760

call

1444

00:49:02,230 --> 00:48:59,599

so that provides a lot of different

1445

00:49:04,470 --> 00:49:02,240

flexibility absolutely we did one

1446

00:49:06,390 --> 00:49:04,480

another one early on was when we did

1447

00:49:09,270 --> 00:49:06,400

with nasa in silicon valley which is

1448

00:49:10,950 --> 00:49:09,280

another podcast and we did that one uh

1449

00:49:13,270 --> 00:49:10,960

remote i was with shane kimbrough at the

1450

00:49:15,510 --> 00:49:13,280

time just me and him uh in the studio in

1451

00:49:17,030 --> 00:49:15,520

the booth actually uh we both had two

1452

00:49:19,109 --> 00:49:17,040

microphones and we were talking with the

1453

00:49:20,950 --> 00:49:19,119

the host and uh guest over there over at

1454

00:49:22,950 --> 00:49:20,960

ames research center so we're able to do

1455

00:49:24,630 --> 00:49:22,960

it remote um which is which is pretty

1456

00:49:26,710 --> 00:49:24,640

nice i haven't gone over to another

1457

00:49:28,549 --> 00:49:26,720

center though to record that yeah and

1458

00:49:30,710 --> 00:49:28,559

kind of like silicon valley there are

1459

00:49:33,430 --> 00:49:30,720

there are podcasts at other centers now

1460

00:49:35,670 --> 00:49:33,440

um the the the podcast revolution kind

1461

00:49:37,349 --> 00:49:35,680

of swept through swept through nasa i

1462

00:49:39,190 --> 00:49:37,359

think silicon valley was the first one

1463

00:49:40,790 --> 00:49:39,200

and then yeah you guys started this one

1464

00:49:43,430 --> 00:49:40,800

you were second yeah um i know there's

1465

00:49:45,990 --> 00:49:43,440

rocket ranch out at ksc and there's a

1466

00:49:47,349 --> 00:49:46,000

gravity assist at a nasa headquarters so

1467

00:49:48,710 --> 00:49:47,359

that that's one of the things to

1468

00:49:50,630 --> 00:49:48,720

remember is

1469

00:49:52,630 --> 00:49:50,640

we we obviously talked about human space

1470

00:49:53,990 --> 00:49:52,640

flight a lot there's so much more to

1471

00:49:56,829 --> 00:49:54,000

nasa

1472

00:50:00,390 --> 00:49:56,839

whether it's robotic missions or

1473

00:50:02,790 --> 00:50:00,400

aeronautics just really

1474

00:50:04,790 --> 00:50:02,800

out there physics and just fundamental

1475

00:50:06,870 --> 00:50:04,800

science and stuff and so there there's

1476
00:50:08,870 --> 00:50:06,880
probably if there's some other aspect of

1477
00:50:10,549 --> 00:50:08,880
nasa that that we're not hitting on

1478
00:50:12,390 --> 00:50:10,559
since we kind of tend to focus on the

1479
00:50:13,910 --> 00:50:12,400
human space flight there's probably a

1480
00:50:15,190 --> 00:50:13,920
nasa podcast out there that you can

1481
00:50:17,270 --> 00:50:15,200
listen to that's gonna that's gonna

1482
00:50:20,150 --> 00:50:17,280
scratch that edge on that i got i got

1483
00:50:22,710 --> 00:50:20,160
one more pull for our audience and so um

1484
00:50:24,069 --> 00:50:22,720
this one is about topics so of all of

1485
00:50:26,309 --> 00:50:24,079
the architecture we have a podcast

1486
00:50:29,030 --> 00:50:26,319
topics that we've had which one

1487
00:50:31,910 --> 00:50:29,040
interests you most so i got mars space

1488
00:50:34,069 --> 00:50:31,920

station science engineering astronauts

1489

00:50:35,670 --> 00:50:34,079

are the ones that i have listed but if

1490

00:50:38,069 --> 00:50:35,680

you have another topic that is of

1491

00:50:39,990 --> 00:50:38,079

interest to you life sciences or you

1492

00:50:41,829 --> 00:50:40,000

know by different biology microbiology

1493

00:50:43,829 --> 00:50:41,839

whatever it may be put in the comments

1494

00:50:45,349 --> 00:50:43,839

um that's what's nice about the podcast

1495

00:50:46,790 --> 00:50:45,359

as you were saying you know we do human

1496

00:50:48,309 --> 00:50:46,800

spaceflight but we kind of broaden it a

1497

00:50:50,150 --> 00:50:48,319

little bit more and then there's other

1498

00:50:51,670 --> 00:50:50,160

nasa podcasts that go into maybe

1499

00:50:53,349 --> 00:50:51,680

different astronomy or what's going on

1500

00:50:55,190 --> 00:50:53,359

at different nasa centers so yeah so we

1501
00:50:56,150 --> 00:50:55,200
got a little bit of everything which is

1502
00:50:58,150 --> 00:50:56,160
nice

1503
00:51:00,230 --> 00:50:58,160
all right um going back to commercial

1504
00:51:01,750 --> 00:51:00,240
crew uh and our coverage for a second

1505
00:51:03,829 --> 00:51:01,760
actually going beyond commercial crew i

1506
00:51:04,630 --> 00:51:03,839
kind of wanted to end with this is

1507
00:51:06,630 --> 00:51:04,640
um

1508
00:51:08,150 --> 00:51:06,640
commercial crew i mean what you have

1509
00:51:09,910 --> 00:51:08,160
been helping to do and helping lead the

1510
00:51:12,470 --> 00:51:09,920
charge to do is is do things a little

1511
00:51:14,309 --> 00:51:12,480
bit differently now we're pulling in uh

1512
00:51:16,309 --> 00:51:14,319
spacex and boeing to come with us and

1513
00:51:18,470 --> 00:51:16,319

tell this story of human space flight

1514

00:51:19,750 --> 00:51:18,480

but things are changing we have private

1515

00:51:21,510 --> 00:51:19,760

astronauts going to the international

1516

00:51:23,270 --> 00:51:21,520

space station soon we're going to be

1517

00:51:24,549 --> 00:51:23,280

going to the moon and we've got we both

1518

00:51:26,069 --> 00:51:24,559

talked about how excited we are about

1519

00:51:28,069 --> 00:51:26,079

artemis missions but that's all going to

1520

00:51:29,990 --> 00:51:28,079

change how we do our mission commentary

1521

00:51:31,510 --> 00:51:30,000

and how we tell these different stories

1522

00:51:32,790 --> 00:51:31,520

so what are you looking forward to most

1523

00:51:34,390 --> 00:51:32,800

yeah it's

1524

00:51:36,390 --> 00:51:34,400

i think i said it in a meeting the other

1525

00:51:38,069 --> 00:51:36,400

day it's kind of it's kind of a

1526
00:51:39,190 --> 00:51:38,079
double-edged sword

1527
00:51:41,430 --> 00:51:39,200
where

1528
00:51:43,670 --> 00:51:41,440
there's all of this new stuff coming up

1529
00:51:45,190 --> 00:51:43,680
and so that's really exciting you're

1530
00:51:47,670 --> 00:51:45,200
you're going to be constantly kind of

1531
00:51:50,790 --> 00:51:47,680
reinventing and figuring out new things

1532
00:51:52,470 --> 00:51:50,800
and trying new things at the same time

1533
00:51:54,069 --> 00:51:52,480
you don't ever really get a breather

1534
00:51:55,910 --> 00:51:54,079
where you can just kind of you know

1535
00:51:57,589 --> 00:51:55,920
let's just keep doing this this kind of

1536
00:52:00,549 --> 00:51:57,599
show for a while like there's always

1537
00:52:02,790 --> 00:52:00,559
that pressure or really that necessity

1538
00:52:05,589 --> 00:52:02,800

to change how you're covering something

1539

00:52:07,829 --> 00:52:05,599

because i mean you mentioned private

1540

00:52:09,670 --> 00:52:07,839

astronauts we're we're figuring that all

1541

00:52:11,589 --> 00:52:09,680

out right now because they'll be going

1542

00:52:13,430 --> 00:52:11,599

to the space station so we're involved

1543

00:52:16,470 --> 00:52:13,440

but they're not nasa astronauts

1544

00:52:18,790 --> 00:52:16,480

launching and it's not a nasa mission

1545

00:52:20,150 --> 00:52:18,800

so we just have to continue to evolve

1546

00:52:21,109 --> 00:52:20,160

you know how we're gonna but at the same

1547

00:52:23,430 --> 00:52:21,119

time

1548

00:52:25,190 --> 00:52:23,440

it's a critical step in the

1549

00:52:27,589 --> 00:52:25,200

commercialization of low earth orbit

1550

00:52:29,349 --> 00:52:27,599

which is what we've been pushing so hard

1551
00:52:31,109 --> 00:52:29,359
with space station for years now and

1552
00:52:33,349 --> 00:52:31,119
it's really the cornerstone of making

1553
00:52:35,030 --> 00:52:33,359
that possible so we obviously have a

1554
00:52:36,710 --> 00:52:35,040
vested interest in it

1555
00:52:39,190 --> 00:52:36,720
really any time there's human space

1556
00:52:41,829 --> 00:52:39,200
flight we're a fan of it

1557
00:52:44,549 --> 00:52:41,839
and so how else can we kind of help

1558
00:52:46,069 --> 00:52:44,559
cover that and augment it and you know

1559
00:52:47,750 --> 00:52:46,079
really help tell the story and then

1560
00:52:52,150 --> 00:52:47,760
artemis is

1561
00:52:55,030 --> 00:52:52,160
another complete reinvention um

1562
00:52:57,109 --> 00:52:55,040
i'm really excited for that just because

1563
00:52:59,190 --> 00:52:57,119

and our our previous nasa administrator

1564

00:53:01,030 --> 00:52:59,200

jim bridenstine would talk about this a

1565

00:53:02,309 --> 00:53:01,040

lot where

1566

00:53:04,390 --> 00:53:02,319

you have

1567

00:53:06,549 --> 00:53:04,400

multiple generations living on planet

1568

00:53:09,109 --> 00:53:06,559

earth that did not experience the first

1569

00:53:12,150 --> 00:53:09,119

moon landing that it's it's black and

1570

00:53:14,870 --> 00:53:12,160

white footage or it's a textbook

1571

00:53:16,390 --> 00:53:14,880

article for us um

1572

00:53:18,390 --> 00:53:16,400

and when you you

1573

00:53:20,069 --> 00:53:18,400

look at the numbers of just how many

1574

00:53:21,510 --> 00:53:20,079

people tuned in

1575

00:53:24,470 --> 00:53:21,520

and how just

1576

00:53:26,870 --> 00:53:24,480

pivotal a moment it stands out in the

1577

00:53:28,390 --> 00:53:26,880

history of engineering and just human

1578

00:53:31,109 --> 00:53:28,400

achievement

1579

00:53:34,710 --> 00:53:31,119

we're going back to do that again we're

1580

00:53:37,030 --> 00:53:34,720

we're taking that big leap again and so

1581

00:53:38,870 --> 00:53:37,040

we better really have our stuff together

1582

00:53:40,069 --> 00:53:38,880

uh to bring the whole world along with

1583

00:53:42,790 --> 00:53:40,079

it and so

1584

00:53:44,870 --> 00:53:42,800

i'm really excited for kind of the new

1585

00:53:47,270 --> 00:53:44,880

kind of technologies out there as we can

1586

00:53:49,589 --> 00:53:47,280

make cameras smaller and you know

1587

00:53:51,510 --> 00:53:49,599

increase resolution i

1588

00:53:54,549 --> 00:53:51,520

i understand everybody we're still at

1589

00:53:55,670 --> 00:53:54,559

720p for a lot of stuff we're working on

1590

00:53:58,710 --> 00:53:55,680

it

1591

00:54:01,030 --> 00:53:58,720

because

1592

00:54:03,829 --> 00:54:01,040

a moment like that deserves that a

1593

00:54:07,270 --> 00:54:03,839

moment like that deserves to be seen

1594

00:54:08,390 --> 00:54:07,280

and experienced in just the best way

1595

00:54:11,670 --> 00:54:08,400

possible

1596

00:54:15,030 --> 00:54:11,680

and given to as many people as we could

1597

00:54:16,950 --> 00:54:15,040

ever possibly reach um and so

1598

00:54:18,150 --> 00:54:16,960

tackling those challenges is going to be

1599

00:54:19,670 --> 00:54:18,160

it's going to be exciting it's going to

1600

00:54:22,230 --> 00:54:19,680

be hard because

1601

00:54:23,990 --> 00:54:22,240

it's it's never as easy as just stick a

1602

00:54:26,790 --> 00:54:24,000

camera on a spacecraft and point an

1603

00:54:29,190 --> 00:54:26,800

antenna back at earth

1604

00:54:31,270 --> 00:54:29,200

every single pound that goes to the moon

1605

00:54:32,790 --> 00:54:31,280

is worth a lot of money and a lot of

1606

00:54:35,109 --> 00:54:32,800

fuel

1607

00:54:36,870 --> 00:54:35,119

you don't have an unlimited data plan

1608

00:54:39,510 --> 00:54:36,880

when you're sending stuff back and forth

1609

00:54:42,870 --> 00:54:39,520

from the moon and believe it or not 4k

1610

00:54:44,309 --> 00:54:42,880

video eats up a lot of bandwidth um so i

1611

00:54:46,150 --> 00:54:44,319

mean there's challenges out there but

1612

00:54:47,910 --> 00:54:46,160

the the cool thing is like we're having

1613

00:54:49,589 --> 00:54:47,920

those discussions right now we're

1614

00:54:50,710 --> 00:54:49,599

thinking about how the heck are we going

1615

00:54:53,270 --> 00:54:50,720

to do this

1616

00:54:55,910 --> 00:54:53,280

and it's not something that's you know

1617

00:54:57,990 --> 00:54:55,920

way off in the future like we need to

1618

00:54:59,750 --> 00:54:58,000

have those meetings now or we're not

1619

00:55:01,829 --> 00:54:59,760

going to be able to do it and so that's

1620

00:55:04,230 --> 00:55:01,839

what's really exciting

1621

00:55:05,910 --> 00:55:04,240

dan you're very passionate about

1622

00:55:08,230 --> 00:55:05,920

telling the story right and that's what

1623

00:55:10,549 --> 00:55:08,240

our job is our job is to

1624

00:55:12,789 --> 00:55:10,559

tell that story it's to is to it's to

1625

00:55:15,190 --> 00:55:12,799

give that people what they are expecting

1626
00:55:17,670 --> 00:55:15,200
which is beautiful pictures of the moon

1627
00:55:18,950 --> 00:55:17,680
when we return um it it's to it's to

1628
00:55:21,030 --> 00:55:18,960
tell stories in these we talked about

1629
00:55:22,549 --> 00:55:21,040
space to ground we're doing a podcast

1630
00:55:24,950 --> 00:55:22,559
we're doing everything we can to share

1631
00:55:27,190 --> 00:55:24,960
what we're doing and involve as many

1632
00:55:29,270 --> 00:55:27,200
people as possible so

1633
00:55:31,270 --> 00:55:29,280
when you think about nasa's directive to

1634
00:55:33,829 --> 00:55:31,280
reach out to the widest practical

1635
00:55:36,470 --> 00:55:33,839
practicable audiences which is always

1636
00:55:38,870 --> 00:55:36,480
it's our charter um and and our passion

1637
00:55:40,789 --> 00:55:38,880
for doing it what really drives you to

1638
00:55:43,990 --> 00:55:40,799

tell story to do things differently to

1639

00:55:46,549 --> 00:55:44,000

reach wider audiences well it's

1640

00:55:47,750 --> 00:55:46,559

it really hits home when especially and

1641

00:55:49,589 --> 00:55:47,760

that's one of the things that social

1642

00:55:53,109 --> 00:55:49,599

media has been so great for

1643

00:55:56,069 --> 00:55:53,119

when you see who it is that's watching

1644

00:55:57,750 --> 00:55:56,079

um it's it's it's hard to to kind of

1645

00:55:59,430 --> 00:55:57,760

grasp that when you're in the moment

1646

00:56:01,030 --> 00:55:59,440

because i mean when when we're doing

1647

00:56:02,789 --> 00:56:01,040

this right now when we're when we're

1648

00:56:04,470 --> 00:56:02,799

covering a launch or something it's me

1649

00:56:06,870 --> 00:56:04,480

and like maybe a couple of other people

1650

00:56:08,710 --> 00:56:06,880

in a room and that's it

1651
00:56:10,549 --> 00:56:08,720
but with the advent of social media you

1652
00:56:12,390 --> 00:56:10,559
get a constant stream of this person

1653
00:56:14,950 --> 00:56:12,400
checking in from germany this person

1654
00:56:18,309 --> 00:56:14,960
checking in from india you know it's the

1655
00:56:20,789 --> 00:56:18,319
entire world will will be tuning in

1656
00:56:22,710 --> 00:56:20,799
um and so when you have that kind of

1657
00:56:24,470 --> 00:56:22,720
instant feedback that

1658
00:56:26,630 --> 00:56:24,480
oh wow like all of these people are

1659
00:56:29,030 --> 00:56:26,640
paying attention it it helps kind of

1660
00:56:31,670 --> 00:56:29,040
light the fire under you um

1661
00:56:32,950 --> 00:56:31,680
to to really do as much as you possibly

1662
00:56:34,549 --> 00:56:32,960
can to

1663
00:56:36,710 --> 00:56:34,559

to make it a great show to make it

1664

00:56:39,589 --> 00:56:36,720

something that people want to watch uh

1665

00:56:41,270 --> 00:56:39,599

and are excited and inspired by

1666

00:56:43,270 --> 00:56:41,280

well dan this has been awesome to have

1667

00:56:44,710 --> 00:56:43,280

you on and talk about your passion for

1668

00:56:46,470 --> 00:56:44,720

communication and just all the work you

1669

00:56:48,150 --> 00:56:46,480

did to to make you know to reach wider

1670

00:56:49,990 --> 00:56:48,160

audiences and get them excited about

1671

00:56:53,030 --> 00:56:50,000

what we're doing so i appreciate you

1672

00:56:55,349 --> 00:56:53,040

coming on thanks yeah thanks um it's

1673

00:56:57,750 --> 00:56:55,359

like i said we we did episode one like

1674

00:57:00,150 --> 00:56:57,760

10 feet over there it at a tiny little

1675

00:57:01,750 --> 00:57:00,160

table and two microphones never knowing

1676
00:57:04,710 --> 00:57:01,760
what it would turn into

1677
00:57:05,670 --> 00:57:04,720
uh here's episode 200

1678
00:57:06,870 --> 00:57:05,680
um

1679
00:57:09,270 --> 00:57:06,880
and

1680
00:57:11,349 --> 00:57:09,280
i'm so impressed

1681
00:57:14,789 --> 00:57:11,359
like you guys have done an incredible

1682
00:57:16,789 --> 00:57:14,799
job and this is this was your baby so

1683
00:57:18,710 --> 00:57:16,799
we're really proud of you gary

1684
00:57:21,030 --> 00:57:18,720
well i wasn't fishing for that but thank

1685
00:57:22,789 --> 00:57:21,040
you dan that doesn't mean anything i i

1686
00:57:25,430 --> 00:57:22,799
do appreciate it and and thanks to you

1687
00:57:27,190 --> 00:57:25,440
for for watching um thanks for tuning in

1688
00:57:29,109 --> 00:57:27,200

thanks for uh sending in your questions

1689

00:57:30,950 --> 00:57:29,119

and engaging with us this really did

1690

00:57:32,950 --> 00:57:30,960

mean a lot to the both of us to do

1691

00:57:34,470 --> 00:57:32,960

something special for the 200th episode

1692

00:57:36,309 --> 00:57:34,480

of houston we have a podcast i hope you

1693

00:57:38,710 --> 00:57:36,319

really enjoyed it give us a rating give

1694

00:57:40,789 --> 00:57:38,720

us some feedback on on facebook and on

1695

00:57:43,270 --> 00:57:40,799

our wherever we are apple podcast google

1696

00:57:45,700 --> 00:57:43,280

podcast soundcloud and uh we hope you'll

1697

00:58:01,070 --> 00:57:45,710

tune in next time