

**DISCLOSURE  
TEAM**



Kevin Knuth Interview  
'UAPx, Physics & NASA'  
Live on YouTube  
Monday November 8th  
1pm PST/4pm EST/9pm UK



1  
00:00:33,750 --> 00:00:30,870

[Music]

2  
00:00:35,750 --> 00:00:33,760

hello everybody thank you for being here

3  
00:00:37,830 --> 00:00:35,760

good to see everybody i hope you're all

4  
00:00:40,709 --> 00:00:37,840

having a really good day

5  
00:00:41,830 --> 00:00:40,719

i'm really excited for this interview um

6  
00:00:43,430 --> 00:00:41,840

i've been looking forward to it for

7  
00:00:45,270 --> 00:00:43,440

quite some time unfortunately kevin had

8  
00:00:47,350 --> 00:00:45,280

to post spain previously

9  
00:00:49,029 --> 00:00:47,360

but we got here today and so without

10  
00:00:50,630 --> 00:00:49,039

further ado i would just like to get

11  
00:00:51,430 --> 00:00:50,640

straight into it because i'm itching to

12  
00:00:53,750 --> 00:00:51,440

go

13  
00:00:55,590 --> 00:00:53,760

so please welcome

14

00:00:57,670 --> 00:00:55,600

mr kevin knuth

15

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

kevin how are you very good thank you

16

00:01:02,069 --> 00:00:59,840

thank you for having me no thank you so

17

00:01:03,189 --> 00:01:02,079

much for for being here um like i was

18

00:01:04,950 --> 00:01:03,199

just saying i've really been looking

19

00:01:06,950 --> 00:01:04,960

forward to speaking with you i think you

20

00:01:09,510 --> 00:01:06,960

have a very important voice um in this

21

00:01:10,950 --> 00:01:09,520

subject and um yeah

22

00:01:12,710 --> 00:01:10,960

i i've been saying for quite some time

23

00:01:14,070 --> 00:01:12,720

that i believe the scientific community

24

00:01:15,510 --> 00:01:14,080

is is um

25

00:01:19,190 --> 00:01:15,520

it's really important to the the

26  
00:01:21,030 --> 00:01:19,200  
direction of the of the uap issues so um

27  
00:01:22,310 --> 00:01:21,040  
yeah let's let's jump straight into it i

28  
00:01:23,749 --> 00:01:22,320  
wonder if you could just start off by

29  
00:01:25,510 --> 00:01:23,759  
just giving us a bit of a background on

30  
00:01:28,630 --> 00:01:25,520  
yourself

31  
00:01:30,469 --> 00:01:28,640  
background myself certainly um let's see

32  
00:01:32,950 --> 00:01:30,479  
my

33  
00:01:35,670 --> 00:01:32,960  
i have a phd in physics

34  
00:01:36,630 --> 00:01:35,680  
and i've basically

35  
00:01:38,310 --> 00:01:36,640  
um

36  
00:01:40,630 --> 00:01:38,320  
followed a very

37  
00:01:44,230 --> 00:01:40,640  
random course through

38  
00:01:45,830 --> 00:01:44,240

um my studies i have i have lots of

39

00:01:48,230 --> 00:01:45,840

interests and

40

00:01:50,230 --> 00:01:48,240

i'm easily distracted by

41

00:01:52,310 --> 00:01:50,240

interesting things so

42

00:01:55,510 --> 00:01:52,320

you know i've my

43

00:01:57,350 --> 00:01:55,520

so when i first my phd was focused on

44

00:01:59,030 --> 00:01:57,360

studying magnetic fields generated by

45

00:02:01,190 --> 00:01:59,040

the brain

46

00:02:03,030 --> 00:02:01,200

and from there i

47

00:02:05,429 --> 00:02:03,040

went

48

00:02:06,789 --> 00:02:05,439

and did postdoctoral research in

49

00:02:09,190 --> 00:02:06,799

neuroscience

50

00:02:11,830 --> 00:02:09,200

and um

51  
00:02:14,390 --> 00:02:11,840  
i learned about

52  
00:02:17,350 --> 00:02:14,400  
several data analysis techniques while i

53  
00:02:18,790 --> 00:02:17,360  
was studying neuroscience that um and

54  
00:02:20,309 --> 00:02:18,800  
then later

55  
00:02:21,670 --> 00:02:20,319  
i got

56  
00:02:22,869 --> 00:02:21,680  
sucked into

57  
00:02:26,229 --> 00:02:22,879  
astronomy

58  
00:02:27,750 --> 00:02:26,239  
uh a good friend of mine we it was

59  
00:02:30,070 --> 00:02:27,760  
i was actually at a neuroscience

60  
00:02:32,150 --> 00:02:30,080  
conference in washington dc and and one

61  
00:02:34,949 --> 00:02:32,160  
of my friends um

62  
00:02:36,869 --> 00:02:34,959  
who is an astrophysicist i went i

63  
00:02:38,869 --> 00:02:36,879

visited was visiting her and her husband

64

00:02:41,750 --> 00:02:38,879

is an astronomer

65

00:02:44,630 --> 00:02:41,760

and we were having dinner the the day of

66

00:02:46,790 --> 00:02:44,640

the conference and um

67

00:02:48,710 --> 00:02:46,800

and he came home very frustrated because

68

00:02:50,710 --> 00:02:48,720

he was designing what's called a fourier

69

00:02:52,949 --> 00:02:50,720

transform spectrometer and he was going

70

00:02:55,270 --> 00:02:52,959

to use this to look for

71

00:03:01,350 --> 00:02:58,470

shifts in spectra due to um doppler

72

00:03:03,030 --> 00:03:01,360

shifts due to motion of stars

73

00:03:05,190 --> 00:03:03,040

due to planets orbiting them he wanted

74

00:03:07,350 --> 00:03:05,200

to find earth-like planets and he was

75

00:03:08,949 --> 00:03:07,360

having he had designed this

76

00:03:11,030 --> 00:03:08,959

fourier transform spectrometer and was

77

00:03:12,390 --> 00:03:11,040

having problems analyzing the data from

78

00:03:14,949 --> 00:03:12,400

that so

79

00:03:17,750 --> 00:03:14,959

it just happened that i was able to help

80

00:03:19,110 --> 00:03:17,760

him with that and

81

00:03:20,710 --> 00:03:19,120

i asked him what was wrong and he went

82

00:03:22,309 --> 00:03:20,720

through it and i said oh no you should

83

00:03:24,470 --> 00:03:22,319

actually do it this way

84

00:03:26,229 --> 00:03:24,480

this would be much better and will

85

00:03:29,030 --> 00:03:26,239

almost certainly work and

86

00:03:30,789 --> 00:03:29,040

after dinner he ran upstairs and

87

00:03:32,789 --> 00:03:30,799

coated it and

88

00:03:34,789 --> 00:03:32,799

and within a half hour he came down all

89

00:03:37,990 --> 00:03:34,799

excited that it was working

90

00:03:40,630 --> 00:03:38,000

and so we ended up um co-authoring a

91

00:03:41,750 --> 00:03:40,640

paper together on on the that instrument

92

00:03:51,430 --> 00:03:41,760

and

93

00:03:53,670 --> 00:03:51,440

um peak in arizona to go observing

94

00:03:54,470 --> 00:03:53,680

of planetary nebulae

95

00:04:00,869 --> 00:03:54,480

and

96

00:04:03,270 --> 00:04:00,879

sometime later because his

97

00:04:04,710 --> 00:04:03,280

his wife was pregnant and

98

00:04:07,270 --> 00:04:04,720

his

99

00:04:09,830 --> 00:04:07,280

um child was too

100

00:04:12,229 --> 00:04:09,840

when he was supposed to be in chile at

101

00:04:14,789 --> 00:04:12,239

saratollo observing and

102

00:04:15,830 --> 00:04:14,799

he was hoping that i could um take that

103

00:04:18,629 --> 00:04:15,840

take

104

00:04:21,189 --> 00:04:18,639

flight do that for him and so

105

00:04:24,230 --> 00:04:21,199

so um he

106

00:04:26,790 --> 00:04:24,240

offered to send me to chile to

107

00:04:29,670 --> 00:04:26,800

observe at the sara talolo which is a

108

00:04:32,469 --> 00:04:29,680

twin observatory like like big kit pink

109

00:04:35,510 --> 00:04:32,479

it's the southern hemisphere analog

110

00:04:37,030 --> 00:04:35,520

so i mean who says no to that you know

111

00:04:39,670 --> 00:04:37,040

to observe at a big three meter

112

00:04:42,150 --> 00:04:39,680

telescope in chile and it's a free trip

113

00:04:43,270 --> 00:04:42,160

and you know you have to do some work

114

00:04:44,629 --> 00:04:43,280

but

115

00:04:47,749 --> 00:04:44,639

that's worth it

116

00:04:51,030 --> 00:04:47,759

so so i got pulled into astronomy and

117

00:04:52,870 --> 00:04:51,040

then ended up applying for a job at

118

00:04:54,629 --> 00:04:52,880

nasa ames research center in the

119

00:04:57,590 --> 00:04:54,639

intelligent systems division and i took

120

00:04:58,870 --> 00:04:57,600

that position so i was at nasa ames for

121

00:05:03,189 --> 00:04:58,880

for four years

122

00:05:05,830 --> 00:05:03,199

in the early 2000s 2001 through 2005.

123

00:05:07,590 --> 00:05:05,840

and then in 2005 i took um

124

00:05:09,990 --> 00:05:07,600

an assistant professorship here at

125

00:05:10,950 --> 00:05:10,000

ualbany so i've been here at uofnee

126

00:05:13,749 --> 00:05:10,960

studying

127

00:05:16,629 --> 00:05:13,759

um in the physics department for

128

00:05:19,430 --> 00:05:16,639

oh 16 years now so

129

00:05:23,510 --> 00:05:19,440

so quite some time and my research now

130

00:05:27,749 --> 00:05:26,390

detecting and characterizing exoplanets

131

00:05:37,830 --> 00:05:27,759

and

132

00:05:39,430 --> 00:05:37,840

although that i've kind of left that go

133

00:05:41,990 --> 00:05:39,440

so that i could

134

00:05:44,230 --> 00:05:42,000

take on other things like uap research

135

00:05:46,310 --> 00:05:44,240

so excellent oh we're certainly glad to

136

00:05:47,990 --> 00:05:46,320

have you on board that's for sure i'm

137

00:05:49,590 --> 00:05:48,000

just giving a quick shout out to dolan's

138

00:05:50,629 --> 00:05:49,600

bar thank you so much for the kind

139

00:05:52,310 --> 00:05:50,639

donation

140

00:05:54,629 --> 00:05:52,320

that always goes back into the show and

141

00:05:55,909 --> 00:05:54,639

keeps me being able to do this so thank

142

00:05:58,469 --> 00:05:55,919

you very much

143

00:06:00,230 --> 00:05:58,479

um so when did your actual interest in

144

00:06:01,909 --> 00:06:00,240

the ufo subject come about is it

145

00:06:03,110 --> 00:06:01,919

something from from way back or is it

146

00:06:04,870 --> 00:06:03,120

something you know that you've just

147

00:06:09,029 --> 00:06:04,880

gradually come into

148

00:06:10,710 --> 00:06:09,039

um a little bit of both i was

149

00:06:13,350 --> 00:06:10,720

let's see i'm

150

00:06:15,510 --> 00:06:13,360

i was i'm just the right age that i was

151  
00:06:17,110 --> 00:06:15,520  
12 years old when start star wars came

152  
00:06:18,870 --> 00:06:17,120  
out so

153  
00:06:21,510 --> 00:06:18,880  
so it was a magical

154  
00:06:24,309 --> 00:06:21,520  
event you know seeing this movie it was

155  
00:06:26,870 --> 00:06:24,319  
groundbreaking at the time and um

156  
00:06:29,110 --> 00:06:26,880  
and really inspirational and and at that

157  
00:06:31,990 --> 00:06:29,120  
time also so i was a big sci-fi fan of

158  
00:06:34,550 --> 00:06:32,000  
course as a 12 year old boy and at that

159  
00:06:36,629 --> 00:06:34,560  
time the tv show in search of was

160  
00:06:37,990 --> 00:06:36,639  
running with leonard leonard nimoy was

161  
00:06:42,150 --> 00:06:38,000  
the host

162  
00:06:44,870 --> 00:06:42,160  
and they often had um ufo cases

163  
00:06:46,550 --> 00:06:44,880

on on in search of so i always found

164

00:06:48,870 --> 00:06:46,560

those interesting

165

00:06:51,189 --> 00:06:48,880

and so i was

166

00:06:53,510 --> 00:06:51,199

interested in the topic

167

00:06:56,230 --> 00:06:53,520

and

168

00:06:58,150 --> 00:06:56,240

when i went to graduate school

169

00:07:00,870 --> 00:06:58,160

i grew up in wisconsin and moved to

170

00:07:03,029 --> 00:07:00,880

montana for graduate school at montana

171

00:07:06,870 --> 00:07:03,039

state university in bozeman

172

00:07:09,830 --> 00:07:06,880

and the first two weeks or so of

173

00:07:12,710 --> 00:07:09,840

of being there which would have been in

174

00:07:15,270 --> 00:07:12,720

early september of 1988 there was a

175

00:07:17,589 --> 00:07:15,280

cattle mutilation in bozeman

176

00:07:19,510 --> 00:07:17,599

where two cows were killed

177

00:07:21,110 --> 00:07:19,520

and it's and now that i know more about

178

00:07:23,430 --> 00:07:21,120

cattle mutilations it was a classic

179

00:07:24,950 --> 00:07:23,440

mutilation and they're very bizarre and

180

00:07:26,230 --> 00:07:24,960

this is the first i'd ever heard of such

181

00:07:28,070 --> 00:07:26,240

a thing

182

00:07:29,350 --> 00:07:28,080

and

183

00:07:31,110 --> 00:07:29,360

of course the people on the news were

184

00:07:33,909 --> 00:07:31,120

rather freaked out about this and there

185

00:07:35,749 --> 00:07:33,919

were ufo sightings the night before

186

00:07:39,110 --> 00:07:35,759

and the two prevailing theories were

187

00:07:40,150 --> 00:07:39,120

that it was aliens or satanists

188

00:07:41,670 --> 00:07:40,160

um

189

00:07:45,110 --> 00:07:41,680

and

190

00:07:47,270 --> 00:07:45,120

so the new physics students who had just

191

00:07:48,790 --> 00:07:47,280

moved to montana

192

00:07:50,309 --> 00:07:48,800

were all gathered in the hallway

193

00:07:52,150 --> 00:07:50,319

discussing this

194

00:07:54,790 --> 00:07:52,160

this crazy thing because we'd never

195

00:07:55,749 --> 00:07:54,800

heard of cattle mutilations before and

196

00:07:58,230 --> 00:07:55,759

and

197

00:08:00,629 --> 00:07:58,240

i think the main concern was what kind

198

00:08:02,390 --> 00:08:00,639

of place have we just moved to you know

199

00:08:04,230 --> 00:08:02,400

we've just committed to spending the

200

00:08:05,029 --> 00:08:04,240

next five to seven years of our lives

201  
00:08:10,550 --> 00:08:05,039  
here

202  
00:08:12,790 --> 00:08:10,560  
cows can more cows can't be safe in a

203  
00:08:15,350 --> 00:08:12,800  
pasture so

204  
00:08:17,189 --> 00:08:15,360  
we had this heated discussion about you

205  
00:08:19,990 --> 00:08:17,199  
know

206  
00:08:22,710 --> 00:08:20,000  
why would aliens do this and how would

207  
00:08:24,790 --> 00:08:22,720  
satanists do this and um

208  
00:08:26,710 --> 00:08:24,800  
and then there were the of course the

209  
00:08:29,189 --> 00:08:26,720  
side discussions about whether they

210  
00:08:31,029 --> 00:08:29,199  
could be um

211  
00:08:32,870 --> 00:08:31,039  
alien satanists i mean

212  
00:08:34,310 --> 00:08:32,880  
you might as well combine the two right

213  
00:08:36,790 --> 00:08:34,320

i mean well i know

214

00:08:39,430 --> 00:08:36,800

so it was a crazy

215

00:08:42,230 --> 00:08:39,440

crazy excited discussion in the hallway

216

00:08:43,110 --> 00:08:42,240

and i'm certainly we're being very loud

217

00:08:44,710 --> 00:08:43,120

and

218

00:08:47,190 --> 00:08:44,720

one of the professors came out of his

219

00:08:49,190 --> 00:08:47,200

office to see what was going on and came

220

00:08:50,389 --> 00:08:49,200

down the hall

221

00:08:52,389 --> 00:08:50,399

and

222

00:08:54,630 --> 00:08:52,399

um he when we told him what was

223

00:08:57,750 --> 00:08:54,640

happening he had um

224

00:09:00,150 --> 00:08:57,760

he suggested that

225

00:09:01,030 --> 00:09:00,160

um he said well that's a very strange

226

00:09:02,870 --> 00:09:01,040

thing

227

00:09:04,630 --> 00:09:02,880

sorry i'm getting

228

00:09:08,070 --> 00:09:04,640

delivered a drink here thank you no

229

00:09:11,910 --> 00:09:09,829

so i can keep my voice up yeah so he

230

00:09:13,430 --> 00:09:11,920

said yeah that's very the these candle

231

00:09:15,670 --> 00:09:13,440

mutilations are very strange you know

232

00:09:18,470 --> 00:09:15,680

they happen and no one ever quite

233

00:09:21,590 --> 00:09:18,480

figures it out um no you know very often

234

00:09:22,790 --> 00:09:21,600

there's ufo sighted so that's very weird

235

00:09:24,470 --> 00:09:22,800

and

236

00:09:26,790 --> 00:09:24,480

then he said

237

00:09:29,590 --> 00:09:26,800

but you know what's really strange is he

238

00:09:31,030 --> 00:09:29,600

said i have friends who are

239

00:09:32,949 --> 00:09:31,040

in the air force

240

00:09:35,590 --> 00:09:32,959

and they work up at malmstrom air force

241

00:09:38,470 --> 00:09:35,600

base which is in northern montana yeah

242

00:09:40,630 --> 00:09:38,480

and they have problems there with ufos

243

00:09:42,550 --> 00:09:40,640

flying over our nuclear weapons sites

244

00:09:45,509 --> 00:09:42,560

and shutting down our nuclear missiles

245

00:09:47,030 --> 00:09:45,519

instead of shutting down the icbms

246

00:09:48,949 --> 00:09:47,040

and

247

00:09:51,190 --> 00:09:48,959

to be honest at the time we listened

248

00:09:52,790 --> 00:09:51,200

politely and when he walked away we i

249

00:09:53,829 --> 00:09:52,800

mean we laughed our asses off because

250

00:09:56,470 --> 00:09:53,839

that's the

251  
00:09:57,829 --> 00:09:56,480  
craziest thing you i've ever heard right

252  
00:10:00,230 --> 00:09:57,839  
and yeah

253  
00:10:03,030 --> 00:10:00,240  
how how would you not hear about this

254  
00:10:05,190 --> 00:10:03,040  
how could this be happening and no one

255  
00:10:07,350 --> 00:10:05,200  
says anything no one looks into it no

256  
00:10:09,190 --> 00:10:07,360  
one studies it and that was my thinking

257  
00:10:13,269 --> 00:10:09,200  
at the time i mean i thought this can't

258  
00:10:15,430 --> 00:10:13,279  
possibly be true it's just ridiculous

259  
00:10:19,269 --> 00:10:15,440  
so it wasn't until i was um here at

260  
00:10:22,550 --> 00:10:19,279  
ualbany and i was preparing a

261  
00:10:24,550 --> 00:10:22,560  
lecture on astrobiology for my astronomy

262  
00:10:25,350 --> 00:10:24,560  
class and some of the students had asked

263  
00:10:27,509 --> 00:10:25,360

about

264

00:10:28,310 --> 00:10:27,519

possibilities of aliens visiting earth

265

00:10:32,470 --> 00:10:28,320

and

266

00:10:34,630 --> 00:10:32,480

so i was

267

00:10:36,470 --> 00:10:34,640

it was the night before that

268

00:10:38,230 --> 00:10:36,480

class and i was poking around the

269

00:10:40,710 --> 00:10:38,240

internet trying to find

270

00:10:44,470 --> 00:10:40,720

something intelligent i could say about

271

00:10:46,470 --> 00:10:44,480

aliens and ufos and the possibilities of

272

00:10:48,069 --> 00:10:46,480

them visiting earth and

273

00:10:50,389 --> 00:10:48,079

of course the internet is the

274

00:10:52,870 --> 00:10:50,399

appropriate place to look right i'm

275

00:10:54,310 --> 00:10:52,880

being sarcastic

276

00:10:56,470 --> 00:10:54,320

and so i'm just poking around just

277

00:10:59,190 --> 00:10:56,480

trying to get some ideas right and what

278

00:11:01,910 --> 00:10:59,200

how can i approach this you know from a

279

00:11:04,550 --> 00:11:01,920

reasonable perspective without just

280

00:11:07,269 --> 00:11:04,560

shooting the idea down because

281

00:11:09,829 --> 00:11:07,279

it's not obvious that it's necessarily

282

00:11:11,110 --> 00:11:09,839

ridiculous um

283

00:11:15,110 --> 00:11:11,120

so

284

00:11:18,230 --> 00:11:15,120

i then stumbled on the press conference

285

00:11:21,590 --> 00:11:18,240

that robert hastings had held

286

00:11:23,910 --> 00:11:21,600

at the national press club where he had

287

00:11:26,470 --> 00:11:23,920

six people from the air force or

288

00:11:27,350 --> 00:11:26,480

contractors who

289

00:11:30,310 --> 00:11:27,360

were

290

00:11:32,710 --> 00:11:30,320

talking about their encounters with ufos

291

00:11:35,110 --> 00:11:32,720

um at nuclear weapon sites with them

292

00:11:36,310 --> 00:11:35,120

shutting down nuclear weapons and i yeah

293

00:11:39,430 --> 00:11:36,320

and i was

294

00:11:41,030 --> 00:11:39,440

blown away because i i thought my god i

295

00:11:43,190 --> 00:11:41,040

heard about this

296

00:11:45,750 --> 00:11:43,200

30 years ago

297

00:11:47,350 --> 00:11:45,760

from a physics professor who knew people

298

00:11:48,630 --> 00:11:47,360

at the time who are having these

299

00:11:51,269 --> 00:11:48,640

problems so

300

00:11:54,069 --> 00:11:51,279

he claimed this was going on in the late

301  
00:11:56,870 --> 00:11:54,079  
1980s right but then you have robert

302  
00:11:58,230 --> 00:11:56,880  
salas here talking about his encounters

303  
00:12:01,110 --> 00:11:58,240  
with these things

304  
00:12:02,629 --> 00:12:01,120  
in 1966 or 65

305  
00:12:04,069 --> 00:12:02,639  
mid 60s

306  
00:12:05,829 --> 00:12:04,079  
20 years before

307  
00:12:08,150 --> 00:12:05,839  
and i thought you don't have

308  
00:12:09,110 --> 00:12:08,160  
professionals like this

309  
00:12:12,629 --> 00:12:09,120  
don't

310  
00:12:15,030 --> 00:12:12,639  
have legends and myths that last

311  
00:12:17,190 --> 00:12:15,040  
more than a couple deck you know 20

312  
00:12:18,230 --> 00:12:17,200  
decades you know 20 decades is a long

313  
00:12:20,550 --> 00:12:18,240

time for

314

00:12:22,870 --> 00:12:20,560

there to be some crazy story floating

315

00:12:25,030 --> 00:12:22,880

around about and i thought this can't be

316

00:12:27,030 --> 00:12:25,040

crazy this has to be real

317

00:12:29,670 --> 00:12:27,040

and the fact that you know and listening

318

00:12:31,030 --> 00:12:29,680

to their stories i it really just dawned

319

00:12:33,590 --> 00:12:31,040

on me that

320

00:12:35,990 --> 00:12:33,600

or it was you know just really cemented

321

00:12:36,949 --> 00:12:36,000

in the fact that

322

00:12:38,870 --> 00:12:36,959

the

323

00:12:40,069 --> 00:12:38,880

because this is thought of is so

324

00:12:41,910 --> 00:12:40,079

ridiculous

325

00:12:44,150 --> 00:12:41,920

no one paid any attention to it and

326

00:12:46,230 --> 00:12:44,160

that's why nobody's no one's treated it

327

00:12:48,230 --> 00:12:46,240

seriously or done anything

328

00:12:50,310 --> 00:12:48,240

and it really impressed upon me the fact

329

00:12:53,430 --> 00:12:50,320

that this could be a really serious

330

00:12:55,829 --> 00:12:53,440

problem and we don't know anything about

331

00:13:00,470 --> 00:12:55,839

it we're we're as knowledgeable about

332

00:13:01,670 --> 00:13:00,480

ufos today as we were in 1947 it seems

333

00:13:05,430 --> 00:13:01,680

talking to

334

00:13:07,590 --> 00:13:05,440

people like lou elizondo and this

335

00:13:09,430 --> 00:13:07,600

privately it doesn't seem like we know

336

00:13:11,590 --> 00:13:09,440

that much more than we did in the 40s

337

00:13:13,430 --> 00:13:11,600

which is really pretty scary

338

00:13:14,870 --> 00:13:13,440

yeah absolutely

339

00:13:15,670 --> 00:13:14,880

but um you've been doing quite a lot of

340

00:13:16,790 --> 00:13:15,680

work

341

00:13:19,190 --> 00:13:16,800

oh i'm actually getting a bit of

342

00:13:20,790 --> 00:13:19,200

feedback now

343

00:13:21,590 --> 00:13:20,800

are you able to grab your headphones at

344

00:13:23,350 --> 00:13:21,600

all

345

00:13:24,949 --> 00:13:23,360

um

346

00:13:26,310 --> 00:13:24,959

no that's absolutely fine it's coming

347

00:13:27,350 --> 00:13:26,320

back at me now

348

00:13:28,949 --> 00:13:27,360

thank you

349

00:13:30,870 --> 00:13:28,959

sorry everybody in the chat we did a

350

00:13:32,069 --> 00:13:30,880

little test before the interview and

351  
00:13:33,829 --> 00:13:32,079  
everything sounded alright but i'm

352  
00:13:35,590 --> 00:13:33,839  
getting some serious feedback right now

353  
00:13:37,590 --> 00:13:35,600  
so please bear with me

354  
00:13:40,230 --> 00:13:37,600  
um oh i'll just quickly

355  
00:13:42,710 --> 00:13:40,240  
shout out the signal and yep signal dan

356  
00:13:43,829 --> 00:13:42,720  
has got a amazing fundraiser up at the

357  
00:13:45,990 --> 00:13:43,839  
moment

358  
00:13:49,110 --> 00:13:46,000  
uh the link is there go and check it out

359  
00:13:50,150 --> 00:13:49,120  
you can win a sign luelezando poster an

360  
00:13:51,990 --> 00:13:50,160  
nft

361  
00:13:54,389 --> 00:13:52,000  
and the highest owner gets a personal

362  
00:13:55,670 --> 00:13:54,399  
phone call from the man himself so

363  
00:13:58,950 --> 00:13:55,680

go and support that it's for two

364

00:14:00,870 --> 00:13:58,960

incredible causes so yeah

365

00:14:03,990 --> 00:14:00,880

[Music]

366

00:14:05,430 --> 00:14:04,000

all right here we go headset

367

00:14:08,470 --> 00:14:05,440

is coming

368

00:14:11,590 --> 00:14:08,480

thank you so much i appreciate it

369

00:14:17,430 --> 00:14:13,910

removed my mouse dongle which isn't

370

00:14:19,910 --> 00:14:17,440

helpful there it is

371

00:14:21,509 --> 00:14:19,920

can you hear me okay

372

00:14:23,189 --> 00:14:21,519

yes i can hear you can you hear me all

373

00:14:25,269 --> 00:14:23,199

right absolutely absolutely fine thank

374

00:14:26,389 --> 00:14:25,279

you so much for that i really appreciate

375

00:14:33,350 --> 00:14:26,399

it

376

00:14:34,550 --> 00:14:33,360

comes to this subject um

377

00:14:36,150 --> 00:14:34,560

first of all could you talk about the

378

00:14:41,509 --> 00:14:36,160

reasons why you think interstellar

379

00:14:41,519 --> 00:14:49,590

why it's not uncommon

380

00:14:56,790 --> 00:14:51,750

i don't know i guess that's mostly from

381

00:15:01,990 --> 00:14:59,189

we are naturally humans are naturally

382

00:15:04,389 --> 00:15:02,000

explorers so i think that

383

00:15:06,310 --> 00:15:04,399

you know we've explored every

384

00:15:07,910 --> 00:15:06,320

every corner of the globe

385

00:15:18,230 --> 00:15:07,920

um

386

00:15:20,629 --> 00:15:18,240

but we've you know we've explored you

387

00:15:24,710 --> 00:15:20,639

know and populated most of the land mass

388

00:15:26,790 --> 00:15:24,720

on earth except for parts of antarctica

389

00:15:28,629 --> 00:15:26,800

and we're

390

00:15:30,870 --> 00:15:28,639

working to study the oceans we're

391

00:15:33,509 --> 00:15:30,880

working to get to the moon we're working

392

00:15:35,829 --> 00:15:33,519

to go to mars we've explored our solar

393

00:15:38,310 --> 00:15:35,839

system with robotic probes

394

00:15:42,230 --> 00:15:38,320

um this seems to be a natural thing for

395

00:15:44,550 --> 00:15:42,240

us to do and it certainly is tied to

396

00:15:46,710 --> 00:15:44,560

survival um

397

00:15:48,550 --> 00:15:46,720

if you can if you're resilient enough to

398

00:15:50,470 --> 00:15:48,560

be able to live in different climates

399

00:15:52,870 --> 00:15:50,480

that resiliency

400

00:15:54,870 --> 00:15:52,880

is going to assist your survival

401  
00:15:55,910 --> 00:15:54,880  
increase your survival probability and

402  
00:15:58,550 --> 00:15:55,920  
so

403  
00:15:59,590 --> 00:15:58,560  
um certainly colonizing mars

404  
00:16:01,509 --> 00:15:59,600  
is

405  
00:16:03,670 --> 00:16:01,519  
you know as elon musk has pointed out it

406  
00:16:05,670 --> 00:16:03,680  
gives us two planets to live on gives

407  
00:16:06,870 --> 00:16:05,680  
doubles our chances of survival and i

408  
00:16:09,430 --> 00:16:06,880  
think that

409  
00:16:11,829 --> 00:16:09,440  
that any species that

410  
00:16:13,670 --> 00:16:11,839  
does this um or

411  
00:16:16,310 --> 00:16:13,680  
can explore and is that resilient is

412  
00:16:18,470 --> 00:16:16,320  
going to just keep reaching out and keep

413  
00:16:19,670 --> 00:16:18,480

going and the stars are the next natural

414

00:16:21,670 --> 00:16:19,680

place to go

415

00:16:24,949 --> 00:16:21,680

yeah now that makes makes a lot of sense

416

00:16:26,310 --> 00:16:24,959

thank you um let's break down um your

417

00:16:29,509 --> 00:16:26,320

work that you've been doing on

418

00:16:31,269 --> 00:16:29,519

estimations of uap speeds um and

419

00:16:32,949 --> 00:16:31,279

accelerations and how it

420

00:16:35,670 --> 00:16:32,959

possibly relates to some estimates that

421

00:16:36,389 --> 00:16:35,680

were done in the 1950s as well

422

00:16:37,670 --> 00:16:36,399

right

423

00:16:42,949 --> 00:16:37,680

so

424

00:16:44,470 --> 00:16:42,959

when i decided that i really wanted to

425

00:16:47,030 --> 00:16:44,480

study these things

426  
00:16:49,590 --> 00:16:47,040  
you are immediately run up against the

427  
00:16:51,030 --> 00:16:49,600  
problem and that there is a paucity of

428  
00:16:53,910 --> 00:16:51,040  
data there's

429  
00:16:55,269 --> 00:16:53,920  
there's really is no data to work with

430  
00:16:57,189 --> 00:16:55,279  
um you have

431  
00:16:59,030 --> 00:16:57,199  
mostly have anecdotes to work through

432  
00:17:00,310 --> 00:16:59,040  
with work from

433  
00:17:09,029 --> 00:17:00,320  
and

434  
00:17:11,029 --> 00:17:09,909  
so

435  
00:17:13,429 --> 00:17:11,039  
what

436  
00:17:15,750 --> 00:17:13,439  
i did was thought well let's let's get

437  
00:17:20,630 --> 00:17:15,760  
some idea of what we're probably dealing

438  
00:17:21,829 --> 00:17:20,640

with here and so and this is really i i

439

00:17:26,549 --> 00:17:21,839

basically

440

00:17:28,630 --> 00:17:26,559

doing my homework as a physicist you

441

00:17:31,029 --> 00:17:28,640

know what are we looking at here what

442

00:17:33,110 --> 00:17:31,039

let's get some estimates of how how

443

00:17:35,510 --> 00:17:33,120

these things move how

444

00:17:36,950 --> 00:17:35,520

how anomalous are they

445

00:17:38,710 --> 00:17:36,960

um what are we

446

00:17:40,710 --> 00:17:38,720

are they move flying at hundreds of

447

00:17:43,110 --> 00:17:40,720

miles an hour thousands of miles an hour

448

00:17:45,430 --> 00:17:43,120

tens of thousands miles an hour at this

449

00:17:46,630 --> 00:17:45,440

point it's not clear until you actually

450

00:17:48,230 --> 00:17:46,640

look at this

451  
00:17:49,830 --> 00:17:48,240  
so the only thing you do have to work

452  
00:17:53,190 --> 00:17:49,840  
from is is

453  
00:17:55,750 --> 00:17:53,200  
anecdotal data sure we like to call it

454  
00:17:58,710 --> 00:17:55,760  
anik data um

455  
00:18:03,270 --> 00:18:01,350  
now of course you know a lot of

456  
00:18:05,110 --> 00:18:03,280  
overly skeptical scientists will then

457  
00:18:07,909 --> 00:18:05,120  
question every

458  
00:18:09,350 --> 00:18:07,919  
anecdote that's ever been

459  
00:18:11,270 --> 00:18:09,360  
um reported

460  
00:18:14,870 --> 00:18:11,280  
and

461  
00:18:17,750 --> 00:18:14,880  
some cases yeah things are questionable

462  
00:18:18,870 --> 00:18:17,760  
but there are some cases where

463  
00:18:21,830 --> 00:18:18,880

you can

464

00:18:23,510 --> 00:18:21,840

legitimately ask how wrong could the

465

00:18:24,230 --> 00:18:23,520

observers have been

466

00:18:26,230 --> 00:18:24,240

yeah

467

00:18:28,470 --> 00:18:26,240

um and especially when it comes to

468

00:18:29,990 --> 00:18:28,480

professionals like fighter pilots

469

00:18:31,750 --> 00:18:30,000

fighter pilots are

470

00:18:33,909 --> 00:18:31,760

well trained

471

00:18:35,510 --> 00:18:33,919

um millions of tens of millions of

472

00:18:37,830 --> 00:18:35,520

dollars go into their training they have

473

00:18:40,070 --> 00:18:37,840

thousands of hours of flight experience

474

00:18:43,190 --> 00:18:40,080

they're trained to be able to identify

475

00:18:44,630 --> 00:18:43,200

uh to be able to spot and identify

476  
00:18:46,710 --> 00:18:44,640  
aircraft

477  
00:18:49,110 --> 00:18:46,720  
um at different distances they're trying

478  
00:18:51,190 --> 00:18:49,120  
to be able to estimate those distances

479  
00:18:54,230 --> 00:18:51,200  
um this is all very important for the

480  
00:18:57,270 --> 00:18:54,240  
life of a fighter pilot and

481  
00:18:59,029 --> 00:18:57,280  
so when a pilot sees something anomalous

482  
00:19:01,270 --> 00:18:59,039  
like this and reports it you can

483  
00:19:03,029 --> 00:19:01,280  
legitimately ask how wrong do you think

484  
00:19:05,909 --> 00:19:03,039  
they can be

485  
00:19:08,950 --> 00:19:05,919  
so this tic-tac-shaped object

486  
00:19:11,510 --> 00:19:08,960  
you know that was observed in the 2004

487  
00:19:12,470 --> 00:19:11,520  
nimitz encounters

488  
00:19:17,110 --> 00:19:12,480

the

489

00:19:18,950 --> 00:19:17,120

size of an f-18

490

00:19:23,669 --> 00:19:18,960

so

491

00:19:26,070 --> 00:19:23,679

this is about 40 they estimated about 40

492

00:19:27,669 --> 00:19:26,080

feet in length and f-18 is like 50 feet

493

00:19:28,789 --> 00:19:27,679

57 maybe

494

00:19:31,990 --> 00:19:28,799

um

495

00:19:35,830 --> 00:19:33,830

so really how wrong could the pilots

496

00:19:38,150 --> 00:19:35,840

have been could these have been four

497

00:19:40,549 --> 00:19:38,160

foot long craft as some people have

498

00:19:42,150 --> 00:19:40,559

claimed you know little drones

499

00:19:45,270 --> 00:19:42,160

um well you're not going to see a four

500

00:19:46,390 --> 00:19:45,280

foot long craft from 20 000 feet

501  
00:19:47,990 --> 00:19:46,400  
a lot of the

502  
00:19:50,789 --> 00:19:48,000  
the problems with a lot of this over

503  
00:19:52,630 --> 00:19:50,799  
skepticism is it relies on cherry

504  
00:19:54,789 --> 00:19:52,640  
picking the data

505  
00:19:56,549 --> 00:19:54,799  
cherry picking the anic data that

506  
00:19:59,270 --> 00:19:56,559  
they're being presented

507  
00:20:00,070 --> 00:19:59,280  
and they explain one little aspect of

508  
00:20:02,390 --> 00:20:00,080  
that

509  
00:20:05,750 --> 00:20:02,400  
and their explanation doesn't at all

510  
00:20:07,510 --> 00:20:05,760  
extend to the other

511  
00:20:09,990 --> 00:20:07,520  
examples so

512  
00:20:11,909 --> 00:20:10,000  
so that's really problematic

513  
00:20:14,549 --> 00:20:11,919

so no these things couldn't have been

514

00:20:16,549 --> 00:20:14,559

four feet long and they very probably

515

00:20:18,230 --> 00:20:16,559

were around 40 feet

516

00:20:20,149 --> 00:20:18,240

could they have been off by 10

517

00:20:21,990 --> 00:20:20,159

certainly

518

00:20:25,909 --> 00:20:22,000

so yeah they could have been anywhere

519

00:20:27,669 --> 00:20:25,919

from 36 feet to 44 feet fine could they

520

00:20:29,430 --> 00:20:27,679

be off by 20

521

00:20:30,710 --> 00:20:29,440

possible right

522

00:20:43,190 --> 00:20:30,720

so

523

00:20:44,710 --> 00:20:43,200

we attempted to do in that paper and of

524

00:20:49,270 --> 00:20:44,720

course we chose

525

00:20:53,909 --> 00:20:51,590

either additional data or

526

00:20:55,990 --> 00:20:53,919

videos or some other kind of

527

00:20:57,390 --> 00:20:56,000

confirmations so the first case we

528

00:21:00,549 --> 00:20:57,400

looked at was the

529

00:21:03,990 --> 00:21:00,559

1951 encounter with graham that bethune

530

00:21:04,870 --> 00:21:04,000

off the coast of newfoundland

531

00:21:08,470 --> 00:21:04,880

and

532

00:21:10,710 --> 00:21:08,480

that in that case they had a large

533

00:21:12,549 --> 00:21:10,720

metallic disk that they estimated to be

534

00:21:15,350 --> 00:21:12,559

300 feet across

535

00:21:17,830 --> 00:21:15,360

came up from the either below the ocean

536

00:21:20,149 --> 00:21:17,840

surface or at the ocean surface down

537

00:21:23,350 --> 00:21:20,159

down near the surface came up to their

538

00:21:26,149 --> 00:21:23,360

altitude in a fraction of a second

539

00:21:28,070 --> 00:21:26,159

at 10 000 feet right so that's a

540

00:21:30,789 --> 00:21:28,080

so you're basically going from vertical

541

00:21:33,190 --> 00:21:30,799

rest to accelerating and then you have

542

00:21:35,190 --> 00:21:33,200

to decelerate to stop right so

543

00:21:37,669 --> 00:21:35,200

so you can put a bound

544

00:21:39,430 --> 00:21:37,679

on the minimum acceleration that you

545

00:21:41,510 --> 00:21:39,440

would need to do this

546

00:21:42,710 --> 00:21:41,520

and that's what we attempted to do in

547

00:21:47,350 --> 00:21:42,720

that paper

548

00:21:49,029 --> 00:21:47,360

acceleration so the minimum acceleration

549

00:21:51,990 --> 00:21:49,039

happens when you

550

00:21:54,310 --> 00:21:52,000

accelerate from zero

551  
00:21:56,870 --> 00:21:54,320  
with a constant acceleration

552  
00:21:58,630 --> 00:21:56,880  
to the midpoint and then you decelerate

553  
00:22:00,950 --> 00:21:58,640  
with the same acceleration until you

554  
00:22:02,710 --> 00:22:00,960  
stop

555  
00:22:03,830 --> 00:22:02,720  
that gives you the minimum acceleration

556  
00:22:06,070 --> 00:22:03,840  
can you

557  
00:22:08,470 --> 00:22:06,080  
traverse this distance any differently

558  
00:22:10,230 --> 00:22:08,480  
well of course you could accelerate at a

559  
00:22:11,830 --> 00:22:10,240  
super high rate and then travel at a

560  
00:22:13,990 --> 00:22:11,840  
very high constant speed till you get to

561  
00:22:15,190 --> 00:22:14,000  
the top and then decelerate at a much

562  
00:22:17,510 --> 00:22:15,200  
higher rate

563  
00:22:18,870 --> 00:22:17,520

but that's a higher acceleration than

564

00:22:20,390 --> 00:22:18,880

than the one where you accelerate to the

565

00:22:22,630 --> 00:22:20,400

midpoint and then

566

00:22:26,630 --> 00:22:22,640

decelerate the rest of the way

567

00:22:28,230 --> 00:22:26,640

so all of the estimates we made were

568

00:22:30,549 --> 00:22:28,240

are understood to be minimum

569

00:22:31,909 --> 00:22:30,559

accelerations

570

00:22:33,990 --> 00:22:31,919

and um

571

00:22:36,470 --> 00:22:34,000

and that's an imp so that's an important

572

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

point and then the idea was that these

573

00:22:39,750 --> 00:22:38,000

cases

574

00:22:42,310 --> 00:22:39,760

they probably couldn't have been off

575

00:22:44,390 --> 00:22:42,320

more than about 10 so we use something

576  
00:22:46,149 --> 00:22:44,400  
like a 10 percent error in all of these

577  
00:22:47,029 --> 00:22:46,159  
cases right

578  
00:22:50,310 --> 00:22:47,039  
um

579  
00:22:52,310 --> 00:22:50,320  
so for the case with graham bethune

580  
00:22:53,750 --> 00:22:52,320  
some craft

581  
00:22:56,070 --> 00:22:53,760  
the

582  
00:22:58,789 --> 00:22:56,080  
most probable acceleration was estimated

583  
00:23:00,710 --> 00:22:58,799  
to be about 1700 times the acceleration

584  
00:23:02,630 --> 00:23:00,720  
of gravity so

585  
00:23:05,270 --> 00:23:02,640  
so you're looking at a thousand seven

586  
00:23:07,350 --> 00:23:05,280  
hundred times acceleration of gravity

587  
00:23:10,710 --> 00:23:07,360  
and which is

588  
00:23:13,190 --> 00:23:10,720

crazy um um you don't you you don't

589

00:23:16,310 --> 00:23:13,200

expect to see things like that right

590

00:23:18,149 --> 00:23:16,320

so so how wrong would the how wrong

591

00:23:19,029 --> 00:23:18,159

would the

592

00:23:20,950 --> 00:23:19,039

would

593

00:23:22,470 --> 00:23:20,960

the pilots have to be

594

00:23:25,669 --> 00:23:22,480

for that

595

00:23:28,470 --> 00:23:25,679

acceleration to be more reasonable um

596

00:23:31,750 --> 00:23:28,480

maybe 1.7 g acceleration would be

597

00:23:34,230 --> 00:23:31,760

reasonable 17 would be too high 7

598

00:23:35,990 --> 00:23:34,240

at 13 and a half g you start ripping

599

00:23:37,029 --> 00:23:36,000

wings off airplanes even our fighter

600

00:23:38,070 --> 00:23:37,039

jets

601  
00:23:43,350 --> 00:23:38,080  
so

602  
00:23:46,230 --> 00:23:43,360  
at an accelerate a minimum acceleration

603  
00:23:48,830 --> 00:23:46,240  
is estimated that is a thousand times

604  
00:23:51,350 --> 00:23:48,840  
more than what's reasonable

605  
00:23:53,830 --> 00:23:51,360  
unbelievable and it's unbelievable and

606  
00:23:55,590 --> 00:23:53,840  
it's going to be very hard to

607  
00:23:57,029 --> 00:23:55,600  
explain that away

608  
00:24:03,190 --> 00:23:57,039  
um

609  
00:24:04,549 --> 00:24:03,200  
the either either that or the pilots

610  
00:24:06,870 --> 00:24:04,559  
have to be

611  
00:24:08,870 --> 00:24:06,880  
extremely mistaken which is hard to

612  
00:24:11,750 --> 00:24:08,880  
imagine that you can be mistaken to that

613  
00:24:13,669 --> 00:24:11,760

degree or or just lying but then you

614

00:24:15,830 --> 00:24:13,679

have a plane load and actually other

615

00:24:19,269 --> 00:24:15,840

passengers saw the thing too so you've

616

00:24:22,390 --> 00:24:19,279

got a plane load of passengers who

617

00:24:25,190 --> 00:24:22,400

witnessed the object as well so

618

00:24:26,950 --> 00:24:25,200

and then they estimated it to leave the

619

00:24:28,470 --> 00:24:26,960

the thing then took off after some

620

00:24:30,149 --> 00:24:28,480

period of time flying around the plane

621

00:24:33,110 --> 00:24:30,159

for a few moments

622

00:24:35,510 --> 00:24:33,120

and they estimated its speed to be

623

00:24:36,549 --> 00:24:35,520

something like um a thousand miles an

624

00:24:39,269 --> 00:24:36,559

hour

625

00:24:40,630 --> 00:24:39,279

um where and it was actually picked up

626  
00:24:42,230 --> 00:24:40,640  
on radar

627  
00:24:43,430 --> 00:24:42,240  
um by the

628  
00:24:45,590 --> 00:24:43,440  
um

629  
00:24:48,789 --> 00:24:45,600  
by a radar station in

630  
00:24:50,149 --> 00:24:48,799  
um no in nova scotia

631  
00:24:53,029 --> 00:24:50,159  
where

632  
00:24:54,789 --> 00:24:53,039  
they estimated the speed it was a gander

633  
00:24:57,110 --> 00:24:54,799  
center radar i'm reading on my paper

634  
00:24:58,789 --> 00:24:57,120  
actually newfoundland canada

635  
00:25:00,950 --> 00:24:58,799  
and they confirmed yeah so they

636  
00:25:04,549 --> 00:25:00,960  
estimated its speed to be

637  
00:25:09,110 --> 00:25:04,559  
about 1500 miles an hour as it left

638  
00:25:13,029 --> 00:25:11,510

actually measured its speed at 1800

639

00:25:13,830 --> 00:25:13,039

miles an hour

640

00:25:15,029 --> 00:25:13,840

so

641

00:25:17,269 --> 00:25:15,039

this thing was

642

00:25:19,190 --> 00:25:17,279

you know very

643

00:25:20,470 --> 00:25:19,200

it was very fast

644

00:25:23,110 --> 00:25:20,480

now

645

00:25:25,669 --> 00:25:23,120

that's important because this happened

646

00:25:29,269 --> 00:25:25,679

in 1951

647

00:25:31,029 --> 00:25:29,279

and later in the year of 1952

648

00:25:33,190 --> 00:25:31,039

the

649

00:25:36,549 --> 00:25:33,200

um

650

00:25:40,630 --> 00:25:36,559

you had general uh slade nash was flying

651  
00:25:44,549 --> 00:25:40,640  
a an f-86 sabre d saber

652  
00:25:47,909 --> 00:25:44,559  
and he made the airspeed record in 1952

653  
00:25:52,390 --> 00:25:47,919  
the world air speed record in 1952

654  
00:25:54,470 --> 00:25:52,400  
was 698 miles an hour right

655  
00:25:56,870 --> 00:25:54,480  
so that's the world speed record two

656  
00:25:58,630 --> 00:25:56,880  
years after this event and they

657  
00:26:00,630 --> 00:25:58,640  
and the pilots estimated this thing

658  
00:26:02,549 --> 00:26:00,640  
leaving at 1500 miles an hour and it was

659  
00:26:05,750 --> 00:26:02,559  
actually measured by radar to be leaving

660  
00:26:08,230 --> 00:26:05,760  
at 1800 miles an hour wow

661  
00:26:10,230 --> 00:26:08,240  
and you know as

662  
00:26:12,230 --> 00:26:10,240  
jesse narnis says you've got a lot of

663  
00:26:13,590 --> 00:26:12,240

splaining to do

664

00:26:16,390 --> 00:26:13,600

you really do

665

00:26:18,230 --> 00:26:16,400

and you can't you can't easily dismiss

666

00:26:19,909 --> 00:26:18,240

all these these cases

667

00:26:22,390 --> 00:26:19,919

yeah and and so we looked at the

668

00:26:26,390 --> 00:26:22,400

japanese airline case um

669

00:26:27,830 --> 00:26:26,400

in 1986 we looked at the 2004 nimitz

670

00:26:30,149 --> 00:26:27,840

encounters

671

00:26:32,630 --> 00:26:30,159

and there we had the um

672

00:26:34,549 --> 00:26:32,640

both the

673

00:26:35,510 --> 00:26:34,559

we had three

674

00:26:37,190 --> 00:26:35,520

different

675

00:26:39,190 --> 00:26:37,200

um

676  
00:26:42,549 --> 00:26:39,200  
ways we could estimate accelerations and

677  
00:26:44,710 --> 00:26:42,559  
speeds one one was using the information

678  
00:26:47,669 --> 00:26:44,720  
from kevin day about the senior chief

679  
00:26:49,269 --> 00:26:47,679  
kevin day on the uss princeton yeah

680  
00:26:51,750 --> 00:26:49,279  
with the radar data

681  
00:26:55,269 --> 00:26:51,760  
that where he had observed these things

682  
00:26:57,430 --> 00:26:55,279  
dropping from 28 000 feet to sea level

683  
00:26:58,230 --> 00:26:57,440  
in 0.78 seconds

684  
00:27:00,070 --> 00:26:58,240  
so

685  
00:27:02,070 --> 00:27:00,080  
again you can estimate the acceler the

686  
00:27:04,870 --> 00:27:02,080  
minimum acceleration there and in that

687  
00:27:07,750 --> 00:27:04,880  
case you're talking over 5000 g's of

688  
00:27:13,110 --> 00:27:07,760

acceleration

689

00:27:15,190 --> 00:27:13,120

and to give and and you know

690

00:27:18,149 --> 00:27:15,200

our machines can't survive that much

691

00:27:20,549 --> 00:27:18,159

less people or biological organisms so

692

00:27:22,149 --> 00:27:20,559

this is very very strange

693

00:27:24,149 --> 00:27:22,159

these things are really anomalous

694

00:27:26,389 --> 00:27:24,159

they're not just slightly anomalous or

695

00:27:28,070 --> 00:27:26,399

weird they're beyond that

696

00:27:30,630 --> 00:27:28,080

yeah absolutely and with the three navy

697

00:27:34,149 --> 00:27:30,640

videos that we all know so well did you

698

00:27:40,230 --> 00:27:34,159

use them to try and do analysis as well

699

00:27:45,269 --> 00:27:43,350

because you don't have to to obtain an

700

00:27:47,750 --> 00:27:45,279

estimate of the acceleration you have to

701  
00:27:51,750 --> 00:27:47,760  
have some idea of either the distance to

702  
00:27:54,070 --> 00:27:51,760  
the object or the size of the object

703  
00:27:57,029 --> 00:27:54,080  
triangulation of some sort yeah you need

704  
00:27:59,190 --> 00:27:57,039  
some you need some some known distance

705  
00:28:01,350 --> 00:27:59,200  
so that you can get an acceleration from

706  
00:28:03,830 --> 00:28:01,360  
that because an acceleration is

707  
00:28:05,750 --> 00:28:03,840  
is a distance divided by time squared so

708  
00:28:07,669 --> 00:28:05,760  
you need a distance

709  
00:28:09,269 --> 00:28:07,679  
and in the nimitz case we were able to

710  
00:28:12,310 --> 00:28:09,279  
use the 40 feet

711  
00:28:14,789 --> 00:28:12,320  
estimates that the pilots made

712  
00:28:17,510 --> 00:28:14,799  
now um you can be critical of that and

713  
00:28:18,950 --> 00:28:17,520

that's fine but then the then the task

714

00:28:19,830 --> 00:28:18,960

is to

715

00:28:20,870 --> 00:28:19,840

take

716

00:28:23,269 --> 00:28:20,880

you know

717

00:28:25,110 --> 00:28:23,279

if you don't believe in those lengths

718

00:28:27,110 --> 00:28:25,120

then take the link that you do believe

719

00:28:28,070 --> 00:28:27,120

in and then see what the acceleration is

720

00:28:33,110 --> 00:28:28,080

so

721

00:28:35,110 --> 00:28:33,120

four feet long well

722

00:28:36,710 --> 00:28:35,120

do the math the math is actually in the

723

00:28:37,590 --> 00:28:36,720

equations are in the paper you can plug

724

00:28:38,389 --> 00:28:37,600

it in

725

00:28:40,549 --> 00:28:38,399

um

726

00:28:43,110 --> 00:28:40,559

but if it was four feet long instead of

727

00:28:46,789 --> 00:28:43,120

40 feet long then instead of

728

00:28:47,669 --> 00:28:46,799

you know flying away from the f-18 at 78

729

00:28:58,070 --> 00:28:47,679

g

730

00:29:00,230 --> 00:28:58,080

that you can't possibly be that far in

731

00:29:02,070 --> 00:29:00,240

front of the airplane that's basically

732

00:29:04,710 --> 00:29:02,080

keeping pace in front of the jet

733

00:29:07,590 --> 00:29:04,720

airplane at about 250 miles an hour yeah

734

00:29:10,310 --> 00:29:07,600

and then accelerates away at 7.8 g and

735

00:29:12,470 --> 00:29:10,320

then this is an infrared video so

736

00:29:14,630 --> 00:29:12,480

where's the exhaust from the propellant

737

00:29:17,029 --> 00:29:14,640

or the thrust what how did

738

00:29:19,909 --> 00:29:17,039

so even if this thing ex you know did

739

00:29:22,470 --> 00:29:19,919

escape at 7.8 g which is

740

00:29:24,230 --> 00:29:22,480

surprising but not horribly unreasonable

741

00:29:26,070 --> 00:29:24,240

a missile can accelerate much faster

742

00:29:27,430 --> 00:29:26,080

than that but then you'd expect to see

743

00:29:28,630 --> 00:29:27,440

some exhaust and you don't see an

744

00:29:29,750 --> 00:29:28,640

exhaust

745

00:29:32,149 --> 00:29:29,760

yeah

746

00:29:33,990 --> 00:29:32,159

and then and then of course there's the

747

00:29:36,310 --> 00:29:34,000

there are the claims that oh the go fast

748

00:29:40,389 --> 00:29:36,320

video wasn't actually going very fast

749

00:29:42,470 --> 00:29:40,399

well that's fine you know it's one of

750

00:29:44,470 --> 00:29:42,480

the problems with

751

00:29:46,549 --> 00:29:44,480

these things is they

752

00:29:48,710 --> 00:29:46,559

that ufos aren't always going very fast

753

00:29:50,789 --> 00:29:48,720

sometimes they stop and they hover or go

754

00:29:53,350 --> 00:29:50,799

at very slow speeds

755

00:29:55,750 --> 00:29:53,360

where you can't stay aloft without

756

00:29:56,630 --> 00:29:55,760

some additional form of propulsion to

757

00:29:58,710 --> 00:29:56,640

yeah

758

00:30:01,510 --> 00:29:58,720

you know to provide lift

759

00:30:03,590 --> 00:30:01,520

so that's also problematic um the go

760

00:30:04,470 --> 00:30:03,600

fast video is the one with the little

761

00:30:06,870 --> 00:30:04,480

white

762

00:30:08,549 --> 00:30:06,880

dot that's moving cruising along the sea

763

00:30:10,149 --> 00:30:08,559

surface which

764

00:30:11,669 --> 00:30:10,159

you know because of parallax it looks

765

00:30:13,510 --> 00:30:11,679

like it's going really fast so it's a

766

00:30:15,350 --> 00:30:13,520

fun video to watch

767

00:30:18,389 --> 00:30:15,360

but people have claimed that oh it's

768

00:30:21,350 --> 00:30:18,399

probably just a seagull and

769

00:30:23,590 --> 00:30:21,360

and now that's also silly because you

770

00:30:25,590 --> 00:30:23,600

have the the fact that this is an

771

00:30:27,430 --> 00:30:25,600

infrared video

772

00:30:28,630 --> 00:30:27,440

and if you look at the

773

00:30:31,029 --> 00:30:28,640

lower

774

00:30:34,310 --> 00:30:31,039

left corner of the video that it says

775

00:30:38,230 --> 00:30:34,320

either wht or blk and that says that

776

00:30:39,750 --> 00:30:38,240

either white is is hot or black is hot

777

00:30:41,430 --> 00:30:39,760

so through most of the video when you

778

00:30:43,510 --> 00:30:41,440

can see this little white thing cruising

779

00:30:45,110 --> 00:30:43,520

along it says blk which means black

780

00:30:47,590 --> 00:30:45,120

things are hot

781

00:30:50,710 --> 00:30:47,600

so this white thing is actually cold and

782

00:30:52,389 --> 00:30:50,720

it's colder than the sea surface

783

00:30:54,389 --> 00:30:52,399

seagulls aren't colder than the sea

784

00:30:55,669 --> 00:30:54,399

surface

785

00:30:58,549 --> 00:30:55,679

so that's

786

00:31:01,430 --> 00:30:58,559

also ridiculous so again we see these

787

00:31:02,549 --> 00:31:01,440

i'm i'm extremely skeptical a lot of a

788

00:31:05,909 --> 00:31:02,559

lot of the

789

00:31:07,909 --> 00:31:05,919

explanations provided by skeptics

790

00:31:09,190 --> 00:31:07,919

yeah i think quite a few of us are but i

791

00:31:10,630 --> 00:31:09,200

think it's one of them conversations

792

00:31:13,590 --> 00:31:10,640

that just will keep going around in

793

00:31:17,029 --> 00:31:13,600

circles for the time being

794

00:31:18,870 --> 00:31:17,039

well until until we get until there is

795

00:31:20,310 --> 00:31:18,880

enough um

796

00:31:21,750 --> 00:31:20,320

independently

797

00:31:23,190 --> 00:31:21,760

recorded data

798

00:31:27,669 --> 00:31:23,200

and

799

00:31:29,750 --> 00:31:27,679

studying this openly i think that

800

00:31:32,070 --> 00:31:29,760

the conversation will have to change i'm

801  
00:31:33,830 --> 00:31:32,080  
the um

802  
00:31:36,070 --> 00:31:33,840  
the scientific community will have their

803  
00:31:38,230 --> 00:31:36,080  
own discussions and skeptics can

804  
00:31:40,070 --> 00:31:38,240  
complain all they want but they're gonna

805  
00:31:41,750 --> 00:31:40,080  
the skeptics will

806  
00:31:44,070 --> 00:31:41,760  
fall into the same class as the flat

807  
00:31:45,669 --> 00:31:44,080  
earthers so yeah

808  
00:31:47,830 --> 00:31:45,679  
absolutely i mean mentioning the

809  
00:31:49,909 --> 00:31:47,840  
scientific community we've seen

810  
00:31:52,389 --> 00:31:49,919  
a lot more of it come to the forefront

811  
00:31:54,630 --> 00:31:52,399  
in the last especially in the last year

812  
00:31:57,350 --> 00:31:54,640  
yeah but in your experience have you

813  
00:31:59,430 --> 00:31:57,360

seen the stigma drop over over that sort

814

00:32:01,029 --> 00:31:59,440

of time are the conversations happening

815

00:32:02,070 --> 00:32:01,039

now where they wouldn't have been a few

816

00:32:05,269 --> 00:32:02,080

years ago

817

00:32:08,549 --> 00:32:05,279

the stigma has dropped and

818

00:32:08,559 --> 00:32:13,190

i mean i would i would have to credit um

819

00:32:18,950 --> 00:32:17,029

elizondo for coming out about atip and

820

00:32:21,350 --> 00:32:18,960

and the us navy

821

00:32:22,870 --> 00:32:21,360

going to congress for assistance um i

822

00:32:24,710 --> 00:32:22,880

think those

823

00:32:27,029 --> 00:32:24,720

those two events were absolutely

824

00:32:28,950 --> 00:32:27,039

enormous um

825

00:32:31,110 --> 00:32:28,960

we didn't get the kind of

826

00:32:32,549 --> 00:32:31,120

disclosure you know ufo people didn't

827

00:32:34,230 --> 00:32:32,559

get the kind of disclosure that they

828

00:32:36,870 --> 00:32:34,240

were hoping for but

829

00:32:39,269 --> 00:32:36,880

but what did change is it

830

00:32:41,590 --> 00:32:39,279

provided some legitimacy to the

831

00:32:44,310 --> 00:32:41,600

phenomenon

832

00:32:45,590 --> 00:32:44,320

and that's really the most

833

00:32:47,830 --> 00:32:45,600

difficult

834

00:32:49,430 --> 00:32:47,840

barrier to get over the

835

00:32:51,430 --> 00:32:49,440

when you're trying to study something

836

00:32:57,350 --> 00:32:51,440

new

837

00:33:02,230 --> 00:32:59,750

usually in science what you're doing is

838

00:33:03,110 --> 00:33:02,240

you are you're not trying to

839

00:33:04,950 --> 00:33:03,120

um

840

00:33:07,110 --> 00:33:04,960

you're not trying to prove something's

841

00:33:10,070 --> 00:33:07,120

true you're trying to

842

00:33:11,990 --> 00:33:10,080

either rule out possibilities by showing

843

00:33:13,750 --> 00:33:12,000

these things aren't true

844

00:33:16,230 --> 00:33:13,760

other things aren't true that these

845

00:33:17,990 --> 00:33:16,240

things aren't explanations or you are

846

00:33:21,029 --> 00:33:18,000

trying to characterize you know the

847

00:33:22,549 --> 00:33:21,039

phenomena that you're studying

848

00:33:25,110 --> 00:33:22,559

and

849

00:33:27,430 --> 00:33:25,120

that's one of the differentiating

850

00:33:29,509 --> 00:33:27,440

features between pseudoscience and

851  
00:33:31,669 --> 00:33:29,519  
science and pseudoscience people are

852  
00:33:32,870 --> 00:33:31,679  
typically trying to prove something's

853  
00:33:34,870 --> 00:33:32,880  
true

854  
00:33:35,830 --> 00:33:34,880  
which is not really how we work in

855  
00:33:39,110 --> 00:33:35,840  
science

856  
00:33:41,350 --> 00:33:39,120  
so it's one of those those features that

857  
00:33:42,950 --> 00:33:41,360  
is for scientists is kind of a red flag

858  
00:33:45,430 --> 00:33:42,960  
that suggests oh this looks like

859  
00:33:47,909 --> 00:33:45,440  
pseudoscience now the problem with a new

860  
00:33:50,389 --> 00:33:47,919  
phenomenon you know like

861  
00:33:52,710 --> 00:33:50,399  
you know ufos were to the collective

862  
00:33:54,630 --> 00:33:52,720  
consciousness in the 1940s

863  
00:33:57,269 --> 00:33:54,640

is that

864

00:34:00,389 --> 00:33:57,279

you had to first show that this is a

865

00:34:02,549 --> 00:34:00,399

real phenomenon that you can study

866

00:34:05,269 --> 00:34:02,559

absolutely and so

867

00:34:07,990 --> 00:34:05,279

a lot of the early work has to be to

868

00:34:11,909 --> 00:34:08,000

prove that this is a real phenomenon

869

00:34:14,550 --> 00:34:11,919

and that activity looks to scientists a

870

00:34:16,790 --> 00:34:14,560

lot like pseudoscience

871

00:34:21,430 --> 00:34:19,430

and and and in the 1940s i mean this is

872

00:34:23,589 --> 00:34:21,440

so that's that's

873

00:34:26,230 --> 00:34:23,599

that's not when ufos started at all i

874

00:34:30,069 --> 00:34:26,240

mean we have ufo reports go back well

875

00:34:31,990 --> 00:34:30,079

into this 1800s 1700s and they

876

00:34:33,349 --> 00:34:32,000

and in some of those cases they were

877

00:34:34,470 --> 00:34:33,359

actually published in scientific

878

00:34:39,829 --> 00:34:34,480

journals

879

00:34:40,790 --> 00:34:39,839

were astronomical phenomena right

880

00:34:42,310 --> 00:34:40,800

and

881

00:34:45,270 --> 00:34:42,320

um

882

00:34:49,030 --> 00:34:45,280

but by the time we get to 1947

883

00:34:51,190 --> 00:34:49,040

and actually 1947 was unique in several

884

00:34:51,990 --> 00:34:51,200

ways in that you had

885

00:34:54,550 --> 00:34:52,000

um

886

00:34:56,629 --> 00:34:54,560

in june and july of 1947 you had

887

00:34:57,990 --> 00:34:56,639

multiple prominent sightings that were

888

00:35:01,030 --> 00:34:58,000

reported

889

00:35:03,510 --> 00:35:01,040

and then by the 1940s by the late 1940s

890

00:35:05,349 --> 00:35:03,520

you have you have

891

00:35:08,390 --> 00:35:05,359

global news which

892

00:35:10,230 --> 00:35:08,400

you know didn't exist um

893

00:35:11,750 --> 00:35:10,240

didn't exist certainly in the 1800s

894

00:35:12,870 --> 00:35:11,760

right so you had radio you had

895

00:35:14,870 --> 00:35:12,880

television

896

00:35:16,630 --> 00:35:14,880

you could propagate stories like this

897

00:35:19,030 --> 00:35:16,640

much faster

898

00:35:22,390 --> 00:35:19,040

and we were much more more organized in

899

00:35:23,910 --> 00:35:22,400

doing that so so that's really when ufos

900

00:35:26,870 --> 00:35:23,920

came into the

901  
00:35:29,109 --> 00:35:26,880  
public consciousness

902  
00:35:31,190 --> 00:35:29,119  
but they've been here throughout human

903  
00:35:32,710 --> 00:35:31,200  
history it really appears

904  
00:35:38,790 --> 00:35:32,720  
and

905  
00:35:40,390 --> 00:35:38,800  
mean so the first event you had you had

906  
00:35:45,349 --> 00:35:40,400  
um

907  
00:35:47,510 --> 00:35:45,359  
kenneth kenneth arnold yep kenneth

908  
00:35:49,510 --> 00:35:47,520  
arnold was seeing the saucers at

909  
00:35:51,109 --> 00:35:49,520  
mount rainier you then had the roswell

910  
00:35:53,349 --> 00:35:51,119  
crash you had the

911  
00:35:57,550 --> 00:35:53,359  
event at puget sound

912  
00:36:01,030 --> 00:35:57,560  
uh those were all in all in july of

913  
00:36:03,829 --> 00:36:01,040

1947 you also had two other crashes it

914

00:36:05,510 --> 00:36:03,839

seems in new mexico the one at corona

915

00:36:08,870 --> 00:36:05,520

and then the um

916

00:36:11,430 --> 00:36:08,880

the one at um san agustin plains

917

00:36:14,550 --> 00:36:11,440

so you've got a lot of activity going on

918

00:36:16,150 --> 00:36:14,560

in 1947 so that's really when we became

919

00:36:17,990 --> 00:36:16,160

aware that wow there's something

920

00:36:18,950 --> 00:36:18,000

interesting here

921

00:36:21,670 --> 00:36:18,960

and

922

00:36:23,670 --> 00:36:21,680

at the time the extraterrestrial

923

00:36:28,790 --> 00:36:23,680

hypothesis

924

00:36:32,470 --> 00:36:28,800

really does seem ridiculous because

925

00:36:34,950 --> 00:36:32,480

1947 you were still 10 years out 10

926

00:36:37,270 --> 00:36:34,960

years before sputnik

927

00:36:40,710 --> 00:36:37,280

yeah so we were not flying in space

928

00:36:43,430 --> 00:36:40,720

nobody flew in space in 1947 it was not

929

00:36:44,230 --> 00:36:43,440

known that it was possible really

930

00:36:49,349 --> 00:36:44,240

and

931

00:36:53,190 --> 00:36:49,359

up until two weeks before sputnik the um

932

00:36:55,109 --> 00:36:53,200

the astronomer royale uh in of the uk

933

00:36:57,910 --> 00:36:55,119

had made a statement that space travel

934

00:36:59,349 --> 00:36:57,920

is bunk he said this two weeks before

935

00:37:00,230 --> 00:36:59,359

sputnik so

936

00:37:02,550 --> 00:37:00,240

so

937

00:37:04,150 --> 00:37:02,560

many scientists did not believe that

938

00:37:07,990 --> 00:37:04,160

space travel was

939

00:37:10,710 --> 00:37:08,000

possible or reasonable even in 1957

940

00:37:13,270 --> 00:37:10,720

right before sputnik um

941

00:37:15,270 --> 00:37:13,280

but this was back in 1947 so now you've

942

00:37:17,510 --> 00:37:15,280

got the hypothesis maybe these are

943

00:37:19,109 --> 00:37:17,520

visitors from another planet but

944

00:37:20,950 --> 00:37:19,119

most scientists don't believe you can

945

00:37:22,550 --> 00:37:20,960

try you know not sure you can actually

946

00:37:24,790 --> 00:37:22,560

travel in space

947

00:37:26,950 --> 00:37:24,800

and then second the next point is we

948

00:37:29,589 --> 00:37:26,960

didn't know what the other planets are

949

00:37:31,270 --> 00:37:29,599

actually like you know we had some idea

950

00:37:31,990 --> 00:37:31,280

of what their atmospheres were like but

951  
00:37:34,150 --> 00:37:32,000  
that

952  
00:37:35,990 --> 00:37:34,160  
we hadn't actually sent you know of

953  
00:37:37,750 --> 00:37:36,000  
course we hadn't sent probes to mars yet

954  
00:37:39,109 --> 00:37:37,760  
or any of the other planets so we don't

955  
00:37:41,270 --> 00:37:39,119  
actually know what the other planets are

956  
00:37:42,310 --> 00:37:41,280  
like we don't know if they can support

957  
00:37:44,230 --> 00:37:42,320  
life

958  
00:37:45,510 --> 00:37:44,240  
we knew that the moon couldn't at this

959  
00:37:47,510 --> 00:37:45,520  
point we knew that there was no

960  
00:37:49,750 --> 00:37:47,520  
atmosphere on the moon so

961  
00:37:52,069 --> 00:37:49,760  
um

962  
00:37:54,150 --> 00:37:52,079  
and then we didn't know that there were

963  
00:37:55,670 --> 00:37:54,160

planets around other stars you know we

964

00:37:57,750 --> 00:37:55,680

didn't discover planets around other

965

00:38:00,310 --> 00:37:57,760

stars until the first one or two were

966

00:38:03,750 --> 00:38:00,320

discovered in the 1990s

967

00:38:05,589 --> 00:38:03,760

and another 50 years later right so

968

00:38:07,990 --> 00:38:05,599

so there was really no

969

00:38:12,069 --> 00:38:08,000

scientific basis for the

970

00:38:14,069 --> 00:38:12,079

extraterrestrial hypothesis in 1947 so

971

00:38:17,430 --> 00:38:14,079

you can see why

972

00:38:21,190 --> 00:38:17,440

that didn't fly in 1947 and then

973

00:38:23,990 --> 00:38:21,200

the topic became taboo because it just

974

00:38:25,510 --> 00:38:24,000

seemed so ridiculous you had fifty ten

975

00:38:29,190 --> 00:38:25,520

years for it to

976

00:38:31,670 --> 00:38:29,200

become ridiculous um yeah the 1952 wave

977

00:38:33,030 --> 00:38:31,680

again five years before sputnik

978

00:38:35,030 --> 00:38:33,040

and so

979

00:38:35,990 --> 00:38:35,040

by this time the whole topic was taboo

980

00:38:37,510 --> 00:38:36,000

and so

981

00:38:40,710 --> 00:38:37,520

once we did

982

00:38:42,710 --> 00:38:40,720

started flying in space and um

983

00:38:44,550 --> 00:38:42,720

it's been hard for us to recover from

984

00:38:46,790 --> 00:38:44,560

that you know that

985

00:38:48,710 --> 00:38:46,800

that predisposition we've all been we've

986

00:38:51,109 --> 00:38:48,720

all been told since we were kids that

987

00:38:51,910 --> 00:38:51,119

ufos are not real and they're ridiculous

988

00:38:52,710 --> 00:38:51,920

right

989

00:38:54,150 --> 00:38:52,720

yeah

990

00:38:56,630 --> 00:38:54,160

and that's interstellar travel is

991

00:38:59,270 --> 00:38:56,640

impossible and blah blah blah

992

00:39:01,109 --> 00:38:59,280

and it's not actually but it's

993

00:39:03,829 --> 00:39:01,119

we're working on it we're working to

994

00:39:05,589 --> 00:39:03,839

develop interstellar craft nasa's nasa

995

00:39:08,230 --> 00:39:05,599

has a plan to

996

00:39:10,430 --> 00:39:08,240

get the first probes to the near star

997

00:39:13,430 --> 00:39:10,440

alpha centauri by

998

00:39:15,589 --> 00:39:13,440

2069 for the 100 year anniversary of the

999

00:39:16,870 --> 00:39:15,599

moon landings so

1000

00:39:19,190 --> 00:39:16,880

so

1001  
00:39:21,910 --> 00:39:19,200  
wow that's incredible we're we're we're

1002  
00:39:24,390 --> 00:39:21,920  
also new we also we're also rather

1003  
00:39:25,910 --> 00:39:24,400  
arrogant we're rather new at flying i

1004  
00:39:27,750 --> 00:39:25,920  
mean we've only been flying for a

1005  
00:39:31,030 --> 00:39:27,760  
century yeah

1006  
00:39:33,109 --> 00:39:31,040  
and and for us to then

1007  
00:39:34,950 --> 00:39:33,119  
mentally put bounds on what's possible

1008  
00:39:36,630 --> 00:39:34,960  
and impossible is really pretty

1009  
00:39:39,589 --> 00:39:36,640  
ridiculous

1010  
00:39:40,630 --> 00:39:39,599  
lord calvin in the late 1800s said that

1011  
00:39:42,950 --> 00:39:40,640  
um

1012  
00:39:45,510 --> 00:39:42,960  
heavier than air flying machines are

1013  
00:39:47,990 --> 00:39:45,520

impossible and so that was the late

1014

00:39:51,030 --> 00:39:48,000

1800s so

1015

00:39:53,589 --> 00:39:51,040

physicists are very bad at predicting

1016

00:39:55,990 --> 00:39:53,599

um engineering advances and the reason

1017

00:39:58,150 --> 00:39:56,000

why is because engineering the whole

1018

00:39:59,510 --> 00:39:58,160

point of engineering is to come up with

1019

00:40:01,430 --> 00:39:59,520

a clever

1020

00:40:05,190 --> 00:40:01,440

way to use

1021

00:40:07,190 --> 00:40:05,200

physics to work around problems right

1022

00:40:09,750 --> 00:40:07,200

so you can't use the fact that there's a

1023

00:40:11,670 --> 00:40:09,760

problem to limit in you know your

1024

00:40:13,510 --> 00:40:11,680

expectations of what engineering can and

1025

00:40:16,069 --> 00:40:13,520

can't do the trick is to find a

1026

00:40:17,670 --> 00:40:16,079

workaround right yeah

1027

00:40:19,829 --> 00:40:17,680

absolutely now there's been a lot of

1028

00:40:21,510 --> 00:40:19,839

hypotheses flying around and even

1029

00:40:23,030 --> 00:40:21,520

probably more so these these last few

1030

00:40:25,109 --> 00:40:23,040

months and this year

1031

00:40:27,670 --> 00:40:25,119

but i believe you've actually got a

1032

00:40:30,230 --> 00:40:27,680

favored hypothesis that

1033

00:40:32,470 --> 00:40:30,240

um it's similar to even nasa the lasso

1034

00:40:33,589 --> 00:40:32,480

administrator bill nelson you know he's

1035

00:40:35,670 --> 00:40:33,599

said a lot of things on the matter

1036

00:40:37,109 --> 00:40:35,680

recently and i think your hypothesis

1037

00:40:39,109 --> 00:40:37,119

ties into that can you break that down

1038

00:40:41,430 --> 00:40:39,119

for us a bit

1039

00:40:42,630 --> 00:40:41,440

um for for what do you mean in with

1040

00:40:45,589 --> 00:40:42,640

regard to the extraterrestrial

1041

00:40:47,190 --> 00:40:45,599

hypothesis or or i don't know i i i just

1042

00:40:48,550 --> 00:40:47,200

see that you ha you have a favored

1043

00:40:49,589 --> 00:40:48,560

hypothesis

1044

00:40:51,510 --> 00:40:49,599

um

1045

00:40:52,790 --> 00:40:51,520

and i think

1046

00:40:55,030 --> 00:40:52,800

something you wrote somewhere is that

1047

00:40:56,150 --> 00:40:55,040

it's similar or it falls in line with

1048

00:40:57,670 --> 00:40:56,160

some of the some of the things that bill

1049

00:41:05,190 --> 00:40:57,680

nelson has recently

1050

00:41:10,390 --> 00:41:08,630

right so i think that

1051

00:41:11,589 --> 00:41:10,400

at this point it's rather clear that

1052

00:41:12,550 --> 00:41:11,599

this

1053

00:41:18,309 --> 00:41:12,560

these

1054

00:41:20,950 --> 00:41:18,319

things are probably correct that some of

1055

00:41:22,150 --> 00:41:20,960

these things are craft now of course

1056

00:41:24,390 --> 00:41:22,160

not all

1057

00:41:26,870 --> 00:41:24,400

unidentified

1058

00:41:29,990 --> 00:41:26,880

flying objects are

1059

00:41:32,950 --> 00:41:30,000

alien spacecraft or craft at all some

1060

00:41:34,790 --> 00:41:32,960

some of them very possibly could be

1061

00:41:36,790 --> 00:41:34,800

aerial phenomenon or atmospheric

1062

00:41:39,750 --> 00:41:36,800

phenomena that hasn't been studied yet

1063

00:41:40,630 --> 00:41:39,760

or it hasn't been recognized

1064

00:41:45,270 --> 00:41:40,640

so

1065

00:41:47,829 --> 00:41:45,280

complications in discussing this

1066

00:41:49,990 --> 00:41:47,839

phenomenon because it's not clear

1067

00:41:51,750 --> 00:41:50,000

whether it's it's

1068

00:41:53,910 --> 00:41:51,760

it's known that it's not a single

1069

00:41:55,750 --> 00:41:53,920

phenomenon there are

1070

00:41:56,790 --> 00:41:55,760

multiple explanations for different

1071

00:41:59,589 --> 00:41:56,800

events

1072

00:42:03,510 --> 00:41:59,599

so two two sightings are you know can't

1073

00:42:10,870 --> 00:42:05,190

so

1074

00:42:12,790 --> 00:42:10,880

are craft and

1075

00:42:15,109 --> 00:42:12,800

and from what we know about their speeds

1076

00:42:17,829 --> 00:42:15,119

and accelerations is that there's

1077

00:42:18,950 --> 00:42:17,839

there's no way that these are human-made

1078

00:42:20,309 --> 00:42:18,960

craft

1079

00:42:22,309 --> 00:42:20,319

um there's no

1080

00:42:24,950 --> 00:42:22,319

no no country on earth that can do this

1081

00:42:27,430 --> 00:42:24,960

no known company that can do this

1082

00:42:30,470 --> 00:42:27,440

and um

1083

00:42:33,270 --> 00:42:30,480

and i think what's interesting is is

1084

00:42:35,990 --> 00:42:33,280

bill nelson pointed out that we should

1085

00:42:37,589 --> 00:42:36,000

be thankful that there's no country that

1086

00:42:39,910 --> 00:42:37,599

can do this because it would be

1087

00:42:41,030 --> 00:42:39,920

disastrous

1088

00:42:42,829 --> 00:42:41,040

at these

1089

00:42:44,870 --> 00:42:42,839

these accelerations and

1090

00:42:46,150 --> 00:42:44,880

speeds um

1091

00:42:48,710 --> 00:42:46,160

oh when i didn't i didn't get to

1092

00:42:51,109 --> 00:42:48,720

mentioning the speed the speed for in

1093

00:42:52,710 --> 00:42:51,119

the case of the 5000 g acceleration in

1094

00:42:55,670 --> 00:42:52,720

the nimitz case when the tic tacs

1095

00:42:57,109 --> 00:42:55,680

dropped from 28 000 feet to sea level

1096

00:43:00,630 --> 00:42:57,119

the

1097

00:43:03,270 --> 00:43:00,640

top speed about halfway down is about 45

1098

00:43:04,230 --> 00:43:03,280

000 miles an hour

1099

00:43:07,510 --> 00:43:04,240

so

1100

00:43:10,470 --> 00:43:07,520

this thing accelerates from

1101  
00:43:13,750 --> 00:43:10,480  
zero vertical speed to

1102  
00:43:15,270 --> 00:43:13,760  
45 000 miles an hour in about a third of

1103  
00:43:16,950 --> 00:43:15,280  
a second

1104  
00:43:19,109 --> 00:43:16,960  
and then a little more than a third of a

1105  
00:43:21,990 --> 00:43:19,119  
second and then decelerates to zero in

1106  
00:43:23,829 --> 00:43:22,000  
another third of a second yeah and forty

1107  
00:43:25,190 --> 00:43:23,839  
five thousand miles an hour is about how

1108  
00:43:27,670 --> 00:43:25,200  
fast the

1109  
00:43:29,190 --> 00:43:27,680  
new horizons probe that we sent to pluto

1110  
00:43:29,990 --> 00:43:29,200  
is going

1111  
00:43:31,510 --> 00:43:30,000  
wow

1112  
00:43:34,550 --> 00:43:31,520  
so

1113  
00:43:35,910 --> 00:43:34,560

when people ask me well why do why do

1114

00:43:38,309 --> 00:43:35,920

some people think these things are

1115

00:43:40,470 --> 00:43:38,319

spaceships and the answer is simple

1116

00:43:42,390 --> 00:43:40,480

because they move at speeds that

1117

00:43:44,550 --> 00:43:42,400

spacecraft move

1118

00:43:46,630 --> 00:43:44,560

that's it

1119

00:43:49,109 --> 00:43:46,640

completely reasonable to think that they

1120

00:43:51,910 --> 00:43:49,119

could be spaceships because they move at

1121

00:43:53,510 --> 00:43:51,920

the requisite velocities

1122

00:43:55,510 --> 00:43:53,520

and so

1123

00:43:57,270 --> 00:43:55,520

i think that's very simple

1124

00:43:59,990 --> 00:43:57,280

so so it really does appear that these

1125

00:44:01,270 --> 00:44:00,000

things could be spacecraft

1126  
00:44:03,270 --> 00:44:01,280  
if they could maintain these

1127  
00:44:04,630 --> 00:44:03,280  
accelerations in a vacuum they could

1128  
00:44:06,790 --> 00:44:04,640  
easily

1129  
00:44:08,550 --> 00:44:06,800  
reach um

1130  
00:44:10,710 --> 00:44:08,560  
reach relativistic speeds you know

1131  
00:44:12,550 --> 00:44:10,720  
speeds close to the speed of light in

1132  
00:44:14,710 --> 00:44:12,560  
very reasonable periods of time within a

1133  
00:44:16,950 --> 00:44:14,720  
few hours typically

1134  
00:44:19,349 --> 00:44:16,960  
depending of course on the acceleration

1135  
00:44:20,950 --> 00:44:19,359  
yeah so so and i think the the

1136  
00:44:23,510 --> 00:44:20,960  
interesting thing that bill nelson

1137  
00:44:26,230 --> 00:44:23,520  
pointed out at um you know so at these

1138  
00:44:30,069 --> 00:44:26,240

speeds um

1139

00:44:31,510 --> 00:44:30,079

so 45 000 miles an hour is about mach 60

1140

00:44:33,030 --> 00:44:31,520

6-0

1141

00:44:35,670 --> 00:44:33,040

and um

1142

00:44:39,750 --> 00:44:37,430

the

1143

00:44:42,470 --> 00:44:39,760

wow i'm spacing on what i was gonna say

1144

00:44:45,349 --> 00:44:42,480

precisely but all right yeah so at that

1145

00:44:47,109 --> 00:44:45,359

but at that speed you can get from new

1146

00:44:50,870 --> 00:44:47,119

york to london

1147

00:44:52,630 --> 00:44:50,880

in around five to ten minutes

1148

00:44:54,710 --> 00:44:52,640

wow so

1149

00:44:57,430 --> 00:44:54,720

you know load one of these things with

1150

00:44:59,670 --> 00:44:57,440

nuclear weapons you can get anywhere in

1151  
00:45:02,630 --> 00:44:59,680  
the world in

1152  
00:45:04,630 --> 00:45:02,640  
less than an hour which gives

1153  
00:45:07,589 --> 00:45:04,640  
almost no time for

1154  
00:45:10,390 --> 00:45:07,599  
um preparation you know if they're for

1155  
00:45:12,470 --> 00:45:10,400  
an attack so you can't

1156  
00:45:14,870 --> 00:45:12,480  
so it would be very dangerous um if

1157  
00:45:17,190 --> 00:45:14,880  
another country or our country if

1158  
00:45:18,790 --> 00:45:17,200  
anybody's country had and had these

1159  
00:45:22,230 --> 00:45:18,800  
objects

1160  
00:45:25,750 --> 00:45:22,240  
and with these capabilities so

1161  
00:45:26,870 --> 00:45:25,760  
that may very well be the

1162  
00:45:28,790 --> 00:45:26,880  
the

1163  
00:45:32,870 --> 00:45:28,800

angle that

1164

00:45:35,190 --> 00:45:32,880

our government needed to

1165

00:45:36,390 --> 00:45:35,200

disclose the fact that these things are

1166

00:45:38,550 --> 00:45:36,400

non-human

1167

00:45:41,510 --> 00:45:38,560

technologies

1168

00:45:47,589 --> 00:45:44,829

making sure that people don't panic

1169

00:45:49,349 --> 00:45:47,599

right yeah yeah they're not they're

1170

00:45:51,190 --> 00:45:49,359

non-human technologies and you should be

1171

00:45:53,190 --> 00:45:51,200

glad because humans are really scary and

1172

00:45:54,790 --> 00:45:53,200

if humans have these we should be if the

1173

00:45:56,309 --> 00:45:54,800

chinese had these or the russians had

1174

00:45:58,790 --> 00:45:56,319

these or you know the americans had

1175

00:46:01,510 --> 00:45:58,800

these whoever you happen to be we should

1176

00:46:03,510 --> 00:46:01,520

you would be worried so but

1177

00:46:05,910 --> 00:46:03,520

thank god the people don't have this

1178

00:46:06,870 --> 00:46:05,920

technology and i think that's maybe

1179

00:46:09,430 --> 00:46:06,880

maybe

1180

00:46:12,150 --> 00:46:09,440

you know that seemed to me to be

1181

00:46:14,390 --> 00:46:12,160

an out for them right and

1182

00:46:16,470 --> 00:46:14,400

a chance for them to disclose some of

1183

00:46:17,990 --> 00:46:16,480

this without people panicking

1184

00:46:23,430 --> 00:46:18,000

absolutely

1185

00:46:23,440 --> 00:46:27,589

the other thing is that the

1186

00:46:31,829 --> 00:46:29,670

language has changed slightly they've

1187

00:46:34,069 --> 00:46:31,839

gone from

1188

00:46:38,870 --> 00:46:34,079

calling them possibly alien or

1189

00:46:41,750 --> 00:46:38,880

extraterrestrial to non-human yeah

1190

00:46:46,470 --> 00:46:41,760

and that's interesting i i picked up on

1191

00:46:50,150 --> 00:46:46,480

that from another source as well and um

1192

00:46:53,829 --> 00:46:52,790

the question then is that

1193

00:46:54,870 --> 00:46:53,839

well

1194

00:46:56,290 --> 00:46:54,880

why

1195

00:46:58,630 --> 00:46:56,300

that language change

1196

00:47:00,870 --> 00:46:58,640

[Music]

1197

00:47:03,030 --> 00:47:00,880

extraterrestrial would typically mean

1198

00:47:05,190 --> 00:47:03,040

they come from another planet

1199

00:47:06,950 --> 00:47:05,200

so if you're changing it to non-human

1200

00:47:08,950 --> 00:47:06,960

you're either being

1201

00:47:10,390 --> 00:47:08,960

more careful and not making an

1202

00:47:11,990 --> 00:47:10,400

assumption about where they're from

1203

00:47:14,309 --> 00:47:12,000

because we don't know

1204

00:47:15,589 --> 00:47:14,319

or um or maybe you do have some

1205

00:47:16,870 --> 00:47:15,599

information about where they're from and

1206

00:47:18,230 --> 00:47:16,880

you know that they're not from another

1207

00:47:19,990 --> 00:47:18,240

planet so

1208

00:47:20,710 --> 00:47:20,000

so there's it's one or the one or the

1209

00:47:23,589 --> 00:47:20,720

other

1210

00:47:28,309 --> 00:47:23,599

right and i think that latter

1211

00:47:34,390 --> 00:47:31,670

so once i realized how fast these

1212

00:47:38,390 --> 00:47:34,400

craft move it made me

1213

00:47:43,589 --> 00:47:40,790

interstellar travel more how how could

1214

00:47:46,549 --> 00:47:43,599

that work what what would actually be

1215

00:47:49,510 --> 00:47:46,559

necessary to

1216

00:47:51,430 --> 00:47:49,520

be an interstellar traveling

1217

00:47:53,349 --> 00:47:51,440

race

1218

00:47:56,390 --> 00:47:53,359

and so i had

1219

00:47:58,549 --> 00:47:56,400

done some simulations of

1220

00:47:59,349 --> 00:47:58,559

interstellar colonization

1221

00:48:00,390 --> 00:47:59,359

right

1222

00:48:02,870 --> 00:48:00,400

and i

1223

00:48:05,030 --> 00:48:02,880

had aimed to publish these but it's just

1224

00:48:07,910 --> 00:48:05,040

not to that point yet there was

1225

00:48:09,430 --> 00:48:07,920

some work done by some other astronomers

1226

00:48:11,670 --> 00:48:09,440

where they had

1227

00:48:14,069 --> 00:48:11,680

done something similar

1228

00:48:15,910 --> 00:48:14,079

they'd done some similar um simulations

1229

00:48:17,829 --> 00:48:15,920

and got similar results but they took

1230

00:48:21,670 --> 00:48:17,839

into account the fact that the

1231

00:48:24,069 --> 00:48:21,680

stars in the galaxy are moving and i i

1232

00:48:26,390 --> 00:48:24,079

didn't account for that because i was

1233

00:48:29,349 --> 00:48:26,400

i had a different goal in mind so and i

1234

00:48:31,510 --> 00:48:29,359

needed to do lots of simulations so

1235

00:48:33,190 --> 00:48:31,520

so i ended up doing several million some

1236

00:48:35,510 --> 00:48:33,200

simulations of

1237

00:48:37,670 --> 00:48:35,520

interstellar colonizing

1238

00:48:39,349 --> 00:48:37,680

societies

1239

00:48:41,910 --> 00:48:39,359

and what i did is i kept track of the

1240

00:48:43,349 --> 00:48:41,920

ones that found earth so i ran several

1241

00:48:45,750 --> 00:48:43,359

million of these i kept track of the

1242

00:48:47,750 --> 00:48:45,760

ones that found earth and then i

1243

00:48:49,750 --> 00:48:47,760

could do statistics on their

1244

00:48:52,950 --> 00:48:49,760

characteristics to figure out what

1245

00:48:54,630 --> 00:48:52,960

characteristics are necessary

1246

00:48:57,109 --> 00:48:54,640

for finding earth

1247

00:48:58,950 --> 00:48:57,119

and um

1248

00:49:00,549 --> 00:48:58,960

and so the results you know and i'll

1249

00:49:03,829 --> 00:49:00,559

call these preliminary results they're

1250

00:49:05,990 --> 00:49:03,839

interesting because first it

1251

00:49:06,870 --> 00:49:06,000

it's clear that finding earth is hard to

1252

00:49:08,870 --> 00:49:06,880

do

1253

00:49:11,109 --> 00:49:08,880

and

1254

00:49:13,950 --> 00:49:11,119

it's in my simulations it was coming out

1255

00:49:16,950 --> 00:49:13,960

to be about one out of eight million

1256

00:49:18,309 --> 00:49:16,960

civilizations that are active in

1257

00:49:20,150 --> 00:49:18,319

colonizing

1258

00:49:22,710 --> 00:49:20,160

interstellar

1259

00:49:24,790 --> 00:49:22,720

colonizing star systems

1260

00:49:27,510 --> 00:49:24,800

only one out of eight million ever finds

1261

00:49:30,549 --> 00:49:27,520

earth wow so

1262

00:49:32,790 --> 00:49:30,559

so that suggests already that if anyone

1263

00:49:33,710 --> 00:49:32,800

has ever found earth if we can ever

1264

00:49:35,589 --> 00:49:33,720

prove that there have been

1265

00:49:37,270 --> 00:49:35,599

extraterrestrials here

1266

00:49:38,630 --> 00:49:37,280

then there have

1267

00:49:40,790 --> 00:49:38,640

got to be

1268

00:49:42,470 --> 00:49:40,800

on the order of

1269

00:49:44,790 --> 00:49:42,480

over a million

1270

00:49:46,950 --> 00:49:44,800

interstellar colonizing civilizations in

1271

00:49:51,190 --> 00:49:46,960

our galaxy

1272

00:49:53,829 --> 00:49:51,200

so take that um drake equation

1273

00:49:56,150 --> 00:49:53,839

that's a whole as a whole other

1274

00:49:58,309 --> 00:49:56,160

um level right so

1275

00:50:00,150 --> 00:49:58,319

yeah so i'm not working on beefing up my

1276

00:50:02,630 --> 00:50:00,160

simulations and making them more

1277

00:50:05,270 --> 00:50:02,640

accurate so i can get um better numbers

1278

00:50:07,750 --> 00:50:05,280

and i'd like to publish that

1279

00:50:12,309 --> 00:50:07,760

the other interesting things are that

1280

00:50:15,510 --> 00:50:14,549

that the speeds you need to attain

1281

00:50:17,109 --> 00:50:15,520

aren't

1282

00:50:19,910 --> 00:50:17,119

horribly great

1283

00:50:23,670 --> 00:50:19,920

depending on how resilient you are about

1284

00:50:25,910 --> 00:50:23,680

being able to set up um a base or

1285

00:50:27,510 --> 00:50:25,920

some kind of home or live on a planet in

1286

00:50:30,309 --> 00:50:27,520

another star system

1287

00:50:33,270 --> 00:50:30,319

if you're very resilient then you can

1288

00:50:35,270 --> 00:50:33,280

travel at speeds as low as you know 10

1289

00:50:36,710 --> 00:50:35,280

percent the speed of light or 20 the

1290

00:50:38,950 --> 00:50:36,720

speed of light which

1291

00:50:41,190 --> 00:50:38,960

is still for us unattainable but of

1292

00:50:43,190 --> 00:50:41,200

course

1293

00:50:45,109 --> 00:50:43,200

but the

1294

00:50:47,109 --> 00:50:45,119

but you can then

1295

00:50:49,430 --> 00:50:47,119

perform interstellar colonization if

1296

00:50:51,030 --> 00:50:49,440

you're very resilient in those cases now

1297

00:50:52,950 --> 00:50:51,040

of course in most of my simulations i

1298

00:50:55,990 --> 00:50:52,960

think it was like 60 percent of the

1299

00:50:56,710 --> 00:50:56,000

societies never left their solar system

1300

00:50:59,349 --> 00:50:56,720

so

1301  
00:51:01,510 --> 00:50:59,359  
that's why you have to run lots of

1302  
00:51:02,470 --> 00:51:01,520  
simulations right and then then the ones

1303  
00:51:04,309 --> 00:51:02,480  
who do

1304  
00:51:06,390 --> 00:51:04,319  
still one out of eight million find

1305  
00:51:09,190 --> 00:51:06,400  
earth so you've got to run even more

1306  
00:51:12,630 --> 00:51:09,200  
wow right so now they

1307  
00:51:14,790 --> 00:51:12,640  
so the ones that did find earth you can

1308  
00:51:19,109 --> 00:51:14,800  
estimate about how long ago they found

1309  
00:51:23,430 --> 00:51:19,119  
earth and that turns out to have a

1310  
00:51:25,910 --> 00:51:23,440  
an average of about 200 000 years

1311  
00:51:28,549 --> 00:51:25,920  
so on average

1312  
00:51:31,109 --> 00:51:28,559  
so if an extraterrestrial system

1313  
00:51:33,829 --> 00:51:31,119

civilization finds earth then they

1314

00:51:37,349 --> 00:51:33,839

probably found earth about 200

1315

00:51:39,349 --> 00:51:37,359

250 000 years ago

1316

00:51:42,549 --> 00:51:39,359

so they've probably been here or known

1317

00:51:45,190 --> 00:51:42,559

about earth throughout human history

1318

00:51:46,230 --> 00:51:45,200

now interestingly that tracks with what

1319

00:51:48,150 --> 00:51:46,240

we see

1320

00:51:49,109 --> 00:51:48,160

you know with ufo reports because you've

1321

00:51:51,190 --> 00:51:49,119

got

1322

00:51:53,510 --> 00:51:51,200

flying shields reported by roman

1323

00:51:55,910 --> 00:51:53,520

historians and things like this

1324

00:51:57,349 --> 00:51:55,920

so this has been going on a long time

1325

00:52:01,349 --> 00:51:57,359

and

1326  
00:52:03,589 --> 00:52:01,359  
extraterrestrial it's very possible they

1327  
00:52:05,750 --> 00:52:03,599  
found earth a long time ago

1328  
00:52:09,109 --> 00:52:05,760  
now there's some consequences to this

1329  
00:52:12,549 --> 00:52:10,390  
because

1330  
00:52:14,870 --> 00:52:12,559  
there are those who colonize and then

1331  
00:52:16,630 --> 00:52:14,880  
there are those who are colonized right

1332  
00:52:18,790 --> 00:52:16,640  
those those who are on the business end

1333  
00:52:20,150 --> 00:52:18,800  
of colonization find things to be rather

1334  
00:52:22,710 --> 00:52:20,160  
difficult

1335  
00:52:26,390 --> 00:52:22,720  
the colonizers typically believe that

1336  
00:52:28,549 --> 00:52:26,400  
they own what they find right sure

1337  
00:52:30,230 --> 00:52:28,559  
look at how europeans feel about north

1338  
00:52:32,710 --> 00:52:30,240

america right

1339

00:52:34,230 --> 00:52:32,720

this is our country all right we found

1340

00:52:35,430 --> 00:52:34,240

it it's ours

1341

00:52:36,870 --> 00:52:35,440

right so

1342

00:52:38,950 --> 00:52:36,880

and then you have all the people who are

1343

00:52:40,790 --> 00:52:38,960

on the business end of colonization who

1344

00:52:42,710 --> 00:52:40,800

are like whoa whoa wait a minute no

1345

00:52:43,990 --> 00:52:42,720

that's not how it should work

1346

00:52:46,790 --> 00:52:44,000

um

1347

00:52:48,790 --> 00:52:46,800

but we could very well be in a situation

1348

00:52:49,670 --> 00:52:48,800

where

1349

00:52:51,109 --> 00:52:49,680

these

1350

00:52:54,309 --> 00:52:51,119

peoples have

1351  
00:52:56,710 --> 00:52:54,319  
discovered earth 200 000 years ago and

1352  
00:52:58,150 --> 00:52:56,720  
they really truly believe it's their

1353  
00:53:00,150 --> 00:52:58,160  
planet

1354  
00:53:01,670 --> 00:53:00,160  
um there could be bases here they could

1355  
00:53:04,150 --> 00:53:01,680  
live here

1356  
00:53:07,190 --> 00:53:04,160  
and i really suspect that's probably

1357  
00:53:08,790 --> 00:53:07,200  
more likely than visiting um carl sagan

1358  
00:53:11,670 --> 00:53:08,800  
had pointed out at one point i think

1359  
00:53:13,030 --> 00:53:11,680  
correctly i he said i'd be surprised if

1360  
00:53:16,309 --> 00:53:13,040  
if you had

1361  
00:53:17,270 --> 00:53:16,319  
multiple ships visiting our planet every

1362  
00:53:19,030 --> 00:53:17,280  
year

1363  
00:53:21,190 --> 00:53:19,040

interstellar travel is going to be

1364

00:53:22,870 --> 00:53:21,200

relatively difficult still but so why

1365

00:53:24,069 --> 00:53:22,880

would you have multiple ships visiting

1366

00:53:25,510 --> 00:53:24,079

per year

1367

00:53:26,870 --> 00:53:25,520

and um

1368

00:53:29,270 --> 00:53:26,880

and i think the answer to that is

1369

00:53:31,030 --> 00:53:29,280

they're not visiting they live here i

1370

00:53:33,990 --> 00:53:31,040

think that's probably the the most

1371

00:53:36,549 --> 00:53:34,000

likely situation at that point

1372

00:53:37,349 --> 00:53:36,559

and that also could very well be why

1373

00:53:41,270 --> 00:53:37,359

um

1374

00:53:43,349 --> 00:53:41,280

point it could be that

1375

00:53:44,470 --> 00:53:43,359

that we might have evidence that they do

1376  
00:53:46,390 --> 00:53:44,480  
live here

1377  
00:53:49,270 --> 00:53:46,400  
yeah when you consider their responses

1378  
00:53:50,870 --> 00:53:49,280  
to military activity so you know the

1379  
00:53:54,870 --> 00:53:50,880  
soviets had

1380  
00:53:57,349 --> 00:53:54,880  
used military activity to try to lure ua

1381  
00:54:00,309 --> 00:53:57,359  
ufos in or uap is in

1382  
00:54:02,710 --> 00:54:00,319  
and so um so they would move ships and

1383  
00:54:05,030 --> 00:54:02,720  
military equipment and

1384  
00:54:08,470 --> 00:54:05,040  
you know within

1385  
00:54:10,069 --> 00:54:08,480  
ufos well

1386  
00:54:12,390 --> 00:54:10,079  
those ufos aren't coming from another

1387  
00:54:13,349 --> 00:54:12,400  
star system they're coming from our star

1388  
00:54:15,190 --> 00:54:13,359

system

1389

00:54:16,950 --> 00:54:15,200

so they're here already

1390

00:54:19,109 --> 00:54:16,960

and

1391

00:54:20,710 --> 00:54:19,119

yeah now that makes sense i mean that's

1392

00:54:22,870 --> 00:54:20,720

one of the big hypotheses that they come

1393

00:54:24,950 --> 00:54:22,880

out of the oceans or they you know or

1394

00:54:27,190 --> 00:54:24,960

they're in a dimension that is close to

1395

00:54:29,030 --> 00:54:27,200

us that we just cannot see you know

1396

00:54:31,109 --> 00:54:29,040

as a human being so i think that's

1397

00:54:31,829 --> 00:54:31,119

probably the case and i think that you

1398

00:54:33,430 --> 00:54:31,839

know

1399

00:54:35,910 --> 00:54:33,440

the the the

1400

00:54:37,349 --> 00:54:35,920

their activities with our nuclear

1401  
00:54:41,030 --> 00:54:37,359  
weapons

1402  
00:54:42,710 --> 00:54:41,040  
and in their interference in military

1403  
00:54:44,870 --> 00:54:42,720  
operations

1404  
00:54:48,789 --> 00:54:44,880  
which has been increasing

1405  
00:54:53,349 --> 00:54:50,870  
it suggests to me

1406  
00:54:57,349 --> 00:54:53,359  
my concern is that they

1407  
00:55:00,549 --> 00:54:57,359  
they see this planet as theirs and um we

1408  
00:55:03,109 --> 00:55:00,559  
are now we've probably had this ex we've

1409  
00:55:05,829 --> 00:55:03,119  
had this great relationship for

1410  
00:55:10,069 --> 00:55:05,839  
you know throughout human history

1411  
00:55:15,190 --> 00:55:12,069  
except for all the probing

1412  
00:55:17,670 --> 00:55:15,200  
that maybe happens um but but they've

1413  
00:55:20,230 --> 00:55:17,680

left us alone for the most part and we

1414

00:55:21,670 --> 00:55:20,240  
didn't know they existed so it's it

1415

00:55:22,630 --> 00:55:21,680  
worked right

1416

00:55:25,270 --> 00:55:22,640  
but now

1417

00:55:26,390 --> 00:55:25,280  
you know since 1945

1418

00:55:28,470 --> 00:55:26,400  
we've

1419

00:55:29,750 --> 00:55:28,480  
developed weapons that really are a

1420

00:55:31,990 --> 00:55:29,760  
danger to

1421

00:55:34,470 --> 00:55:32,000  
not just ourselves but the planet and

1422

00:55:36,789 --> 00:55:34,480  
anybody else who lives here so

1423

00:55:38,230 --> 00:55:36,799  
we could very well be seen as a threat

1424

00:55:39,270 --> 00:55:38,240  
to the

1425

00:55:42,549 --> 00:55:39,280  
the

1426

00:55:44,470 --> 00:55:42,559

health of this planet at this point and

1427

00:55:46,230 --> 00:55:44,480

and you could very you could have a

1428

00:55:48,230 --> 00:55:46,240

situation where they feel all right now

1429

00:55:50,069 --> 00:55:48,240

we we need to do something you know so

1430

00:55:51,589 --> 00:55:50,079

what can we do you know maybe we can go

1431

00:55:53,589 --> 00:55:51,599

shut down some of these missiles maybe

1432

00:55:54,390 --> 00:55:53,599

that'll get them to do the right thing

1433

00:55:56,549 --> 00:55:54,400

or

1434

00:55:59,910 --> 00:55:56,559

spur them on a bit but

1435

00:56:01,990 --> 00:55:59,920

um but i suspect that you know that

1436

00:56:04,710 --> 00:56:02,000

i one of my questions now is that i'd

1437

00:56:07,510 --> 00:56:04,720

like to know is there any evidence that

1438

00:56:08,950 --> 00:56:07,520

they have problems with climate change

1439

00:56:12,069 --> 00:56:08,960

that they are

1440

00:56:14,829 --> 00:56:12,079

working against our

1441

00:56:17,829 --> 00:56:14,839

activities that

1442

00:56:19,910 --> 00:56:17,839

um exasperate the problem of climate

1443

00:56:21,589 --> 00:56:19,920

change right and that i don't know that

1444

00:56:23,829 --> 00:56:21,599

that i'm you know talking to friends

1445

00:56:25,510 --> 00:56:23,839

about seeing if if we ever had any

1446

00:56:26,710 --> 00:56:25,520

evidence of this because if there is

1447

00:56:28,789 --> 00:56:26,720

then then

1448

00:56:31,910 --> 00:56:28,799

then it's very possible that we're going

1449

00:56:33,829 --> 00:56:31,920

to come to some kind of

1450

00:56:35,589 --> 00:56:33,839

bumping of heads where they're like whoa

1451

00:56:37,589 --> 00:56:35,599

whoa you guys

1452

00:56:39,910 --> 00:56:37,599

you can't do this you can't do that you

1453

00:56:41,829 --> 00:56:39,920

gotta calm down and listen

1454

00:56:43,030 --> 00:56:41,839

and humans are very bad at being told

1455

00:56:45,270 --> 00:56:43,040

what to do

1456

00:56:47,829 --> 00:56:45,280

yeah so um

1457

00:56:50,549 --> 00:56:47,839

so i suspect that we might we might have

1458

00:56:51,670 --> 00:56:50,559

some trouble and

1459

00:56:53,270 --> 00:56:51,680

and

1460

00:56:56,789 --> 00:56:53,280

it could very well be that we're the

1461

00:57:01,750 --> 00:56:56,799

ones in the wrong but yeah absolutely

1462

00:57:05,430 --> 00:57:03,829

one or multiple phenomena the immune

1463

00:57:07,829 --> 00:57:05,440

system failure of an officer in the

1464

00:57:10,549 --> 00:57:07,839

vagina case suggests that contact with

1465

00:57:12,950 --> 00:57:10,559

actual foreign chemistry happened yeah

1466

00:57:14,870 --> 00:57:12,960

absolutely we've heard of that in in

1467

00:57:16,789 --> 00:57:14,880

many aspects of the phenomena over years

1468

00:57:18,870 --> 00:57:16,799

in certain cases so yeah

1469

00:57:20,069 --> 00:57:18,880

you know it it more than likely isn't

1470

00:57:21,270 --> 00:57:20,079

just one

1471

00:57:23,270 --> 00:57:21,280

type of

1472

00:57:24,150 --> 00:57:23,280

entity being whatever you want to call

1473

00:57:26,710 --> 00:57:24,160

it so

1474

00:57:28,789 --> 00:57:26,720

yeah i mean they're that's that's really

1475

00:57:30,710 --> 00:57:28,799

an interesting point and then the fact

1476

00:57:32,950 --> 00:57:30,720

that

1477

00:57:34,870 --> 00:57:32,960

you know if they're non-human

1478

00:57:39,030 --> 00:57:34,880

they might not be

1479

00:57:40,470 --> 00:57:39,040

or even from the same civilization we

1480

00:57:42,789 --> 00:57:40,480

don't know we don't know what the

1481

00:57:45,270 --> 00:57:42,799

situation is at this point

1482

00:57:46,950 --> 00:57:45,280

and um

1483

00:57:49,430 --> 00:57:46,960

and that's certainly true for the craft

1484

00:57:51,510 --> 00:57:49,440

so when people talk about

1485

00:57:55,430 --> 00:57:51,520

you know their theories of how ufos fly

1486

00:57:57,510 --> 00:57:55,440

well that's that's messy because

1487

00:57:59,990 --> 00:57:57,520

there are different kinds of ufos and

1488

00:58:02,470 --> 00:58:00,000

they very well it and it does appear

1489

00:58:04,630 --> 00:58:02,480

that they use

1490

00:58:07,510 --> 00:58:04,640

different technologies at different

1491

00:58:09,430 --> 00:58:07,520

times for promotion so a single craft

1492

00:58:10,789 --> 00:58:09,440

may use multiple technologies for

1493

00:58:13,510 --> 00:58:10,799

propulsion

1494

00:58:16,789 --> 00:58:13,520

and lift and different craft could very

1495

00:58:18,630 --> 00:58:16,799

well use different technologies we've

1496

00:58:20,069 --> 00:58:18,640

i'm working on collecting evidence for

1497

00:58:21,589 --> 00:58:20,079

this and that really does appear to be

1498

00:58:23,670 --> 00:58:21,599

the case it's

1499

00:58:25,829 --> 00:58:23,680

it's kind of like you know you go grab a

1500

00:58:28,150 --> 00:58:25,839

car off the highway is it is it a

1501

00:58:31,030 --> 00:58:28,160

gasoline-powered car is it a diesel car

1502

00:58:33,109 --> 00:58:31,040

as an electric car and they're different

1503

00:58:34,870 --> 00:58:33,119

sure so absolutely you have to be

1504

00:58:37,190 --> 00:58:34,880

careful not to over generalize when

1505

00:58:38,950 --> 00:58:37,200

you're trying to really study the

1506

00:58:40,630 --> 00:58:38,960

physics of these things

1507

00:58:42,309 --> 00:58:40,640

yeah absolutely so with the work that

1508

00:58:43,510 --> 00:58:42,319

you're doing now and the papers that

1509

00:58:45,030 --> 00:58:43,520

you're saying you're wanting to publish

1510

00:58:46,230 --> 00:58:45,040

do you have a time scale for those at

1511

00:58:47,510 --> 00:58:46,240

all

1512

00:58:49,270 --> 00:58:47,520

um

1513

00:58:51,109 --> 00:58:49,280

probably i'd like to in the next year

1514

00:58:53,510 --> 00:58:51,119

we'll see how it goes

1515

00:58:56,950 --> 00:58:53,520

there's always so many things going on

1516

00:58:59,829 --> 00:58:56,960

so things get pushed off sometimes and

1517

00:59:02,150 --> 00:58:59,839

picked up again and it just says

1518

00:59:03,990 --> 00:59:02,160

yeah well also before we go i'd like to

1519

00:59:06,150 --> 00:59:04,000

talk about you apx because i believe

1520

00:59:08,470 --> 00:59:06,160

you're now the vice president am i right

1521

00:59:09,990 --> 00:59:08,480

yeah that's correct so i mean that must

1522

00:59:11,430 --> 00:59:10,000

you know take time out of your day as

1523

00:59:13,270 --> 00:59:11,440

well when you when you're doing that so

1524

00:59:14,549 --> 00:59:13,280

can you tell us how that came about and

1525

00:59:16,549 --> 00:59:14,559

and what your

1526

00:59:18,470 --> 00:59:16,559

sort of what you're doing for or with

1527

00:59:20,870 --> 00:59:18,480

you apx let's say

1528

00:59:22,470 --> 00:59:20,880

right so uapx is a non-profit

1529

00:59:23,910 --> 00:59:22,480

organization

1530

00:59:27,030 --> 00:59:23,920

focused on

1531

00:59:28,710 --> 00:59:27,040

openly studying uaps

1532

00:59:31,670 --> 00:59:28,720

we want to

1533

00:59:33,829 --> 00:59:31,680

want to find out what they are what

1534

00:59:35,510 --> 00:59:33,839

they're like how they work

1535

00:59:36,789 --> 00:59:35,520

all of that good stuff we want to

1536

00:59:39,190 --> 00:59:36,799

collect data

1537

00:59:40,470 --> 00:59:39,200

on them collect imagery and other data

1538

00:59:42,549 --> 00:59:40,480

and

1539

00:59:45,349 --> 00:59:42,559

the idea is to make it publicly

1540

00:59:47,430 --> 00:59:45,359

available so that it can be studied by

1541

00:59:49,910 --> 00:59:47,440

scientists

1542

00:59:53,190 --> 00:59:51,589

that's basically what we're doing we

1543

00:59:56,150 --> 00:59:53,200

have had

1544

00:59:59,349 --> 00:59:56,160

some success in collecting data already

1545

01:00:00,390 --> 00:59:59,359

and we are currently going through that

1546

01:00:02,390 --> 01:00:00,400

data

1547

01:00:04,630 --> 01:00:02,400

and analyzing it ourselves and once

1548

01:00:06,870 --> 01:00:04,640

we've gone through it and

1549

01:00:09,750 --> 01:00:06,880

cataloged everything

1550

01:00:11,670 --> 01:00:09,760

our plan is to put it all online so

1551  
01:00:14,549 --> 01:00:11,680  
we have

1552  
01:00:15,910 --> 01:00:14,559  
several hundred hours of infrared video

1553  
01:00:17,030 --> 01:00:15,920  
footage

1554  
01:00:20,150 --> 01:00:17,040  
um

1555  
01:00:23,589 --> 01:00:20,160  
and we have multiple captures in you

1556  
01:00:29,190 --> 01:00:25,030  
and

1557  
01:00:32,950 --> 01:00:29,200  
data from other instruments as well so

1558  
01:00:34,390 --> 01:00:32,960  
that's that's what we're up to at uapx

1559  
01:00:38,069 --> 01:00:34,400  
and um

1560  
01:00:43,829 --> 01:00:38,079  
we have a donations link so i'm gonna

1561  
01:00:46,950 --> 01:00:45,270  
i'll make a note of it because i'll put

1562  
01:00:48,789 --> 01:00:46,960  
it in the description below as well so

1563  
01:00:49,589 --> 01:00:48,799

people can go to it after the fact as

1564

01:00:51,510 --> 01:00:49,599

well

1565

01:00:53,829 --> 01:00:51,520

yeah so any little bit helps at this

1566

01:00:54,789 --> 01:00:53,839

point um because that's all we have is a

1567

01:00:56,549 --> 01:00:54,799

little bit

1568

01:00:59,349 --> 01:00:56,559

and

1569

01:01:03,670 --> 01:00:59,359

we can't there's no possibilities for

1570

01:01:05,910 --> 01:01:03,680

federal funding yet so the the um

1571

01:01:07,349 --> 01:01:05,920

so right now we rely on donations which

1572

01:01:09,109 --> 01:01:07,359

would be great

1573

01:01:11,430 --> 01:01:09,119

and where

1574

01:01:14,150 --> 01:01:11,440

um working on at this point we're

1575

01:01:15,670 --> 01:01:14,160

working on analyzing the data we have

1576

01:01:18,390 --> 01:01:15,680

and getting that to the point where we

1577

01:01:19,829 --> 01:01:18,400

can make it publicly available and then

1578

01:01:21,510 --> 01:01:19,839

we are

1579

01:01:23,109 --> 01:01:21,520

also working on designing new

1580

01:01:25,990 --> 01:01:23,119

instrumentation

1581

01:01:28,470 --> 01:01:26,000

brilliant that's excellent

1582

01:01:29,670 --> 01:01:28,480

and i've just got a couple of um

1583

01:01:30,950 --> 01:01:29,680

questions which were sent to me through

1584

01:01:32,710 --> 01:01:30,960

instagram if you don't mind me just

1585

01:01:34,950 --> 01:01:32,720

quickly

1586

01:01:37,510 --> 01:01:34,960

so jonathan asks can can you ask kevin

1587

01:01:38,470 --> 01:01:37,520

his thoughts on the recent future human

1588

01:01:40,870 --> 01:01:38,480

narrative

1589

01:01:44,549 --> 01:01:40,880

taking hold i believe he suggested this

1590

01:01:47,270 --> 01:01:44,559

possibility some time ago in a podcast

1591

01:01:49,190 --> 01:01:47,280

yeah no that's at this point all

1592

01:01:50,789 --> 01:01:49,200

hypotheses have to be on the table

1593

01:01:55,510 --> 01:01:50,799

because we really don't know what the

1594

01:02:00,309 --> 01:01:58,150

and that's certainly an interesting

1595

01:02:01,109 --> 01:02:00,319

hypothesis

1596

01:02:04,390 --> 01:02:01,119

the

1597

01:02:06,950 --> 01:02:04,400

i i would feel

1598

01:02:09,670 --> 01:02:06,960

i'm more hesitant to accept that it's

1599

01:02:10,470 --> 01:02:09,680

only on the basis of time travel in the

1600

01:02:11,670 --> 01:02:10,480

past being

1601  
01:02:16,789 --> 01:02:11,680

[Music]

1602  
01:02:21,270 --> 01:02:19,109  
and so

1603  
01:02:22,870 --> 01:02:21,280  
so as a physicist i find that harder to

1604  
01:02:24,789 --> 01:02:22,880  
accept than the extraterrestrial

1605  
01:02:27,029 --> 01:02:24,799  
hypothesis or the idea that there are

1606  
01:02:28,710 --> 01:02:27,039  
non-humans living here

1607  
01:02:30,309 --> 01:02:28,720  
um

1608  
01:02:33,349 --> 01:02:30,319  
and i and i

1609  
01:02:35,270 --> 01:02:33,359  
and in that spirit i also find the

1610  
01:02:37,270 --> 01:02:35,280  
multiple dimensions to be even less

1611  
01:02:38,950 --> 01:02:37,280  
probable so

1612  
01:02:40,309 --> 01:02:38,960  
so

1613  
01:02:41,670 --> 01:02:40,319

no that's interesting i think that's

1614

01:02:43,349 --> 01:02:41,680

like you said all things need to be on

1615

01:02:46,069 --> 01:02:43,359

the table until we

1616

01:02:47,029 --> 01:02:46,079

can answer something definitively so

1617

01:02:50,390 --> 01:02:47,039

yeah

1618

01:02:53,270 --> 01:02:50,400

and then finally um ldn asks

1619

01:02:55,589 --> 01:02:53,280

at the recent aia conference in august

1620

01:02:57,990 --> 01:02:55,599

one of your slides featured a flea video

1621

01:03:00,470 --> 01:02:58,000

by david mason showing a trey foil

1622

01:03:02,150 --> 01:03:00,480

shaped object following a jet airplane

1623

01:03:03,670 --> 01:03:02,160

can you give us more details on that

1624

01:03:06,390 --> 01:03:03,680

video

1625

01:03:09,109 --> 01:03:06,400

right yeah we have this we um david

1626

01:03:13,589 --> 01:03:09,119

mason when he when he was with you apx

1627

01:03:15,430 --> 01:03:13,599

or before he was with you apx he had um

1628

01:03:18,069 --> 01:03:15,440

he was experimenting with his flare

1629

01:03:20,630 --> 01:03:18,079

cameras and had captured he's actually

1630

01:03:23,750 --> 01:03:20,640

captured multiple uaps

1631

01:03:25,430 --> 01:03:23,760

and um that video is is

1632

01:03:29,990 --> 01:03:25,440

one example

1633

01:03:31,109 --> 01:03:30,000

that we looked at closely at uapx and it

1634

01:03:33,670 --> 01:03:31,119

is

1635

01:03:36,150 --> 01:03:33,680

so we so you have in the video you have

1636

01:03:38,950 --> 01:03:36,160

a um i can probably show it still of

1637

01:03:43,670 --> 01:03:38,960

that of the image from that if i can

1638

01:03:51,349 --> 01:03:47,750

yeah so in that video you have a

1639

01:03:53,750 --> 01:03:51,359

jet airplane that is flying over

1640

01:03:55,349 --> 01:03:53,760

um overhead

1641

01:03:57,589 --> 01:03:55,359

and we know

1642

01:03:59,670 --> 01:03:57,599

we know what pat that it's a passenger

1643

01:04:02,309 --> 01:03:59,680

jet and we know what

1644

01:04:04,549 --> 01:04:02,319

company and what flight it is even

1645

01:04:07,670 --> 01:04:04,559

we are able to figure that out

1646

01:04:11,510 --> 01:04:07,680

and it's but it's being followed by a

1647

01:04:17,470 --> 01:04:14,950

which is really interesting so

1648

01:04:20,789 --> 01:04:17,480

and it's interesting because i at the

1649

01:04:23,750 --> 01:04:20,799

aia conference where i

1650

01:04:24,870 --> 01:04:23,760

talked about this and and presented that

1651  
01:04:27,270 --> 01:04:24,880  
imagery

1652  
01:04:29,510 --> 01:04:27,280  
um i had

1653  
01:04:32,069 --> 01:04:29,520  
also seen

1654  
01:04:37,190 --> 01:04:35,190  
the talk by um

1655  
01:04:39,829 --> 01:04:37,200  
i talked that ted gave and he talked

1656  
01:04:41,589 --> 01:04:39,839  
about he was talking about air safety

1657  
01:04:43,270 --> 01:04:41,599  
and he was talking about

1658  
01:04:46,870 --> 01:04:43,280  
shadowing

1659  
01:04:49,829 --> 01:04:46,880  
where they were uaps often shadow shadow

1660  
01:04:52,710 --> 01:04:51,190  
i think is that the video there that

1661  
01:04:54,390 --> 01:04:52,720  
i've got up on the screen

1662  
01:04:55,430 --> 01:04:54,400  
oh do you have the video on the screen

1663  
01:04:58,470 --> 01:04:55,440

let's see

1664

01:04:59,270 --> 01:04:58,480

that is the video yeah so that's the uap

1665

01:05:00,789 --> 01:04:59,280

there

1666

01:05:01,990 --> 01:05:00,799

and it was actually picked up on two

1667

01:05:03,750 --> 01:05:02,000

cameras

1668

01:05:04,710 --> 01:05:03,760

right

1669

01:05:06,309 --> 01:05:04,720

wow

1670

01:05:08,069 --> 01:05:06,319

right and it's a

1671

01:05:10,390 --> 01:05:08,079

yeah when you zoom in on that it's a

1672

01:05:11,910 --> 01:05:10,400

trefoil shaped object i like to joke

1673

01:05:14,710 --> 01:05:11,920

that it looks like a

1674

01:05:16,150 --> 01:05:14,720

klington bird of prey

1675

01:05:17,589 --> 01:05:16,160

um although i

1676

01:05:18,620 --> 01:05:17,599

certainly hope it's not something like

1677

01:05:21,990 --> 01:05:18,630

that

1678

01:05:23,190 --> 01:05:22,000

[Laughter]

1679

01:05:24,870 --> 01:05:23,200

to the fact that it's following a

1680

01:05:25,990 --> 01:05:24,880

passenger jet

1681

01:05:27,670 --> 01:05:26,000

um

1682

01:05:29,510 --> 01:05:27,680

and when you when you look at that video

1683

01:05:31,510 --> 01:05:29,520

you realize a few things that airplane

1684

01:05:33,349 --> 01:05:31,520

is very bright which the color scale

1685

01:05:35,029 --> 01:05:33,359

tells the temperature so the airplane is

1686

01:05:37,109 --> 01:05:35,039

quite warm

1687

01:05:39,510 --> 01:05:37,119

the thermodynamics of our machines is

1688

01:05:41,349 --> 01:05:39,520

such that they are hot they're always

1689

01:05:43,109 --> 01:05:41,359

there's always waste heat

1690

01:05:45,589 --> 01:05:43,119

you're going to pick that up in infrared

1691

01:05:47,430 --> 01:05:45,599

and that really shows up when you have

1692

01:05:48,470 --> 01:05:47,440

drones and airplanes and things like

1693

01:05:50,630 --> 01:05:48,480

this

1694

01:05:53,349 --> 01:05:50,640

what's interesting about uap is is they

1695

01:05:55,430 --> 01:05:53,359

don't have waste heat very often or

1696

01:05:57,190 --> 01:05:55,440

they're or they're at least very cold

1697

01:06:00,150 --> 01:05:57,200

you know whether this is because they've

1698

01:06:01,910 --> 01:06:00,160

just come in from outer space or what

1699

01:06:03,510 --> 01:06:01,920

but they're not heating up when we're

1700

01:06:04,870 --> 01:06:03,520

entering the atmosphere either so

1701  
01:06:09,029 --> 01:06:04,880  
there's

1702  
01:06:10,230 --> 01:06:09,039  
anomalous they're anomalous in multiple

1703  
01:06:11,910 --> 01:06:10,240  
ways

1704  
01:06:13,990 --> 01:06:11,920  
and that's another way in which they're

1705  
01:06:16,710 --> 01:06:14,000  
anomalous so that trefoil shaped object

1706  
01:06:19,270 --> 01:06:16,720  
is about 60 degrees below zero

1707  
01:06:20,630 --> 01:06:19,280  
right and you can see that in the video

1708  
01:06:22,230 --> 01:06:20,640  
and that is

1709  
01:06:24,309 --> 01:06:22,240  
you know the same temperature on the two

1710  
01:06:26,150 --> 01:06:24,319  
cameras so the plane was picked the

1711  
01:06:28,789 --> 01:06:26,160  
airplane was picked up on one camera but

1712  
01:06:34,789 --> 01:06:28,799  
the uap was picked up on two cameras

1713  
01:06:38,470 --> 01:06:36,390

wow that's incredible i'll actually have

1714

01:06:39,670 --> 01:06:38,480

the link for that video i just showed um

1715

01:06:41,670 --> 01:06:39,680

from the conference i'll put it in the

1716

01:06:43,910 --> 01:06:41,680

description below so anybody can go and

1717

01:06:45,270 --> 01:06:43,920

check it out for themselves um but yeah

1718

01:06:46,710 --> 01:06:45,280

i found that very interesting because

1719

01:06:48,309 --> 01:06:46,720

videos like that you know you'd think

1720

01:06:50,230 --> 01:06:48,319

would be in the public domain like we

1721

01:06:52,950 --> 01:06:50,240

see the navy videos so

1722

01:06:54,150 --> 01:06:52,960

yeah that's really interesting

1723

01:06:55,990 --> 01:06:54,160

so

1724

01:06:58,069 --> 01:06:56,000

well kevin we've gone over the hour mark

1725

01:06:59,750 --> 01:06:58,079

um i just is there anything you wanted

1726

01:07:01,829 --> 01:06:59,760

to discuss before we leave or anything

1727

01:07:03,270 --> 01:07:01,839

you want to you want to finish on oh

1728

01:07:05,829 --> 01:07:03,280

um

1729

01:07:09,029 --> 01:07:05,839

no i mean i could talk for 10 hours on

1730

01:07:14,870 --> 01:07:09,039

this and and i i have unfortunately at

1731

01:07:17,510 --> 01:07:16,150

have you got anything coming up in the

1732

01:07:19,829 --> 01:07:17,520

near future or in the new year or

1733

01:07:21,910 --> 01:07:19,839

anything you're working towards

1734

01:07:25,349 --> 01:07:21,920

you know anything we can look out for

1735

01:07:30,710 --> 01:07:25,359

um let's see yes i am

1736

01:07:35,349 --> 01:07:32,390

yeah well i think what's what we can

1737

01:07:37,670 --> 01:07:35,359

look forward to is the um

1738

01:07:40,150 --> 01:07:37,680

our

1739

01:07:42,150 --> 01:07:40,160

clear imagery that we've recorded um

1740

01:07:43,910 --> 01:07:42,160

coming out making us making that public

1741

01:07:45,829 --> 01:07:43,920

when we when we

1742

01:07:47,270 --> 01:07:45,839

after we've gone through it all

1743

01:07:49,670 --> 01:07:47,280

because we did find some interesting

1744

01:07:52,309 --> 01:07:49,680

things which is great great fun

1745

01:07:54,150 --> 01:07:52,319

classic yeah that's very exciting and i

1746

01:07:56,069 --> 01:07:54,160

understand that these things can't be

1747

01:07:57,029 --> 01:07:56,079

really discussed or disclosed until it's

1748

01:07:59,349 --> 01:07:57,039

been fully

1749

01:08:01,510 --> 01:07:59,359

analyzed and things like that so yeah i

1750

01:08:03,589 --> 01:08:01,520

respect that completely well finally i

1751

01:08:05,349 --> 01:08:03,599

just got to say a huge thank you so much

1752

01:08:07,349 --> 01:08:05,359

for for joining me today and having this

1753

01:08:09,349 --> 01:08:07,359

discussion it was fascinating and you

1754

01:08:10,950 --> 01:08:09,359

know maybe a few months down the line if

1755

01:08:12,230 --> 01:08:10,960

things change and pick up you you'd come

1756

01:08:13,910 --> 01:08:12,240

back and we'll uh

1757

01:08:15,910 --> 01:08:13,920

talk about what's going on once we once

1758

01:08:17,669 --> 01:08:15,920

we've gone through our videos i'm happy

1759

01:08:18,470 --> 01:08:17,679

to talk about what we found and what we

1760

01:08:20,470 --> 01:08:18,480

saw

1761

01:08:22,390 --> 01:08:20,480

that would be fantastic well kevin stay

1762

01:08:25,269 --> 01:08:22,400

in touch my friend enjoy the rest of

1763

01:08:27,189 --> 01:08:25,279

your day and uh yeah thank you so much

1764

01:08:30,950 --> 01:08:27,199

okay thank you for having me thank you

1765

01:08:34,709 --> 01:08:32,630

hey guys everyone that's been watching

1766

01:08:36,390 --> 01:08:34,719

thank you so much for being here in the

1767

01:08:40,630 --> 01:08:36,400

chat thank you for the for the kind

1768

01:08:43,030 --> 01:08:40,640

donations so much appreciated and yeah