

**MARC
D'ANTONIO
&
TED ROE**

#469



1
00:00:59,830 --> 00:00:22,450

[Music]

2
00:01:03,990 --> 00:01:01,430

hello and welcome to the show i'm martin

3
00:01:05,990 --> 00:01:04,000

willis your host and we have a i think

4
00:01:08,870 --> 00:01:06,000

we have a great show tonight we it's

5
00:01:10,550 --> 00:01:08,880

packed full we have avilobe coming up uh

6
00:01:11,910 --> 00:01:10,560

we have my friend mark d'antonio i'm

7
00:01:12,870 --> 00:01:11,920

actually going to bring them both on

8
00:01:13,910 --> 00:01:12,880

together

9
00:01:15,910 --> 00:01:13,920

because we're going to be talking about

10
00:01:17,910 --> 00:01:15,920

the galileo project i'm pretty excited

11
00:01:18,630 --> 00:01:17,920

about talking about that

12
00:01:21,270 --> 00:01:18,640

and

13
00:01:23,510 --> 00:01:21,280

we can all help with this too this is uh

14

00:01:25,590 --> 00:01:23,520

something i was alerted um for i was on

15

00:01:27,910 --> 00:01:25,600

a podcast a while back the basement

16

00:01:29,910 --> 00:01:27,920

hangout with some real fun guys i

17

00:01:31,830 --> 00:01:29,920

suggest anyone check that out they do a

18

00:01:33,830 --> 00:01:31,840

lot of ufo things

19

00:01:36,870 --> 00:01:33,840

chad and bob over there and they said

20

00:01:38,390 --> 00:01:36,880

hey avi's just set up this funding where

21

00:01:40,469 --> 00:01:38,400

anybody can fund because it's real

22

00:01:42,069 --> 00:01:40,479

tricky when it comes to harvard

23

00:01:43,990 --> 00:01:42,079

funding harvard it has to be a fifty

24

00:01:46,469 --> 00:01:44,000

thousand dollar donor or above and they

25

00:01:47,990 --> 00:01:46,479

have to be vetted um but there's a kind

26

00:01:49,830 --> 00:01:48,000

of a workaround then i'm gonna be

27

00:01:52,389 --> 00:01:49,840

talking to avi about that where anyone

28

00:01:54,469 --> 00:01:52,399

can pitch in and i plan to and i hope i

29

00:01:55,749 --> 00:01:54,479

hope more people can help because we're

30

00:01:58,950 --> 00:01:55,759

going to talk a little bit about that

31

00:02:00,149 --> 00:01:58,960

and the process of what avi is trying to

32

00:02:03,109 --> 00:02:00,159

do

33

00:02:04,709 --> 00:02:03,119

um so i also have ted rowe uh coming in

34

00:02:07,590 --> 00:02:04,719

as well and he's going to be talking

35

00:02:09,990 --> 00:02:07,600

about some interesting things with nasa

36

00:02:12,070 --> 00:02:10,000

and well actually

37

00:02:14,949 --> 00:02:12,080

aeronautics research and aviation

38

00:02:17,670 --> 00:02:14,959

research in the uap taking it

39

00:02:21,750 --> 00:02:17,680

scientifically more on that so

40

00:02:24,710 --> 00:02:21,760

um i also i do want to say that uh last

41

00:02:26,710 --> 00:02:24,720

week i had a guest on and i was talking

42

00:02:29,430 --> 00:02:26,720

about uh working with a really good

43

00:02:32,390 --> 00:02:29,440

friend of mine and how he's an antique

44

00:02:34,150 --> 00:02:32,400

guy and he works like crazy anyway uh

45

00:02:35,589 --> 00:02:34,160

another friend of mine who actually

46

00:02:37,110 --> 00:02:35,599

works with him

47

00:02:39,830 --> 00:02:37,120

send me a text and i want to give a

48

00:02:41,830 --> 00:02:39,840

shout out to dalton meter

49

00:02:43,990 --> 00:02:41,840

dan meter a good friend of mine works

50

00:02:46,869 --> 00:02:44,000

like crazy too and he he was listening

51
00:02:48,470 --> 00:02:46,879
in atlanta he said that sounds just like

52
00:02:50,550 --> 00:02:48,480
my uncle

53
00:02:53,270 --> 00:02:50,560
dan i wonder

54
00:02:54,790 --> 00:02:53,280
if he's talking about dan so he texts

55
00:02:56,710 --> 00:02:54,800
his uncle and said

56
00:02:58,710 --> 00:02:56,720
i do you happen to know a guy named

57
00:03:00,630 --> 00:02:58,720
martin willis and dan and i have known

58
00:03:03,270 --> 00:03:00,640
each other for years anyway little shout

59
00:03:05,750 --> 00:03:03,280
out to him it's kind of funny how

60
00:03:07,670 --> 00:03:05,760
uh you know one thing antiques and ufos

61
00:03:10,550 --> 00:03:07,680
somehow goes together sometimes i don't

62
00:03:12,869 --> 00:03:10,560
know exactly why ancient aliens maybe i

63
00:03:15,270 --> 00:03:12,879

don't know uh what that's about but

64

00:03:18,149 --> 00:03:15,280

anyway uh the blog written by charles

65

00:03:20,390 --> 00:03:18,159

lear as every week is a ufo flap in

66

00:03:22,470 --> 00:03:20,400

virginia 1965

67

00:03:25,190 --> 00:03:22,480

and that's another fascinating one

68

00:03:28,149 --> 00:03:25,200

remember all these go into audio blogs

69

00:03:31,110 --> 00:03:28,159

uh about the end of the week or first of

70

00:03:32,630 --> 00:03:31,120

the next week uh he's a real busy guy he

71

00:03:34,550 --> 00:03:32,640

just moved back across country to new

72

00:03:36,710 --> 00:03:34,560

york and he's still writing these blogs

73

00:03:39,910 --> 00:03:36,720

and doing the audio blogs and thank you

74

00:03:42,630 --> 00:03:39,920

for that charles so um i think i want to

75

00:03:44,070 --> 00:03:42,640

jump right in and bring our guests avi

76

00:03:46,470 --> 00:03:44,080

loeb harvard

77

00:03:48,070 --> 00:03:46,480

rv loeb and to talk about the galileo

78

00:03:50,710 --> 00:03:48,080

project and also

79

00:03:53,830 --> 00:03:50,720

mark how are you guys

80

00:03:55,710 --> 00:03:53,840

thanks for having us likewise yeah

81

00:03:58,550 --> 00:03:55,720

yeah avi you have done

82

00:04:00,550 --> 00:03:58,560

1100 interviews

83

00:04:02,470 --> 00:04:00,560

and you are on you were on with i was on

84

00:04:05,990 --> 00:04:02,480

the same podcast the week before with

85

00:04:08,470 --> 00:04:06,000

chad and bob uh really fun fun guys and

86

00:04:10,949 --> 00:04:08,480

they they were hilarious talking to you

87

00:04:14,390 --> 00:04:10,959

they dared to ask really silly questions

88

00:04:15,910 --> 00:04:14,400

like is his bigfoot next

89

00:04:17,990 --> 00:04:15,920

well i i don't think there are silly

90

00:04:19,030 --> 00:04:18,000

questions so usually there's the answers

91

00:04:23,270 --> 00:04:19,040

but

92

00:04:25,270 --> 00:04:23,280

things i i know it was a while since you

93

00:04:27,909 --> 00:04:25,280

were on but one of the things i really

94

00:04:30,870 --> 00:04:27,919

really like your approach because

95

00:04:32,310 --> 00:04:30,880

it's how all things really are created

96

00:04:34,150 --> 00:04:32,320

in the world if you think about it you

97

00:04:35,590 --> 00:04:34,160

have to act like a child with an

98

00:04:37,270 --> 00:04:35,600

imagination

99

00:04:38,870 --> 00:04:37,280

and i was watching something on the

100

00:04:41,110 --> 00:04:38,880

creative brain it was called something

101
00:04:44,070 --> 00:04:41,120
like that a documentary and how people

102
00:04:47,030 --> 00:04:44,080
have to think so outside of the box

103
00:04:48,550 --> 00:04:47,040
and one of the architects there said hey

104
00:04:49,590 --> 00:04:48,560
you know picture of the empire state

105
00:04:51,430 --> 00:04:49,600
building

106
00:04:53,270 --> 00:04:51,440
just picture it it's always been there

107
00:04:54,870 --> 00:04:53,280
as far as we know you know but someone

108
00:04:56,550 --> 00:04:54,880
had to think that up

109
00:04:58,629 --> 00:04:56,560
someone had to think that design up you

110
00:05:00,469 --> 00:04:58,639
know it always starts from a thought

111
00:05:02,550 --> 00:05:00,479
everything starts from a thought right

112
00:05:04,870 --> 00:05:02,560
imagination and some you know some

113
00:05:06,790 --> 00:05:04,880

defenders of science are actually

114

00:05:09,029 --> 00:05:06,800

hurting it because they are not paying

115

00:05:11,510 --> 00:05:09,039

attention to unusual evidence

116

00:05:14,070 --> 00:05:11,520

and unconventional ideas eventually

117

00:05:16,870 --> 00:05:14,080

become conventional look at the

118

00:05:19,670 --> 00:05:16,880

the lab leak theory about covid you know

119

00:05:21,430 --> 00:05:19,680

a year ago it was laughed at and now the

120

00:05:23,110 --> 00:05:21,440

biden administration is about to get a

121

00:05:26,150 --> 00:05:23,120

report

122

00:05:27,909 --> 00:05:26,160

any minute uh about it there's a serious

123

00:05:29,749 --> 00:05:27,919

matter and

124

00:05:31,510 --> 00:05:29,759

it just illustrates that we should be

125

00:05:34,790 --> 00:05:31,520

guided by evidence we should keep our

126

00:05:37,029 --> 00:05:34,800

eyes on the ball not on the audience

127

00:05:39,510 --> 00:05:37,039

right and i i heard you say that on

128

00:05:41,350 --> 00:05:39,520

their podcast i'm wearing neil

129

00:05:43,430 --> 00:05:41,360

degrasse tyson's shirt

130

00:05:45,670 --> 00:05:43,440

it's all stardust a very good close

131

00:05:47,590 --> 00:05:45,680

friend of mine gave this to me but um

132

00:05:49,670 --> 00:05:47,600

and i heard what you said

133

00:05:51,189 --> 00:05:49,680

um and i've i've given him a little bit

134

00:05:53,270 --> 00:05:51,199

of criticism because of the way he

135

00:05:54,550 --> 00:05:53,280

treats the ufo topic

136

00:05:55,909 --> 00:05:54,560

with

137

00:05:57,430 --> 00:05:55,919

such ridicule

138

00:06:00,309 --> 00:05:57,440

and basically

139

00:06:02,790 --> 00:06:00,319

i like what you said you said he is

140

00:06:04,790 --> 00:06:02,800

addressing an audience not science right

141

00:06:08,309 --> 00:06:04,800

he cares a lot about the number of likes

142

00:06:10,070 --> 00:06:08,319

he gets on twitter and the point is that

143

00:06:11,430 --> 00:06:10,080

you know that's not the way science

144

00:06:13,110 --> 00:06:11,440

should be guided science should be

145

00:06:14,550 --> 00:06:13,120

guided by evidence and you know

146

00:06:16,469 --> 00:06:14,560

especially when you see something

147

00:06:18,629 --> 00:06:16,479

unusual it should be intriguing you

148

00:06:20,710 --> 00:06:18,639

should be excited by it rather than

149

00:06:22,790 --> 00:06:20,720

ridiculing it because you want to stay

150

00:06:25,510 --> 00:06:22,800

in your comfort zone that's the wrong

151
00:06:27,990 --> 00:06:25,520
attitude and i think anyone that is used

152
00:06:31,350 --> 00:06:28,000
to making discoveries in science or

153
00:06:33,270 --> 00:06:31,360
innovating and taking risks you know

154
00:06:35,990 --> 00:06:33,280
would admit that

155
00:06:37,670 --> 00:06:36,000
you must allow for the evidence to guide

156
00:06:39,830 --> 00:06:37,680
you rather than assuming that you know

157
00:06:41,670 --> 00:06:39,840
the answer in advance because then it's

158
00:06:44,150 --> 00:06:41,680
a self-fulfilling prophecy you will not

159
00:06:47,029 --> 00:06:44,160
collect the data that would allow you to

160
00:06:48,390 --> 00:06:47,039
learn something new and that's a very

161
00:06:50,629 --> 00:06:48,400
simple idea

162
00:06:53,029 --> 00:06:50,639
nevertheless people have a hard time

163
00:06:55,029 --> 00:06:53,039

accepting it you know starting from the

164

00:06:56,150 --> 00:06:55,039

philosophers during the days of galileo

165

00:06:58,390 --> 00:06:56,160

that refused to look through his

166

00:07:00,550 --> 00:06:58,400

telescope because they knew that the sun

167

00:07:02,629 --> 00:07:00,560

moves around the earth and

168

00:07:05,430 --> 00:07:02,639

you know even a month ago there was an

169

00:07:08,070 --> 00:07:05,440

article in the nature mag astronomy

170

00:07:10,230 --> 00:07:08,080

magazine by a philosopher arguing that

171

00:07:13,110 --> 00:07:10,240

omumua this strange object that was

172

00:07:15,990 --> 00:07:13,120

discovered in 2017 didn't look like a

173

00:07:18,550 --> 00:07:16,000

comet or an asteroid that strange object

174

00:07:20,629 --> 00:07:18,560

must be natural he said this

175

00:07:22,070 --> 00:07:20,639

philosopher and i thought to myself

176

00:07:24,230 --> 00:07:22,080

haven't we learned something over the

177

00:07:26,710 --> 00:07:24,240

past four centuries

178

00:07:28,390 --> 00:07:26,720

right now i'm going to have mark ask you

179

00:07:31,189 --> 00:07:28,400

like the real nitty gritty of the

180

00:07:34,469 --> 00:07:31,199

galileo project as far as the technology

181

00:07:36,309 --> 00:07:34,479

uh mark has actually worked on uh for a

182

00:07:38,390 --> 00:07:36,319

number of years on something i don't

183

00:07:41,830 --> 00:07:38,400

want to say similar but he he knows

184

00:07:43,670 --> 00:07:41,840

enough to ask uh the right questions but

185

00:07:45,110 --> 00:07:43,680

before that i just wanted to address one

186

00:07:47,830 --> 00:07:45,120

quick thing and that i was kind of

187

00:07:49,749 --> 00:07:47,840

surprised to see that seth shaw stack

188

00:07:51,430 --> 00:07:49,759

from seti was part of the team

189

00:07:54,629 --> 00:07:51,440

seth shawsak is also someone that

190

00:07:56,950 --> 00:07:54,639

ridicules um you know the idea of ufos

191

00:07:58,550 --> 00:07:56,960

uh the possibility that they could be

192

00:08:00,230 --> 00:07:58,560

extraterrestrial here on this show i

193

00:08:02,629 --> 00:08:00,240

never say that i know they're

194

00:08:04,790 --> 00:08:02,639

extraterrestrial because i don't but he

195

00:08:05,589 --> 00:08:04,800

just even the thought of it he just goes

196

00:08:07,990 --> 00:08:05,599

well

197

00:08:10,710 --> 00:08:08,000

so apparently he changed the his

198

00:08:12,550 --> 00:08:10,720

attitude by 180 degrees because he wrote

199

00:08:14,950 --> 00:08:12,560

the scientific american article where he

200

00:08:17,830 --> 00:08:14,960

supports the galileo project now he's

201
00:08:20,230 --> 00:08:17,840
not a member of the research team he's a

202
00:08:21,029 --> 00:08:20,240
member of the scientific advisory board

203
00:08:22,309 --> 00:08:21,039
and

204
00:08:23,990 --> 00:08:22,319
you know we

205
00:08:24,869 --> 00:08:24,000
in the research team are following a

206
00:08:27,909 --> 00:08:24,879
path

207
00:08:29,909 --> 00:08:27,919
uh that we can talk about that involves

208
00:08:32,469 --> 00:08:29,919
selecting instruments and then testing

209
00:08:34,469 --> 00:08:32,479
them and eventually taking data he is

210
00:08:37,750 --> 00:08:34,479
more of an advisory

211
00:08:39,509 --> 00:08:37,760
uh in an advisory capacity and right now

212
00:08:42,709 --> 00:08:39,519
he's quite supportive of what we are

213
00:08:44,389 --> 00:08:42,719

doing so that that illustrates the the

214

00:08:46,150 --> 00:08:44,399

fact that you know people can change

215

00:08:47,509 --> 00:08:46,160

their views and you shouldn't pay too

216

00:08:49,990 --> 00:08:47,519

much attention to what they say you

217

00:08:52,070 --> 00:08:50,000

should be guided by the desire to get

218

00:08:53,750 --> 00:08:52,080

more data more evidence

219

00:08:55,509 --> 00:08:53,760

yeah and i know funding is a big part of

220

00:08:57,350 --> 00:08:55,519

that and that's always something he's

221

00:08:58,630 --> 00:08:57,360

afraid of and we'll talk more about that

222

00:09:00,070 --> 00:08:58,640

in a minute but mark do you have a

223

00:09:02,710 --> 00:09:00,080

question for

224

00:09:04,710 --> 00:09:02,720

for avi yeah well actually uh it's great

225

00:09:06,150 --> 00:09:04,720

to see you again avi um

226

00:09:08,070 --> 00:09:06,160

when we were

227

00:09:09,910 --> 00:09:08,080

you know in the past few months i

228

00:09:11,509 --> 00:09:09,920

implemented a remote observatory out in

229

00:09:13,190 --> 00:09:11,519

the arizona desert

230

00:09:14,630 --> 00:09:13,200

uh and i run it from here i'm in

231

00:09:17,430 --> 00:09:14,640

connecticut so

232

00:09:19,750 --> 00:09:17,440

it's 2500 miles away i can access it and

233

00:09:20,630 --> 00:09:19,760

work with it take imagery and so forth

234

00:09:22,070 --> 00:09:20,640

um

235

00:09:24,230 --> 00:09:22,080

it's a wide wide-angle

236

00:09:26,710 --> 00:09:24,240

view so i get you know like a two degree

237

00:09:28,470 --> 00:09:26,720

field so it's kind of interesting um and

238

00:09:30,949 --> 00:09:28,480

that telescope behind me right there is

239

00:09:32,389 --> 00:09:30,959

actually for this observatory here in

240

00:09:34,310 --> 00:09:32,399

connecticut we're making a new building

241

00:09:36,630 --> 00:09:34,320

so we have two that are going to run on

242

00:09:39,110 --> 00:09:36,640

the east and west coast right so my

243

00:09:40,230 --> 00:09:39,120

question becomes

244

00:09:45,190 --> 00:09:40,240

what

245

00:09:47,750 --> 00:09:45,200

planning to use for galileo right

246

00:09:49,990 --> 00:09:47,760

so we plan to have it

247

00:09:51,990 --> 00:09:50,000

each telescope system will have a few

248

00:09:53,509 --> 00:09:52,000

telescopes so that we can get a parallax

249

00:09:56,230 --> 00:09:53,519

in other words see the object from

250

00:09:57,829 --> 00:09:56,240

different directions to map its motion

251
00:09:58,630 --> 00:09:57,839
in three dimensions

252
00:09:59,430 --> 00:09:58,640
uh

253
00:10:01,430 --> 00:09:59,440
so

254
00:10:03,269 --> 00:10:01,440
those telescopes may not have high

255
00:10:06,710 --> 00:10:03,279
resolution they

256
00:10:09,269 --> 00:10:06,720
would potentially be able to uh resolve

257
00:10:12,230 --> 00:10:09,279
a feature the size of a cell phone

258
00:10:14,310 --> 00:10:12,240
on an object at the distance of a mile

259
00:10:15,269 --> 00:10:14,320
that roughly would be their resolution

260
00:10:18,310 --> 00:10:15,279
and

261
00:10:20,550 --> 00:10:18,320
that would allow us to track the motion

262
00:10:21,990 --> 00:10:20,560
of unusual objects of course if it looks

263
00:10:24,310 --> 00:10:22,000

like a bird

264

00:10:26,790 --> 00:10:24,320

then we don't care too much about it if

265

00:10:28,710 --> 00:10:26,800

it looks like a drone or an airplane we

266

00:10:31,030 --> 00:10:28,720

also don't care about it anything that

267

00:10:32,630 --> 00:10:31,040

is human made would be for us as boring

268

00:10:34,230 --> 00:10:32,640

as a bird

269

00:10:35,990 --> 00:10:34,240

and we you know i'm sure there are

270

00:10:38,230 --> 00:10:36,000

residents of washington dc that would

271

00:10:40,150 --> 00:10:38,240

care a lot about an object that says

272

00:10:42,310 --> 00:10:40,160

made in china made in russia but for us

273

00:10:44,069 --> 00:10:42,320

it's not really exciting and what we

274

00:10:45,430 --> 00:10:44,079

would look for are other types of

275

00:10:48,150 --> 00:10:45,440

objects now

276

00:10:50,470 --> 00:10:48,160

in order to be able to get a high higher

277

00:10:53,750 --> 00:10:50,480

resolution image we will need a bigger

278

00:10:56,150 --> 00:10:53,760

telescope within that system but all the

279

00:10:57,670 --> 00:10:56,160

data will be fed to state-of-the-art

280

00:11:00,790 --> 00:10:57,680

cameras that

281

00:11:02,790 --> 00:11:00,800

we are starting to test now and then

282

00:11:04,470 --> 00:11:02,800

the key is really the computer system

283

00:11:06,710 --> 00:11:04,480

that will uh

284

00:11:08,470 --> 00:11:06,720

filter objects of interest out of the

285

00:11:10,790 --> 00:11:08,480

data stream it will be a huge data

286

00:11:12,550 --> 00:11:10,800

stream that we can store but once we

287

00:11:16,310 --> 00:11:12,560

identify an object of interest we'll

288

00:11:18,870 --> 00:11:16,320

track it and collect data on it

289

00:11:21,910 --> 00:11:18,880

both from reflected sunlight during the

290

00:11:23,670 --> 00:11:21,920

day or from infrared emission during the

291

00:11:25,269 --> 00:11:23,680

night and day

292

00:11:28,150 --> 00:11:25,279

by the object you know if an object

293

00:11:31,750 --> 00:11:28,160

moves faster than sound in air it should

294

00:11:33,990 --> 00:11:31,760

heat up we know it from supersonic

295

00:11:37,269 --> 00:11:34,000

airplanes we know it from the

296

00:11:39,829 --> 00:11:37,279

the space shuttle uh they both got

297

00:11:41,509 --> 00:11:39,839

heated up by hundreds of degrees and

298

00:11:43,509 --> 00:11:41,519

that kind of temperature emits in the

299

00:11:45,910 --> 00:11:43,519

infrared and you can see it at night

300

00:11:47,670 --> 00:11:45,920

this glow this heat

301
00:11:49,269 --> 00:11:47,680
and then of course we'll have radar

302
00:11:52,550 --> 00:11:49,279
systems and

303
00:11:54,389 --> 00:11:52,560
look for radio reflection or emission by

304
00:11:56,710 --> 00:11:54,399
by the objects of interest and

305
00:11:58,150 --> 00:11:56,720
altogether we want to use multiple

306
00:12:00,150 --> 00:11:58,160
wavelengths and

307
00:12:01,829 --> 00:12:00,160
so that we can verify that it's a real

308
00:12:03,990 --> 00:12:01,839
object and it's it's not

309
00:12:06,310 --> 00:12:04,000
a phenomenon in the atmosphere it's not

310
00:12:07,910 --> 00:12:06,320
some weather pattern

311
00:12:10,629 --> 00:12:07,920
and that will take some time for us to

312
00:12:12,949 --> 00:12:10,639
build the software and to put together a

313
00:12:14,230 --> 00:12:12,959

set of instruments that we buy

314

00:12:16,629 --> 00:12:14,240

off the shelf

315

00:12:18,870 --> 00:12:16,639

uh so that it performs to our

316

00:12:21,509 --> 00:12:18,880

satisfaction once we have such a system

317

00:12:23,430 --> 00:12:21,519

in place then we will produce copies of

318

00:12:25,750 --> 00:12:23,440

it and the number of copies that we

319

00:12:27,990 --> 00:12:25,760

produce depends on the level of funding

320

00:12:30,710 --> 00:12:28,000

so as of now i received over the past

321

00:12:32,550 --> 00:12:30,720

month donations commitments for

322

00:12:33,670 --> 00:12:32,560

donations at the level of

323

00:12:36,069 --> 00:12:33,680

up to

324

00:12:39,269 --> 00:12:36,079

two million dollars and that would allow

325

00:12:40,710 --> 00:12:39,279

us to have perhaps 10 such systems

326

00:12:43,190 --> 00:12:40,720

that's not enough we did some

327

00:12:46,310 --> 00:12:43,200

calculations about the statistics of uap

328

00:12:48,389 --> 00:12:46,320

reports and we need more like a hundred

329

00:12:50,790 --> 00:12:48,399

or hundreds of substitutions so it's

330

00:12:53,110 --> 00:12:50,800

very good that you have one or two but

331

00:12:55,509 --> 00:12:53,120

but the point is it really needs to be

332

00:12:58,069 --> 00:12:55,519

hundreds in order to cover enough of the

333

00:13:00,870 --> 00:12:58,079

sky and have a high likelihood of seeing

334

00:13:04,790 --> 00:13:00,880

something of the type that was reported

335

00:13:07,030 --> 00:13:04,800

uh to congress and uh we hope to get the

336

00:13:09,190 --> 00:13:07,040

funded at the level that is 10 times

337

00:13:11,750 --> 00:13:09,200

bigger than we currently are

338

00:13:14,310 --> 00:13:11,760

and that's this the origin for this

339

00:13:16,550 --> 00:13:14,320

crowdfunding that we started we we hope

340

00:13:17,829 --> 00:13:16,560

to get up to 10 million 20 million

341

00:13:21,030 --> 00:13:17,839

dollars and then we can do a

342

00:13:22,949 --> 00:13:21,040

comprehensive study and and definitely

343

00:13:25,269 --> 00:13:22,959

the data will be open to the public

344

00:13:27,190 --> 00:13:25,279

everyone would be able to use it and

345

00:13:30,470 --> 00:13:27,200

analyze it so there will be nothing

346

00:13:33,269 --> 00:13:30,480

hidden and the the instruments that we

347

00:13:35,430 --> 00:13:33,279

will use will all be under full control

348

00:13:38,230 --> 00:13:35,440

there will not be like a camera in a

349

00:13:38,949 --> 00:13:38,240

jittery cockpit of a jet a fighter jet

350

00:13:40,550 --> 00:13:38,959

you know

351
00:13:41,509 --> 00:13:40,560
right there'll be control systems that

352
00:13:44,150 --> 00:13:41,519
can

353
00:13:46,389 --> 00:13:44,160
target specific locations

354
00:13:48,230 --> 00:13:46,399
and you might ask why astronomical

355
00:13:50,150 --> 00:13:48,240
observatories that exist right now that

356
00:13:52,389 --> 00:13:50,160
are looking at the sky never report

357
00:13:55,189 --> 00:13:52,399
about uap well the answer is simply if

358
00:13:57,590 --> 00:13:55,199
there is a bird flying above a telescope

359
00:13:59,910 --> 00:13:57,600
uh astronomers ignore it but we will

360
00:14:01,670 --> 00:13:59,920
monitor it we will track it well the

361
00:14:03,030 --> 00:14:01,680
other thing is too that usually those

362
00:14:05,030 --> 00:14:03,040
observatories are not wide angle

363
00:14:06,550 --> 00:14:05,040

observatories actually just like like a

364

00:14:09,110 --> 00:14:06,560

pencil point in the sky right so they're

365

00:14:10,470 --> 00:14:09,120

only looking at narrow ranges

366

00:14:12,710 --> 00:14:10,480

and so the likelihood of something

367

00:14:14,230 --> 00:14:12,720

passing through is it's very unlikely if

368

00:14:16,310 --> 00:14:14,240

you put a cork in a bathtub and look

369

00:14:19,430 --> 00:14:16,320

through a straw and try to find the cork

370

00:14:21,750 --> 00:14:19,440

you may never find it right no because

371

00:14:24,230 --> 00:14:21,760

you see that's exactly the reason that

372

00:14:26,470 --> 00:14:24,240

we decided after 70 years of people

373

00:14:28,550 --> 00:14:26,480

reporting about unusual objects you know

374

00:14:31,030 --> 00:14:28,560

and it may well be a mixed bag maybe

375

00:14:33,189 --> 00:14:31,040

most reports have some mundane

376

00:14:34,470 --> 00:14:33,199

explanations you know but we are sending

377

00:14:36,629 --> 00:14:34,480

our hooks

378

00:14:38,389 --> 00:14:36,639

and whatever fish we find it's like a

379

00:14:40,710 --> 00:14:38,399

fishing expedition we don't assume

380

00:14:42,550 --> 00:14:40,720

anything and we will report back

381

00:14:44,790 --> 00:14:42,560

whatever we find and

382

00:14:48,230 --> 00:14:44,800

maybe we will not find any interesting

383

00:14:50,710 --> 00:14:48,240

fish but um maybe we will and and we

384

00:14:52,389 --> 00:14:50,720

shouldn't assume anything yeah yeah

385

00:14:53,430 --> 00:14:52,399

working and still do with douglas

386

00:14:56,949 --> 00:14:53,440

trumbull

387

00:14:58,870 --> 00:14:56,959

visual effects guy and uh he and i were

388

00:15:00,870 --> 00:14:58,880

working on a project called the aerial

389

00:15:02,230 --> 00:15:00,880

anomaly detection system and of course

390

00:15:03,590 --> 00:15:02,240

it was all about funding we could not

391

00:15:05,269 --> 00:15:03,600

get the funding because when people

392

00:15:07,509 --> 00:15:05,279

heard the word ufo

393

00:15:09,269 --> 00:15:07,519

uh they just ran the other way you know

394

00:15:11,189 --> 00:15:09,279

so basically we had to change it to

395

00:15:13,110 --> 00:15:11,199

aerial anomaly detection system we just

396

00:15:15,110 --> 00:15:13,120

did that so who knows what will happen

397

00:15:17,269 --> 00:15:15,120

but again it's a series of platters with

398

00:15:19,509 --> 00:15:17,279

instrumentation because i think if you

399

00:15:20,389 --> 00:15:19,519

look in the sky in a broad view of the

400

00:15:22,069 --> 00:15:20,399

sky

401
00:15:23,910 --> 00:15:22,079
all right you should be able to detect

402
00:15:25,910 --> 00:15:23,920
something and we put them at various

403
00:15:28,150 --> 00:15:25,920
distances from each other

404
00:15:29,749 --> 00:15:28,160
laid out in threes for instance so they

405
00:15:32,310 --> 00:15:29,759
can triangulate positions overhead

406
00:15:33,509 --> 00:15:32,320
sounds similar thing to galileo

407
00:15:34,949 --> 00:15:33,519
but ours are

408
00:15:36,230 --> 00:15:34,959
ours might be movable they might be

409
00:15:37,990 --> 00:15:36,240
little platters that can actually be

410
00:15:39,670 --> 00:15:38,000
moved to different locations and then

411
00:15:41,829 --> 00:15:39,680
you just get that gps coordinate for

412
00:15:43,110 --> 00:15:41,839
that exact location and the other system

413
00:15:45,030 --> 00:15:43,120

will know and then you can triangulate

414

00:15:46,310 --> 00:15:45,040

to a pretty good degree yeah so we

415

00:15:47,990 --> 00:15:46,320

should we should learn from your

416

00:15:49,670 --> 00:15:48,000

experience that would be interesting for

417

00:15:51,430 --> 00:15:49,680

us to learn

418

00:15:53,990 --> 00:15:51,440

but i should say that

419

00:15:56,790 --> 00:15:54,000

the re the reason we have funding is

420

00:15:59,910 --> 00:15:56,800

simply because a number of donors

421

00:16:02,230 --> 00:15:59,920

came to the porch of my home and

422

00:16:04,949 --> 00:16:02,240

or contacted me these are people that

423

00:16:06,069 --> 00:16:04,959

have i haven't met more than a month ago

424

00:16:08,230 --> 00:16:06,079

they just

425

00:16:09,670 --> 00:16:08,240

read my book extraterrestrial they were

426

00:16:11,670 --> 00:16:09,680

intrigued by

427

00:16:13,749 --> 00:16:11,680

all the interviews that they gave and

428

00:16:16,470 --> 00:16:13,759

they had questions and then they decided

429

00:16:18,069 --> 00:16:16,480

that they are inspired by the vision and

430

00:16:19,590 --> 00:16:18,079

uh it's interesting that the funding

431

00:16:22,470 --> 00:16:19,600

came from the private sector you know

432

00:16:24,389 --> 00:16:22,480

from individuals that really care about

433

00:16:26,470 --> 00:16:24,399

this question and

434

00:16:29,269 --> 00:16:26,480

it's not as if this research will take

435

00:16:32,629 --> 00:16:29,279

away money from existing programs like

436

00:16:34,389 --> 00:16:32,639

the search for dark matter so i think

437

00:16:36,470 --> 00:16:34,399

the science community should support it

438

00:16:38,389 --> 00:16:36,480

because we are not taking funds away

439

00:16:40,629 --> 00:16:38,399

from anything that is done right now we

440

00:16:42,710 --> 00:16:40,639

are actually adding funds and moreover

441

00:16:45,749 --> 00:16:42,720

we are looking for evidence what else

442

00:16:48,470 --> 00:16:45,759

can be better for science than data and

443

00:16:51,030 --> 00:16:48,480

it just strikes me as strange if

444

00:16:53,990 --> 00:16:51,040

seeing some scientists um

445

00:16:56,470 --> 00:16:54,000

still uh pushing back against this

446

00:16:59,509 --> 00:16:56,480

project yeah you're right i mean the

447

00:17:02,150 --> 00:16:59,519

reticence the reticence to to to move

448

00:17:03,030 --> 00:17:02,160

forward with this type of thinking

449

00:17:04,710 --> 00:17:03,040

you know

450

00:17:06,069 --> 00:17:04,720

it goes back to when i was getting my

451
00:17:07,829 --> 00:17:06,079
astronomy degree i talked to the

452
00:17:09,750 --> 00:17:07,839
director of my observatory

453
00:17:11,510 --> 00:17:09,760
and i told him that i believe it's a

454
00:17:12,949 --> 00:17:11,520
populated universe that's what i i told

455
00:17:13,990 --> 00:17:12,959
him and he looked at me and he laughed

456
00:17:15,750 --> 00:17:14,000
at me and said

457
00:17:17,429 --> 00:17:15,760
come on get back in the observatory

458
00:17:19,350 --> 00:17:17,439
leave captain kirk to us that's what he

459
00:17:21,590 --> 00:17:19,360
said to me exactly well you know you

460
00:17:23,750 --> 00:17:21,600
know that was my experience as a kid

461
00:17:26,150 --> 00:17:23,760
that was the thing that i remember the

462
00:17:28,870 --> 00:17:26,160
most when i was a kid i used to sit at

463
00:17:31,029 --> 00:17:28,880

dinner with adults and i would ask a

464

00:17:32,710 --> 00:17:31,039

difficult question and the adults in the

465

00:17:35,029 --> 00:17:32,720

room would pretend that they know much

466

00:17:36,950 --> 00:17:35,039

more than they actually know that was

467

00:17:38,630 --> 00:17:36,960

response number one and the second

468

00:17:40,630 --> 00:17:38,640

response was when they didn't have a

469

00:17:41,750 --> 00:17:40,640

good answer they would simply dismiss

470

00:17:44,549 --> 00:17:41,760

the question

471

00:17:47,590 --> 00:17:44,559

and i must say that as a senior

472

00:17:49,190 --> 00:17:47,600

scientist i have a very similar feeling

473

00:17:50,870 --> 00:17:49,200

and that bothers me

474

00:17:53,590 --> 00:17:50,880

you know because science is supposed to

475

00:17:55,590 --> 00:17:53,600

be open-minded and based on evidence and

476

00:17:58,390 --> 00:17:55,600

you know it's exactly the same feeling

477

00:18:00,310 --> 00:17:58,400

as when i was a kid and i i will never

478

00:18:02,310 --> 00:18:00,320

surrender for that kind of an approach i

479

00:18:04,789 --> 00:18:02,320

mean it makes little sense the only way

480

00:18:06,390 --> 00:18:04,799

for us to learn something new is not to

481

00:18:09,669 --> 00:18:06,400

surrender to this

482

00:18:11,350 --> 00:18:09,679

uh pretension by the adults in the room

483

00:18:13,430 --> 00:18:11,360

so to speak because they don't really

484

00:18:15,510 --> 00:18:13,440

know what they are talking about i get a

485

00:18:16,630 --> 00:18:15,520

cute little time of being sorry martin

486

00:18:18,950 --> 00:18:16,640

i'll let you go on a second sorry

487

00:18:21,669 --> 00:18:18,960

apologize it's your show um

488

00:18:22,470 --> 00:18:21,679

i get accused all the time of of

489

00:18:23,590 --> 00:18:22,480

uh

490

00:18:25,830 --> 00:18:23,600

being someone who believes

491

00:18:26,549 --> 00:18:25,840

extraterrestrial life is out there and

492

00:18:28,870 --> 00:18:26,559

and

493

00:18:30,150 --> 00:18:28,880

okay accuse me i believe it is i i have

494

00:18:31,830 --> 00:18:30,160

no doubt and

495

00:18:33,990 --> 00:18:31,840

and i'm actually one of the few i think

496

00:18:35,750 --> 00:18:34,000

that that i i really don't have an

497

00:18:37,590 --> 00:18:35,760

arrogance about this

498

00:18:39,270 --> 00:18:37,600

science can be arrogant as you know

499

00:18:41,190 --> 00:18:39,280

right and that's because they have a

500

00:18:42,549 --> 00:18:41,200

feeling of for what they feel is right

501
00:18:44,789 --> 00:18:42,559
they know what they have their their

502
00:18:46,150 --> 00:18:44,799
their their dogma their

503
00:18:49,430 --> 00:18:46,160
their their

504
00:18:50,950 --> 00:18:49,440
uh their unabashed attention to their

505
00:18:53,270 --> 00:18:50,960
detail and their

506
00:18:56,150 --> 00:18:53,280
concepts or what your approach is the

507
00:18:58,230 --> 00:18:56,160
modest approach to assume that we exist

508
00:19:00,870 --> 00:18:58,240
conditional so many tens of billions of

509
00:19:03,029 --> 00:19:00,880
planets are similar in terms of surface

510
00:19:04,549 --> 00:19:03,039
temperature to those that on earth and

511
00:19:06,150 --> 00:19:04,559
uh why should we assume that we are

512
00:19:08,150 --> 00:19:06,160
special and unique why should we assume

513
00:19:10,630 --> 00:19:08,160

that the play is about us that we are

514

00:19:13,350 --> 00:19:10,640

the central actors we might be just like

515

00:19:15,350 --> 00:19:13,360

an ant among many ants on the sidewalk

516

00:19:18,070 --> 00:19:15,360

of the milky way galaxy you know and i

517

00:19:20,549 --> 00:19:18,080

think that is the modest approach so

518

00:19:23,029 --> 00:19:20,559

everyone else that claims otherwise is

519

00:19:24,710 --> 00:19:23,039

arrogant and they're cl yeah arrogant

520

00:19:26,950 --> 00:19:24,720

the arrogance of science has always

521

00:19:29,430 --> 00:19:26,960

bothered me and i just determined i will

522

00:19:31,909 --> 00:19:29,440

never be that guy

523

00:19:34,150 --> 00:19:31,919

you know stay open-minded yes you might

524

00:19:37,110 --> 00:19:34,160

be wrong but you know what be okay being

525

00:19:39,430 --> 00:19:37,120

wrong right i'm okay being disproven

526
00:19:41,510 --> 00:19:39,440
that's fine yeah but if we collect

527
00:19:44,390 --> 00:19:41,520
evidence there is nothing bad that can

528
00:19:46,870 --> 00:19:44,400
come out of it anyone that says

529
00:19:48,710 --> 00:19:46,880
let's not collect evidence is behaving

530
00:19:50,549 --> 00:19:48,720
just like those philosophers that refuse

531
00:19:52,470 --> 00:19:50,559
to look through the telescope of galileo

532
00:19:54,470 --> 00:19:52,480
and that's why we called it the galileo

533
00:19:56,230 --> 00:19:54,480
project that's a pretty good team i like

534
00:19:58,230 --> 00:19:56,240
that name too by the way that's a name

535
00:20:00,470 --> 00:19:58,240
for it that's my son's middle name and

536
00:20:02,710 --> 00:20:00,480
if galileo was around he would be

537
00:20:05,270 --> 00:20:02,720
a honorary member of our group i bet he

538
00:20:07,350 --> 00:20:05,280

would my son gabe his middle name

539

00:20:10,070 --> 00:20:07,360

galileo but by the way he would have

540

00:20:13,110 --> 00:20:10,080

been cancelled on social media today

541

00:20:15,510 --> 00:20:13,120

i'm pretty sure about that

542

00:20:16,470 --> 00:20:15,520

so i brought i brought ted in ted rosen

543

00:20:20,470 --> 00:20:16,480

here too

544

00:20:22,390 --> 00:20:20,480

ted does some great research um so but

545

00:20:24,549 --> 00:20:22,400

and you're welcome to chime in but i i

546

00:20:27,190 --> 00:20:24,559

just have a couple questions and one of

547

00:20:28,870 --> 00:20:27,200

them do those guys that show up on your

548

00:20:30,149 --> 00:20:28,880

door were they wearing black suits by

549

00:20:32,149 --> 00:20:30,159

chance

550

00:20:34,549 --> 00:20:32,159

that's a joke

551
00:20:37,190 --> 00:20:34,559
they were just humans that had questions

552
00:20:38,230 --> 00:20:37,200
about my book and very nice people very

553
00:20:40,149 --> 00:20:38,240
nice people

554
00:20:42,870 --> 00:20:40,159
and actually with one of them we went

555
00:20:44,710 --> 00:20:42,880
for a walk for three hours and uh so all

556
00:20:47,110 --> 00:20:44,720
together you know these are people that

557
00:20:49,909 --> 00:20:47,120
are really curious about the question of

558
00:20:51,190 --> 00:20:49,919
are we the smartest kid on the block and

559
00:20:53,430 --> 00:20:51,200
my point is

560
00:20:54,310 --> 00:20:53,440
now we have a channel for crowdfunding

561
00:20:58,789 --> 00:20:54,320
that

562
00:21:01,350 --> 00:20:58,799
are quite you know minimal

563
00:21:03,430 --> 00:21:01,360

the cost of a dinner are

564

00:21:05,430 --> 00:21:03,440

you know are are really welcome to

565

00:21:08,149 --> 00:21:05,440

contribute to the project and if we have

566

00:21:10,549 --> 00:21:08,159

enough of of such contributions we will

567

00:21:12,390 --> 00:21:10,559

be able to buy more more telescopes and

568

00:21:15,350 --> 00:21:12,400

it will be all about

569

00:21:16,950 --> 00:21:15,360

creating more copies of the same system

570

00:21:19,830 --> 00:21:16,960

so that we can distribute them around

571

00:21:22,470 --> 00:21:19,840

the globe and get more data on uap

572

00:21:24,230 --> 00:21:22,480

is this going to be like the wasp system

573

00:21:26,470 --> 00:21:24,240

at all it's different i mean we are

574

00:21:27,750 --> 00:21:26,480

building our own systems that have a

575

00:21:32,630 --> 00:21:27,760

different

576

00:21:34,870 --> 00:21:32,640

that's why you know it was never done

577

00:21:37,270 --> 00:21:34,880

before what we are doing so we we are we

578

00:21:38,870 --> 00:21:37,280

have a lot of discussions about that and

579

00:21:41,990 --> 00:21:38,880

of course there are some members of the

580

00:21:44,870 --> 00:21:42,000

research team that are that worked on on

581

00:21:45,750 --> 00:21:44,880

searching for exoplanets and

582

00:21:46,789 --> 00:21:45,760

um

583

00:21:47,830 --> 00:21:46,799

but the

584

00:21:51,190 --> 00:21:47,840

the

585

00:21:53,190 --> 00:21:51,200

different than astronomy in general

586

00:21:55,350 --> 00:21:53,200

because the objects we are tracing are

587

00:21:57,190 --> 00:21:55,360

moving on the sky quite fast now the

588

00:21:58,789 --> 00:21:57,200

second component of the project i should

589

00:22:00,710 --> 00:21:58,799

have mentioned he's also searching for

590

00:22:03,270 --> 00:22:00,720

objects like

591

00:22:04,950 --> 00:22:03,280

that are weird that came into the solar

592

00:22:06,310 --> 00:22:04,960

system from

593

00:22:08,549 --> 00:22:06,320

outside and

594

00:22:09,909 --> 00:22:08,559

do not look like a comet or an asteroid

595

00:22:11,750 --> 00:22:09,919

you know there was an interstellar

596

00:22:14,070 --> 00:22:11,760

object that looked just like a comet

597

00:22:17,350 --> 00:22:14,080

borisov and the

598

00:22:19,750 --> 00:22:17,360

omo was nothing like borisov so

599

00:22:22,630 --> 00:22:19,760

and and you know people that are claimed

600

00:22:24,789 --> 00:22:22,640

to be mainstream in astronomy they tried

601
00:22:26,710 --> 00:22:24,799
to explain the properties of a moomoo

602
00:22:28,630 --> 00:22:26,720
and only came up with

603
00:22:31,029 --> 00:22:28,640
uh types of objects that we've never

604
00:22:32,870 --> 00:22:31,039
seen before like a nitrogen iceberg a

605
00:22:34,149 --> 00:22:32,880
hydrogen iceberg and to me it always

606
00:22:35,909 --> 00:22:34,159
reminds me of

607
00:22:38,310 --> 00:22:35,919
you know a caveman that is presented

608
00:22:40,470 --> 00:22:38,320
with a cell phone and is used to playing

609
00:22:42,870 --> 00:22:40,480
with rocks the caveman would say it's

610
00:22:44,310 --> 00:22:42,880
just a shiny rock but of course it's the

611
00:22:46,549 --> 00:22:44,320
beginning of a learning experience

612
00:22:49,830 --> 00:22:46,559
because the caveman can press a button

613
00:22:52,549 --> 00:22:49,840

and then record his or her voice

614

00:22:56,149 --> 00:22:52,559

and press another button and record an

615

00:22:58,470 --> 00:22:56,159

image and and if we happen to get more

616

00:23:01,190 --> 00:22:58,480

data on an unusual

617

00:23:03,430 --> 00:23:01,200

rock quote-unquote we might be able to

618

00:23:05,590 --> 00:23:03,440

press some buttons there

619

00:23:07,669 --> 00:23:05,600

i have a couple of questions for you avi

620

00:23:08,549 --> 00:23:07,679

and the first one is

621

00:23:11,750 --> 00:23:08,559

um

622

00:23:14,070 --> 00:23:11,760

so this is being funded through harvard

623

00:23:16,470 --> 00:23:14,080

you're using um no it's private

624

00:23:18,549 --> 00:23:16,480

donations that were given to my research

625

00:23:20,310 --> 00:23:18,559

account through harvard because i cannot

626

00:23:22,950 --> 00:23:20,320

okay i cannot

627

00:23:24,630 --> 00:23:22,960

accept funds directly to me

628

00:23:26,950 --> 00:23:24,640

only through harvard because that's my

629

00:23:27,990 --> 00:23:26,960

employer and it goes straight to the

630

00:23:29,430 --> 00:23:28,000

project

631

00:23:32,149 --> 00:23:29,440

okay and

632

00:23:34,070 --> 00:23:32,159

did is they have no problem in doing

633

00:23:36,230 --> 00:23:34,080

this part of it oh so that was

634

00:23:37,909 --> 00:23:36,240

interesting i was asked before we

635

00:23:40,470 --> 00:23:37,919

announced the project

636

00:23:42,950 --> 00:23:40,480

whether it relates to my

637

00:23:44,950 --> 00:23:42,960

research as an astronomer because if not

638

00:23:46,870 --> 00:23:44,960

it would have been regarded as activity

639

00:23:49,750 --> 00:23:46,880

outside of the scope of my research at

640

00:23:51,750 --> 00:23:49,760

harvard and i explained that my duty as

641

00:23:54,710 --> 00:23:51,760

an astronomer and i have been practicing

642

00:23:56,870 --> 00:23:54,720

that for decades now is to interpret

643

00:23:58,470 --> 00:23:56,880

data that comes from telescopes that's

644

00:24:00,230 --> 00:23:58,480

what i do as an astronomer they agreed

645

00:24:02,470 --> 00:24:00,240

with that and then i said the only

646

00:24:05,269 --> 00:24:02,480

difference here is we use telescope but

647

00:24:07,750 --> 00:24:05,279

collect data on nearby objects now there

648

00:24:09,510 --> 00:24:07,760

is no restriction in astronomy to look

649

00:24:11,350 --> 00:24:09,520

at objects that are very far away there

650

00:24:13,830 --> 00:24:11,360

is no minimum distance you know we look

651
00:24:15,430 --> 00:24:13,840
at comets we look at meteors

652
00:24:18,070 --> 00:24:15,440
these are objects that come relatively

653
00:24:20,789 --> 00:24:18,080
nearby and omua for example came from

654
00:24:23,190 --> 00:24:20,799
very far away just approached us so it's

655
00:24:25,269 --> 00:24:23,200
still part of astronomy and they agreed

656
00:24:27,430 --> 00:24:25,279
with this reasoning they said yes it is

657
00:24:30,710 --> 00:24:27,440
astronomy even though you're looking at

658
00:24:33,029 --> 00:24:30,720
nearby objects so it there was no issue

659
00:24:35,750 --> 00:24:33,039
after i explained that it's regarded as

660
00:24:37,510 --> 00:24:35,760
part of my research and it's astronomy

661
00:24:39,110 --> 00:24:37,520
as far as i'm concerned

662
00:24:40,390 --> 00:24:39,120
and we will try and figure out the

663
00:24:42,390 --> 00:24:40,400

nature of these objects that are

664

00:24:44,630 --> 00:24:42,400

currently unidentified

665

00:24:46,950 --> 00:24:44,640

and you can all i know find these

666

00:24:51,269 --> 00:24:49,590

eventually classified as a potential

667

00:24:53,029 --> 00:24:51,279

danger to the planet too so you've got

668

00:24:55,430 --> 00:24:53,039

that going for you as well

669

00:24:57,510 --> 00:24:55,440

right right but as i said before if it

670

00:24:59,669 --> 00:24:57,520

happens to be human-made it would be

671

00:25:02,549 --> 00:24:59,679

very boring as boring as seeing a bird

672

00:25:03,510 --> 00:25:02,559

as far as i'm concerned

673

00:25:05,510 --> 00:25:03,520

so

674

00:25:07,190 --> 00:25:05,520

you know i'm happy to put into the

675

00:25:10,789 --> 00:25:07,200

software

676

00:25:13,190 --> 00:25:10,799

an automatic uh transfer of data to

677

00:25:15,350 --> 00:25:13,200

uh residents of washington dc if it

678

00:25:17,909 --> 00:25:15,360

happens to show letters of the alphabet

679

00:25:19,590 --> 00:25:17,919

our alphabet

680

00:25:22,070 --> 00:25:19,600

yeah oh yeah they would like to have

681

00:25:22,710 --> 00:25:22,080

that information um just just a couple

682

00:25:23,669 --> 00:25:22,720

of

683

00:25:24,870 --> 00:25:23,679

uh

684

00:25:26,390 --> 00:25:24,880

questions

685

00:25:27,990 --> 00:25:26,400

first of all before you go tonight i

686

00:25:30,310 --> 00:25:28,000

want you to elaborate how someone can

687

00:25:32,549 --> 00:25:30,320

get to that funding i do have the i do

688

00:25:34,549 --> 00:25:32,559

have the link below and the either the

689

00:25:35,830 --> 00:25:34,559

show notes are down in the text

690

00:25:37,750 --> 00:25:35,840

on the video

691

00:25:40,549 --> 00:25:37,760

but um

692

00:25:42,149 --> 00:25:40,559

my what my last question i guess is

693

00:25:45,269 --> 00:25:42,159

how do you figure out where you're going

694

00:25:48,070 --> 00:25:45,279

to put these objects and uh these uh the

695

00:25:50,230 --> 00:25:48,080

the equipment and is this protected

696

00:25:51,750 --> 00:25:50,240

equipment that it's got to be away from

697

00:25:53,750 --> 00:25:51,760

people so no one's gonna but it sounds

698

00:25:56,230 --> 00:25:53,760

expensive so i mean how are you gonna

699

00:25:58,870 --> 00:25:56,240

protect it as well right so that's the

700

00:26:01,190 --> 00:25:58,880

same issue that the astronomers face and

701
00:26:03,909 --> 00:26:01,200
often there is a god or some fence

702
00:26:06,310 --> 00:26:03,919
around some of our telescopes will be

703
00:26:08,710 --> 00:26:06,320
on the sides of observatories because

704
00:26:10,230 --> 00:26:08,720
mountain tops are you know the best

705
00:26:13,669 --> 00:26:10,240
locations in the sense that the

706
00:26:17,110 --> 00:26:13,679
atmosphere is more verified up there and

707
00:26:18,630 --> 00:26:17,120
then therefore blurring of the images uh

708
00:26:21,510 --> 00:26:18,640
is uh

709
00:26:23,190 --> 00:26:21,520
weaker than than at the sea level so to

710
00:26:25,190 --> 00:26:23,200
speak but then

711
00:26:27,430 --> 00:26:25,200
as to where to put them you know that

712
00:26:30,549 --> 00:26:27,440
there is a claim that there is a

713
00:26:32,310 --> 00:26:30,559

clustering of uap reports around the

714

00:26:35,190 --> 00:26:32,320

sensitive facilities like military

715

00:26:39,350 --> 00:26:35,200

facilities or nuclear facilities um it

716

00:26:41,830 --> 00:26:39,360

may well be a result of having more

717

00:26:44,390 --> 00:26:41,840

patrols around those areas because

718

00:26:45,750 --> 00:26:44,400

they're sensitive and uh one thing we

719

00:26:48,070 --> 00:26:45,760

want to find out is whether this

720

00:26:51,110 --> 00:26:48,080

clustering is real or just a reflection

721

00:26:55,190 --> 00:26:51,120

of having more pilots monitor these

722

00:26:57,110 --> 00:26:55,200

areas and um so we plan to distribute

723

00:26:59,590 --> 00:26:57,120

our observatories in many different

724

00:27:01,590 --> 00:26:59,600

locations again it's limited by the

725

00:27:04,310 --> 00:27:01,600

funding we get and we haven't yet

726

00:27:06,870 --> 00:27:04,320

decided specifically about the locations

727

00:27:09,830 --> 00:27:06,880

uh and with respect to the your your

728

00:27:12,710 --> 00:27:09,840

other uh comment or question um the

729

00:27:15,590 --> 00:27:12,720

crowdfunding is possible through a link

730

00:27:17,669 --> 00:27:15,600

on our website so if you just google the

731

00:27:20,870 --> 00:27:17,679

galileo project harvard university

732

00:27:21,909 --> 00:27:20,880

avilobe you will get to that website and

733

00:27:25,590 --> 00:27:21,919

there is

734

00:27:27,909 --> 00:27:25,600

a tab uh support us and if you click on

735

00:27:29,909 --> 00:27:27,919

that you will see the the guidelines for

736

00:27:31,830 --> 00:27:29,919

how to contribute irrespective of the

737

00:27:34,389 --> 00:27:31,840

amount

738

00:27:38,389 --> 00:27:34,399

yes uh so mark or ted do you either one

739

00:27:40,789 --> 00:27:39,350

i do

740

00:27:42,389 --> 00:27:40,799

um

741

00:27:45,029 --> 00:27:42,399

this is ted i've been working on this

742

00:27:46,950 --> 00:27:45,039

for 20 years collecting data aviation

743

00:27:48,549 --> 00:27:46,960

cases uh

744

00:27:50,710 --> 00:27:48,559

understanding the general trends in that

745

00:27:51,590 --> 00:27:50,720

data and trying to get a an overall

746

00:27:53,350 --> 00:27:51,600

vision

747

00:27:54,950 --> 00:27:53,360

of

748

00:27:56,389 --> 00:27:54,960

what we might be looking at you know

749

00:27:58,310 --> 00:27:56,399

throw it all against the wall then you

750

00:28:01,029 --> 00:27:58,320

have a scope right and then you can from

751
00:28:03,750 --> 00:28:01,039
there you can start rationally engaging

752
00:28:04,870 --> 00:28:03,760
various aspects of the phenomenon

753
00:28:06,549 --> 00:28:04,880
and

754
00:28:10,149 --> 00:28:06,559
in the process i learned that there were

755
00:28:11,269 --> 00:28:10,159
places where there are clusters

756
00:28:13,029 --> 00:28:11,279
and

757
00:28:14,470 --> 00:28:13,039
i've been exposed to a couple of them

758
00:28:16,789 --> 00:28:14,480
through

759
00:28:18,470 --> 00:28:16,799
mr erling strand and dr massimo

760
00:28:19,510 --> 00:28:18,480
teodorani

761
00:28:21,430 --> 00:28:19,520
um

762
00:28:23,590 --> 00:28:21,440
and i i

763
00:28:25,909 --> 00:28:23,600

i want to know if there's any real

764

00:28:27,590 --> 00:28:25,919

attention for looking at a couple of

765

00:28:28,950 --> 00:28:27,600

these spots um

766

00:28:30,870 --> 00:28:28,960

i think there's some real merit

767

00:28:33,669 --> 00:28:30,880

listening to those two men

768

00:28:35,909 --> 00:28:33,679

um i've been i've been on searches with

769

00:28:37,669 --> 00:28:35,919

them and we've collected data they're

770

00:28:40,149 --> 00:28:37,679

they're um

771

00:28:42,149 --> 00:28:40,159

very rigorous in their methodology and

772

00:28:43,510 --> 00:28:42,159

uh uh

773

00:28:46,070 --> 00:28:43,520

ethical

774

00:28:48,070 --> 00:28:46,080

uh which is a

775

00:28:49,350 --> 00:28:48,080

uh so have you thought it at all about

776

00:28:51,590 --> 00:28:49,360

talking to these fellows and looking

777

00:28:54,710 --> 00:28:51,600

into their work yeah we already had a

778

00:28:57,110 --> 00:28:54,720

conversation with massimo uh and he

779

00:28:59,110 --> 00:28:57,120

provided the useful information and we

780

00:29:01,029 --> 00:28:59,120

will definitely take

781

00:29:02,789 --> 00:29:01,039

this into consideration when we decide

782

00:29:05,269 --> 00:29:02,799

about the locations but

783

00:29:08,310 --> 00:29:05,279

just to explain at first in the coming

784

00:29:11,110 --> 00:29:08,320

weeks and maybe uh months

785

00:29:13,110 --> 00:29:11,120

we will have to purchase the relevant

786

00:29:14,950 --> 00:29:13,120

equipment and then test it to make sure

787

00:29:17,190 --> 00:29:14,960

that we when we put it together it

788

00:29:19,269 --> 00:29:17,200

operates uh to our satisfaction

789

00:29:21,669 --> 00:29:19,279

including developing the software that

790

00:29:24,070 --> 00:29:21,679

we need and then once we have it working

791

00:29:27,029 --> 00:29:24,080

then we'll have to decide uh which

792

00:29:28,870 --> 00:29:27,039

locations to put it at and of course as

793

00:29:31,110 --> 00:29:28,880

i said again that depends on the level

794

00:29:33,350 --> 00:29:31,120

of funding the more funding we have the

795

00:29:35,110 --> 00:29:33,360

more locations we can sample and and

796

00:29:36,870 --> 00:29:35,120

examine exactly the point you made

797

00:29:38,789 --> 00:29:36,880

whether there is clustering and

798

00:29:41,510 --> 00:29:38,799

definitely we will pay attention to the

799

00:29:43,350 --> 00:29:41,520

reports that some areas are

800

00:29:47,350 --> 00:29:43,360

have a higher

801

00:29:49,590 --> 00:29:47,360

chance or or a report rate of of uap

802

00:29:51,909 --> 00:29:49,600

yeah i i strongly recommend that you do

803

00:29:54,230 --> 00:29:51,919

i've been in a couple of those places

804

00:29:55,190 --> 00:29:54,240

and they should be very interesting to

805

00:29:57,029 --> 00:29:55,200

to you

806

00:29:59,029 --> 00:29:57,039

um and i want to say it's very

807

00:30:00,950 --> 00:29:59,039

refreshing to to hear

808

00:30:03,110 --> 00:30:00,960

proper attitudes about inquiry and

809

00:30:07,029 --> 00:30:03,120

objectivity i've said 20 years

810

00:30:09,510 --> 00:30:07,039

underground basically in the

811

00:30:11,510 --> 00:30:09,520

should say wild it's not original to me

812

00:30:13,830 --> 00:30:11,520

because when the report was delivered to

813

00:30:15,990 --> 00:30:13,840

congress bill nelson the nasa

814

00:30:18,149 --> 00:30:16,000

administrator said that scientists

815

00:30:21,029 --> 00:30:18,159

should look into that so you know i'm

816

00:30:23,669 --> 00:30:21,039

just trying to make him happy

817

00:30:26,710 --> 00:30:23,679

well you're making more than him happy

818

00:30:28,470 --> 00:30:26,720

and uh uh uh i don't know if you saw any

819

00:30:30,389 --> 00:30:28,480

of our presentations

820

00:30:31,990 --> 00:30:30,399

to the aiaa

821

00:30:35,590 --> 00:30:32,000

two weeks ago

822

00:30:36,389 --> 00:30:35,600

uh dr kobarapu and dr knuth and myself

823

00:30:37,190 --> 00:30:36,399

and

824

00:30:42,310 --> 00:30:37,200

um

825

00:30:44,630 --> 00:30:42,320

i i presented our preliminary findings

826

00:30:46,710 --> 00:30:44,640

with narcap and i hope that everybody

827

00:30:49,350 --> 00:30:46,720

takes a look at that and any help i can

828

00:30:51,990 --> 00:30:49,360

be to share anything or offer insights

829

00:30:54,070 --> 00:30:52,000

you know just just from long experience

830

00:30:54,950 --> 00:30:54,080

i'm i'm happy to contribute however i

831

00:30:56,470 --> 00:30:54,960

can

832

00:30:59,190 --> 00:30:56,480

thank you very much we definitely

833

00:31:01,029 --> 00:30:59,200

appreciate experience uh but then we

834

00:31:02,789 --> 00:31:01,039

would like to collect new data to

835

00:31:05,269 --> 00:31:02,799

substantiate it with

836

00:31:06,870 --> 00:31:05,279

very important the instruments nowadays

837

00:31:09,269 --> 00:31:06,880

are far better than they used to be two

838

00:31:11,509 --> 00:31:09,279

decades ago and uh if we have full

839

00:31:12,630 --> 00:31:11,519

control over them then we can

840

00:31:13,909 --> 00:31:12,640

deliver

841

00:31:17,669 --> 00:31:13,919

the

842

00:31:19,509 --> 00:31:17,679

science community because i do think

843

00:31:21,350 --> 00:31:19,519

that it should be there

844

00:31:23,990 --> 00:31:21,360

well yeah some new data

845

00:31:26,389 --> 00:31:24,000

that's fine with me i we don't have

846

00:31:28,710 --> 00:31:26,399

we shouldn't have sacred cows in this

847

00:31:32,230 --> 00:31:28,720

field of you know cases that we consider

848

00:31:34,230 --> 00:31:32,240

inviabile and that you know or um and and

849

00:31:36,389 --> 00:31:34,240

people and researchers that stand in

850

00:31:38,470 --> 00:31:36,399

front of the data i think that's

851

00:31:41,110 --> 00:31:38,480

one one caveat to what you said there

852

00:31:41,990 --> 00:31:41,120

should be one sacred principle and that

853

00:31:43,990 --> 00:31:42,000

is

854

00:31:46,549 --> 00:31:44,000

paying attention to evidence and not

855

00:31:48,630 --> 00:31:46,559

prejudice that's right that's right

856

00:31:50,230 --> 00:31:48,640

yeah exactly right

857

00:31:51,430 --> 00:31:50,240

i agree with you mark you have a last

858

00:31:53,909 --> 00:31:51,440

question do you have a last question

859

00:31:55,430 --> 00:31:53,919

mark i was going to suggest uh avi did

860

00:31:56,630 --> 00:31:55,440

you uh consider

861

00:31:58,870 --> 00:31:56,640

uh

862

00:32:00,470 --> 00:31:58,880

a portability option for these so oh

863

00:32:02,950 --> 00:32:00,480

yeah that's an excellent point there

864

00:32:04,310 --> 00:32:02,960

mark yeah definitely that's an excellent

865

00:32:06,230 --> 00:32:04,320

point

866

00:32:08,630 --> 00:32:06,240

i've got a portable observatory we're

867

00:32:10,070 --> 00:32:08,640

building to to do outreach because i

868

00:32:12,070 --> 00:32:10,080

think it's important to show people

869

00:32:14,389 --> 00:32:12,080

what's happening to get more involved

870

00:32:16,389 --> 00:32:14,399

right so one-on-one what can be done

871

00:32:18,630 --> 00:32:16,399

yeah it's it's not just for that reason

872

00:32:21,110 --> 00:32:18,640

it it you know we if we can put it on a

873

00:32:23,350 --> 00:32:21,120

truck and move it to uh we can sample

874

00:32:25,669 --> 00:32:23,360

many locations with the same

875

00:32:27,909 --> 00:32:25,679

yeah primary that's the primary uh

876

00:32:30,710 --> 00:32:27,919

obviously motivation of course but sure

877

00:32:33,269 --> 00:32:30,720

yeah yeah i think you know once we get

878

00:32:35,350 --> 00:32:33,279

evidence that would be exciting

879

00:32:37,190 --> 00:32:35,360

you know the public will go crazy about

880

00:32:39,350 --> 00:32:37,200

it irrespective whether we go around

881

00:32:42,389 --> 00:32:39,360

with a truck or not

882

00:32:44,950 --> 00:32:42,399

well you you lend it credibility also i

883

00:32:47,269 --> 00:32:44,960

mean if it was just one of i hate to say

884

00:32:49,909 --> 00:32:47,279

it this way but if it was myself out

885

00:32:52,870 --> 00:32:49,919

there you know with equipment and i got

886

00:32:54,870 --> 00:32:52,880

this image or whatever i wouldn't have

887

00:32:56,870 --> 00:32:54,880

what you have the level of credibility

888

00:32:58,549 --> 00:32:56,880

you have uh you know to bring this to

889

00:33:01,110 --> 00:32:58,559

the table so we

890

00:33:02,950 --> 00:33:01,120

i i can say for myself and probably many

891

00:33:05,750 --> 00:33:02,960

others that we really do appreciate that

892

00:33:06,789 --> 00:33:05,760

you're you're investing yourself in this

893

00:33:08,549 --> 00:33:06,799

and uh

894

00:33:10,310 --> 00:33:08,559

and i really like your attitude and i

895

00:33:12,950 --> 00:33:10,320

really thank you i should say that we

896

00:33:15,590 --> 00:33:12,960

have a team of 20 exceptional scientists

897

00:33:17,110 --> 00:33:15,600

it's not just me and uh they're really

898

00:33:19,750 --> 00:33:17,120

there are some exceptional

899

00:33:21,830 --> 00:33:19,760

instrumentalists in the team that are

900

00:33:25,190 --> 00:33:21,840

that will be putting things together so

901
00:33:27,110 --> 00:33:25,200
everyone deserves the credit yes

902
00:33:29,430 --> 00:33:27,120
very good all right well thank you very

903
00:33:30,789 --> 00:33:29,440
much avi and uh we will look to see what

904
00:33:32,950 --> 00:33:30,799
happens with what you're doing in the

905
00:33:34,389 --> 00:33:32,960
future i would be delighted to join you

906
00:33:36,950 --> 00:33:34,399
again thank you great

907
00:33:39,350 --> 00:33:36,960
thank you take care thank you

908
00:33:41,830 --> 00:33:39,360
bye

909
00:33:44,549 --> 00:33:41,840
all right well that was great and so ted

910
00:33:47,190 --> 00:33:44,559
um yeah uh welcome to the show we have

911
00:33:48,950 --> 00:33:47,200
ted and mark and you guys have never

912
00:33:50,230 --> 00:33:48,960
really talked to each other i just found

913
00:33:51,509 --> 00:33:50,240

that out

914

00:33:54,470 --> 00:33:51,519

i just had this

915

00:33:55,350 --> 00:33:54,480

i had this uh wild idea ted you and i

916

00:33:59,509 --> 00:33:55,360

were

917

00:34:02,149 --> 00:33:59,519

this talk that you did you're gonna talk

918

00:34:05,509 --> 00:34:02,159

about um you text me

919

00:34:07,750 --> 00:34:05,519

and um and then i was uh it was last

920

00:34:10,149 --> 00:34:07,760

week and i almost pulled you into last

921

00:34:11,829 --> 00:34:10,159

week's show and then so i said hey mark

922

00:34:13,109 --> 00:34:11,839

do you mind being on you know sharing a

923

00:34:13,990 --> 00:34:13,119

show with someone you never talked to

924

00:34:16,389 --> 00:34:14,000

before

925

00:34:22,950 --> 00:34:16,399

you said yeah why not so here we are

926

00:34:27,430 --> 00:34:25,589

so um i want to hear from both of you

927

00:34:29,109 --> 00:34:27,440

you both have things going on and i

928

00:34:31,669 --> 00:34:29,119

don't know who wants to start first mark

929

00:34:33,669 --> 00:34:31,679

you have this observatory you and i have

930

00:34:36,470 --> 00:34:33,679

talked about it many times out in

931

00:34:38,230 --> 00:34:36,480

arizona yeah but you know just real

932

00:34:40,790 --> 00:34:38,240

quickly i think

933

00:34:43,589 --> 00:34:40,800

because i have so many new listeners all

934

00:34:44,629 --> 00:34:43,599

the time it wouldn't hurt too bad i know

935

00:34:47,109 --> 00:34:44,639

some people are going to be rolling

936

00:34:48,950 --> 00:34:47,119

their eyes i can almost see them now but

937

00:34:51,589 --> 00:34:48,960

a little recap on who you are and what

938

00:34:53,750 --> 00:34:51,599

you do let's start with you mark

939

00:34:55,430 --> 00:34:53,760

oh i'm move on to chief phone and video

940

00:34:58,790 --> 00:34:55,440

analyst um

941

00:35:00,790 --> 00:34:58,800

and uh an astronomer of course and um

942

00:35:02,069 --> 00:35:00,800

uh so i spent

943

00:35:04,790 --> 00:35:02,079

many years i knew i was gonna be an

944

00:35:06,390 --> 00:35:04,800

astronomer since age nine uh and i stuck

945

00:35:07,750 --> 00:35:06,400

with it you know and that's what i went

946

00:35:09,589 --> 00:35:07,760

to school for and

947

00:35:11,750 --> 00:35:09,599

i worked in big observatories and small

948

00:35:14,390 --> 00:35:11,760

and i decided that i wanted to do some

949

00:35:16,630 --> 00:35:14,400

observatory building of my own

950

00:35:18,150 --> 00:35:16,640

so i built two ones in the arizona

951

00:35:20,710 --> 00:35:18,160

desert one's here in connecticut that

952

00:35:23,589 --> 00:35:20,720

telescope behind me right there is

953

00:35:25,270 --> 00:35:23,599

actually the east coast uh observatory

954

00:35:26,950 --> 00:35:25,280

uh telescope unit we're actually

955

00:35:28,390 --> 00:35:26,960

building a new building here and that's

956

00:35:30,390 --> 00:35:28,400

we outgrew the other one and so that

957

00:35:31,430 --> 00:35:30,400

one's in here for

958

00:35:32,550 --> 00:35:31,440

rehab

959

00:35:33,829 --> 00:35:32,560

um

960

00:35:35,270 --> 00:35:33,839

and uh

961

00:35:37,510 --> 00:35:35,280

so that that's what i did it's called

962

00:35:40,310 --> 00:35:37,520

sky tour right the thing you do live is

963

00:35:43,109 --> 00:35:40,320

the sky tour sky tour live stream is the

964

00:35:44,790 --> 00:35:43,119

live observatory and we just had

965

00:35:46,950 --> 00:35:44,800

gangbuster nights out in arizona you

966

00:35:48,710 --> 00:35:46,960

have 300 clear nights a year

967

00:35:52,790 --> 00:35:48,720

you're right you don't get lost look at

968

00:35:55,910 --> 00:35:54,550

the bottom line the bottom line is that

969

00:35:57,910 --> 00:35:55,920

you know i believe science is for

970

00:35:59,670 --> 00:35:57,920

everybody okay so does avi and that was

971

00:36:03,109 --> 00:35:59,680

what was kind of cool listening to him

972

00:36:05,030 --> 00:36:03,119

scientists for everybody uh and it just

973

00:36:06,630 --> 00:36:05,040

it just means that they have to have it

974

00:36:08,069 --> 00:36:06,640

explained in a way they can understand

975

00:36:10,310 --> 00:36:08,079

and digest

976

00:36:11,589 --> 00:36:10,320

that's the problem as i said it's not

977

00:36:12,470 --> 00:36:11,599

taught in our schools as much as it

978

00:36:14,950 --> 00:36:12,480

should be

979

00:36:16,390 --> 00:36:14,960

and uh it's been dropped forward

980

00:36:18,550 --> 00:36:16,400

right even though ted you understand

981

00:36:20,710 --> 00:36:18,560

that right so

982

00:36:22,550 --> 00:36:20,720

i think that when we talk science we

983

00:36:23,990 --> 00:36:22,560

should actually you know start at an

984

00:36:26,630 --> 00:36:24,000

early age

985

00:36:29,030 --> 00:36:26,640

i had benefit of having science talk to

986

00:36:32,390 --> 00:36:29,040

me at early age i had benefit of

987

00:36:34,310 --> 00:36:32,400

of of doing unbelievable stuff in my my

988

00:36:35,829 --> 00:36:34,320

science class okay my high school

989

00:36:38,310 --> 00:36:35,839

chemistry okay when i was doing organic

990

00:36:40,550 --> 00:36:38,320

chemistry in high school at that time

991

00:36:41,670 --> 00:36:40,560

we had the benefit of actually getting a

992

00:36:44,550 --> 00:36:41,680

rock

993

00:36:46,710 --> 00:36:44,560

and because we had been taught so well

994

00:36:48,870 --> 00:36:46,720

okay inorganic chemistry actually and

995

00:36:50,630 --> 00:36:48,880

they were taught so well that the

996

00:36:52,950 --> 00:36:50,640

teacher said okay this is a rock

997

00:36:54,790 --> 00:36:52,960

identify it and extract the ore from it

998

00:36:56,870 --> 00:36:54,800

if there's or in it

999

00:36:58,870 --> 00:36:56,880

and that was the final exam

1000

00:37:00,310 --> 00:36:58,880

and for three days we worked in the

1001
00:37:02,870 --> 00:37:00,320
school lab

1002
00:37:05,190 --> 00:37:02,880
extracting ore from our samples and i'm

1003
00:37:06,710 --> 00:37:05,200
telling you i still have the copper from

1004
00:37:09,190 --> 00:37:06,720
the copper ore that i extracted a little

1005
00:37:11,109 --> 00:37:09,200
glass jar okay

1006
00:37:13,510 --> 00:37:11,119
i did that years and years ago

1007
00:37:15,829 --> 00:37:13,520
see so that's the benefit of science you

1008
00:37:18,230 --> 00:37:15,839
never forget good science

1009
00:37:19,910 --> 00:37:18,240
you know so that's what i'm all about

1010
00:37:23,430 --> 00:37:19,920
and the public outreach thing is great

1011
00:37:25,670 --> 00:37:23,440
you know um i in fact and i was on i

1012
00:37:27,750 --> 00:37:25,680
i was actually doing interviews i did an

1013
00:37:32,470 --> 00:37:27,760

interview in anchorage today you uh are

1014

00:37:35,109 --> 00:37:32,480

you familiar with uh uh kwhl radio

1015

00:37:36,950 --> 00:37:35,119

that's where ted is right now yes yeah

1016

00:37:39,589 --> 00:37:36,960

awhl radio

1017

00:37:40,630 --> 00:37:39,599

uh it was a bob lester and and brock

1018

00:37:42,069 --> 00:37:40,640

lindell

1019

00:37:43,270 --> 00:37:42,079

that was their show

1020

00:37:44,950 --> 00:37:43,280

um

1021

00:37:47,109 --> 00:37:44,960

i didn't hear about it before but i got

1022

00:37:49,270 --> 00:37:47,119

on their show and they want me on as a

1023

00:37:50,870 --> 00:37:49,280

regular now as a regular contributor

1024

00:37:52,710 --> 00:37:50,880

because they like to talk about suppose

1025

00:37:53,990 --> 00:37:52,720

it's one of their favorite topics so you

1026

00:37:56,630 --> 00:37:54,000

should call them

1027

00:37:59,349 --> 00:37:56,640

at kwhl and i'll bet you you're going to

1028

00:38:02,630 --> 00:37:59,359

have a way in there all right yeah get

1029

00:38:05,270 --> 00:38:02,640

to work very much sure sure i'll do that

1030

00:38:07,030 --> 00:38:05,280

yeah right so uh before you before you

1031

00:38:08,950 --> 00:38:07,040

jump into just real quickly mark one of

1032

00:38:11,109 --> 00:38:08,960

the things i liked from your very from

1033

00:38:14,230 --> 00:38:11,119

the very first time i met you was that

1034

00:38:15,990 --> 00:38:14,240

you have a way of explaining things

1035

00:38:18,230 --> 00:38:16,000

that are difficult

1036

00:38:20,230 --> 00:38:18,240

but down to the level where anyone can

1037

00:38:22,470 --> 00:38:20,240

digest it and i do i've always

1038

00:38:24,950 --> 00:38:22,480

appreciated that about you you don't get

1039

00:38:27,589 --> 00:38:24,960

all sciency and technical where if

1040

00:38:28,710 --> 00:38:27,599

people start i i start glazing over any

1041

00:38:30,470 --> 00:38:28,720

of that

1042

00:38:32,790 --> 00:38:30,480

to go over someone's head if they don't

1043

00:38:35,190 --> 00:38:32,800

know the science so what i do is i

1044

00:38:37,030 --> 00:38:35,200

assess their capability right in science

1045

00:38:38,790 --> 00:38:37,040

and again it comes from the schooling

1046

00:38:42,950 --> 00:38:38,800

it's not their fault

1047

00:38:45,589 --> 00:38:42,960

don't know it so it's that i assume the

1048

00:38:47,589 --> 00:38:45,599

responsibility to enlighten the parts

1049

00:38:49,910 --> 00:38:47,599

they don't know if i know the answers i

1050

00:38:52,630 --> 00:38:49,920

don't know everything obviously

1051

00:38:55,109 --> 00:38:52,640

but i do know certain things you know

1052

00:38:57,750 --> 00:38:55,119

and i think that um it makes sense to be

1053

00:39:00,310 --> 00:38:57,760

able to talk to people at their level

1054

00:39:02,150 --> 00:39:00,320

and engage with them and then they they

1055

00:39:03,510 --> 00:39:02,160

open up they ask questions and there is

1056

00:39:05,750 --> 00:39:03,520

and i've said this a thousand times

1057

00:39:07,990 --> 00:39:05,760

there is no dumb question

1058

00:39:10,710 --> 00:39:08,000

you know no dumb questions

1059

00:39:14,069 --> 00:39:10,720

just stupid answer

1060

00:39:14,870 --> 00:39:14,079

all right ted how about you ted

1061

00:39:15,829 --> 00:39:14,880

well

1062

00:39:17,589 --> 00:39:15,839

um

1063

00:39:20,310 --> 00:39:17,599

ted rowe i

1064

00:39:22,630 --> 00:39:20,320

ran narcap from the time dr haines and i

1065

00:39:25,270 --> 00:39:22,640

founded it i was executive director and

1066

00:39:27,589 --> 00:39:25,280

then when dr haines retired in 2015 i

1067

00:39:29,910 --> 00:39:27,599

took over the organization as a director

1068

00:39:31,829 --> 00:39:29,920

of research

1069

00:39:34,550 --> 00:39:31,839

our entire goal in all of this has been

1070

00:39:36,230 --> 00:39:34,560

to influence the aviation community

1071

00:39:37,910 --> 00:39:36,240

because we felt that by if we could

1072

00:39:40,150 --> 00:39:37,920

change the aviation community we changed

1073

00:39:42,870 --> 00:39:40,160

the world

1074

00:39:44,230 --> 00:39:42,880

and so we worked very hard dr haines had

1075

00:39:47,190 --> 00:39:44,240

accumulated

1076
00:39:49,510 --> 00:39:47,200
uh several thousand aviation cases and

1077
00:39:50,630 --> 00:39:49,520
many of them reflected aviation safety

1078
00:39:53,910 --> 00:39:50,640
factors

1079
00:39:56,230 --> 00:39:53,920
so we we we set our focus on that the

1080
00:39:59,109 --> 00:39:56,240
most data are in those cases where

1081
00:40:00,310 --> 00:39:59,119
safety factors are involved things like

1082
00:40:02,150 --> 00:40:00,320
oh

1083
00:40:04,230 --> 00:40:02,160
close pacing mid-air collision near

1084
00:40:06,550 --> 00:40:04,240
mid-air collisions

1085
00:40:07,840 --> 00:40:06,560
collision headings

1086
00:40:09,030 --> 00:40:07,850
all of these things

1087
00:40:10,550 --> 00:40:09,040
[Music]

1088
00:40:13,190 --> 00:40:10,560

concurrent failures of electrical

1089

00:40:14,470 --> 00:40:13,200

systems during an encounter all of these

1090

00:40:16,470 --> 00:40:14,480

things kind of tell us a little bit

1091

00:40:18,309 --> 00:40:16,480

about what's going on with these things

1092

00:40:19,910 --> 00:40:18,319

in the physics of it all and we can

1093

00:40:22,150 --> 00:40:19,920

understand the flight dynamics when they

1094

00:40:24,710 --> 00:40:22,160

are behaving dynamically

1095

00:40:26,710 --> 00:40:24,720

so we look at those cases and we the

1096

00:40:29,910 --> 00:40:26,720

first paper we wrote was aviation safety

1097

00:40:32,230 --> 00:40:29,920

in america a previously neglected factor

1098

00:40:34,470 --> 00:40:32,240

and that was in that in 1999.

1099

00:40:36,790 --> 00:40:34,480

so we we started the conversation on

1100

00:40:39,349 --> 00:40:36,800

aviation safety in this subject and we

1101

00:40:42,790 --> 00:40:39,359

also established the uap term

1102

00:40:44,630 --> 00:40:42,800

and and our definition of it in 1999 and

1103

00:40:46,790 --> 00:40:44,640

obviously it's gone viral everybody's

1104

00:40:48,309 --> 00:40:46,800

using it now but it has a definition and

1105

00:40:51,670 --> 00:40:48,319

that's on the website

1106

00:40:53,430 --> 00:40:51,680

um it's it's actually a

1107

00:40:55,030 --> 00:40:53,440

term that you arrive at after you've

1108

00:40:56,950 --> 00:40:55,040

done the work

1109

00:40:58,870 --> 00:40:56,960

it's not a uap until you've resolved

1110

00:41:00,230 --> 00:40:58,880

that it's not anything else

1111

00:41:01,589 --> 00:41:00,240

um

1112

00:41:03,270 --> 00:41:01,599

and uh

1113

00:41:04,950 --> 00:41:03,280

in our like i said our focus has been

1114

00:41:06,870 --> 00:41:04,960

trying to get towards the aviation

1115

00:41:08,710 --> 00:41:06,880

community we've been very conservative

1116

00:41:10,950 --> 00:41:08,720

you won't find little aliens dancing on

1117

00:41:12,790 --> 00:41:10,960

our website um

1118

00:41:14,790 --> 00:41:12,800

we've been very focused on on serving

1119

00:41:17,430 --> 00:41:14,800

our demographic which are pilots and air

1120

00:41:21,030 --> 00:41:17,440

controllers because they face a stigma

1121

00:41:22,230 --> 00:41:21,040

the faa absolutely rejects their reports

1122

00:41:23,990 --> 00:41:22,240

you know uh

1123

00:41:26,150 --> 00:41:24,000

pilot pilots and air controllers and

1124

00:41:28,069 --> 00:41:26,160

that's been going on right up till right

1125

00:41:29,589 --> 00:41:28,079

now when they're seriously trying to

1126

00:41:32,069 --> 00:41:29,599

remedy their image

1127

00:41:35,589 --> 00:41:32,079

in this this particular chain sea change

1128

00:41:38,069 --> 00:41:35,599

we're dealing with with the dni report

1129

00:41:43,430 --> 00:41:40,710

well very good i i have a quick question

1130

00:41:45,430 --> 00:41:43,440

for you um when it comes to aviation and

1131

00:41:50,630 --> 00:41:45,440

all that i always think of

1132

00:41:53,510 --> 00:41:50,640

2007 and gate c17 chicago o'hare airport

1133

00:41:56,150 --> 00:41:53,520

for the for united airlines and all that

1134

00:41:59,270 --> 00:41:56,160

and the question is

1135

00:42:01,750 --> 00:41:59,280

it seems to me that eventually some of

1136

00:42:04,790 --> 00:42:01,760

those people that were there that day

1137

00:42:09,670 --> 00:42:04,800

are have retired by now and could talk

1138

00:42:12,870 --> 00:42:11,109

does anyone else hear that i don't know

1139

00:42:13,670 --> 00:42:12,880

where that came from

1140

00:42:17,589 --> 00:42:13,680

yeah

1141

00:42:19,270 --> 00:42:17,599

interesting so ah anyway has has anyone

1142

00:42:21,670 --> 00:42:19,280

ever that that you're aware of has

1143

00:42:23,190 --> 00:42:21,680

anyone ever come forward

1144

00:42:25,910 --> 00:42:23,200

um no

1145

00:42:28,630 --> 00:42:25,920

we've we've the case kind of

1146

00:42:29,670 --> 00:42:28,640

comes to life every now and then but uh

1147

00:42:34,550 --> 00:42:29,680

um

1148

00:42:36,309 --> 00:42:34,560

i i don't think so we only had one

1149

00:42:39,109 --> 00:42:36,319

possible photograph of the case for

1150

00:42:41,270 --> 00:42:39,119

example of the object itself by one of

1151

00:42:42,950 --> 00:42:41,280

the people one of the ground crew

1152

00:42:45,510 --> 00:42:42,960

uh and that was referenced by the ramp

1153

00:42:48,390 --> 00:42:45,520

controller for united that reported it

1154

00:42:50,470 --> 00:42:48,400

to the control tower and that photograph

1155

00:42:53,589 --> 00:42:50,480

never turned up i did the photo analysis

1156

00:42:54,550 --> 00:42:53,599

for that that case and all we got were

1157

00:42:56,390 --> 00:42:54,560

hoaxes

1158

00:42:58,390 --> 00:42:56,400

um lots of them

1159

00:43:00,230 --> 00:42:58,400

it was kind of disheartening

1160

00:43:01,750 --> 00:43:00,240

so you never got it you never got that

1161

00:43:03,829 --> 00:43:01,760

particular photo

1162

00:43:05,670 --> 00:43:03,839

no no i never saw the photo that was

1163

00:43:07,670 --> 00:43:05,680

alleged to be that

1164

00:43:10,230 --> 00:43:07,680

and and it's um

1165

00:43:12,069 --> 00:43:10,240

um and since then you know like i said

1166

00:43:13,750 --> 00:43:12,079

it's like it's one of these zombie cases

1167

00:43:16,390 --> 00:43:13,760

it comes back to life every now and then

1168

00:43:18,150 --> 00:43:16,400

and people find themselves with a uh

1169

00:43:20,630 --> 00:43:18,160

they claim to have new data and so on

1170

00:43:22,710 --> 00:43:20,640

and new witnesses and all that but i i

1171

00:43:24,550 --> 00:43:22,720

i just ignore it i haven't had anything

1172

00:43:25,670 --> 00:43:24,560

come to me

1173

00:43:26,870 --> 00:43:25,680

so

1174

00:43:29,270 --> 00:43:26,880

yeah you know

1175

00:43:30,870 --> 00:43:29,280

roswell thing ted you know i mean

1176

00:43:33,030 --> 00:43:30,880

you know what we're not going to see any

1177

00:43:34,870 --> 00:43:33,040

new information about roswell there's

1178

00:43:37,270 --> 00:43:34,880

nothing new that can come out now that

1179

00:43:40,150 --> 00:43:37,280

we can actually trust number one and

1180

00:43:42,390 --> 00:43:40,160

number two that's actually in existence

1181

00:43:44,150 --> 00:43:42,400

for real in my view i think that that's

1182

00:43:45,990 --> 00:43:44,160

that's so far in the past we need to

1183

00:43:48,069 --> 00:43:46,000

leave it in the past and just focus on

1184

00:43:50,150 --> 00:43:48,079

the here and now moving forward

1185

00:43:52,470 --> 00:43:50,160

well this is the thing that i agree with

1186

00:43:55,430 --> 00:43:52,480

abby on his point there you know new

1187

00:43:57,589 --> 00:43:55,440

data uh the phenomena is real yes we've

1188

00:43:59,430 --> 00:43:57,599

got we've got cases we've got data we've

1189

00:44:00,390 --> 00:43:59,440

got stories we got anecdotes we got all

1190

00:44:02,390 --> 00:44:00,400

this stuff

1191

00:44:03,750 --> 00:44:02,400

but new data is coming because it's a

1192

00:44:04,710 --> 00:44:03,760

real phenomenon

1193

00:44:08,550 --> 00:44:04,720

and

1194

00:44:11,750 --> 00:44:08,560

frankly a lot of us are going to get

1195

00:44:14,470 --> 00:44:11,760

phased out of this over time i um i did

1196

00:44:17,510 --> 00:44:14,480

this work for 20 years underground uh in

1197

00:44:19,349 --> 00:44:17,520

the wild basically collecting cases and

1198

00:44:21,030 --> 00:44:19,359

working data and trying to influence the

1199

00:44:23,270 --> 00:44:21,040

aviation system

1200

00:44:24,470 --> 00:44:23,280

uh keeping my own experiences to myself

1201

00:44:27,030 --> 00:44:24,480

more or less

1202

00:44:29,030 --> 00:44:27,040

and uh um

1203

00:44:31,190 --> 00:44:29,040

uh and at some point

1204

00:44:33,109 --> 00:44:31,200

these guys or or people like them are

1205

00:44:34,550 --> 00:44:33,119

gonna pick up the ball and move on

1206

00:44:36,870 --> 00:44:34,560

uh that's what was so important about

1207

00:44:38,069 --> 00:44:36,880

the aiaa conference the american

1208

00:44:40,470 --> 00:44:38,079

institute for aeronautics and

1209

00:44:43,030 --> 00:44:40,480

astronautics conference it's it's the

1210

00:44:43,990 --> 00:44:43,040

largest aviation engineering society in

1211

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

the world

1212

00:44:48,630 --> 00:44:46,960

and and it's an american society that is

1213

00:44:51,670 --> 00:44:48,640

a major driver in research and

1214

00:44:54,550 --> 00:44:51,680

development in the aviation system

1215

00:44:56,710 --> 00:44:54,560

and they invited us myself and five

1216

00:44:59,510 --> 00:44:56,720

others to present to them

1217

00:45:02,390 --> 00:44:59,520

uh to their conference on

1218

00:45:03,990 --> 00:45:02,400

august 6 i believe it was

1219

00:45:05,109 --> 00:45:04,000

that was a very important moment it was

1220

00:45:08,069 --> 00:45:05,119

probably one of the most important

1221

00:45:10,230 --> 00:45:08,079

moments in ufology uh we've had a couple

1222

00:45:11,670 --> 00:45:10,240

of them over the last few years but but

1223

00:45:13,990 --> 00:45:11,680

certainly this one

1224

00:45:17,030 --> 00:45:14,000

this was we were the purpose was to

1225

00:45:19,270 --> 00:45:17,040

advocate for scientific inquiry

1226

00:45:21,670 --> 00:45:19,280

and uh uh

1227

00:45:23,910 --> 00:45:21,680

and so we were presenting rationale for

1228

00:45:26,630 --> 00:45:23,920

aviation science to look more closely at

1229

00:45:29,510 --> 00:45:26,640

these cases as a group to follow the dni

1230

00:45:31,109 --> 00:45:29,520

recommendation that the stigma be lifted

1231

00:45:33,109 --> 00:45:31,119

and that people start talking about this

1232

00:45:35,030 --> 00:45:33,119

stuff so

1233

00:45:37,109 --> 00:45:35,040

yeah that was a real watershed moment i

1234

00:45:38,950 --> 00:45:37,119

posted the presentations on our website

1235

00:45:42,150 --> 00:45:38,960

at narcap uh but there were

1236

00:45:44,950 --> 00:45:42,160

presentations by dr robbie copperapu who

1237

00:45:47,829 --> 00:45:44,960

was a planetary scientist at goddard

1238

00:45:49,910 --> 00:45:47,839

uh nasa space flight center um

1239

00:45:52,470 --> 00:45:49,920

there was uh um

1240

00:45:56,230 --> 00:45:52,480

dr kevin knew made a presentation there

1241

00:45:58,630 --> 00:45:56,240

a very interesting one i might add uh uh

1242

00:46:00,710 --> 00:45:58,640

peter really from scu was there and did

1243

00:46:03,910 --> 00:46:00,720

a talk on on

1244

00:46:05,750 --> 00:46:03,920

flight dynamics and kinematics

1245

00:46:08,390 --> 00:46:05,760

and then ryan graves was there with

1246

00:46:11,190 --> 00:46:08,400

personal experience from being an f-18

1247

00:46:12,710 --> 00:46:11,200

pilot confronting uap in the course of

1248

00:46:13,750 --> 00:46:12,720

his duty

1249

00:46:16,710 --> 00:46:13,760

um

1250

00:46:18,950 --> 00:46:16,720

then myself i presented over the last

1251
00:46:20,390 --> 00:46:18,960
20 years of preliminary findings of 20

1252
00:46:21,670 --> 00:46:20,400
years of research

1253
00:46:23,349 --> 00:46:21,680
and then uh

1254
00:46:26,150 --> 00:46:23,359
and then the final one was philly

1255
00:46:29,030 --> 00:46:26,160
belarus who presented on aviation safety

1256
00:46:30,309 --> 00:46:29,040
factors and data collection uh schemas

1257
00:46:31,990 --> 00:46:30,319
for uh

1258
00:46:34,069 --> 00:46:32,000
uap research

1259
00:46:35,750 --> 00:46:34,079
so uh it was a very

1260
00:46:37,109 --> 00:46:35,760
it was very level and i think it was

1261
00:46:38,630 --> 00:46:37,119
really kind of telling who they picked

1262
00:46:39,750 --> 00:46:38,640
to make these talks

1263
00:46:42,390 --> 00:46:39,760

versus who

1264

00:46:44,790 --> 00:46:42,400

the faces are in this field

1265

00:46:47,750 --> 00:46:46,069

i thought that was terribly interesting

1266

00:46:48,950 --> 00:46:47,760

myself but

1267

00:46:50,630 --> 00:46:48,960

yeah

1268

00:46:51,990 --> 00:46:50,640

do you have speculations on the site

1269

00:46:53,990 --> 00:46:52,000

right

1270

00:46:57,030 --> 00:46:54,000

yes yes i do there are playlists on the

1271

00:46:59,270 --> 00:46:57,040

narcap website youtube channel

1272

00:47:00,550 --> 00:46:59,280

excuse me the narcap youtube channel is

1273

00:47:01,589 --> 00:47:00,560

where you go

1274

00:47:05,030 --> 00:47:01,599

yeah

1275

00:47:08,390 --> 00:47:05,040

um and i offered uh findings from 100

1276

00:47:12,950 --> 00:47:10,870

i've got uap cases all the way back to

1277

00:47:16,390 --> 00:47:12,960

1916.

1278

00:47:18,790 --> 00:47:16,400

wow yeah and

1279

00:47:20,790 --> 00:47:18,800

in what form were they back then

1280

00:47:23,750 --> 00:47:20,800

okay the first uap report that i have

1281

00:47:27,349 --> 00:47:23,760

from 1916 the pilot complained of being

1282

00:47:28,549 --> 00:47:27,359

accosted by six flying manhole covers he

1283

00:47:30,230 --> 00:47:28,559

called them

1284

00:47:34,549 --> 00:47:30,240

disc forms about that

1285

00:47:36,870 --> 00:47:34,559

yeah 1924 i had a dh4 pilot flying a

1286

00:47:38,710 --> 00:47:36,880

mail route over nevada

1287

00:47:41,030 --> 00:47:38,720

and uh he said he was forced to land

1288

00:47:42,150 --> 00:47:41,040

after an encounter with a huge wingless

1289

00:47:43,829 --> 00:47:42,160

cylinder

1290

00:47:45,829 --> 00:47:43,839

which looks a lot like the one that

1291

00:47:47,589 --> 00:47:45,839

david hastings photographed over nevada

1292

00:47:49,750 --> 00:47:47,599

in 1985

1293

00:47:51,910 --> 00:47:49,760

which is a very sobering photograph as

1294

00:47:54,470 --> 00:47:51,920

well he almost hit it with his airplane

1295

00:47:56,150 --> 00:47:54,480

um what i found anyway and analyzing all

1296

00:47:57,910 --> 00:47:56,160

this data first off it didn't start in

1297

00:48:00,390 --> 00:47:57,920

the 40s

1298

00:48:02,870 --> 00:48:00,400

uh whenever uap started it started much

1299

00:48:05,270 --> 00:48:02,880

earlier for pilots

1300

00:48:07,910 --> 00:48:05,280

there's a general set of profiles that

1301

00:48:10,069 --> 00:48:07,920

pilots encounter primarily which are

1302

00:48:13,030 --> 00:48:10,079

balls of light discs

1303

00:48:14,390 --> 00:48:13,040

spheres and cylinders

1304

00:48:16,069 --> 00:48:14,400

there are other things out there but

1305

00:48:17,990 --> 00:48:16,079

their outlier data the general data

1306

00:48:19,030 --> 00:48:18,000

carries those four profiles

1307

00:48:22,470 --> 00:48:19,040

i've done

1308

00:48:23,990 --> 00:48:22,480

an analysis of their flight dynamics um

1309

00:48:25,750 --> 00:48:24,000

uh which is

1310

00:48:27,829 --> 00:48:25,760

what puts us on in in some really

1311

00:48:28,710 --> 00:48:27,839

interesting territory i think

1312

00:48:30,870 --> 00:48:28,720

um

1313

00:48:32,829 --> 00:48:30,880

they don't experience resistance to

1314

00:48:35,430 --> 00:48:32,839

changes in velocity or

1315

00:48:37,030 --> 00:48:35,440

direction and that

1316

00:48:38,069 --> 00:48:37,040

that's very important given that they

1317

00:48:40,390 --> 00:48:38,079

don't use

1318

00:48:41,910 --> 00:48:40,400

uh propulsive thrust or aerodynamic lift

1319

00:48:43,430 --> 00:48:41,920

to fly

1320

00:48:44,549 --> 00:48:43,440

so there's no

1321

00:48:45,990 --> 00:48:44,559

um

1322

00:48:48,150 --> 00:48:46,000

when they want to stop they just stop

1323

00:48:49,990 --> 00:48:48,160

they don't have any respect for the the

1324

00:48:53,270 --> 00:48:50,000

four forces that make an aircraft able

1325

00:48:56,230 --> 00:48:53,280

to fly which are drag lift thrust and

1326

00:48:58,069 --> 00:48:56,240

gravity right uh an airplane flight is a

1327

00:48:59,430 --> 00:48:58,079

concert of those things and these don't

1328

00:49:01,190 --> 00:48:59,440

do any of that

1329

00:49:03,109 --> 00:49:01,200

i think that's a direct

1330

00:49:04,870 --> 00:49:03,119

it's a direct result of the propulsion

1331

00:49:06,470 --> 00:49:04,880

methodology

1332

00:49:10,870 --> 00:49:06,480

uh

1333

00:49:12,710 --> 00:49:10,880

shifting i think rather than actually

1334

00:49:14,549 --> 00:49:12,720

moving forward through space like a

1335

00:49:17,349 --> 00:49:14,559

space you know they're shifting one

1336

00:49:19,190 --> 00:49:17,359

place to another i think they're

1337

00:49:21,270 --> 00:49:19,200

you might say decoupled from the local

1338

00:49:22,630 --> 00:49:21,280

space time they're they're not

1339

00:49:23,990 --> 00:49:22,640

that right

1340

00:49:25,750 --> 00:49:24,000

i don't know how to explain that but

1341

00:49:27,990 --> 00:49:25,760

that that's kind of the

1342

00:49:29,430 --> 00:49:28,000

gist of it there are temporal effects

1343

00:49:32,230 --> 00:49:29,440

associated with getting close to them

1344

00:49:34,950 --> 00:49:32,240

which is another clue about about

1345

00:49:37,109 --> 00:49:34,960

what these things might be like um

1346

00:49:38,630 --> 00:49:37,119

you know the technology involved if we

1347

00:49:40,309 --> 00:49:38,640

experience temporal effects if we get

1348

00:49:42,870 --> 00:49:40,319

close to them and we experience an

1349

00:49:44,790 --> 00:49:42,880

acceleration in time for example

1350

00:49:47,510 --> 00:49:44,800

we're probably looking i would guess in

1351

00:49:50,309 --> 00:49:47,520

general relativistic corners for

1352

00:49:53,109 --> 00:49:50,319

information on how that's possible um we

1353

00:49:54,069 --> 00:49:53,119

should also explain decoupling

1354

00:49:56,150 --> 00:49:54,079

i don't know

1355

00:49:57,510 --> 00:49:56,160

it could yeah it could i mean there's a

1356

00:50:00,230 --> 00:49:57,520

there's a way in which that could all

1357

00:50:02,309 --> 00:50:00,240

apply in in some form or another i i

1358

00:50:03,589 --> 00:50:02,319

just have never experienced any

1359

00:50:04,710 --> 00:50:03,599

time dilation effects as you're

1360

00:50:05,910 --> 00:50:04,720

referring to

1361

00:50:07,190 --> 00:50:05,920

yeah

1362

00:50:08,630 --> 00:50:07,200

got me in here there's a personal

1363

00:50:09,990 --> 00:50:08,640

experience that brought me into this

1364

00:50:10,870 --> 00:50:10,000

field and um

1365

00:50:13,829 --> 00:50:10,880

um

1366

00:50:16,470 --> 00:50:13,839

and i did have a a pretty blatant one

1367

00:50:17,750 --> 00:50:16,480

um and i got very close to it less than

1368

00:50:19,910 --> 00:50:17,760

15 feet

1369

00:50:21,990 --> 00:50:19,920

um and i saw the crew and all the other

1370

00:50:23,670 --> 00:50:22,000

stuff but the whole point is that the

1371

00:50:26,470 --> 00:50:23,680

the physics of this thing and the way it

1372

00:50:27,750 --> 00:50:26,480

moved uh at one point it moved very

1373

00:50:29,109 --> 00:50:27,760

quickly and it should have killed the

1374

00:50:31,030 --> 00:50:29,119

crew and they didn't even rock on their

1375

00:50:33,589 --> 00:50:31,040

heels so they weren't experiencing

1376

00:50:35,750 --> 00:50:33,599

inertia either you know

1377

00:50:38,390 --> 00:50:35,760

uh yeah so you're talking about

1378

00:50:41,270 --> 00:50:38,400

ted are you talking about you saw a crew

1379

00:50:44,470 --> 00:50:41,280

that was on a craft yes

1380

00:50:46,710 --> 00:50:44,480

that's how i got involved in all of this

1381

00:50:50,470 --> 00:50:46,720

so i think you and i talked about that

1382

00:50:52,309 --> 00:50:50,480

um years ago a little bit and you also

1383

00:50:55,430 --> 00:50:52,319

mentioned that you had

1384

00:50:57,430 --> 00:50:55,440

a sighting in oakland on the um and you

1385

00:50:59,430 --> 00:50:57,440

saw this thing up above you were in a

1386

00:51:01,510 --> 00:50:59,440

car and you were driving along you were

1387

00:51:03,990 --> 00:51:01,520

riding as a passenger and you saw this

1388

00:51:06,870 --> 00:51:04,000

thing and i think you said oakland along

1389

00:51:08,950 --> 00:51:06,880

that way or east bay somewhere yeah

1390

00:51:10,710 --> 00:51:08,960

craft

1391

00:51:12,230 --> 00:51:10,720

whatever it was you knew that it knew

1392

00:51:14,470 --> 00:51:12,240

that you were in the car or something

1393

00:51:16,710 --> 00:51:14,480

along those lines right well we saw it

1394

00:51:18,390 --> 00:51:16,720

from miles away and it intercepted us

1395

00:51:20,230 --> 00:51:18,400

and stopped less than 15 feet from the

1396

00:51:22,950 --> 00:51:20,240

vehicle and then it

1397

00:51:24,870 --> 00:51:22,960

made a maneuver around us i mean it was

1398

00:51:26,230 --> 00:51:24,880

pretty obviously focused on us and i

1399

00:51:27,990 --> 00:51:26,240

don't know why but it's what got me

1400

00:51:29,829 --> 00:51:28,000

involved in all of this i i made a

1401
00:51:33,430 --> 00:51:29,839
report to the

1402
00:51:36,470 --> 00:51:33,440
pr office at ames research center and um

1403
00:51:39,109 --> 00:51:36,480
i got a call back from dr haynes

1404
00:51:41,109 --> 00:51:39,119
and one thing led to another and

1405
00:51:43,109 --> 00:51:41,119
ended up running narcap and then having

1406
00:51:44,230 --> 00:51:43,119
to basically sideline that experience

1407
00:51:47,270 --> 00:51:44,240
and bury it

1408
00:51:49,109 --> 00:51:47,280
um but it it helps inform my

1409
00:51:51,430 --> 00:51:49,119
understanding of how they move

1410
00:51:53,750 --> 00:51:51,440
and the kinds of

1411
00:51:55,510 --> 00:51:53,760
but the the kinds of effects and

1412
00:51:58,630 --> 00:51:55,520
situations that the researchers like

1413
00:52:00,230 --> 00:51:58,640

abby are going to end up encountering

1414

00:52:01,589 --> 00:52:00,240

you know if their work is sincere in all

1415

00:52:03,270 --> 00:52:01,599

this

1416

00:52:04,790 --> 00:52:03,280

my experiences are certainly what i know

1417

00:52:06,710 --> 00:52:04,800

they are and they're going to run into

1418

00:52:08,390 --> 00:52:06,720

this eventually and it goes down a

1419

00:52:10,390 --> 00:52:08,400

rabbit hole

1420

00:52:13,030 --> 00:52:10,400

some of us are a little ways down there

1421

00:52:15,270 --> 00:52:13,040

you know we we don't have a

1422

00:52:16,870 --> 00:52:15,280

i don't have a reputation to protect you

1423

00:52:19,589 --> 00:52:16,880

know i can talk about this and now

1424

00:52:22,069 --> 00:52:19,599

they've given us a license to speak out

1425

00:52:23,670 --> 00:52:22,079

where i can at least say that i've seen

1426

00:52:25,430 --> 00:52:23,680

it you know

1427

00:52:27,109 --> 00:52:25,440

and and that's been the hardest thing is

1428

00:52:29,109 --> 00:52:27,119

having credibility it's one of the only

1429

00:52:30,150 --> 00:52:29,119

fields i know where you can have

1430

00:52:32,230 --> 00:52:30,160

uh

1431

00:52:34,870 --> 00:52:32,240

where you lose credibility by having

1432

00:52:36,069 --> 00:52:34,880

experience with what you're studying

1433

00:52:37,670 --> 00:52:36,079

wow

1434

00:52:39,589 --> 00:52:37,680

that's i never thought of that but

1435

00:52:40,870 --> 00:52:39,599

you're right um there's a question in

1436

00:52:43,030 --> 00:52:40,880

facebook and we're going to be going

1437

00:52:45,190 --> 00:52:43,040

into break here in like three minutes

1438

00:52:46,790 --> 00:52:45,200

and uh i'm hoping you guys can hang out

1439

00:52:48,470 --> 00:52:46,800

i don't really um

1440

00:52:50,230 --> 00:52:48,480

actually could play a video from last

1441

00:52:52,549 --> 00:52:50,240

week it would just be a repeat i might

1442

00:52:54,390 --> 00:52:52,559

just do that but here's a question uh

1443

00:52:57,349 --> 00:52:54,400

from stella bell and facebook have you

1444

00:52:59,510 --> 00:52:57,359

guys looked into anti-mass field theory

1445

00:53:00,870 --> 00:52:59,520

it cancels the mass

1446

00:53:02,710 --> 00:53:00,880

can go to

1447

00:53:03,910 --> 00:53:02,720

ftl travel

1448

00:53:04,870 --> 00:53:03,920

uh anyway

1449

00:53:06,309 --> 00:53:04,880

um

1450

00:53:07,670 --> 00:53:06,319

has anyone looked into this either one

1451
00:53:10,710 --> 00:53:07,680
of you

1452
00:53:13,670 --> 00:53:10,720
i i personally have not because um it

1453
00:53:16,150 --> 00:53:13,680
requires such a different view

1454
00:53:17,750 --> 00:53:16,160
of what we call mass that we don't have

1455
00:53:20,950 --> 00:53:17,760
enough science to even surround that

1456
00:53:22,950 --> 00:53:20,960
with anything meaningful at the moment

1457
00:53:24,470 --> 00:53:22,960
i tend to avoid that stuff let the data

1458
00:53:26,630 --> 00:53:24,480
speak for itself we'll come to a

1459
00:53:28,150 --> 00:53:26,640
consensus as we all look at it

1460
00:53:30,230 --> 00:53:28,160
and that was what was terribly

1461
00:53:31,829 --> 00:53:30,240
interesting about the aiaa presentations

1462
00:53:33,670 --> 00:53:31,839
is that we were all speaking about

1463
00:53:35,349 --> 00:53:33,680

different situations most of the

1464

00:53:37,670 --> 00:53:35,359

presenters were speaking about specific

1465

00:53:39,589 --> 00:53:37,680

cases i was speaking in generalities and

1466

00:53:41,910 --> 00:53:39,599

yet we were all saying the same thing

1467

00:53:42,950 --> 00:53:41,920

that these uap they demonstrate very

1468

00:53:44,870 --> 00:53:42,960

specific

1469

00:53:46,309 --> 00:53:44,880

uh flight characteristics that are uh

1470

00:53:48,710 --> 00:53:46,319

that we all agree that are there and

1471

00:53:50,390 --> 00:53:48,720

they're very curious and then i added a

1472

00:53:52,790 --> 00:53:50,400

bit to the conversation on ball of light

1473

00:53:53,990 --> 00:53:52,800

phenomena based on observations i've had

1474

00:53:55,349 --> 00:53:54,000

in arizona

1475

00:53:58,150 --> 00:53:55,359

um

1476
00:53:59,589 --> 00:53:58,160
and uh uh other places and that and and

1477
00:54:00,710 --> 00:53:59,599
on what our pilots are reporting in

1478
00:54:02,309 --> 00:54:00,720
terms of

1479
00:54:03,910 --> 00:54:02,319
for example colors

1480
00:54:06,470 --> 00:54:03,920
uh they look a lot like the emission

1481
00:54:07,510 --> 00:54:06,480
spectro specific atmospheric

1482
00:54:09,270 --> 00:54:07,520
atoms

1483
00:54:12,630 --> 00:54:09,280
um the orange

1484
00:54:13,589 --> 00:54:12,640
helium right um blues or nitrogen reds

1485
00:54:14,870 --> 00:54:13,599
neon

1486
00:54:17,030 --> 00:54:14,880
um

1487
00:54:19,109 --> 00:54:17,040
yellow yellow or white

1488
00:54:22,309 --> 00:54:19,119

yellow or white whitish green could be

1489

00:54:26,309 --> 00:54:22,319

oxygen you know there's

1490

00:54:29,349 --> 00:54:26,319

yeah exactly so so there's a whole um

1491

00:54:30,790 --> 00:54:29,359

uh uh possibility of a

1492

00:54:31,910 --> 00:54:30,800

direction to look in terms of

1493

00:54:36,630 --> 00:54:31,920

understanding these ball of light

1494

00:54:39,349 --> 00:54:37,430

okay

1495

00:54:41,030 --> 00:54:39,359

sorry my camera will be back

1496

00:54:43,589 --> 00:54:41,040

okay that's all right

1497

00:54:47,430 --> 00:54:43,599

so we are just about ready to go into

1498

00:54:49,829 --> 00:54:47,440

into uh break but i wanted to uh yeah i

1499

00:54:51,349 --> 00:54:49,839

guess i guess it would be time to go in

1500

00:54:53,990 --> 00:54:51,359

so i think what i'm gonna do is i'm

1501
00:54:56,230 --> 00:54:54,000
going to play the video for those people

1502
00:54:58,549 --> 00:54:56,240
um that i played last week i just didn't

1503
00:55:01,270 --> 00:54:58,559
get a chance today to to bring anything

1504
00:55:02,789 --> 00:55:01,280
on so hang in there over at kgr a radio

1505
00:55:18,430 --> 00:55:02,799
we'll be right back right after these

1506
00:55:18,440 --> 00:55:30,230
[Music]

1507
00:55:34,870 --> 00:55:32,870
and but uh kevin there was

1508
00:55:39,670 --> 00:55:34,880
how many would you say that you saw in

1509
00:55:41,910 --> 00:55:39,680
one any given situation at at one time

1510
00:55:44,230 --> 00:55:41,920
um they appeared on the radar in groups

1511
00:55:46,470 --> 00:55:44,240
of five to ten at a time and if i was to

1512
00:55:48,069 --> 00:55:46,480
add up all the groups over the

1513
00:55:49,349 --> 00:55:48,079

entire period of time we were tracking

1514

00:55:51,349 --> 00:55:49,359

these things there was probably about a

1515

00:55:53,910 --> 00:55:51,359

hundred total objects

1516

00:55:56,069 --> 00:55:53,920

now i don't have any idea if um they

1517

00:55:58,710 --> 00:55:56,079

were a hundred separate objects or they

1518

00:56:00,710 --> 00:55:58,720

were the same five you know groups

1519

00:56:02,470 --> 00:56:00,720

the same groups basically repeating

1520

00:56:04,549 --> 00:56:02,480

somehow i don't even know if they're all

1521

00:56:06,870 --> 00:56:04,559

the same shape and size because all i'm

1522

00:56:10,789 --> 00:56:06,880

looking at on my on my console is a

1523

00:56:12,950 --> 00:56:10,799

symbol symbology represents everything

1524

00:56:14,870 --> 00:56:12,960

so it's um

1525

00:56:17,349 --> 00:56:14,880

based on my loose my loose math is about

1526

00:56:19,109 --> 00:56:17,359

100 altogether

1527

00:56:21,430 --> 00:56:19,119

so you know the

1528

00:56:23,430 --> 00:56:21,440

going back to you know gary's thoughts

1529

00:56:25,829 --> 00:56:23,440

or whatever have

1530

00:56:28,069 --> 00:56:25,839

it just seems like if there was this

1531

00:56:31,270 --> 00:56:28,079

tic-tac-shaped

1532

00:56:33,109 --> 00:56:31,280

uh odd object objects that was developed

1533

00:56:35,030 --> 00:56:33,119

by the military and they were testing

1534

00:56:36,710 --> 00:56:35,040

them you just seemed

1535

00:56:39,270 --> 00:56:36,720

you would seem to

1536

00:56:40,870 --> 00:56:39,280

kind of get the idea that a lot of

1537

00:56:43,589 --> 00:56:40,880

people would be seeing them it wouldn't

1538

00:56:45,190 --> 00:56:43,599

just be your situation you know they'd

1539

00:56:49,190 --> 00:56:45,200

be seeing them over and over and over

1540

00:56:50,470 --> 00:56:49,200

and uh uh are there any other um you

1541

00:56:52,789 --> 00:56:50,480

know people that have come forward

1542

00:56:54,230 --> 00:56:52,799

saying they're seeing the same objects

1543

00:56:56,470 --> 00:56:54,240

that you're aware of

1544

00:56:58,230 --> 00:56:56,480

i know kevin has done some research in

1545

00:57:00,069 --> 00:56:58,240

this with especially with the sightings

1546

00:57:01,990 --> 00:57:00,079

around the same area that we were at and

1547

00:57:04,230 --> 00:57:02,000

apparently there's been hundreds of

1548

00:57:05,349 --> 00:57:04,240

people that have seen it

1549

00:57:07,270 --> 00:57:05,359

so yeah

1550

00:57:08,470 --> 00:57:07,280

and then the recent the more recent uh

1551
00:57:10,150 --> 00:57:08,480
events on the east coast with the

1552
00:57:12,230 --> 00:57:10,160
roosevelt battle group

1553
00:57:13,990 --> 00:57:12,240
um according to some of the reports i've

1554
00:57:15,109 --> 00:57:14,000
heard from those guys is they were

1555
00:57:17,349 --> 00:57:15,119
seeing them

1556
00:57:20,230 --> 00:57:17,359
some sort of objects out there almost on

1557
00:57:21,990 --> 00:57:20,240
a daily basis for for a period of time

1558
00:57:23,270 --> 00:57:22,000
but that's more like that's where the go

1559
00:57:24,789 --> 00:57:23,280
ahead that's where the gimbal and the go

1560
00:57:26,789 --> 00:57:24,799
fast videos came yeah i was going to say

1561
00:57:28,870 --> 00:57:26,799
but that's the gimbal is not you know

1562
00:57:31,109 --> 00:57:28,880
not your tic tac shape and then you're

1563
00:57:33,270 --> 00:57:31,119

getting you're going to be getting into

1564

00:57:34,069 --> 00:57:33,280

some other type of technology that that

1565

00:57:37,670 --> 00:57:34,079

is

1566

00:57:39,270 --> 00:57:37,680

if it's our own um you know

1567

00:57:40,950 --> 00:57:39,280

that i mean they could have different

1568

00:57:42,470 --> 00:57:40,960

models using the same thing i mean they

1569

00:57:45,190 --> 00:57:42,480

could be for different things because i

1570

00:57:46,630 --> 00:57:45,200

mean rf-18s don't look like jumbo jets

1571

00:57:48,789 --> 00:57:46,640

you know i mean

1572

00:57:50,710 --> 00:57:48,799

it's just a matter of or they could

1573

00:57:53,510 --> 00:57:50,720

have different purposes one could be

1574

00:58:15,349 --> 00:57:53,520

reconnaissance one could be uh you know

1575

00:58:15,359 --> 00:58:19,349

stand by

1576

00:58:23,430 --> 00:58:20,150

in

1577

00:58:25,589 --> 00:58:23,440

three two one go

1578

00:58:28,950 --> 00:58:25,599

all right welcome back everyone so my

1579

00:58:30,630 --> 00:58:28,960

guests are ted ro whoa i'm blurry

1580

00:58:33,109 --> 00:58:30,640

wow i don't know what happened this is a

1581

00:58:34,710 --> 00:58:33,119

self-focusing

1582

00:58:37,349 --> 00:58:34,720

okay

1583

00:58:39,430 --> 00:58:37,359

well maybe maybe it's to my advantage

1584

00:58:43,190 --> 00:58:39,440

looking blurry could be to my advantage

1585

00:58:44,069 --> 00:58:43,200

tonight so it's okay voice for radio

1586

00:58:48,150 --> 00:58:44,079

only

1587

00:58:50,630 --> 00:58:48,160

so uh bringing back we got ted and mark

1588

00:58:53,430 --> 00:58:50,640

welcome back yeah where where are you

1589

00:58:55,190 --> 00:58:53,440

yeah there you are over there

1590

00:58:57,510 --> 00:58:55,200

you're the one without the your camera

1591

00:58:59,349 --> 00:58:57,520

went out mark so i didn't realize mark

1592

00:59:02,150 --> 00:58:59,359

you're actually in your observatory

1593

00:59:04,150 --> 00:59:02,160

that's i was in there no i'm actually in

1594

00:59:06,630 --> 00:59:04,160

my my office uh actually i'm in the

1595

00:59:09,510 --> 00:59:06,640

office where you did the show that time

1596

00:59:11,670 --> 00:59:09,520

oh okay i just happen to have your your

1597

00:59:13,349 --> 00:59:11,680

telescope behind you no that's the one

1598

00:59:15,589 --> 00:59:13,359

that's it's here because it's on a work

1599

00:59:17,990 --> 00:59:15,599

table and i'm rehabbing it right now

1600

00:59:19,670 --> 00:59:18,000

um it goes in this observatory out here

1601
00:59:20,549 --> 00:59:19,680
which is the building's being built

1602
00:59:22,630 --> 00:59:20,559
because

1603
00:59:25,109 --> 00:59:22,640
we outgrew this the dome that we had in

1604
00:59:29,109 --> 00:59:25,119
on the front lawn of my house

1605
00:59:31,750 --> 00:59:29,119
is the dome was that shipped out west

1606
00:59:33,589 --> 00:59:31,760
and yeah oh my soul and i'm building a

1607
00:59:36,470 --> 00:59:33,599
whole new building that uses the same

1608
00:59:38,150 --> 00:59:36,480
type of profile as the arizona system

1609
00:59:40,150 --> 00:59:38,160
because i need full automation here i

1610
00:59:43,109 --> 00:59:40,160
got to be able to do this you know well

1611
00:59:45,910 --> 00:59:43,119
automation plus remote activity and so i

1612
00:59:47,109 --> 00:59:45,920
need to have access in the same way and

1613
00:59:49,990 --> 00:59:47,119

i wrote a program to control the

1614

00:59:51,190 --> 00:59:50,000

observatory out there in arizona and i'm

1615

00:59:53,750 --> 00:59:51,200

writing the same program to run the

1616

00:59:55,510 --> 00:59:53,760

observatory here in connecticut and they

1617

00:59:56,630 --> 00:59:55,520

need to talk to each other

1618

00:59:58,230 --> 00:59:56,640

because i'm going to take pictures with

1619

00:59:59,750 --> 00:59:58,240

one telescope at the same time as i'm

1620

01:00:02,069 --> 00:59:59,760

taking the same pictures of the same

1621

01:00:03,430 --> 01:00:02,079

object with this telescope

1622

01:00:05,349 --> 01:00:03,440

interesting

1623

01:00:06,789 --> 01:00:05,359

it's really cool first time of like the

1624

01:00:09,030 --> 01:00:06,799

moon and things like that no one's ever

1625

01:00:10,230 --> 01:00:09,040

seen a true 3d image of the moon but you

1626
01:00:12,230 --> 01:00:10,240
will not

1627
01:00:15,270 --> 01:00:12,240
hey you must get along really well with

1628
01:00:18,710 --> 01:00:15,280
your town office

1629
01:00:20,470 --> 01:00:18,720
well things on your lawn and stuff yeah

1630
01:00:22,150 --> 01:00:20,480
they said to me one time what's that big

1631
01:00:24,470 --> 01:00:22,160
white minion looking thing on your front

1632
01:00:26,630 --> 01:00:24,480
lawn

1633
01:00:28,470 --> 01:00:26,640
minion you know it looked like stewart

1634
01:00:31,270 --> 01:00:28,480
over halloween one year i dressed it up

1635
01:00:33,270 --> 01:00:31,280
as stuart dominion

1636
01:00:35,430 --> 01:00:33,280
i could see it look like a ghost

1637
01:00:37,430 --> 01:00:35,440
it could also look like casper the ghost

1638
01:00:42,950 --> 01:00:37,440

too you know how many cars stop took

1639

01:00:46,069 --> 01:00:44,870

you know yeah yeah but

1640

01:00:48,150 --> 01:00:46,079

let's see that's the thing you know

1641

01:00:49,910 --> 01:00:48,160

ted's talking about the the the narcap

1642

01:00:52,150 --> 01:00:49,920

type things he's talking about all the

1643

01:00:53,109 --> 01:00:52,160

cases with aircraft and stuff

1644

01:00:55,670 --> 01:00:53,119

uh

1645

01:00:57,670 --> 01:00:55,680

observatories i have a all-sky camera

1646

01:01:00,309 --> 01:00:57,680

because the all-sky camera is a very

1647

01:01:01,750 --> 01:01:00,319

vital piece of low-light technology to

1648

01:01:03,430 --> 01:01:01,760

be able to look at the whole sky as a

1649

01:01:05,349 --> 01:01:03,440

whole i have 180 degree camera that

1650

01:01:08,390 --> 01:01:05,359

views the whole sky all at once

1651

01:01:10,549 --> 01:01:08,400

it's not it's not practical for doing

1652

01:01:11,430 --> 01:01:10,559

measured things it's great for looking

1653

01:01:14,470 --> 01:01:11,440

at

1654

01:01:16,549 --> 01:01:14,480

visual things and so i would take uh 30

1655

01:01:18,549 --> 01:01:16,559

second exposures with this camera this

1656

01:01:21,430 --> 01:01:18,559

low-light camera and then right away

1657

01:01:23,670 --> 01:01:21,440

take a new exposure okay like of your

1658

01:01:25,030 --> 01:01:23,680

keyboard uh and

1659

01:01:27,190 --> 01:01:25,040

so

1660

01:01:30,710 --> 01:01:27,200

i know right this is a

1661

01:01:33,750 --> 01:01:32,150

no you get it right

1662

01:01:36,150 --> 01:01:33,760

you're up there you do everything

1663

01:01:36,870 --> 01:01:36,160

backwards yeah i know it's backwards

1664

01:01:38,870 --> 01:01:36,880

so

1665

01:01:39,829 --> 01:01:38,880

uh but but what's what you're seeing ted

1666

01:01:42,870 --> 01:01:39,839

is about

1667

01:01:44,470 --> 01:01:42,880

teddy's reigns over there no that's you

1668

01:01:46,390 --> 01:01:44,480

you have to do everything backwards here

1669

01:01:48,390 --> 01:01:46,400

it's really i know

1670

01:01:49,910 --> 01:01:48,400

i had a question for you tattoo because

1671

01:01:52,309 --> 01:01:49,920

one of the things i discovered was on

1672

01:01:55,510 --> 01:01:52,319

this all sky camera okay yes ted's over

1673

01:01:57,270 --> 01:01:55,520

there okay we know that uh

1674

01:01:59,990 --> 01:01:57,280

i i actually found something really

1675

01:02:02,390 --> 01:02:00,000

interesting i actually saw a uh aerial

1676

01:02:05,190 --> 01:02:02,400

refueler fly over i recognize that by

1677

01:02:07,029 --> 01:02:05,200

the the lights on the bottom okay

1678

01:02:09,510 --> 01:02:07,039

right because they're very different

1679

01:02:10,390 --> 01:02:09,520

obviously from other aircraft naturally

1680

01:02:12,390 --> 01:02:10,400

well

1681

01:02:13,190 --> 01:02:12,400

it flew over and then

1682

01:02:15,430 --> 01:02:13,200

right

1683

01:02:17,270 --> 01:02:15,440

uh on its heels

1684

01:02:19,430 --> 01:02:17,280

okay the tanker flew over and it was

1685

01:02:22,069 --> 01:02:19,440

like a 35 second exposure so it's a long

1686

01:02:23,990 --> 01:02:22,079

trail with the punctuated lights okay

1687

01:02:25,430 --> 01:02:24,000

and and the trail of the many lights on

1688

01:02:28,630 --> 01:02:25,440

the bottom that we're on

1689

01:02:32,069 --> 01:02:28,640

and then uh way up in the sky okay above

1690

01:02:33,829 --> 01:02:32,079

you actually way up in the sky was

1691

01:02:35,190 --> 01:02:33,839

in one frame there was there was a

1692

01:02:36,870 --> 01:02:35,200

semi-circular pattern it was like

1693

01:02:39,029 --> 01:02:36,880

there's a semi-circular

1694

01:02:41,990 --> 01:02:39,039

light pattern and then the next frame it

1695

01:02:43,190 --> 01:02:42,000

completed that light pattern

1696

01:02:44,069 --> 01:02:43,200

brightness now you know what that says

1697

01:02:45,910 --> 01:02:44,079

to me

1698

01:02:49,029 --> 01:02:45,920

i first thought oh well that might be

1699

01:02:51,029 --> 01:02:49,039

like a jet circling to do a practice

1700

01:02:52,789 --> 01:02:51,039

tanker approach

1701

01:02:54,390 --> 01:02:52,799

i thought that makes sense i've seen

1702

01:02:56,950 --> 01:02:54,400

every refueling in action i know what it

1703

01:02:58,549 --> 01:02:56,960

looks like at night daytime

1704

01:02:59,349 --> 01:02:58,559

not from the air yet but i will get

1705

01:03:03,190 --> 01:02:59,359

there

1706

01:03:05,190 --> 01:03:03,200

but the thing is um that didn't work

1707

01:03:07,670 --> 01:03:05,200

when you do the analysis because the

1708

01:03:10,630 --> 01:03:07,680

brightness of the of the jet should only

1709

01:03:12,789 --> 01:03:10,640

have been bright when its exhaust was

1710

01:03:14,069 --> 01:03:12,799

facing me and as it went around in a

1711

01:03:16,230 --> 01:03:14,079

circle

1712

01:03:19,029 --> 01:03:16,240

now its exhaust isn't facing me and that

1713

01:03:21,349 --> 01:03:19,039

semi-circular sort of dimmed out and

1714

01:03:23,829 --> 01:03:21,359

stayed dim and gone

1715

01:03:25,990 --> 01:03:23,839

but it wasn't the whole thing was there

1716

01:03:28,829 --> 01:03:26,000

there was no room i have no idea what it

1717

01:03:32,710 --> 01:03:28,839

was so i caught what i think is an

1718

01:03:34,630 --> 01:03:32,720

actual unidentified craft of some kind

1719

01:03:37,029 --> 01:03:34,640

i'm not saying it's a

1720

01:03:40,150 --> 01:03:37,039

alien extraterrestrial craft

1721

01:03:42,470 --> 01:03:40,160

at all i mean it was definitely you know

1722

01:03:43,990 --> 01:03:42,480

appearing higher in the sky according to

1723

01:03:45,750 --> 01:03:44,000

the photograph but without a second

1724

01:03:47,589 --> 01:03:45,760

position to measure it i don't know how

1725

01:03:49,270 --> 01:03:47,599

right yeah of course

1726

01:03:51,829 --> 01:03:49,280

and of course that's one thing people

1727

01:03:53,670 --> 01:03:51,839

say it was 5 000 feet in the air and 300

1728

01:03:55,910 --> 01:03:53,680

feet across

1729

01:03:57,670 --> 01:03:55,920

yeah well the stanford in the stanford

1730

01:03:59,750 --> 01:03:57,680

university and the eye institute both

1731

01:04:01,829 --> 01:03:59,760

have done studies that show that humans

1732

01:04:04,069 --> 01:04:01,839

cannot estimate distance in the dark

1733

01:04:06,069 --> 01:04:04,079

when you've got one single object they

1734

01:04:08,150 --> 01:04:06,079

just can't right it's a

1735

01:04:10,309 --> 01:04:08,160

far away or a small thing up close you

1736

01:04:12,390 --> 01:04:10,319

know it's one of the two or something in

1737

01:04:15,349 --> 01:04:12,400

between so we don't know

1738

01:04:17,349 --> 01:04:15,359

but this object because of the faintness

1739

01:04:20,309 --> 01:04:17,359

of the trail and me thinking well if

1740

01:04:21,670 --> 01:04:20,319

that's a jet that's probably at a fairly

1741

01:04:23,109 --> 01:04:21,680

high altitude

1742

01:04:24,710 --> 01:04:23,119

and it was a very tight circle by the

1743

01:04:26,710 --> 01:04:24,720

way if you know if you look at a jet

1744

01:04:28,789 --> 01:04:26,720

making a circle a lazy circle a fighter

1745

01:04:31,349 --> 01:04:28,799

jet would make it especially at speed

1746

01:04:33,109 --> 01:04:31,359

let's say 200 knots going slow okay it

1747

01:04:35,589 --> 01:04:33,119

would make a fairly

1748

01:04:36,630 --> 01:04:35,599

large circle

1749

01:04:42,630 --> 01:04:36,640

circle

1750

01:04:45,510 --> 01:04:42,640

frames it completed after two frames so

1751

01:04:47,430 --> 01:04:45,520

uh i don't know what it was

1752

01:04:48,230 --> 01:04:47,440

yeah you know and that's right that's

1753

01:04:51,829 --> 01:04:48,240

right

1754

01:04:54,230 --> 01:04:51,839

two three talking about g-forces and

1755

01:04:55,029 --> 01:04:54,240

you're talking about

1756

01:04:58,630 --> 01:04:55,039

right

1757

01:05:00,390 --> 01:04:58,640

had a this object seemed to make a

1758

01:05:02,230 --> 01:05:00,400

semi-certain the first 30 seconds it

1759

01:05:03,829 --> 01:05:02,240

made half the circle and the second

1760

01:05:05,510 --> 01:05:03,839

three completed the circle so it

1761

01:05:07,190 --> 01:05:05,520

basically was like a minute

1762

01:05:09,829 --> 01:05:07,200

for it to do this

1763

01:05:11,349 --> 01:05:09,839

but at the at the size of the circle i

1764

01:05:13,910 --> 01:05:11,359

was looking at

1765

01:05:16,309 --> 01:05:13,920

i was thinking if that's a fighter

1766

01:05:19,270 --> 01:05:16,319

i could calculate the rough

1767

01:05:20,150 --> 01:05:19,280

radius that a fighter at a slow approach

1768

01:05:22,710 --> 01:05:20,160

speed

1769

01:05:24,309 --> 01:05:22,720

might have to go uh and then what the

1770

01:05:25,829 --> 01:05:24,319

radius might appear to be and then i can

1771

01:05:27,990 --> 01:05:25,839

actually calculate an altitude for it

1772

01:05:28,789 --> 01:05:28,000

based on just some trigonometric stuff

1773

01:05:31,270 --> 01:05:28,799

so

1774

01:05:32,470 --> 01:05:31,280

if i don't know that it's a jet on the

1775

01:05:35,750 --> 01:05:32,480

other hand

1776

01:05:37,270 --> 01:05:35,760

um then i don't have any clues i just

1777

01:05:39,589 --> 01:05:37,280

said well operating from the assumption

1778

01:05:42,549 --> 01:05:39,599

that it might be this jet aircraft

1779

01:05:44,870 --> 01:05:42,559

then this thing has to be in excess of

1780

01:05:46,710 --> 01:05:44,880

25 000 feet

1781

01:05:49,109 --> 01:05:46,720

if it's a jet aircraft

1782

01:05:51,270 --> 01:05:49,119

but the tanker went over and its lights

1783

01:05:53,430 --> 01:05:51,280

were very bright and in the time it in

1784

01:05:55,750 --> 01:05:53,440

the 30 second period that the tanker

1785

01:05:58,789 --> 01:05:55,760

went over the entire sky was full of the

1786

01:06:01,349 --> 01:05:58,799

tanker so that means that streak means

1787

01:06:02,630 --> 01:06:01,359

it was a lot lower or moving at some

1788

01:06:05,190 --> 01:06:02,640

high rate of speed you know but

1789

01:06:07,190 --> 01:06:05,200

obviously it was probably a lot lower

1790

01:06:11,029 --> 01:06:07,200

it was probably luke air force base

1791

01:06:14,870 --> 01:06:11,750

so

1792

01:06:19,109 --> 01:06:16,470

i'll tell you that stretch out there

1793

01:06:20,309 --> 01:06:19,119

between phoenix and yuma is a bit

1794

01:06:21,270 --> 01:06:20,319

curious

1795

01:06:23,190 --> 01:06:21,280

um

1796

01:06:24,470 --> 01:06:23,200

the observatory is

1797

01:06:27,029 --> 01:06:24,480

in that stretch

1798

01:06:28,710 --> 01:06:27,039

i've been in there and uh there's a spot

1799

01:06:32,309 --> 01:06:28,720

in particular that

1800

01:06:38,150 --> 01:06:32,319

they took it off the the usgs maps about

1801
01:06:40,710 --> 01:06:38,160
1939 and uh i've sat out there and um

1802
01:06:42,789 --> 01:06:40,720
i'm still processing the things we saw

1803
01:06:43,589 --> 01:06:42,799
out there at ground level

1804
01:06:45,589 --> 01:06:43,599
um

1805
01:06:46,789 --> 01:06:45,599
and i i was there once with erling

1806
01:06:50,150 --> 01:06:46,799
strand

1807
01:06:52,549 --> 01:06:50,160
uh dr teodorani's been there

1808
01:06:54,549 --> 01:06:52,559
we all have opinions about that place

1809
01:06:56,390 --> 01:06:54,559
uh erling told me it was like hesterlin

1810
01:06:57,589 --> 01:06:56,400
on steroids

1811
01:06:59,430 --> 01:06:57,599
so

1812
01:07:01,190 --> 01:06:59,440
it's a terribly active spot and it's not

1813
01:07:03,510 --> 01:07:01,200

the only one that whole strip along

1814

01:07:06,230 --> 01:07:03,520

there there's a couple of spots where it

1815

01:07:08,069 --> 01:07:06,240

where it's all kind of going down and um

1816

01:07:09,430 --> 01:07:08,079

my suggestion is get a little infrared

1817

01:07:10,710 --> 01:07:09,440

and look at the ground around those

1818

01:07:12,710 --> 01:07:10,720

places

1819

01:07:15,430 --> 01:07:12,720

well i actually

1820

01:07:16,870 --> 01:07:15,440

did uh i did kind of one better actually

1821

01:07:18,549 --> 01:07:16,880

not one better but i actually in the

1822

01:07:19,430 --> 01:07:18,559

same vein of thinking

1823

01:07:32,150 --> 01:07:19,440

i

1824

01:07:37,589 --> 01:07:32,160

drone

1825

01:07:39,750 --> 01:07:37,599

saw coyotes and i saw other life

1826

01:07:41,750 --> 01:07:39,760

right and i went up

1827

01:07:44,630 --> 01:07:41,760

higher than i should have let's just be

1828

01:07:48,549 --> 01:07:44,640

clear okay but out there

1829

01:07:52,630 --> 01:07:49,510

uh

1830

01:07:54,549 --> 01:07:52,640

and i actually had a purview of probably

1831

01:07:56,230 --> 01:07:54,559

uh i'd say

1832

01:07:58,789 --> 01:07:56,240

35

1833

01:08:00,230 --> 01:07:58,799

maybe 40 miles

1834

01:08:02,950 --> 01:08:00,240

that i could see

1835

01:08:05,430 --> 01:08:02,960

and i just kept circulating going around

1836

01:08:07,349 --> 01:08:05,440

and looking for what i could see

1837

01:08:08,470 --> 01:08:07,359

and with the flear system on this drone

1838

01:08:10,789 --> 01:08:08,480

that i

1839

01:08:12,789 --> 01:08:10,799

flew up there i had 14 minutes of time

1840

01:08:14,309 --> 01:08:12,799

at that point was the bet

1841

01:08:16,149 --> 01:08:14,319

and so actually about 10 because i

1842

01:08:17,829 --> 01:08:16,159

didn't have to bring it down as well and

1843

01:08:20,870 --> 01:08:17,839

go up at the time so

1844

01:08:22,229 --> 01:08:20,880

uh i didn't see anything odd on the

1845

01:08:24,070 --> 01:08:22,239

video

1846

01:08:26,309 --> 01:08:24,080

and you know i thought that's really

1847

01:08:27,349 --> 01:08:26,319

interesting but then again

1848

01:08:29,269 --> 01:08:27,359

uh they

1849

01:08:30,470 --> 01:08:29,279

this stuff has its own schedule and just

1850

01:08:32,550 --> 01:08:30,480

because you don't see anything doesn't

1851
01:08:35,110 --> 01:08:32,560
mean it's not happening you know

1852
01:08:36,630 --> 01:08:35,120
so i've been told about this one

1853
01:08:38,229 --> 01:08:36,640
particular location that there was a

1854
01:08:41,110 --> 01:08:38,239
particular type of phenomenon to look

1855
01:08:43,110 --> 01:08:41,120
for it had it has a pattern to light

1856
01:08:45,269 --> 01:08:43,120
light phenomena and

1857
01:08:46,870 --> 01:08:45,279
um but nobody knows what the frequency

1858
01:08:48,709 --> 01:08:46,880
is on the thing but i've heard locals

1859
01:08:51,349 --> 01:08:48,719
talk about it i've heard researchers

1860
01:08:53,669 --> 01:08:51,359
talk about it um and one night i was out

1861
01:08:54,709 --> 01:08:53,679
there with a crew and we we saw it

1862
01:08:57,749 --> 01:08:54,719
um

1863
01:09:00,390 --> 01:08:57,759

very close you know 50 75 yards not not

1864

01:09:01,829 --> 01:09:00,400

far away uh and then it was accompanied

1865

01:09:04,390 --> 01:09:01,839

eventually by a number of other light

1866

01:09:05,590 --> 01:09:04,400

phenomena that kind of filled the area

1867

01:09:06,470 --> 01:09:05,600

and that's where it all just really kind

1868

01:09:07,910 --> 01:09:06,480

of

1869

01:09:10,229 --> 01:09:07,920

you know when you get exposed enough

1870

01:09:13,430 --> 01:09:10,239

weird your brain will stop working

1871

01:09:15,749 --> 01:09:13,440

it it's i i don't it's i don't know it's

1872

01:09:16,630 --> 01:09:15,759

kind of like tonic and mobility

1873

01:09:17,910 --> 01:09:16,640

you know

1874

01:09:19,910 --> 01:09:17,920

in animals when they get to a point

1875

01:09:22,470 --> 01:09:19,920

where they can't run and they can't

1876

01:09:23,990 --> 01:09:22,480

fight they freeze and and it's like they

1877

01:09:25,269 --> 01:09:24,000

just wait until they're eaten you know

1878

01:09:27,269 --> 01:09:25,279

what i mean they don't

1879

01:09:28,309 --> 01:09:27,279

um you like those goats you know you

1880

01:09:30,630 --> 01:09:28,319

scare them

1881

01:09:32,550 --> 01:09:30,640

they just fall over yeah exactly

1882

01:09:33,910 --> 01:09:32,560

yeah and and

1883

01:09:36,229 --> 01:09:33,920

i've been this way in a number of

1884

01:09:37,990 --> 01:09:36,239

situations where where uap have i've

1885

01:09:40,149 --> 01:09:38,000

been close to them and

1886

01:09:41,510 --> 01:09:40,159

um i've talked to dr teotarani about it

1887

01:09:43,829 --> 01:09:41,520

i was trying to get some advice from him

1888

01:09:46,070 --> 01:09:43,839

about how to how to stay functional when

1889

01:09:47,269 --> 01:09:46,080

all this goes on and his word was get

1890

01:09:51,030 --> 01:09:47,279

cold

1891

01:09:52,630 --> 01:09:51,040

walking towards it he said that's the

1892

01:09:54,149 --> 01:09:52,640

only way that you can really face these

1893

01:09:56,229 --> 01:09:54,159

things when they're

1894

01:09:58,310 --> 01:09:56,239

i'll tell you i'm a free diver right i

1895

01:10:00,390 --> 01:09:58,320

teach freediving uh in hawaii i live in

1896

01:10:02,390 --> 01:10:00,400

hawaii in alaska but i'm i'm in alaska

1897

01:10:04,149 --> 01:10:02,400

right now um and i've been in the water

1898

01:10:06,390 --> 01:10:04,159

with big sharks

1899

01:10:08,070 --> 01:10:06,400

you know and i used to say well before

1900

01:10:09,350 --> 01:10:08,080

that it ever happened to me i used to

1901

01:10:11,189 --> 01:10:09,360

say well you know being around these

1902

01:10:13,750 --> 01:10:11,199

things like having a big shark come up

1903

01:10:15,189 --> 01:10:13,760

on you there's nowhere you can go it you

1904

01:10:16,630 --> 01:10:15,199

have its attention

1905

01:10:19,510 --> 01:10:16,640

and and

1906

01:10:21,669 --> 01:10:19,520

and there it's not negotiable you know

1907

01:10:23,189 --> 01:10:21,679

uh you you can project anything you want

1908

01:10:25,270 --> 01:10:23,199

on the experience itself but the one

1909

01:10:27,030 --> 01:10:25,280

thing you can't do is stop it

1910

01:10:29,990 --> 01:10:27,040

and um

1911

01:10:31,750 --> 01:10:30,000

uh so i've compared it to like the

1912

01:10:33,750 --> 01:10:31,760

the inherent terror we might have being

1913

01:10:35,750 --> 01:10:33,760

confronted by a shark well i was on the

1914

01:10:37,830 --> 01:10:35,760

ocean one day doing some deep swimming

1915

01:10:40,070 --> 01:10:37,840

and found myself nose to nose with a

1916

01:10:41,030 --> 01:10:40,080

15-footer and and uh it wasn't like that

1917

01:10:42,950 --> 01:10:41,040

at all

1918

01:10:44,870 --> 01:10:42,960

you know it wasn't wasn't anything like

1919

01:10:46,790 --> 01:10:44,880

like what the terrorite experience when

1920

01:10:48,070 --> 01:10:46,800

confronted by these things and

1921

01:10:49,189 --> 01:10:48,080

um

1922

01:10:51,110 --> 01:10:49,199

so

1923

01:10:53,030 --> 01:10:51,120

you know there's this whole aspect of

1924

01:10:55,189 --> 01:10:53,040

exposure to these things that goes

1925

01:10:56,470 --> 01:10:55,199

beyond just being technical

1926

01:11:01,510 --> 01:10:56,480

you know

1927

01:11:04,550 --> 01:11:01,520

challenge to do this work in the field

1928

01:11:06,310 --> 01:11:04,560

getting close to them and uh um

1929

01:11:08,149 --> 01:11:06,320

i think i think obvi and those guys are

1930

01:11:09,510 --> 01:11:08,159

going to find this out a lot this new

1931

01:11:12,070 --> 01:11:09,520

generation of science is starting to

1932

01:11:13,350 --> 01:11:12,080

work its way into the field

1933

01:11:15,110 --> 01:11:13,360

they're going to learn there's a rabbit

1934

01:11:16,950 --> 01:11:15,120

hole and that we've all been looking

1935

01:11:18,870 --> 01:11:16,960

into it for a while now

1936

01:11:21,110 --> 01:11:18,880

the ground observations are related to

1937

01:11:23,990 --> 01:11:21,120

the pilot observations pilots see what

1938

01:11:26,550 --> 01:11:24,000

ground observers see

1939

01:11:29,590 --> 01:11:26,560

abductee type experiences are related to

1940

01:11:31,270 --> 01:11:29,600

the ground observer situation and and

1941

01:11:33,830 --> 01:11:31,280

and eventually you know you end up in

1942

01:11:36,229 --> 01:11:33,840

this loop of of a spectrum of

1943

01:11:37,270 --> 01:11:36,239

experiences that are related to uap

1944

01:11:38,270 --> 01:11:37,280

and they're going to find themselves

1945

01:11:40,790 --> 01:11:38,280

moving into that it's a

1946

01:11:43,590 --> 01:11:40,800

multi-disciplinary area uh not to

1947

01:11:45,430 --> 01:11:43,600

mention a tactical problem in my opinion

1948

01:11:46,870 --> 01:11:45,440

um could be

1949

01:11:48,630 --> 01:11:46,880

you know i'm gonna throw i'd like to

1950

01:11:51,270 --> 01:11:48,640

throw out kind of a philosophical

1951

01:11:52,870 --> 01:11:51,280

question to both of you

1952

01:11:54,950 --> 01:11:52,880

here i'd like to hear both of your

1953

01:11:58,310 --> 01:11:54,960

answers and that is

1954

01:12:00,470 --> 01:11:58,320

if indeed the universe is teeming with

1955

01:12:01,350 --> 01:12:00,480

life like mark said you know toward the

1956

01:12:02,709 --> 01:12:01,360

beginning

1957

01:12:06,790 --> 01:12:02,719

of this show

1958

01:12:09,030 --> 01:12:06,800

uh why why if and if indeed we are being

1959

01:12:11,830 --> 01:12:09,040

visited by extraterrestrial

1960

01:12:14,470 --> 01:12:11,840

why would we be so special i don't know

1961

01:12:16,790 --> 01:12:14,480

that that they want us visit us

1962

01:12:18,950 --> 01:12:16,800

if there's so much life out there either

1963

01:12:19,990 --> 01:12:18,960

one of you want to answer that first

1964

01:12:21,750 --> 01:12:20,000

sure

1965

01:12:23,510 --> 01:12:21,760

you want to go first ted cause i have

1966

01:12:25,910 --> 01:12:23,520

either way go ahead

1967

01:12:26,709 --> 01:12:25,920

okay thank you i one of the things that

1968

01:12:27,669 --> 01:12:26,719

uh

1969

01:12:29,030 --> 01:12:27,679

i say

1970

01:12:30,149 --> 01:12:29,040

is

1971

01:12:32,390 --> 01:12:30,159

look at the

1972

01:12:34,229 --> 01:12:32,400

chemical composition of the universe all

1973

01:12:35,750 --> 01:12:34,239

right you look at the most prevalent

1974

01:12:36,870 --> 01:12:35,760

atoms in the universe now why would they

1975

01:12:39,110 --> 01:12:36,880

talk about

1976

01:12:41,110 --> 01:12:39,120

questions about life okay well the

1977

01:12:43,669 --> 01:12:41,120

question really comes down to

1978

01:12:46,070 --> 01:12:43,679

the fact that the earth and all the life

1979

01:12:48,950 --> 01:12:46,080

on it is carbon based

1980

01:12:52,149 --> 01:12:48,960

all the life on the earth has dna

1981

01:12:54,470 --> 01:12:52,159

deoxyribonucleic acid okay and and those

1982

01:12:56,470 --> 01:12:54,480

nucleotides that make up dna

1983

01:12:58,470 --> 01:12:56,480

are made up in special ways depending on

1984

01:12:59,350 --> 01:12:58,480

what you are what creature you are all

1985

01:13:00,709 --> 01:12:59,360

right

1986

01:13:02,470 --> 01:13:00,719

well

1987

01:13:04,070 --> 01:13:02,480

um

1988

01:13:06,390 --> 01:13:04,080

any

1989

01:13:09,510 --> 01:13:06,400

life form elsewhere

1990

01:13:12,149 --> 01:13:09,520

is going to look for life like itself

1991

01:13:13,030 --> 01:13:12,159

most likely that's an assumption

1992

01:13:15,750 --> 01:13:13,040

but

1993

01:13:17,350 --> 01:13:15,760

they only know what they are like we

1994

01:13:19,110 --> 01:13:17,360

only know what we are

1995

01:13:21,990 --> 01:13:19,120

we're looking for carbon-based life

1996

01:13:25,110 --> 01:13:22,000

every nasa mission okay to mars for

1997

01:13:28,470 --> 01:13:25,120

instance has had as one of its species

1998

01:13:31,030 --> 01:13:28,480

find other life forms like us

1999

01:13:32,550 --> 01:13:31,040

okay micro microscopic microbial

2000

01:13:33,910 --> 01:13:32,560

whatever but that's the that's the

2001

01:13:35,590 --> 01:13:33,920

mission okay

2002

01:13:38,310 --> 01:13:35,600

considering that's true

2003

01:13:40,550 --> 01:13:38,320

also consider that carbon-based life

2004

01:13:41,430 --> 01:13:40,560

forms require oxygen

2005

01:13:46,709 --> 01:13:41,440

to

2006

01:13:49,750 --> 01:13:46,719

energy okay they need oxygen so there'll

2007

01:13:51,830 --> 01:13:49,760

be some type of uh respiratory system

2008

01:13:52,709 --> 01:13:51,840

that uses oxygen

2009

01:13:55,750 --> 01:13:52,719

all right

2010

01:13:57,750 --> 01:13:55,760

and so therefore any alien species

2011

01:13:59,430 --> 01:13:57,760

that's carbon based most likely is going

2012

01:14:02,310 --> 01:13:59,440

to use oxygen so what are they going to

2013

01:14:04,709 --> 01:14:02,320

do they're going to look for it

2014

01:14:07,110 --> 01:14:04,719

that have oxygen in their atmospheres

2015

01:14:08,550 --> 01:14:07,120

and guess what i know something [h__h]

2016

01:14:10,470 --> 01:14:08,560

said

2017

01:14:12,950 --> 01:14:10,480

that we should hide from the aliens and

2018

01:14:15,030 --> 01:14:12,960

keep a low profile but guess what two

2019

01:14:17,030 --> 01:14:15,040

billion years ago oxygen was building up

2020

01:14:19,510 --> 01:14:17,040

in our our atmosphere because of

2021

01:14:20,390 --> 01:14:19,520

phytoplankton in the ocean

2022

01:14:22,229 --> 01:14:20,400

okay

2023

01:14:23,910 --> 01:14:22,239

they build the ocean

2024

01:14:26,830 --> 01:14:23,920

so what's that doing it means that we've

2025

01:14:26,950 --> 01:14:26,840

been announcing to the universe for

2026

01:14:29,750 --> 01:14:26,960

billion years

2027

01:14:34,390 --> 01:14:31,990

and guess what it's a blue light yeah

2028

01:14:37,590 --> 01:14:34,400

carl sagan said that the pale blue dot

2029

01:14:41,350 --> 01:14:39,270

we aren't so pale

2030

01:14:45,110 --> 01:14:41,360

if you're an advanced species we stand

2031

01:14:46,070 --> 01:14:45,120

out like a blue beacon of of wowza okay

2032

01:14:47,830 --> 01:14:46,080

and so

2033

01:14:50,630 --> 01:14:47,840

alien species are gonna say hey look at

2034

01:14:51,990 --> 01:14:50,640

that they have oxygen let's go see

2035

01:14:53,030 --> 01:14:52,000

if they have the capability they're

2036

01:14:54,149 --> 01:14:53,040

gonna come

2037

01:14:56,950 --> 01:14:54,159

and you gotta remember that we're

2038

01:14:59,830 --> 01:14:56,960

broadcasting that in all directions the

2039

01:15:01,270 --> 01:14:59,840

life we are planning everywhere

2040

01:15:03,510 --> 01:15:01,280

so

2041

01:15:05,110 --> 01:15:03,520

really like the answer thank you all

2042

01:15:06,229 --> 01:15:05,120

right ted you did you want to add to

2043

01:15:08,229 --> 01:15:06,239

that ted or do you have your own

2044

01:15:10,630 --> 01:15:08,239

thoughts well sure you know the original

2045

01:15:12,870 --> 01:15:10,640

question is why would they come here

2046

01:15:14,229 --> 01:15:12,880

um you know all the well i think

2047

01:15:15,990 --> 01:15:14,239

probably one of the most significant

2048

01:15:18,550 --> 01:15:16,000

contributions that obvi made was his

2049

01:15:20,390 --> 01:15:18,560

paper on

2050

01:15:22,870 --> 01:15:20,400

the ambient temperature of the universe

2051

01:15:25,189 --> 01:15:22,880

during its earliest epoch

2052

01:15:27,030 --> 01:15:25,199

and he he estimated that

2053

01:15:28,630 --> 01:15:27,040

a few hundred years a hundred thousand

2054

01:15:30,229 --> 01:15:28,640

years after the big bang the ambient

2055

01:15:32,070 --> 01:15:30,239

temperature of the universe was 73

2056

01:15:32,870 --> 01:15:32,080

degrees

2057

01:15:34,790 --> 01:15:32,880

and

2058

01:15:36,950 --> 01:15:34,800

given that he you know that's energy

2059

01:15:39,189 --> 01:15:36,960

right that's all part of the life

2060

01:15:41,270 --> 01:15:39,199

process that's why life is created in

2061

01:15:43,350 --> 01:15:41,280

zones around stars right now because

2062

01:15:44,790 --> 01:15:43,360

it's cold out there you know and if you

2063

01:15:45,750 --> 01:15:44,800

want chemistry to happen you need it

2064

01:15:47,910 --> 01:15:45,760

warmer

2065

01:15:49,350 --> 01:15:47,920

and and so the metabolism and all these

2066

01:15:50,630 --> 01:15:49,360

things can take place like mark was

2067

01:15:52,390 --> 01:15:50,640

saying

2068

01:15:54,950 --> 01:15:52,400

so first off there's plenty of time for

2069

01:15:57,430 --> 01:15:54,960

a saturation of the universe in terms of

2070

01:15:59,110 --> 01:15:57,440

um life and intelligent life and

2071

01:16:00,470 --> 01:15:59,120

technically enhanced

2072

01:16:05,270 --> 01:16:00,480

uh

2073

01:16:07,270 --> 01:16:05,280

dr kaku dr minishu kaku

2074

01:16:08,950 --> 01:16:07,280

applied the kardashev scale to

2075

01:16:10,790 --> 01:16:08,960

interstellar travel

2076

01:16:11,990 --> 01:16:10,800

you know and he suggested that that you

2077

01:16:14,149 --> 01:16:12,000

know

2078

01:16:15,830 --> 01:16:14,159

we could break down our understanding of

2079

01:16:18,070 --> 01:16:15,840

the capacity of a civilization by its

2080

01:16:19,669 --> 01:16:18,080

ability to travel much the same way

2081

01:16:21,510 --> 01:16:19,679

kardashev suggested that we can break

2082

01:16:23,270 --> 01:16:21,520

down the way how powerful the

2083

01:16:25,430 --> 01:16:23,280

civilization was by the size of its

2084

01:16:26,709 --> 01:16:25,440

radio signals um and the ability to

2085

01:16:27,750 --> 01:16:26,719

generate the energy to make those

2086

01:16:28,709 --> 01:16:27,760

signals

2087

01:16:29,750 --> 01:16:28,719

um

2088

01:16:32,149 --> 01:16:29,760

so

2089

01:16:35,110 --> 01:16:32,159

the uh

2090

01:16:37,350 --> 01:16:35,120

what we're looking at you know i mean

2091

01:16:39,350 --> 01:16:37,360

for them to make these transits

2092

01:16:41,110 --> 01:16:39,360

here from wherever they come from

2093

01:16:44,149 --> 01:16:41,120

um

2094

01:16:45,430 --> 01:16:44,159

equal and that's what what's going on

2095

01:16:46,470 --> 01:16:45,440

here and i'm not delusional and

2096

01:16:49,030 --> 01:16:46,480

everything's

2097

01:16:51,830 --> 01:16:49,040

kind of what we think it is um

2098

01:16:54,229 --> 01:16:51,840

to to make those transits at light speed

2099

01:16:56,229 --> 01:16:54,239

is is really

2100

01:16:59,350 --> 01:16:56,239

really doesn't work you know what i mean

2101

01:17:02,070 --> 01:16:59,360

it really it takes a long long time

2102

01:17:04,070 --> 01:17:02,080

generational chips this kind of thing so

2103

01:17:06,229 --> 01:17:04,080

you need a work capacity to begin with

2104

01:17:08,470 --> 01:17:06,239

and we're learning that work is possible

2105

01:17:10,790 --> 01:17:08,480

likely

2106

01:17:13,270 --> 01:17:10,800

right and

2107

01:17:16,310 --> 01:17:14,870

what we're looking at is if we are

2108

01:17:18,229 --> 01:17:16,320

looking at a civilization that's here

2109

01:17:21,189 --> 01:17:18,239

it's probably a cost class two class

2110

01:17:23,270 --> 01:17:21,199

three civilization that's capable of um

2111

01:17:25,669 --> 01:17:23,280

general of exploiting general

2112

01:17:26,550 --> 01:17:25,679

relativistic principles in transit

2113

01:17:28,709 --> 01:17:26,560

um

2114

01:17:31,110 --> 01:17:28,719

and it's probably got a very advanced

2115

01:17:33,430 --> 01:17:31,120

materials engineering manufacturing

2116

01:17:35,270 --> 01:17:33,440

process it's probably got a very in the

2117

01:17:38,149 --> 01:17:35,280

know um

2118

01:17:39,910 --> 01:17:38,159

nano technological system i mean and

2119

01:17:41,990 --> 01:17:39,920

i'll just just add that you know

2120

01:17:44,470 --> 01:17:42,000

my own observation of one device that i

2121

01:17:47,669 --> 01:17:44,480

saw the interior of the there was

2122

01:17:49,270 --> 01:17:47,679

nothing in there except the crew i mean

2123

01:17:52,229 --> 01:17:49,280

everything was in the hole of the device

2124

01:17:53,590 --> 01:17:52,239

is my guess it was a very simple thing

2125

01:17:55,270 --> 01:17:53,600

um

2126
01:17:56,630 --> 01:17:55,280
can you describe that a little bit more

2127
01:18:03,430 --> 01:17:56,640
detail ted

2128
01:18:07,110 --> 01:18:05,189
was this like a window you were looking

2129
01:18:08,390 --> 01:18:07,120
through like let's let's hear a little

2130
01:18:10,310 --> 01:18:08,400
bit more about it

2131
01:18:12,390 --> 01:18:10,320
what it was was a cylinder and it was

2132
01:18:14,070 --> 01:18:12,400
transparent on one side you couldn't see

2133
01:18:15,350 --> 01:18:14,080
through it but you can see into it they

2134
01:18:16,310 --> 01:18:15,360
had a deck

2135
01:18:18,149 --> 01:18:16,320
um

2136
01:18:19,510 --> 01:18:18,159
there were three crewmen standing in the

2137
01:18:21,350 --> 01:18:19,520
middle of it with their hands on a panel

2138
01:18:23,830 --> 01:18:21,360

and a heads up display and they were

2139

01:18:25,510 --> 01:18:23,840

facing us so the device was broadside it

2140

01:18:27,270 --> 01:18:25,520

had jumped from a mile away and come to

2141

01:18:28,950 --> 01:18:27,280

a dead stop in front of our car faster

2142

01:18:30,550 --> 01:18:28,960

than i could blink

2143

01:18:31,910 --> 01:18:30,560

i was looking right at it if i hadn't

2144

01:18:34,070 --> 01:18:31,920

been looking at it i wouldn't have seen

2145

01:18:35,350 --> 01:18:34,080

it when it happened and so it just goes

2146

01:18:37,189 --> 01:18:35,360

whack and stops right in front of the

2147

01:18:39,910 --> 01:18:37,199

car and then matches our speed down the

2148

01:18:42,149 --> 01:18:39,920

road and so i get this whole broadside

2149

01:18:43,030 --> 01:18:42,159

interior cross-section of this

2150

01:18:44,310 --> 01:18:43,040

thing

2151

01:18:45,910 --> 01:18:44,320

and i could see the deck they were

2152

01:18:47,910 --> 01:18:45,920

standing on there was a void underneath

2153

01:18:49,189 --> 01:18:47,920

it um and there was nothing in there

2154

01:18:50,070 --> 01:18:49,199

there was no chairs there was no

2155

01:18:53,189 --> 01:18:50,080

anything

2156

01:18:54,950 --> 01:18:53,199

so and again what does that look like

2157

01:18:57,189 --> 01:18:54,960

they didn't look like us had big light

2158

01:18:58,229 --> 01:18:57,199

bulb shaped heads little skinny bodies

2159

01:19:02,870 --> 01:18:58,239

um

2160

01:19:05,990 --> 01:19:04,550

there was a lot of physics in that that

2161

01:19:08,149 --> 01:19:06,000

experience so there was a lot i could

2162

01:19:09,590 --> 01:19:08,159

see that happened that now i've spent 20

2163

01:19:11,990 --> 01:19:09,600

years studying the field i know how to

2164

01:19:15,110 --> 01:19:12,000

talk about it you know so that it's

2165

01:19:16,709 --> 01:19:15,120

interesting right it's appropriate

2166

01:19:18,550 --> 01:19:16,719

i got a hunch they don't use a lot of

2167

01:19:20,070 --> 01:19:18,560

energy to do what they do even though in

2168

01:19:23,350 --> 01:19:20,080

our calculations we would we would

2169

01:19:24,630 --> 01:19:23,360

imagine that they would need it um

2170

01:19:26,310 --> 01:19:24,640

their um

2171

01:19:28,310 --> 01:19:26,320

everything about their systems looks

2172

01:19:29,990 --> 01:19:28,320

different you know in in terms of how

2173

01:19:31,669 --> 01:19:30,000

they function and we're gonna find that

2174

01:19:33,830 --> 01:19:31,679

out you know again because they don't

2175

01:19:35,990 --> 01:19:33,840

fly like anything that we know flies

2176

01:19:39,110 --> 01:19:36,000

they don't fly like a ballistically like

2177

01:19:41,669 --> 01:19:39,120

a bow and arrow they don't fly um like

2178

01:19:43,750 --> 01:19:41,679

like a uh an aerostat or a light or an

2179

01:19:46,790 --> 01:19:43,760

air object they don't they don't fly

2180

01:19:48,550 --> 01:19:46,800

like an airplane right so we've got this

2181

01:19:50,709 --> 01:19:48,560

whole other thing what are they doing

2182

01:19:52,790 --> 01:19:50,719

and it's uh if they can make angular

2183

01:19:55,270 --> 01:19:52,800

turns at speed if they can come to

2184

01:19:57,270 --> 01:19:55,280

sudden stops from speed with very sudden

2185

01:19:58,550 --> 01:19:57,280

decelerations this kind of thing then

2186

01:19:59,510 --> 01:19:58,560

we're looking at something very

2187

01:20:02,070 --> 01:19:59,520

different

2188

01:20:04,149 --> 01:20:02,080

um the case that dr knuth took down was

2189

01:20:11,750 --> 01:20:04,159

a

2190

01:20:14,870 --> 01:20:11,760

seconds

2191

01:20:17,430 --> 01:20:14,880

and the argument was about you know

2192

01:20:19,270 --> 01:20:17,440

yeah huge g's and kinetic energy there

2193

01:20:20,310 --> 01:20:19,280

should have been a rape explosion at the

2194

01:20:21,270 --> 01:20:20,320

end of that

2195

01:20:22,790 --> 01:20:21,280

you know

2196

01:20:24,310 --> 01:20:22,800

tons of tnt

2197

01:20:26,229 --> 01:20:24,320

as that thing throws off the kinetic

2198

01:20:28,470 --> 01:20:26,239

energy which didn't happen

2199

01:20:29,669 --> 01:20:28,480

um yeah so all of these are

2200

01:20:30,950 --> 01:20:29,679

tell us

2201

01:20:32,229 --> 01:20:30,960

go ahead

2202

01:20:34,070 --> 01:20:32,239

no i'm just saying that's the same thing

2203

01:20:35,990 --> 01:20:34,080

with no sonic boom no splash in the

2204

01:20:37,189 --> 01:20:36,000

water

2205

01:20:40,310 --> 01:20:37,199

ripping through the atmosphere but

2206

01:20:42,550 --> 01:20:40,320

leaving no plasma trail no no ionization

2207

01:20:44,709 --> 01:20:42,560

the way a meteor would

2208

01:20:45,830 --> 01:20:44,719

um you know meteor's doing 40 000 miles

2209

01:20:48,070 --> 01:20:45,840

an hour when it hits the upper

2210

01:20:49,669 --> 01:20:48,080

atmosphere what to do it the ionization

2211

01:20:52,310 --> 01:20:49,679

by impact

2212

01:20:54,870 --> 01:20:52,320

yeah you know these don't do that

2213

01:20:57,110 --> 01:20:54,880

um so there's a lot of clues in all of

2214

01:20:58,310 --> 01:20:57,120

this that that we can look at and say

2215

01:21:00,149 --> 01:20:58,320

well

2216

01:21:01,910 --> 01:21:00,159

you know and what i share in terms of my

2217

01:21:03,510 --> 01:21:01,920

own observations that's

2218

01:21:05,510 --> 01:21:03,520

it's already visible in all the other

2219

01:21:07,270 --> 01:21:05,520

cases i'm just i'm just offering it

2220

01:21:09,110 --> 01:21:07,280

because people need to get used to the

2221

01:21:10,229 --> 01:21:09,120

idea people like me who've seen these

2222

01:21:12,870 --> 01:21:10,239

things who are

2223

01:21:15,189 --> 01:21:12,880

talking about them in a rational way

2224

01:21:17,350 --> 01:21:15,199

you know it um and you had you had two

2225

01:21:20,070 --> 01:21:17,360

other uh witnesses with you that day too

2226

01:21:22,550 --> 01:21:20,080

right yeah yeah i wasn't driving you

2227

01:21:24,149 --> 01:21:22,560

know i was in the car and uh

2228

01:21:26,550 --> 01:21:24,159

uh when when the thing this is the

2229

01:21:28,790 --> 01:21:26,560

temporal effect i was talking about mark

2230

01:21:31,030 --> 01:21:28,800

um when the thing pulled up to the car

2231

01:21:32,390 --> 01:21:31,040

it was about 4 30 in the afternoon it

2232

01:21:33,830 --> 01:21:32,400

was about 15 feet in front of the

2233

01:21:36,229 --> 01:21:33,840

vehicle and just above we could see

2234

01:21:37,350 --> 01:21:36,239

under it to see the road sue refused to

2235

01:21:39,750 --> 01:21:37,360

stop the car

2236

01:21:41,350 --> 01:21:39,760

the the thing pulled over to one side on

2237

01:21:42,870 --> 01:21:41,360

us and right in this zone right about

2238

01:21:45,350 --> 01:21:42,880

here

2239

01:21:47,510 --> 01:21:45,360

it went from 4 30 and even we traveled

2240

01:21:50,950 --> 01:21:47,520

about 90 seconds about a mile and a half

2241

01:21:55,350 --> 01:21:52,950

and she didn't stop driving we didn't

2242

01:21:58,470 --> 01:21:55,360

leave the road it was very disorienting

2243

01:22:01,030 --> 01:21:58,480

you know it was like a very weird moment

2244

01:22:03,750 --> 01:22:01,040

sounds like a missing time episode

2245

01:22:05,030 --> 01:22:03,760

well it's accelerated time you know it

2246

01:22:06,790 --> 01:22:05,040

was

2247

01:22:09,189 --> 01:22:06,800

there's a boundary zone between them and

2248

01:22:11,750 --> 01:22:09,199

us if you get too close to it

2249

01:22:13,030 --> 01:22:11,760

it changes your relationship to your

2250

01:22:15,990 --> 01:22:13,040

frame

2251

01:22:18,229 --> 01:22:16,000

i understand that i might and and then

2252

01:22:20,070 --> 01:22:18,239

the only thing i i might

2253

01:22:22,550 --> 01:22:20,080

disagree with you on one thing that you

2254

01:22:23,270 --> 01:22:22,560

mean i'll talk about this too but

2255

01:22:24,629 --> 01:22:23,280

sure

2256

01:22:25,910 --> 01:22:24,639

he said that they don't you know it

2257

01:22:26,870 --> 01:22:25,920

doesn't appear like they use a lot of

2258

01:22:28,229 --> 01:22:26,880

energy

2259

01:22:30,149 --> 01:22:28,239

i actually kind of think it's just the

2260

01:22:32,149 --> 01:22:30,159

opposite they have actually secured a

2261

01:22:34,229 --> 01:22:32,159

way to use

2262

01:22:36,709 --> 01:22:34,239

limitless energy provided by the

2263

01:22:38,149 --> 01:22:36,719

universe itself and thus they it's

2264

01:22:40,790 --> 01:22:38,159

incorporated into their systems which

2265

01:22:42,070 --> 01:22:40,800

looks simple to to you and to us that

2266

01:22:43,830 --> 01:22:42,080

might see them

2267

01:22:46,550 --> 01:22:43,840

uh say nothing inside or whatever no

2268

01:22:48,390 --> 01:22:46,560

visible means of propulsion etc right

2269

01:22:49,990 --> 01:22:48,400

but we are only five thousand years into

2270

01:22:52,550 --> 01:22:50,000

keeping our actual history like from

2271

01:22:54,149 --> 01:22:52,560

samaria on forward right

2272

01:22:55,270 --> 01:22:54,159

we already see ways to use the

2273

01:22:57,430 --> 01:22:55,280

alcubierre drive that you were

2274

01:23:00,709 --> 01:22:57,440

referencing earlier the warp drive right

2275

01:23:03,350 --> 01:23:00,719

near a star in perhaps one to two weeks

2276

01:23:05,750 --> 01:23:03,360

if we go at a proper speed it'll

2277

01:23:07,510 --> 01:23:05,760

actually be a variant of the uh the

2278

01:23:09,189 --> 01:23:07,520

froning el cobiani variant that would

2279

01:23:11,990 --> 01:23:09,199

actually allow us to get there safely

2280

01:23:13,510 --> 01:23:12,000

without sloughing off as you say when

2281

01:23:14,950 --> 01:23:13,520

when we have the kinetic

2282

01:23:16,390 --> 01:23:14,960

uh when we stop

2283

01:23:17,750 --> 01:23:16,400

a lot of energy built up on our

2284

01:23:18,790 --> 01:23:17,760

windshield kind of like bugs on the

2285

01:23:20,709 --> 01:23:18,800

windshield we're gonna have to go

2286

01:23:22,709 --> 01:23:20,719

somewhere and coming off as terms of

2287

01:23:25,030 --> 01:23:22,719

energy that would obliterate the very

2288

01:23:26,390 --> 01:23:25,040

solar system we're trying to enter so

2289

01:23:28,790 --> 01:23:26,400

we have to use a different way to kind

2290

01:23:30,070 --> 01:23:28,800

of stuff that energy past us and let the

2291

01:23:31,990 --> 01:23:30,080

bugs

2292

01:23:33,430 --> 01:23:32,000

on the way through that little gap that

2293

01:23:34,550 --> 01:23:33,440

we crossed

2294

01:23:36,470 --> 01:23:34,560

but

2295

01:23:38,629 --> 01:23:36,480

that's not the only thing i have an

2296

01:23:39,910 --> 01:23:38,639

issue with there but and so everything

2297

01:23:42,070 --> 01:23:39,920

else

2298

01:23:44,470 --> 01:23:42,080

it stands to reason and it's worth

2299

01:23:46,070 --> 01:23:44,480

investigating to to you know generate

2300

01:23:48,229 --> 01:23:46,080

proofs of right i mean

2301

01:23:49,270 --> 01:23:48,239

you know it's all speculation until we

2302

01:23:51,030 --> 01:23:49,280

have

2303

01:23:53,030 --> 01:23:51,040

this darn ship in front of us and we can

2304

01:23:56,149 --> 01:23:53,040

say hey ted can you take that apart i'll

2305

01:23:57,510 --> 01:23:56,159

stand over here behind the shield

2306

01:23:59,830 --> 01:23:57,520

well you know that's the funny thing i

2307

01:24:02,070 --> 01:23:59,840

don't need anybody to believe me okay

2308

01:24:05,350 --> 01:24:02,080

and my story isn't really anything other

2309

01:24:07,910 --> 01:24:05,360

than it it's to inform from the side

2310

01:24:10,550 --> 01:24:07,920

you know just to say hey you know

2311

01:24:13,430 --> 01:24:10,560

don't discount this this is part of

2312

01:24:16,149 --> 01:24:13,440

the general data set you know um

2313

01:24:17,669 --> 01:24:16,159

i know that in the end reality and

2314

01:24:19,110 --> 01:24:17,679

research and good science is going to

2315

01:24:21,430 --> 01:24:19,120

resolve what this is and either i'm

2316

01:24:22,870 --> 01:24:21,440

right or not and i i i don't have an

2317

01:24:23,990 --> 01:24:22,880

investment in it i've never made any

2318

01:24:25,189 --> 01:24:24,000

money at this i'm just trying to

2319

01:24:26,790 --> 01:24:25,199

understand

2320

01:24:28,149 --> 01:24:26,800

why these things have happened to people

2321

01:24:30,070 --> 01:24:28,159

and to me and

2322

01:24:32,149 --> 01:24:30,080

um and to understand what the nature of

2323

01:24:34,470 --> 01:24:32,159

all this really implies

2324

01:24:36,870 --> 01:24:34,480

uh and it was really hard sitting there

2325

01:24:38,950 --> 01:24:36,880

in this group of engineers

2326

01:24:41,270 --> 01:24:38,960

and uh listening to all of this these

2327

01:24:43,350 --> 01:24:41,280

ideas that they had and they had many

2328

01:24:45,990 --> 01:24:43,360

good ones um

2329

01:24:47,590 --> 01:24:46,000

i i but but it was all about how the how

2330

01:24:49,510 --> 01:24:47,600

this was happening

2331

01:24:51,910 --> 01:24:49,520

and i just wanted to scream you do you

2332

01:24:54,870 --> 01:24:51,920

care about why you know

2333

01:24:56,070 --> 01:24:54,880

why is this happening you know and and

2334

01:24:58,390 --> 01:24:56,080

because you know the nerds they get

2335

01:25:00,950 --> 01:24:58,400

focused down into into their you know

2336

01:25:02,790 --> 01:25:00,960

their their particular corner and the

2337

01:25:04,390 --> 01:25:02,800

big picture issues just kind of go by

2338

01:25:06,310 --> 01:25:04,400

because that's what they do they focus

2339

01:25:07,590 --> 01:25:06,320

and and you know that conversation's

2340

01:25:10,229 --> 01:25:07,600

happening somewhere else i don't have

2341

01:25:12,470 --> 01:25:10,239

any doubt about that but but um

2342

01:25:14,070 --> 01:25:12,480

but as somebody who came to this as an

2343

01:25:15,990 --> 01:25:14,080

experienced first and then became a

2344

01:25:18,229 --> 01:25:16,000

researcher and then started carrying

2345

01:25:20,950 --> 01:25:18,239

that torch a little bit to get this ball

2346

01:25:22,870 --> 01:25:20,960

turning you know um

2347

01:25:24,149 --> 01:25:22,880

you know i personally would like to see

2348

01:25:26,149 --> 01:25:24,159

a little bit of

2349

01:25:27,990 --> 01:25:26,159

focus on that

2350

01:25:28,709 --> 01:25:28,000

and i think that comes from just trauma

2351
01:25:30,790 --> 01:25:28,719
from

2352
01:25:31,510 --> 01:25:30,800
my own experiences with them and wanting

2353
01:25:34,629 --> 01:25:31,520
to

2354
01:25:36,950 --> 01:25:34,639
see something happen you know ron neary

2355
01:25:37,990 --> 01:25:36,960
from close encounters got nothing on me

2356
01:25:40,870 --> 01:25:38,000
nothing

2357
01:25:42,709 --> 01:25:40,880
you know

2358
01:25:45,830 --> 01:25:42,719
that's funny um

2359
01:25:48,470 --> 01:25:45,840
i agree with that and i i think that um

2360
01:25:50,229 --> 01:25:48,480
i think that the concepts of

2361
01:25:52,229 --> 01:25:50,239
how they travel or whatever i mean i i

2362
01:25:53,590 --> 01:25:52,239
like the concept that miguel alcubierre

2363
01:25:55,830 --> 01:25:53,600

came up with

2364

01:25:57,189 --> 01:25:55,840

because you know if you have like a

2365

01:25:59,350 --> 01:25:57,199

paper right you know and you're going

2366

01:26:01,030 --> 01:25:59,360

from this corner to this corner

2367

01:26:03,189 --> 01:26:01,040

if we if we just measure that length

2368

01:26:05,430 --> 01:26:03,199

that's a long distance right on this

2369

01:26:07,030 --> 01:26:05,440

cloth but if we hold space and just do

2370

01:26:08,950 --> 01:26:07,040

this and bring those points right next

2371

01:26:11,189 --> 01:26:08,960

to each other then we just have to cross

2372

01:26:13,590 --> 01:26:11,199

a little tiny gap effectively and then

2373

01:26:15,110 --> 01:26:13,600

unfolds now we're there without crossing

2374

01:26:16,149 --> 01:26:15,120

the intervening space

2375

01:26:20,709 --> 01:26:16,159

so

2376

01:26:22,470 --> 01:26:20,719

it was just a thought problem everybody

2377

01:26:24,470 --> 01:26:22,480

said wow cool miguel haha we'll put it

2378

01:26:25,430 --> 01:26:24,480

on the shelf because we can't do it but

2379

01:26:28,229 --> 01:26:25,440

then

2380

01:26:32,709 --> 01:26:30,149

bunny white right down at the eagle

2381

01:26:35,669 --> 01:26:32,719

works labs when he was working there

2382

01:26:38,629 --> 01:26:35,679

he reformulated the shape of the ship

2383

01:26:39,430 --> 01:26:38,639

basically the the the toroid that would

2384

01:26:42,149 --> 01:26:39,440

actually

2385

01:26:44,149 --> 01:26:42,159

this warp bubble that the ship needed

2386

01:26:45,830 --> 01:26:44,159

previously it needed like the energy

2387

01:26:47,669 --> 01:26:45,840

equivalent of converting the mass of

2388

01:26:49,590 --> 01:26:47,679

jupiter to energy which of course is

2389

01:26:51,270 --> 01:26:49,600

ridiculously colossally tremendously

2390

01:26:52,950 --> 01:26:51,280

impossible for even advanced

2391

01:26:54,070 --> 01:26:52,960

civilization probably

2392

01:26:55,910 --> 01:26:54,080

but

2393

01:26:57,430 --> 01:26:55,920

in working it he figured out that he

2394

01:26:58,790 --> 01:26:57,440

could do this with something more like

2395

01:27:01,350 --> 01:26:58,800

the size of say like the voyager

2396

01:27:03,350 --> 01:27:01,360

spacecraft converted to energy

2397

01:27:05,189 --> 01:27:03,360

and that's why nasa's funded research to

2398

01:27:07,189 --> 01:27:05,199

look into this possibility

2399

01:27:09,270 --> 01:27:07,199

it won't be ready now or won't be ready

2400

01:27:10,709 --> 01:27:09,280

now but maybe in three or four hundred

2401
01:27:12,310 --> 01:27:10,719
five hundred we'll have a coke

2402
01:27:13,510 --> 01:27:12,320
bottle-sized probe that can go to alpha

2403
01:27:14,470 --> 01:27:13,520
centauri

2404
01:27:17,430 --> 01:27:14,480
you know

2405
01:27:19,430 --> 01:27:17,440
and that's the start right i mean

2406
01:27:21,430 --> 01:27:19,440
out there that are maybe 10 000 years a

2407
01:27:22,790 --> 01:27:21,440
million years a billion years ahead of

2408
01:27:24,629 --> 01:27:22,800
us or more

2409
01:27:25,510 --> 01:27:24,639
what do they look like

2410
01:27:27,189 --> 01:27:25,520
you know

2411
01:27:28,950 --> 01:27:27,199
what do they mean

2412
01:27:30,830 --> 01:27:28,960
you know and and how do they interact

2413
01:27:33,510 --> 01:27:30,840

with the universe

2414

01:27:35,110 --> 01:27:33,520

yeah how do they get there how are they

2415

01:27:36,950 --> 01:27:35,120

one with the universe are they like part

2416

01:27:40,070 --> 01:27:36,960

of the fabric of the universe

2417

01:27:41,110 --> 01:27:40,080

uh are they i i did this talk in denver

2418

01:27:43,910 --> 01:27:41,120

years ago

2419

01:27:45,510 --> 01:27:43,920

uh are they part of the the

2420

01:27:47,189 --> 01:27:45,520

visiting species perhaps that are

2421

01:27:49,510 --> 01:27:47,199

responsible for

2422

01:27:51,189 --> 01:27:49,520

having every religious deity on the

2423

01:27:53,830 --> 01:27:51,199

planet earth and all the various

2424

01:27:54,790 --> 01:27:53,840

cultures be shown with halos

2425

01:27:56,870 --> 01:27:54,800

okay

2426

01:27:58,149 --> 01:27:56,880

the the wanjina have halos that's

2427

01:27:59,669 --> 01:27:58,159

australia

2428

01:28:02,790 --> 01:27:59,679

yeah

2429

01:28:05,270 --> 01:28:02,800

5 000 years ago that was put on their

2430

01:28:07,110 --> 01:28:05,280

cave walls and picked pictographs okay

2431

01:28:09,510 --> 01:28:07,120

valkamonica aliens are they helmeted

2432

01:28:10,950 --> 01:28:09,520

warriors or are those halos you know

2433

01:28:13,510 --> 01:28:10,960

every single renaissance painting

2434

01:28:16,390 --> 01:28:13,520

showing our our deities uh we've got you

2435

01:28:19,189 --> 01:28:16,400

know halos around the deities where did

2436

01:28:21,030 --> 01:28:19,199

the halo come from and my my view is it

2437

01:28:23,110 --> 01:28:21,040

had to be observed it was probably

2438

01:28:25,590 --> 01:28:23,120

observed and then recorded

2439

01:28:27,270 --> 01:28:25,600

right right so if that's the case

2440

01:28:29,510 --> 01:28:27,280

now we're talking about

2441

01:28:30,790 --> 01:28:29,520

visitation from more than one group

2442

01:28:31,750 --> 01:28:30,800

potentially

2443

01:28:35,590 --> 01:28:31,760

and

2444

01:28:36,629 --> 01:28:35,600

as i said we are an oxygen blazing blue

2445

01:28:38,229 --> 01:28:36,639

ball

2446

01:28:39,990 --> 01:28:38,239

we're not a pale blue dot we're a

2447

01:28:42,709 --> 01:28:40,000

blazing blue ball

2448

01:28:44,310 --> 01:28:42,719

yeah we stick out a sore thumb no doubt

2449

01:28:46,229 --> 01:28:44,320

your thumb yeah like i said and i think

2450

01:28:47,590 --> 01:28:46,239

that we are a signal to every other

2451
01:28:50,229 --> 01:28:47,600
carbon-based life-form in the universe

2452
01:28:52,629 --> 01:28:50,239
hey go there that's where the party is

2453
01:28:55,430 --> 01:28:52,639
look there's here we can study

2454
01:28:56,950 --> 01:28:55,440
you know the thing the thing about this

2455
01:28:59,669 --> 01:28:56,960
the thing about this though mark is that

2456
01:29:01,189 --> 01:28:59,679
there are so many of these blue balls

2457
01:29:03,270 --> 01:29:01,199
now you know

2458
01:29:05,350 --> 01:29:03,280
our extra solar planetary searches are

2459
01:29:08,950 --> 01:29:05,360
revealing the high density of water

2460
01:29:11,590 --> 01:29:08,960
bearing planets and and moons everywhere

2461
01:29:13,110 --> 01:29:11,600
yes we have to be careful about water

2462
01:29:15,510 --> 01:29:13,120
bearing planets because we don't really

2463
01:29:16,709 --> 01:29:15,520

know for sure yet when the james frost

2464

01:29:18,550 --> 01:29:16,719

gets up there

2465

01:29:20,229 --> 01:29:18,560

it'll be able to infer an oxygen

2466

01:29:21,990 --> 01:29:20,239

atmosphere can't observe it directly

2467

01:29:23,590 --> 01:29:22,000

because oxygen is actually in the

2468

01:29:25,669 --> 01:29:23,600

visible spectrum it's

2469

01:29:28,790 --> 01:29:25,679

it's spectral signatures but carbon

2470

01:29:30,870 --> 01:29:28,800

dioxide methane and other

2471

01:29:32,870 --> 01:29:30,880

um signatures are in the infrared part

2472

01:29:34,950 --> 01:29:32,880

of the spectrum and this will allow us

2473

01:29:35,669 --> 01:29:34,960

to infer based on the the quantities of

2474

01:29:38,390 --> 01:29:35,679

each

2475

01:29:40,390 --> 01:29:38,400

whether there's oxygen there or not um

2476
01:29:42,550 --> 01:29:40,400
certainly a civilization that's advanced

2477
01:29:44,070 --> 01:29:42,560
will have figured out a way to look

2478
01:29:46,229 --> 01:29:44,080
directly at the planet and say hey is

2479
01:29:48,070 --> 01:29:46,239
there oxygen in this atmosphere and if

2480
01:29:50,790 --> 01:29:48,080
the answer is yes it'll say ooh

2481
01:29:53,830 --> 01:29:50,800
how much can we survive there well you

2482
01:29:55,350 --> 01:29:53,840
got to think okay a planet like ours

2483
01:29:57,590 --> 01:29:55,360
here's the thing that's so cool a planet

2484
01:29:59,830 --> 01:29:57,600
like ours is one that's that's that's

2485
01:30:01,590 --> 01:29:59,840
not in equilibrium we'd like to think

2486
01:30:02,709 --> 01:30:01,600
we're in equilibrium you know and i know

2487
01:30:04,629 --> 01:30:02,719
people talk about climate change all

2488
01:30:06,790 --> 01:30:04,639

that stuff that's not this

2489

01:30:08,310 --> 01:30:06,800

we have more oxygen in our atmosphere

2490

01:30:11,030 --> 01:30:08,320

than should be there

2491

01:30:13,830 --> 01:30:11,040

the oxygen is there and thus so are we

2492

01:30:15,830 --> 01:30:13,840

but it's a disequilibrium process

2493

01:30:18,310 --> 01:30:15,840

there's more oxygen being pumped into

2494

01:30:19,910 --> 01:30:18,320

the atmosphere and made by something and

2495

01:30:22,709 --> 01:30:19,920

an alien civilization is going to know

2496

01:30:24,790 --> 01:30:22,719

that because they know that oxygen

2497

01:30:27,830 --> 01:30:24,800

of a regular planet is going to get

2498

01:30:29,990 --> 01:30:27,840

absorbed into the rock strata and become

2499

01:30:32,950 --> 01:30:30,000

you know

2500

01:30:35,590 --> 01:30:32,960

other compounds that bond with oxygen

2501
01:30:37,270 --> 01:30:35,600
like mars okay mars lost its oxygen for

2502
01:30:38,070 --> 01:30:37,280
you know billions of years ago

2503
01:30:40,070 --> 01:30:38,080
to

2504
01:30:41,430 --> 01:30:40,080
the iron compounds in the soil for a

2505
01:30:43,830 --> 01:30:41,440
whole bunch of reasons but those the

2506
01:30:46,070 --> 01:30:43,840
oxygen went into the soil and it became

2507
01:30:52,310 --> 01:30:46,080
uh various forms of hematite basically

2508
01:30:58,790 --> 01:30:55,430
yeah so the point being this this

2509
01:31:00,629 --> 01:30:58,800
oxygen if it's in this copious amount

2510
01:31:01,910 --> 01:31:00,639
aliens are gonna know extraterrestrial

2511
01:31:03,990 --> 01:31:01,920
species are going to know that it's

2512
01:31:05,830 --> 01:31:04,000
because it's out of equilibrium which

2513
01:31:06,790 --> 01:31:05,840

means something's pumping oxygen which

2514

01:31:08,709 --> 01:31:06,800

means

2515

01:31:10,470 --> 01:31:08,719

maybe it's absorbent

2516

01:31:12,470 --> 01:31:10,480

or maybe it's life

2517

01:31:14,790 --> 01:31:12,480

right right and that's the thing that

2518

01:31:16,390 --> 01:31:14,800

matters most of all i think to a species

2519

01:31:17,830 --> 01:31:16,400

looking for another world

2520

01:31:21,350 --> 01:31:17,840

that has life

2521

01:31:23,669 --> 01:31:21,360

that is well existent number one and

2522

01:31:25,590 --> 01:31:23,679

possibly like them number two

2523

01:31:27,270 --> 01:31:25,600

we look like we do because of our

2524

01:31:29,510 --> 01:31:27,280

specialized you know path through

2525

01:31:31,750 --> 01:31:29,520

evolution and all the five major

2526

01:31:33,750 --> 01:31:31,760

extinction events we had here of course

2527

01:31:34,629 --> 01:31:33,760

so that said that's why we look the way

2528

01:31:37,430 --> 01:31:34,639

we do

2529

01:31:40,550 --> 01:31:37,440

we can't bet for one second that another

2530

01:31:41,750 --> 01:31:40,560

species is gonna have the same kind of

2531

01:31:43,430 --> 01:31:41,760

situation

2532

01:31:44,950 --> 01:31:43,440

uh they might be on a tidally locked

2533

01:31:46,870 --> 01:31:44,960

planet which is going around their star

2534

01:31:48,629 --> 01:31:46,880

facing the star

2535

01:31:51,189 --> 01:31:48,639

like a small star

2536

01:31:54,629 --> 01:31:51,199

slightly bigger than jupiter okay and

2537

01:31:58,950 --> 01:31:57,350

right the very low temperature stars

2538

01:32:02,310 --> 01:31:58,960

and there's so many variables as you

2539

01:32:03,750 --> 01:32:02,320

said martin neil that that we don't know

2540

01:32:05,270 --> 01:32:03,760

what to expect when we get out there but

2541

01:32:06,070 --> 01:32:05,280

we also don't know what to expect for

2542

01:32:08,550 --> 01:32:06,080

life

2543

01:32:11,030 --> 01:32:08,560

we don't know what we see as grace maybe

2544

01:32:13,110 --> 01:32:11,040

those are maybe those are creatures that

2545

01:32:15,510 --> 01:32:13,120

come from one of these m-class dwarfs

2546

01:32:16,870 --> 01:32:15,520

these red stars so they have big eyes to

2547

01:32:18,629 --> 01:32:16,880

be able to see

2548

01:32:20,629 --> 01:32:18,639

in the dimmer light

2549

01:32:23,189 --> 01:32:20,639

right that's right

2550

01:32:24,390 --> 01:32:23,199

more gravity skinnier bodies

2551

01:32:27,910 --> 01:32:24,400

um

2552

01:32:30,310 --> 01:32:27,920

all of that yeah all that we gotta

2553

01:32:31,510 --> 01:32:30,320

go ahead sorry about that uh mark i i

2554

01:32:34,229 --> 01:32:31,520

don't want to forget to talk to you

2555

01:32:36,390 --> 01:32:34,239

about your series that um i uh a friend

2556

01:32:38,550 --> 01:32:36,400

of mine i watched you and called alien

2557

01:32:40,950 --> 01:32:38,560

invasion it was great but we do have a

2558

01:32:43,590 --> 01:32:40,960

caller right now jeff is calling from

2559

01:32:45,510 --> 01:32:43,600

indiana jeff you're on the air welcome

2560

01:32:47,350 --> 01:32:45,520

to the show

2561

01:32:49,990 --> 01:32:47,360

hi joe

2562

01:32:53,910 --> 01:32:51,990

i'll say that one more time we have jeff

2563

01:32:55,750 --> 01:32:53,920

from indiana on the line jeff you're

2564

01:32:57,750 --> 01:32:55,760

live welcome to the show

2565

01:33:00,149 --> 01:32:57,760

yeah thank you very much

2566

01:33:13,669 --> 01:33:00,159

i just want to say i'm with ted

2567

01:33:13,679 --> 01:33:20,470

all right well hey thanks for the call

2568

01:33:24,149 --> 01:33:22,629

yeah when you when you when you've seen

2569

01:33:27,430 --> 01:33:24,159

this and you're in a conversation with

2570

01:33:30,709 --> 01:33:27,440

people who haven't it's really a bummer

2571

01:33:34,470 --> 01:33:33,030

if you're if you happen if you if you

2572

01:33:35,350 --> 01:33:34,480

happen

2573

01:33:38,229 --> 01:33:35,360

jeff

2574

01:33:40,390 --> 01:33:38,239

if you happen to be running your program

2575

01:33:42,790 --> 01:33:40,400

uh that you're listening to the show uh

2576

01:33:44,310 --> 01:33:42,800

please uh please get out of that please

2577

01:33:46,229 --> 01:33:44,320

cancel it please mute it whatever you

2578

01:33:47,910 --> 01:33:46,239

need to do if you happen to be listening

2579

01:33:52,629 --> 01:33:47,920

to that you want to listen to us we're

2580

01:33:56,629 --> 01:33:54,229

all right so

2581

01:33:57,430 --> 01:33:56,639

thank you jeff uh anyway the line is

2582

01:33:58,709 --> 01:33:57,440

open

2583

01:34:01,030 --> 01:33:58,719

and uh

2584

01:34:02,149 --> 01:34:01,040

i'm sorry jeff the line is open and that

2585

01:34:03,270 --> 01:34:02,159

number is

2586

01:34:05,510 --> 01:34:03,280

uh

2587

01:34:07,830 --> 01:34:05,520

eight five five four seven two five four

2588

01:34:11,590 --> 01:34:07,840

eight three don't you love live

2589

01:34:13,830 --> 01:34:11,600

radio uh it is a challenge yeah you said

2590

01:34:15,030 --> 01:34:13,840

i i do wanna go ahead mark what were you

2591

01:34:16,310 --> 01:34:15,040

gonna say

2592

01:34:17,590 --> 01:34:16,320

this is martin's show and we're like

2593

01:34:19,750 --> 01:34:17,600

taking over ted what the heck you know

2594

01:34:21,830 --> 01:34:19,760

we got to stop this

2595

01:34:23,750 --> 01:34:21,840

i'm enjoying the heck out of it

2596

01:34:25,669 --> 01:34:23,760

i really enjoyed it very much

2597

01:34:27,110 --> 01:34:25,679

but ted mentioned earlier okay it was

2598

01:34:29,590 --> 01:34:27,120

something that i wanted to pursue a

2599

01:34:31,510 --> 01:34:29,600

little bit yes i got it down you know

2600

01:34:33,030 --> 01:34:31,520

yeah right there yeah you have to do

2601
01:34:35,430 --> 01:34:33,040
everything backwards when we talked

2602
01:34:36,790 --> 01:34:35,440
about when we talked about um

2603
01:34:38,790 --> 01:34:36,800
you know alien species around say

2604
01:34:40,470 --> 01:34:38,800
another planet looking different than us

2605
01:34:42,629 --> 01:34:40,480
right

2606
01:34:45,270 --> 01:34:42,639
you know there's rumors of other kinds

2607
01:34:48,229 --> 01:34:45,280
of creatures right that have been seen

2608
01:34:50,149 --> 01:34:48,239
and you know i i have never been

2609
01:34:51,350 --> 01:34:50,159
a fan of the people that say that

2610
01:34:53,430 --> 01:34:51,360
there's all these types of creatures

2611
01:34:56,470 --> 01:34:53,440
that exist out there and you know the

2612
01:34:58,870 --> 01:34:56,480
nordics the reptilians all that stuff um

2613
01:35:00,470 --> 01:34:58,880

but i have to say

2614

01:35:03,990 --> 01:35:00,480

that

2615

01:35:06,870 --> 01:35:04,000

if the dinosaurs didn't die

2616

01:35:09,109 --> 01:35:06,880

in the kt boundary event the chicks

2617

01:35:11,510 --> 01:35:09,119

would meet asteroid strike okay if they

2618

01:35:16,310 --> 01:35:11,520

didn't get white over the intervening

2619

01:35:18,229 --> 01:35:16,320

time the months after the strike um

2620

01:35:20,629 --> 01:35:18,239

what would have happened

2621

01:35:23,510 --> 01:35:20,639

there was one theropod meat eater that

2622

01:35:26,070 --> 01:35:23,520

was actually gaining uh a fairly

2623

01:35:27,750 --> 01:35:26,080

significant cranial capacity

2624

01:35:29,510 --> 01:35:27,760

when he was

2625

01:35:30,790 --> 01:35:29,520

would that dinosaur have become

2626

01:35:32,709 --> 01:35:30,800

intelligent

2627

01:35:34,870 --> 01:35:32,719

we certainly can't say no but we

2628

01:35:36,870 --> 01:35:34,880

certainly can't say yes

2629

01:35:38,709 --> 01:35:36,880

but you think about that and you think

2630

01:35:40,830 --> 01:35:38,719

well what if the fact that there were

2631

01:35:43,910 --> 01:35:40,840

dinosaurs here is that a

2632

01:35:46,550 --> 01:35:43,920

consequence of the way carbon-based life

2633

01:35:48,790 --> 01:35:46,560

evolves on a planet kind of like ours

2634

01:35:51,990 --> 01:35:48,800

would there be dinosaurs elsewhere or

2635

01:35:54,390 --> 01:35:52,000

some version of dinosaurs elsewhere

2636

01:35:58,390 --> 01:35:54,400

don't know but if there is

2637

01:36:00,229 --> 01:35:58,400

then maybe the people that say there are

2638

01:36:01,750 --> 01:36:00,239

and i like i said i

2639

01:36:03,270 --> 01:36:01,760

i always refrain from saying this

2640

01:36:05,350 --> 01:36:03,280

because it makes you sound like a nut

2641

01:36:07,590 --> 01:36:05,360

case right if there are people that say

2642

01:36:11,109 --> 01:36:07,600

there's reptilians out there

2643

01:36:13,669 --> 01:36:11,119

i guess i could imagine a species

2644

01:36:16,070 --> 01:36:13,679

that may have had a similar event but

2645

01:36:18,629 --> 01:36:16,080

didn't have the killing off

2646

01:36:20,390 --> 01:36:18,639

of their dinosaurs at some point and

2647

01:36:22,470 --> 01:36:20,400

then dinosaurs are a consequence of a

2648

01:36:24,070 --> 01:36:22,480

variety of you know events here on this

2649

01:36:26,229 --> 01:36:24,080

planet no guarantee would happen

2650

01:36:28,390 --> 01:36:26,239

elsewhere right but if i did i could

2651
01:36:31,510 --> 01:36:28,400
imagine that there could be a species

2652
01:36:33,109 --> 01:36:31,520
like that you know and

2653
01:36:35,030 --> 01:36:33,119
as far as your experience you had you

2654
01:36:36,310 --> 01:36:35,040
had the experience you talked about ted

2655
01:36:38,629 --> 01:36:36,320
right

2656
01:36:40,390 --> 01:36:38,639
well i had missing time as a kid i lost

2657
01:36:42,149 --> 01:36:40,400
an entire day

2658
01:36:43,750 --> 01:36:42,159
and i still had my bag lunch from this

2659
01:36:44,870 --> 01:36:43,760
field trip i was supposed to go on with

2660
01:36:46,470 --> 01:36:44,880
my school

2661
01:36:48,550 --> 01:36:46,480
and i was sitting back on the bus with

2662
01:36:50,709 --> 01:36:48,560
it and everybody said where were you all

2663
01:36:52,470 --> 01:36:50,719

day and i was like well when are we

2664

01:36:53,910 --> 01:36:52,480

going to get to the pond and of course i

2665

01:36:56,149 --> 01:36:53,920

got called every name of the book you

2666

01:36:57,350 --> 01:36:56,159

jack we've already been to the pond

2667

01:36:59,590 --> 01:36:57,360

okay then

2668

01:37:00,470 --> 01:36:59,600

i had something shoved up by sinus

2669

01:37:02,550 --> 01:37:00,480

right

2670

01:37:04,950 --> 01:37:02,560

which uh was

2671

01:37:07,270 --> 01:37:04,960

a very very strange thing it was some

2672

01:37:08,310 --> 01:37:07,280

thing that made me immobile and i saw it

2673

01:37:09,910 --> 01:37:08,320

coming in

2674

01:37:11,270 --> 01:37:09,920

and i couldn't move my eyes to look at

2675

01:37:12,629 --> 01:37:11,280

it i was sort of in that like

2676
01:37:14,950 --> 01:37:12,639
hip-the-pompic state you know where

2677
01:37:16,550 --> 01:37:14,960
you're kind of in the netherworld i use

2678
01:37:18,390 --> 01:37:16,560
it to meditate actually when i want to

2679
01:37:20,310 --> 01:37:18,400
because it's a really nice feeling

2680
01:37:22,070 --> 01:37:20,320
well i ended up

2681
01:37:24,310 --> 01:37:22,080
watching this thing move this wand type

2682
01:37:26,470 --> 01:37:24,320
thing look like a actually imagine an

2683
01:37:28,870 --> 01:37:26,480
illuminated

2684
01:37:30,390 --> 01:37:28,880
okay white moving back and forth in

2685
01:37:31,750 --> 01:37:30,400
front of my face next thing you know it

2686
01:37:34,390 --> 01:37:31,760
was morning

2687
01:37:35,350 --> 01:37:34,400
uh and i was literally lying in my own

2688
01:37:37,750 --> 01:37:35,360

blood

2689

01:37:39,830 --> 01:37:37,760

face down all right actually drowning

2690

01:37:41,910 --> 01:37:39,840

almost in my own blood so

2691

01:37:43,669 --> 01:37:41,920

this and

2692

01:37:45,270 --> 01:37:43,679

you know going to a surgeon after they

2693

01:37:46,629 --> 01:37:45,280

took it out and

2694

01:37:48,870 --> 01:37:46,639

he said that's the biggest thing i've

2695

01:37:50,550 --> 01:37:48,880

ever seen in someone's nose i don't even

2696

01:37:52,390 --> 01:37:50,560

know what to tell you he said we're

2697

01:37:55,189 --> 01:37:52,400

going to send it to pathology i'll give

2698

01:37:57,030 --> 01:37:55,199

you an answer in a week okay any any and

2699

01:37:58,870 --> 01:37:57,040

i said to them can those things seed

2700

01:38:00,310 --> 01:37:58,880

around like a foreign object in

2701

01:38:02,070 --> 01:38:00,320

someone's nose

2702

01:38:04,390 --> 01:38:02,080

and he said well yeah you mean like a

2703

01:38:07,350 --> 01:38:04,400

metal splinter from a machinist oh yeah

2704

01:38:09,350 --> 01:38:07,360

it was yeah and why well i explained the

2705

01:38:10,709 --> 01:38:09,360

the terrifying events that i had which

2706

01:38:13,109 --> 01:38:10,719

actually forced me to leave the previous

2707

01:38:14,229 --> 01:38:13,119

house actually it was really terrifying

2708

01:38:18,149 --> 01:38:14,239

um and

2709

01:38:20,390 --> 01:38:18,159

uh when when uh he said that um

2710

01:38:21,750 --> 01:38:20,400

i said oh i know it's not aliens i am

2711

01:38:24,629 --> 01:38:21,760

sure it's not alien things and then he

2712

01:38:27,510 --> 01:38:24,639

goes yeah of course not well

2713

01:38:28,950 --> 01:38:27,520

uh i called him in a week and i when i

2714

01:38:30,310 --> 01:38:28,960

asked when the the secretary answered

2715

01:38:32,790 --> 01:38:30,320

the phone and she go oh hello it's

2716

01:38:34,229 --> 01:38:32,800

doctor hello yeah it's mark antonio oh

2717

01:38:36,470 --> 01:38:34,239

hold on doctor has to talk to him like

2718

01:38:38,550 --> 01:38:36,480

oh no it's like head cancer or something

2719

01:38:40,550 --> 01:38:38,560

like that my head's gonna fall off

2720

01:38:42,629 --> 01:38:40,560

he gets on the phone and he goes

2721

01:38:44,870 --> 01:38:42,639

yeah no worries uh it's probably benign

2722

01:38:46,470 --> 01:38:44,880

not to worry about it oh okay so you

2723

01:38:49,910 --> 01:38:46,480

didn't get probably you said it was

2724

01:38:51,430 --> 01:38:49,920

probably not benign right

2725

01:38:54,950 --> 01:38:51,440

and then yes

2726

01:38:56,229 --> 01:38:54,960

okay and i said yeah uh okay benign but

2727

01:38:57,350 --> 01:38:56,239

so you don't have the results he goes

2728

01:39:00,629 --> 01:38:57,360

well

2729

01:39:02,790 --> 01:39:00,639

that's a little bit of a mystery because

2730

01:39:04,790 --> 01:39:02,800

the lie exact phrase for the first time

2731

01:39:07,189 --> 01:39:04,800

in the history of this office

2732

01:39:08,870 --> 01:39:07,199

the pathology office down below

2733

01:39:11,669 --> 01:39:08,880

downstairs

2734

01:39:12,870 --> 01:39:11,679

said that they can't find the sample

2735

01:39:14,390 --> 01:39:12,880

it's gone

2736

01:39:18,470 --> 01:39:14,400

it crawled off

2737

01:39:19,350 --> 01:39:18,480

i do know that it's it's probably been

2738

01:39:20,790 --> 01:39:19,360

you know

2739

01:39:23,830 --> 01:39:20,800

taken somewhere

2740

01:39:27,590 --> 01:39:25,990

well or or somebody from washington came

2741

01:39:30,709 --> 01:39:27,600

to get it and the reason i think that

2742

01:39:32,550 --> 01:39:30,719

was it was because few years later i had

2743

01:39:34,390 --> 01:39:32,560

to go back to him for something else

2744

01:39:36,310 --> 01:39:34,400

and you know i had done a lot of special

2745

01:39:37,510 --> 01:39:36,320

work for the navy i still do well i

2746

01:39:40,070 --> 01:39:37,520

wrote on there that i do special

2747

01:39:41,189 --> 01:39:40,080

projects for the navy with my company

2748

01:39:43,030 --> 01:39:41,199

okay

2749

01:39:45,189 --> 01:39:43,040

and he came in and he says oh special

2750

01:39:46,310 --> 01:39:45,199

projects huh and i detailed one of the

2751

01:39:48,070 --> 01:39:46,320

two of the things that i could talk

2752

01:39:49,990 --> 01:39:48,080

about with him and he

2753

01:39:51,590 --> 01:39:50,000

told me about what he did as well

2754

01:39:54,470 --> 01:39:51,600

and he said but i just gave up my top

2755

01:39:55,350 --> 01:39:54,480

secret clearance this year

2756

01:39:57,030 --> 01:39:55,360

what

2757

01:39:58,870 --> 01:39:57,040

are you operating on top secret giant

2758

01:40:00,470 --> 01:39:58,880

polyps in people's sinuses or that kind

2759

01:40:02,950 --> 01:40:00,480

of thing and he laughed it off he goes

2760

01:40:03,750 --> 01:40:02,960

no no no i was not always a surgeon he

2761

01:40:05,189 --> 01:40:03,760

said

2762

01:40:06,790 --> 01:40:05,199

and he got really serious about that and

2763

01:40:09,270 --> 01:40:06,800

oh and he proceeded to tell me about

2764

01:40:10,709 --> 01:40:09,280

this event he worked on project starfish

2765

01:40:11,910 --> 01:40:10,719

do you remember that one

2766

01:40:17,990 --> 01:40:11,920

no no

2767

01:40:23,189 --> 01:40:21,109

well that wasn't exactly true

2768

01:40:24,950 --> 01:40:23,199

he said they used it to take down a

2769

01:40:26,070 --> 01:40:24,960

satellite

2770

01:40:28,470 --> 01:40:26,080

his words

2771

01:40:31,270 --> 01:40:28,480

okay and he says and we were successful

2772

01:40:32,950 --> 01:40:31,280

it lit up honolulu from 600 miles away

2773

01:40:34,390 --> 01:40:32,960

okay

2774

01:40:36,950 --> 01:40:34,400

yeah you know with a flash an

2775

01:40:38,950 --> 01:40:36,960

instantaneous flash well anyway

2776

01:40:40,550 --> 01:40:38,960

that told me everything because i know

2777

01:40:42,390 --> 01:40:40,560

what the protocols are having been in

2778

01:40:44,229 --> 01:40:42,400

that world um

2779

01:40:46,149 --> 01:40:44,239

he had to call someone in washington to

2780

01:40:46,870 --> 01:40:46,159

say look i had a patient blah blah blah

2781

01:40:48,629 --> 01:40:46,880

and

2782

01:40:50,310 --> 01:40:48,639

he says this happened you know whether

2783

01:40:51,910 --> 01:40:50,320

it is or not i just want to let you know

2784

01:40:53,109 --> 01:40:51,920

okay thank you where's the sample it's

2785

01:40:55,350 --> 01:40:53,119

in the pathology office here at the

2786

01:40:57,189 --> 01:40:55,360

hospital okay thank you and now you see

2787

01:40:58,390 --> 01:40:57,199

he has plausible deniability he really

2788

01:40:59,430 --> 01:40:58,400

doesn't know

2789

01:41:00,629 --> 01:40:59,440

right

2790

01:41:03,270 --> 01:41:00,639

and where it went

2791

01:41:04,950 --> 01:41:03,280

i would uh i would very much

2792

01:41:07,030 --> 01:41:04,960

i would very much enjoy chatting with

2793

01:41:08,470 --> 01:41:07,040

you offline um

2794

01:41:10,310 --> 01:41:08,480

uh i've got a

2795

01:41:11,590 --> 01:41:10,320

got a kind of a similar story to tell

2796

01:41:17,030 --> 01:41:11,600

you about

2797

01:41:21,750 --> 01:41:20,390

yeah not good um but there's nothing

2798

01:41:23,990 --> 01:41:21,760

that's the thing about all of this

2799

01:41:26,070 --> 01:41:24,000

there's i i don't you judge them by what

2800

01:41:27,750 --> 01:41:26,080

they do or what you experience in the in

2801

01:41:30,070 --> 01:41:27,760

the presence of the phenomenon if you're

2802

01:41:32,870 --> 01:41:30,080

gonna if you're gonna be making value

2803

01:41:35,030 --> 01:41:32,880

judgments on it and um and you walk away

2804

01:41:37,910 --> 01:41:35,040

not feeling terribly good about it

2805

01:41:39,750 --> 01:41:37,920

uh in terms of what's going on i if this

2806

01:41:42,310 --> 01:41:39,760

is an intelligence then they have the

2807

01:41:44,149 --> 01:41:42,320

ability to communicate and they're not

2808

01:41:46,790 --> 01:41:44,159

um they have the ability to explain

2809

01:41:48,870 --> 01:41:46,800

themselves and they don't you know and

2810

01:41:50,470 --> 01:41:48,880

people people are subjected to them

2811

01:41:52,629 --> 01:41:50,480

without choice

2812

01:41:54,550 --> 01:41:52,639

right all creatures have boundaries our

2813

01:41:56,790 --> 01:41:54,560

emotions are based on managing our

2814

01:41:58,229 --> 01:41:56,800

boundaries our diplomacy is based on

2815

01:42:00,470 --> 01:41:58,239

managing our

2816

01:42:01,910 --> 01:42:00,480

boundaries you know a lot of the a lot

2817

01:42:04,709 --> 01:42:01,920

of the words we have are so that we can

2818

01:42:06,550 --> 01:42:04,719

manage our boundaries right and they

2819

01:42:09,350 --> 01:42:06,560

they don't care about our boundaries you

2820

01:42:11,830 --> 01:42:09,360

know it is it's what i think it is we

2821

01:42:13,510 --> 01:42:11,840

don't care about the boundaries of elk

2822

01:42:15,109 --> 01:42:13,520

well it's it's

2823

01:42:17,030 --> 01:42:15,119

you know it's it's we're thinking in

2824

01:42:18,870 --> 01:42:17,040

human terms who knows how they think you

2825

01:42:20,709 --> 01:42:18,880

know i mean that's the technically

2826

01:42:21,990 --> 01:42:20,719

you can't define our morality to them

2827

01:42:24,310 --> 01:42:22,000

either that's the question that's a big

2828

01:42:26,790 --> 01:42:24,320

thing yeah you can't say that they feel

2829

01:42:28,550 --> 01:42:26,800

moral obligations not to hurt us they

2830

01:42:30,149 --> 01:42:28,560

may not have any such thing that's

2831

01:42:32,070 --> 01:42:30,159

that's that's projection of human

2832

01:42:33,910 --> 01:42:32,080

emotions and what

2833

01:42:35,830 --> 01:42:33,920

we have so

2834

01:42:37,189 --> 01:42:35,840

what we have though is a responsibility

2835

01:42:38,629 --> 01:42:37,199

to call it what it is and protect

2836

01:42:40,070 --> 01:42:38,639

ourselves

2837

01:42:42,390 --> 01:42:40,080

and and

2838

01:42:44,149 --> 01:42:42,400

and you know whether you know i swim in

2839

01:42:45,669 --> 01:42:44,159

the sea right you know i love everything

2840

01:42:47,030 --> 01:42:45,679

in there if it tries to bite me i'm

2841

01:42:48,070 --> 01:42:47,040

killing it

2842

01:42:48,870 --> 01:42:48,080

okay

2843

01:42:50,470 --> 01:42:48,880

it's

2844

01:42:52,310 --> 01:42:50,480

you know i can't afford to get bit by

2845

01:42:53,910 --> 01:42:52,320

things bigger than i am and and if they

2846

01:42:55,990 --> 01:42:53,920

try it i'm going to do everything i can

2847

01:42:57,350 --> 01:42:56,000

to stop it when i go out in the forest

2848

01:43:00,870 --> 01:42:57,360

here

2849

01:43:04,070 --> 01:43:00,880

i live in alaska right i i i can conceal

2850

01:43:05,430 --> 01:43:04,080

carry anywhere i go it's legal you know

2851

01:43:07,910 --> 01:43:05,440

i can have a driver's license in one

2852

01:43:09,750 --> 01:43:07,920

pocket a pistol in the other and

2853

01:43:12,550 --> 01:43:09,760

out here there's nobody there to protect

2854

01:43:14,790 --> 01:43:12,560

you it's it's all on you and whether you

2855

01:43:17,990 --> 01:43:14,800

and the bears and every other darn thing

2856

01:43:20,310 --> 01:43:18,000

you need you need i use layers i have a

2857

01:43:21,910 --> 01:43:20,320

i carry bear spray first right and then

2858

01:43:24,790 --> 01:43:21,920

it would be a backup of something else

2859

01:43:26,229 --> 01:43:24,800

but but but the idea that you know i

2860

01:43:28,070 --> 01:43:26,239

love all those critters i never want to

2861

01:43:31,270 --> 01:43:28,080

hurt them but i'm not going to let them

2862

01:43:33,030 --> 01:43:31,280

beat me you know

2863

01:43:34,390 --> 01:43:33,040

and if you're using your beard

2864

01:43:41,109 --> 01:43:34,400

it's already too close to get that

2865

01:43:48,390 --> 01:43:44,070

we have gasper uh yes it's gasper from

2866

01:43:53,750 --> 01:43:51,430

hi martin and um

2867

01:43:56,709 --> 01:43:53,760

i i only got

2868

01:43:59,510 --> 01:43:56,719

a little piece of um

2869

01:44:01,430 --> 01:43:59,520

a professor avi's interview i want to

2870

01:44:04,310 --> 01:44:01,440

look back and watch more of it

2871

01:44:06,709 --> 01:44:04,320

but one question i have

2872

01:44:09,590 --> 01:44:06,719

and one i would ask him

2873

01:44:11,109 --> 01:44:09,600

is what happens if he does

2874

01:44:13,510 --> 01:44:11,119

find

2875

01:44:15,350 --> 01:44:13,520

indisputable proof or really good

2876

01:44:17,669 --> 01:44:15,360

evidence

2877

01:44:20,790 --> 01:44:17,679

i can answer that i can answer that

2878

01:44:23,030 --> 01:44:20,800

because i did talk to him about that um

2879

01:44:24,070 --> 01:44:23,040

okay is this is not going to be

2880

01:44:26,149 --> 01:44:24,080

government

2881

01:44:28,470 --> 01:44:26,159

um is not going to have any connection

2882

01:44:31,669 --> 01:44:28,480

to this at all this is all

2883

01:44:33,750 --> 01:44:31,679

um he wants us completely transparent he

2884

01:44:34,870 --> 01:44:33,760

wants uh people to be able to access

2885

01:44:36,870 --> 01:44:34,880

this

2886

01:44:39,350 --> 01:44:36,880

access the feed he doesn't want to hide

2887

01:44:42,229 --> 01:44:39,360

anything he wants this you know to be

2888

01:44:43,750 --> 01:44:42,239

completely like i said it's completely

2889

01:44:45,030 --> 01:44:43,760

open to the public

2890

01:44:47,109 --> 01:44:45,040

i don't know if either one of you have

2891

01:44:48,470 --> 01:44:47,119

any more feedback on that well we hope

2892

01:44:50,709 --> 01:44:48,480

he gets his way

2893

01:44:52,470 --> 01:44:50,719

uh i know that with euphotog that we

2894

01:44:53,910 --> 01:44:52,480

renamed to the aerial anomaly the

2895

01:44:56,470 --> 01:44:53,920

detection system

2896

01:44:59,350 --> 01:44:56,480

that doug trumbull and i are working on

2897

01:45:01,270 --> 01:44:59,360

we also said it's going to be uh free

2898

01:45:03,109 --> 01:45:01,280

and you know humanity owns the data we

2899

01:45:05,030 --> 01:45:03,119

don't basically what we said we're just

2900

01:45:06,550 --> 01:45:05,040

gatherers

2901

01:45:08,629 --> 01:45:06,560

and within

2902

01:45:10,070 --> 01:45:08,639

six weeks of talking about it

2903

01:45:11,189 --> 01:45:10,080

doug got a call from the defense

2904

01:45:13,430 --> 01:45:11,199

department

2905

01:45:15,189 --> 01:45:13,440

and they wanted to know all the details

2906

01:45:17,030 --> 01:45:15,199

about what we're doing

2907

01:45:19,830 --> 01:45:17,040

and doug

2908

01:45:21,510 --> 01:45:19,840

read it basically said i don't think so

2909

01:45:22,229 --> 01:45:21,520

click

2910

01:45:25,750 --> 01:45:22,239

yeah

2911

01:45:31,830 --> 01:45:28,790

the reason why i'm asking too is because

2912

01:45:34,390 --> 01:45:31,840

you know i'm sure maybe this might have

2913

01:45:37,109 --> 01:45:34,400

had something to do with the department

2914

01:45:39,109 --> 01:45:37,119

of defense or whatever calling you but

2915

01:45:40,470 --> 01:45:39,119

you know you get into a situation where

2916

01:45:42,390 --> 01:45:40,480

yes i think

2917

01:45:44,390 --> 01:45:42,400

you know this information should be to

2918

01:45:46,390 --> 01:45:44,400

the public it should be

2919

01:45:47,189 --> 01:45:46,400

uh everyone's to hear

2920

01:45:49,270 --> 01:45:47,199

but

2921

01:45:52,149 --> 01:45:49,280

i often wonder like what are the

2922

01:45:53,750 --> 01:45:52,159

ramifications of that you know

2923

01:45:56,709 --> 01:45:53,760

this is a

2924

01:45:58,310 --> 01:45:56,719

phenomenon i only got into recently my

2925

01:46:01,750 --> 01:45:58,320

mom

2926

01:46:03,030 --> 01:46:01,760

it was around 1998 and her my brother

2927

01:46:06,229 --> 01:46:03,040

and sister

2928

01:46:07,990 --> 01:46:06,239

saw something and my dad and i were not

2929

01:46:09,430 --> 01:46:08,000

there at the time this was in gilbert

2930

01:46:10,790 --> 01:46:09,440

arizona

2931

01:46:14,709 --> 01:46:10,800

and it was

2932

01:46:16,390 --> 01:46:14,719

you know classic ufos uh more of a smear

2933

01:46:17,669 --> 01:46:16,400

i think she said

2934

01:46:21,750 --> 01:46:17,679

and

2935

01:46:22,950 --> 01:46:21,760

i completely dismissed her whole account

2936

01:46:24,709 --> 01:46:22,960

you know for

2937

01:46:27,109 --> 01:46:24,719

you know since that time period i

2938

01:46:29,510 --> 01:46:27,119

remember when she brought it up

2939

01:46:31,830 --> 01:46:29,520

my dad and i just kind of ridiculed and

2940

01:46:34,709 --> 01:46:31,840

made fun of her and she my brother and

2941

01:46:36,310 --> 01:46:34,719

sister just kept quiet about this

2942

01:46:37,350 --> 01:46:36,320

incident that happened and it wasn't

2943

01:46:40,470 --> 01:46:37,360

until

2944

01:46:42,149 --> 01:46:40,480

the nimitz incident and the you know the

2945

01:46:43,109 --> 01:46:42,159

press that it got in the new york times

2946

01:46:45,430 --> 01:46:43,119

where

2947

01:46:46,470 --> 01:46:45,440

you know i was like huh maybe there is

2948

01:46:48,950 --> 01:46:46,480

something

2949

01:46:52,790 --> 01:46:48,960

to this phenomenon and i

2950

01:46:54,790 --> 01:46:52,800

asked her after all those years you know

2951

01:46:57,109 --> 01:46:54,800

you know i asked her to relay the the

2952

01:46:59,990 --> 01:46:57,119

story back to me and she said you know

2953

01:47:01,990 --> 01:47:00,000

it's clear as day 12 in the afternoon

2954

01:47:04,390 --> 01:47:02,000

i'm standing in the backyard with your

2955

01:47:06,629 --> 01:47:04,400

brother and sister and this thing not

2956

01:47:08,390 --> 01:47:06,639

even a thousand feet in the air it was

2957

01:47:09,830 --> 01:47:08,400

just right above them almost like

2958

01:47:11,189 --> 01:47:09,840

looking at them

2959

01:47:13,350 --> 01:47:11,199

and

2960

01:47:15,590 --> 01:47:13,360

out of curiosity because my brother my

2961

01:47:18,149 --> 01:47:15,600

mother they had a falling out

2962

01:47:20,790 --> 01:47:18,159

i called him separately and i asked him

2963

01:47:23,430 --> 01:47:20,800

the details of that day and and the

2964

01:47:25,669 --> 01:47:23,440

shape of it how you know how fast it was

2965

01:47:27,270 --> 01:47:25,679

because she said it had left

2966

01:47:28,709 --> 01:47:27,280

she said it only hovered for about two

2967

01:47:30,790 --> 01:47:28,719

or three minutes and then it shot

2968

01:47:33,030 --> 01:47:30,800

straight up into the air like a gun it

2969

01:47:36,310 --> 01:47:33,040

was gone in about a second all these

2970

01:47:39,109 --> 01:47:36,320

details after all those years it was

2971

01:47:41,270 --> 01:47:39,119

very real and for me a person that

2972

01:47:42,470 --> 01:47:41,280

didn't believe in any of this stuff i

2973

01:47:45,189 --> 01:47:42,480

was like

2974

01:47:46,870 --> 01:47:45,199

shook to the core and so sometimes i

2975

01:47:49,430 --> 01:47:46,880

feel like

2976

01:47:52,709 --> 01:47:49,440

you know yes i want to hear the data but

2977

01:47:55,229 --> 01:47:52,719

how many people out there are really

2978

01:47:58,390 --> 01:47:55,239

ready to find out if this is

2979

01:48:00,790 --> 01:47:58,400

extraterrestrial and are able to

2980

01:48:04,390 --> 01:48:00,800

handle that kind of truth like i

2981

01:48:06,470 --> 01:48:04,400

sometimes wonder is this the reason why

2982

01:48:09,270 --> 01:48:06,480

stuff is being kept from us

2983

01:48:11,590 --> 01:48:09,280

is because that is one of the concerns

2984

01:48:14,310 --> 01:48:11,600

and it's a variable that the government

2985

01:48:15,830 --> 01:48:14,320

is taking into account like look we

2986

01:48:18,070 --> 01:48:15,840

you know we're observing these things

2987

01:48:19,669 --> 01:48:18,080

but we don't know much about it other

2988

01:48:21,030 --> 01:48:19,679

than it's real

2989

01:48:23,910 --> 01:48:21,040

and a lot of people are going to have

2990

01:48:25,830 --> 01:48:23,920

these questions and i'm assuming if uh

2991

01:48:27,830 --> 01:48:25,840

professor loeb or

2992

01:48:30,229 --> 01:48:27,840

mark you know

2993

01:48:32,870 --> 01:48:30,239

you know or ted or anyone gets a hold of

2994

01:48:34,229 --> 01:48:32,880

footage or real evidence

2995

01:48:36,470 --> 01:48:34,239

they're going to be asked those

2996

01:48:38,950 --> 01:48:36,480

questions of like where they come from

2997

01:48:40,550 --> 01:48:38,960

why is this here you know it's just

2998

01:48:44,390 --> 01:48:40,560

something i i

2999

01:48:46,390 --> 01:48:44,400

i think about like are are we ready

3000

01:48:48,390 --> 01:48:46,400

yeah

3001
01:48:50,070 --> 01:48:48,400
something there i saw that like i got to

3002
01:48:51,990 --> 01:48:50,080
say something

3003
01:48:55,430 --> 01:48:52,000
yeah you know gaspar i i think a lot

3004
01:48:58,390 --> 01:48:55,440
about this because i'm not um a phd i'm

3005
01:49:00,310 --> 01:48:58,400
not a physicist i'm i'm i was first an

3006
01:49:02,870 --> 01:49:00,320
administrator and before that i was an

3007
01:49:04,950 --> 01:49:02,880
experiencer and now i'm a researcher

3008
01:49:06,790 --> 01:49:04,960
and have been for 20 years so i've

3009
01:49:08,070 --> 01:49:06,800
learned a bit of all of that worn a lot

3010
01:49:09,669 --> 01:49:08,080
of hats

3011
01:49:11,750 --> 01:49:09,679
but the things that i lose sleep over

3012
01:49:13,510 --> 01:49:11,760
are exactly what you're talking about on

3013
01:49:15,109 --> 01:49:13,520

one hand we want transparency and we

3014

01:49:16,550 --> 01:49:15,119

argued for that when we spoke to the

3015

01:49:17,510 --> 01:49:16,560

aiaa

3016

01:49:19,030 --> 01:49:17,520

um

3017

01:49:21,350 --> 01:49:19,040

that it's very important the data should

3018

01:49:23,830 --> 01:49:21,360

be in a public repository where it can

3019

01:49:25,750 --> 01:49:23,840

be examined and replicated or or built

3020

01:49:27,109 --> 01:49:25,760

upon or debunked

3021

01:49:28,790 --> 01:49:27,119

and uh

3022

01:49:30,790 --> 01:49:28,800

and that you know all of that should be

3023

01:49:32,550 --> 01:49:30,800

in the public domain but at the same

3024

01:49:34,790 --> 01:49:32,560

time the question is you know there are

3025

01:49:36,709 --> 01:49:34,800

a lot of underserved populations because

3026

01:49:38,390 --> 01:49:36,719
of institutional bias around this

3027

01:49:40,310 --> 01:49:38,400
subject i have pilots and air

3028

01:49:43,030 --> 01:49:40,320
controllers but but think of

3029

01:49:45,750 --> 01:49:43,040
psychologists and their patients think

3030

01:49:46,550 --> 01:49:45,760
of other other types of relationships

3031

01:49:48,070 --> 01:49:46,560
where

3032

01:49:49,990 --> 01:49:48,080
uh the professional attitude of this

3033

01:49:51,510 --> 01:49:50,000
can't be happening obstructs the care

3034

01:49:53,189 --> 01:49:51,520
that people need

3035

01:49:54,550 --> 01:49:53,199
who it's happening to

3036

01:49:56,550 --> 01:49:54,560
and and then

3037

01:49:58,709 --> 01:49:56,560
i think about there are a lot of people

3038

01:50:00,390 --> 01:49:58,719

out there that really can't handle this

3039

01:50:01,350 --> 01:50:00,400

there there's uh um

3040

01:50:03,910 --> 01:50:01,360

there are a lot of people with

3041

01:50:06,149 --> 01:50:03,920

psychological issues and so on and and

3042

01:50:08,390 --> 01:50:06,159

uh this is a kind of thing that just

3043

01:50:10,870 --> 01:50:08,400

becomes almost something they can't

3044

01:50:12,629 --> 01:50:10,880

they can't cope with so i i just think

3045

01:50:13,510 --> 01:50:12,639

that that that perhaps

3046

01:50:15,510 --> 01:50:13,520

um

3047

01:50:16,229 --> 01:50:15,520

you're right gaspar with your concerns i

3048

01:50:17,270 --> 01:50:16,239

i

3049

01:50:18,229 --> 01:50:17,280

uh

3050

01:50:21,830 --> 01:50:18,239

i

3051

01:50:23,270 --> 01:50:21,840

you know

3052

01:50:24,629 --> 01:50:23,280

imagine you've got desperate they're

3053

01:50:26,470 --> 01:50:24,639

going to claim they're in the favor of

3054

01:50:28,629 --> 01:50:26,480

the aliens right and it's all going

3055

01:50:30,790 --> 01:50:28,639

their way and you've got

3056

01:50:32,950 --> 01:50:30,800

do countries have the right to keep uh

3057

01:50:35,030 --> 01:50:32,960

ufo data to themselves

3058

01:50:35,990 --> 01:50:35,040

uh when it when it implicates the entire

3059

01:50:37,510 --> 01:50:36,000

world

3060

01:50:39,109 --> 01:50:37,520

um you know any more than they have the

3061

01:50:40,870 --> 01:50:39,119

right to keep you know pandemic

3062

01:50:41,990 --> 01:50:40,880

information to themselves you know is

3063

01:50:43,350 --> 01:50:42,000

there uh

3064

01:50:47,189 --> 01:50:43,360

you know

3065

01:50:49,589 --> 01:50:47,199

with this that that you're exactly right

3066

01:50:50,709 --> 01:50:49,599

it's a much bigger picture than simply

3067

01:50:52,709 --> 01:50:50,719

deciding that we're going to study

3068

01:50:54,390 --> 01:50:52,719

something that we've ridiculed for 50

3069

01:50:56,229 --> 01:50:54,400

years

3070

01:50:57,750 --> 01:50:56,239

and then yes but i'll tell you this too

3071

01:51:01,270 --> 01:50:57,760

from my perspective

3072

01:51:03,350 --> 01:51:01,280

um you can imagine as a science guy okay

3073

01:51:05,350 --> 01:51:03,360

when i see something that doesn't match

3074

01:51:07,270 --> 01:51:05,360

my science

3075

01:51:09,510 --> 01:51:07,280

i could go down one of two paths i could

3076

01:51:11,189 --> 01:51:09,520

go down the path that says well i just

3077

01:51:12,709 --> 01:51:11,199

must not understand what's going on here

3078

01:51:14,950 --> 01:51:12,719

it's probably something

3079

01:51:17,030 --> 01:51:14,960

ordinary that i'm mistaken

3080

01:51:19,109 --> 01:51:17,040

and then dismiss it i get that a lot

3081

01:51:21,510 --> 01:51:19,119

some people do that on the other hand i

3082

01:51:22,950 --> 01:51:21,520

could say hmm this might be something

3083

01:51:25,189 --> 01:51:22,960

more than

3084

01:51:27,189 --> 01:51:25,199

it appears to be i'm gonna have an open

3085

01:51:29,030 --> 01:51:27,199

mind i'm gonna try and investigate it

3086

01:51:32,390 --> 01:51:29,040

and that's the path i took ever since i

3087

01:51:34,950 --> 01:51:32,400

was nine years old actually so i really

3088

01:51:38,070 --> 01:51:34,960

i really feel that that's important i

3089

01:51:40,629 --> 01:51:38,080

know that the that countries do as as

3090

01:51:42,870 --> 01:51:40,639

ted was saying countries do segregate

3091

01:51:44,149 --> 01:51:42,880

data and keep it from the others i know

3092

01:51:46,629 --> 01:51:44,159

that because

3093

01:51:49,669 --> 01:51:46,639

um i've had experiences with this

3094

01:51:51,750 --> 01:51:49,679

working uh for the navy and so forth uh

3095

01:51:53,589 --> 01:51:51,760

i went to siena sub and martin knows the

3096

01:51:54,870 --> 01:51:53,599

story um

3097

01:51:56,629 --> 01:51:54,880

i'm not gonna go through the whole thing

3098

01:51:57,990 --> 01:51:56,639

but basically something was seen on

3099

01:52:01,030 --> 01:51:58,000

board the sub

3100

01:52:03,109 --> 01:52:01,040

and um it was an object moving through

3101
01:52:05,510 --> 01:52:03,119
the sonar very very brief

3102
01:52:07,510 --> 01:52:05,520
and the sonar tech reported it to the

3103
01:52:10,310 --> 01:52:07,520
executive officer as moving several

3104
01:52:13,189 --> 01:52:10,320
hundred knots underwater

3105
01:52:14,229 --> 01:52:13,199
now that's per hour yeah several hundred

3106
01:52:16,709 --> 01:52:14,239
knots yeah

3107
01:52:18,790 --> 01:52:16,719
per hour yeah

3108
01:52:21,830 --> 01:52:18,800
it didn't move several hundred knots it

3109
01:52:23,750 --> 01:52:21,840
moved several hundred knots per hour

3110
01:52:25,830 --> 01:52:23,760
no knots are a

3111
01:52:27,830 --> 01:52:25,840
velocity

3112
01:52:31,350 --> 01:52:27,840
oh god i've been on i've been on the

3113
01:52:33,589 --> 01:52:31,360

ocean for years and i didn't know

3114

01:52:34,629 --> 01:52:33,599

we won't tell anybody sorry gasping i'm

3115

01:52:36,070 --> 01:52:34,639

telling you

3116

01:52:37,750 --> 01:52:36,080

it's just between us

3117

01:52:39,189 --> 01:52:37,760

i agree

3118

01:52:40,950 --> 01:52:39,199

it's right and

3119

01:52:41,830 --> 01:52:40,960

left right

3120

01:52:43,189 --> 01:52:41,840

no

3121

01:52:45,830 --> 01:52:43,199

yeah all right

3122

01:52:48,550 --> 01:52:45,840

i know uh just just keep in mind though

3123

01:52:50,070 --> 01:52:48,560

we do have um we do have one more caller

3124

01:52:52,870 --> 01:52:50,080

i'd like to squeeze them in

3125

01:52:54,870 --> 01:52:52,880

but go ahead wrap that up if you would

3126
01:52:57,030 --> 01:52:54,880
yeah okay so i was just saying that you

3127
01:52:58,629 --> 01:52:57,040
know science um you know

3128
01:53:00,709 --> 01:52:58,639
seeing things that didn't match my

3129
01:53:02,629 --> 01:53:00,719
science and then uh seeing that thing on

3130
01:53:03,830 --> 01:53:02,639
the boat was incredible and then talking

3131
01:53:06,070 --> 01:53:03,840
to one of the joint chiefs when i had to

3132
01:53:08,310 --> 01:53:06,080
do a project for him down in washington

3133
01:53:09,669 --> 01:53:08,320
uh and i asked him about this program

3134
01:53:11,270 --> 01:53:09,679
called the fast mover program because

3135
01:53:13,990 --> 01:53:11,280
that's what they call it on the boat

3136
01:53:15,589 --> 01:53:14,000
uh he said to me i can't talk about the

3137
01:53:16,870 --> 01:53:15,599
program i'm sorry

3138
01:53:18,310 --> 01:53:16,880

whoa

3139

01:53:20,310 --> 01:53:18,320

that was by the way

3140

01:53:21,750 --> 01:53:20,320

decades before the nimitz incident just

3141

01:53:22,550 --> 01:53:21,760

so you know

3142

01:53:24,790 --> 01:53:22,560

yeah

3143

01:53:26,149 --> 01:53:24,800

so i feel like i could go another two

3144

01:53:28,070 --> 01:53:26,159

hours because i have

3145

01:53:29,270 --> 01:53:28,080

many questions for both of the both of

3146

01:53:31,030 --> 01:53:29,280

you here

3147

01:53:32,709 --> 01:53:31,040

but anyway let's uh let's try to get

3148

01:53:35,030 --> 01:53:32,719

thank you very much for the call there

3149

01:53:36,870 --> 01:53:35,040

gasper and now we have stephen on the

3150

01:53:39,109 --> 01:53:36,880

line from michigan stephen you're live

3151

01:53:41,270 --> 01:53:39,119

on the air

3152

01:53:43,189 --> 01:53:41,280

uh mr willis thank you for what you do

3153

01:53:45,030 --> 01:53:43,199

and and to ted and mark thank you for

3154

01:53:47,270 --> 01:53:45,040

the conversation i'll make my uh

3155

01:53:51,030 --> 01:53:47,280

question uh quick and concise

3156

01:53:53,430 --> 01:53:51,040

um in regards to to public safety um i'm

3157

01:53:54,470 --> 01:53:53,440

curious as to and feel free to speculate

3158

01:53:56,870 --> 01:53:54,480

um

3159

01:53:59,589 --> 01:53:56,880

these encounters i've there are multiple

3160

01:54:01,910 --> 01:53:59,599

stories where either encounters are

3161

01:54:03,270 --> 01:54:01,920

awe-inspiring and benellen the aerial

3162

01:54:05,350 --> 01:54:03,280

phenomenon

3163

01:54:06,550 --> 01:54:05,360

messages being sent

3164

01:54:09,189 --> 01:54:06,560

with

3165

01:54:11,589 --> 01:54:09,199

concern for the planet and humans but

3166

01:54:14,390 --> 01:54:11,599

then you also hear stories of abductions

3167

01:54:16,790 --> 01:54:14,400

and um things done to us without our

3168

01:54:18,550 --> 01:54:16,800

consent and so i guess my question is if

3169

01:54:19,430 --> 01:54:18,560

you had to speculate and if you had to

3170

01:54:20,550 --> 01:54:19,440

guess

3171

01:54:22,390 --> 01:54:20,560

um

3172

01:54:24,709 --> 01:54:22,400

do these things lie more on the

3173

01:54:27,270 --> 01:54:24,719

benevolent side or the malevolent side

3174

01:54:29,109 --> 01:54:27,280

or say 50 shades of gray some are good

3175

01:54:30,629 --> 01:54:29,119

some are bad but i'd love to hear your

3176

01:54:31,669 --> 01:54:30,639

thoughts on this and thank you for all

3177

01:54:34,149 --> 01:54:31,679

that you do

3178

01:54:35,430 --> 01:54:34,159

well thank you very much now stephen

3179

01:54:37,270 --> 01:54:35,440

i'll just

3180

01:54:39,109 --> 01:54:37,280

really quick i'll throw this in

3181

01:54:41,669 --> 01:54:39,119

i just uh

3182

01:54:44,550 --> 01:54:41,679

well a documentary two hour documentary

3183

01:54:46,149 --> 01:54:44,560

that uh me ben hansen and melissa tittle

3184

01:54:48,830 --> 01:54:46,159

just worked on in the hudson valley was

3185

01:54:51,589 --> 01:54:48,840

called alien invasion hudson

3186

01:54:53,589 --> 01:54:51,599

valley yeah thank you martin and the

3187

01:54:54,950 --> 01:54:53,599

thing is um

3188

01:54:56,790 --> 01:54:54,960

we went there thinking we're going to

3189

01:54:59,350 --> 01:54:56,800

try and find out what's going on in the

3190

01:55:01,270 --> 01:54:59,360

hudson valley it turned out we ended up

3191

01:55:03,030 --> 01:55:01,280

going there to find answers for all the

3192

01:55:04,390 --> 01:55:03,040

many people

3193

01:55:06,709 --> 01:55:04,400

that actually

3194

01:55:09,030 --> 01:55:06,719

felt they had had encounters of all

3195

01:55:10,790 --> 01:55:09,040

different kinds okay the the

3196

01:55:11,990 --> 01:55:10,800

investigation was focused on the town of

3197

01:55:13,589 --> 01:55:12,000

pine bush

3198

01:55:15,510 --> 01:55:13,599

and if you're in the area september 4th

3199

01:55:16,870 --> 01:55:15,520

pine bush has a wonderful ufo fair i'll

3200

01:55:18,470 --> 01:55:16,880

be speaking there lee speaker will be

3201

01:55:19,910 --> 01:55:18,480

there richard dolan will be there and

3202

01:55:21,189 --> 01:55:19,920

we'll all be talking

3203

01:55:22,790 --> 01:55:21,199

it's going to be and willis will be

3204

01:55:24,070 --> 01:55:22,800

there yeah

3205

01:55:25,830 --> 01:55:24,080

right there okay right there he's going

3206

01:55:28,470 --> 01:55:25,840

to be there yes

3207

01:55:29,910 --> 01:55:28,480

um and um but the point is that it

3208

01:55:31,910 --> 01:55:29,920

wasn't supposed to be like a commercial

3209

01:55:34,550 --> 01:55:31,920

there i was just trying to say the

3210

01:55:36,310 --> 01:55:34,560

people in pine bush have been terrorized

3211

01:55:37,990 --> 01:55:36,320

and terrified

3212

01:55:40,229 --> 01:55:38,000

by things that have gone on here how

3213

01:55:42,470 --> 01:55:40,239

about this 3 000 cases there in the last

3214

01:55:44,070 --> 01:55:42,480

10 years 3 000

3215

01:55:46,070 --> 01:55:44,080

amazing they're not reporting every bird

3216

01:55:47,350 --> 01:55:46,080

that they photograph badly they're

3217

01:55:49,750 --> 01:55:47,360

talking about

3218

01:55:51,350 --> 01:55:49,760

town-wide things that happen

3219

01:55:52,950 --> 01:55:51,360

many people looking in the sky people

3220

01:55:54,229 --> 01:55:52,960

with witnesses saying what is that holy

3221

01:55:55,910 --> 01:55:54,239

cow it's got these lights what's it

3222

01:55:57,189 --> 01:55:55,920

doing and why do they have lights we

3223

01:55:58,709 --> 01:55:57,199

don't even know it's probably a

3224

01:56:01,910 --> 01:55:58,719

consequence of their propulsion for all

3225

01:56:03,990 --> 01:56:01,920

we know so a lot of things going on and

3226

01:56:06,310 --> 01:56:04,000

and and pine bush seems to be the center

3227

01:56:07,910 --> 01:56:06,320

it's the ufo capital of the world

3228

01:56:09,669 --> 01:56:07,920

so you know

3229

01:56:11,750 --> 01:56:09,679

these these people would not say it's

3230

01:56:13,030 --> 01:56:11,760

benevolent these people i had people

3231

01:56:14,629 --> 01:56:13,040

terrified to come out of their homes to

3232

01:56:16,709 --> 01:56:14,639

talk to us

3233

01:56:19,109 --> 01:56:16,719

and they basically came out

3234

01:56:22,629 --> 01:56:19,119

just because we said we're going to get

3235

01:56:24,149 --> 01:56:22,639

them answers and they are terrified so

3236

01:56:25,910 --> 01:56:24,159

they don't think it's benevolent they

3237

01:56:26,830 --> 01:56:25,920

actually think they feel attacked to be

3238

01:56:29,669 --> 01:56:26,840

honest with

3239

01:56:31,430 --> 01:56:29,679

you well i would argue that something

3240

01:56:33,350 --> 01:56:31,440

happened

3241

01:56:35,910 --> 01:56:33,360

we don't have any time i'm real sorry to

3242

01:56:37,990 --> 01:56:35,920

say but we are totally out of time

3243

01:56:41,109 --> 01:56:38,000

and mark uh mark i'll see you there in

3244

01:56:42,709 --> 01:56:41,119

10 days and um

3245

01:56:45,510 --> 01:56:42,719

something happened to mark there it's on

3246

01:56:48,189 --> 01:56:45,520

discovery plus check it out and ted real

3247

01:56:50,790 --> 01:56:48,199

quickly how can someone find you online

3248

01:56:53,589 --> 01:56:50,800

narcn.org um you can reach me through

3249

01:56:55,189 --> 01:56:53,599

the contact us you can call me uh i want

3250

01:56:56,709 --> 01:56:55,199

to hear from all of you guys you know

3251

01:56:59,109 --> 01:56:56,719

and check in with me mark but we've got

3252

01:57:01,430 --> 01:56:59,119

some notes to compare i think um and if

3253

01:57:03,270 --> 01:57:01,440

anybody connect you to yeah

3254

01:57:05,430 --> 01:57:03,280

right and i try to talk to everybody i

3255

01:57:07,990 --> 01:57:05,440

answer the phone so if you call me i'll

3256

01:57:09,830 --> 01:57:08,000

i'll talk to you so all right thanks

3257

01:57:11,830 --> 01:57:09,840

thanks we are totally out of time thank

3258

01:57:13,910 --> 01:57:11,840

you both so much i really had a lot of

3259

01:57:15,830 --> 01:57:13,920

fun and i'll i'll send you both on a

3260

01:57:16,870 --> 01:57:15,840

common email to connect to you take care

3261

01:57:20,149 --> 01:57:16,880

but thank you

3262

01:57:22,310 --> 01:57:20,159

thank you for 10 days yeah

3263

01:57:25,270 --> 01:57:22,320

bye all right next week we have martin

3264

01:57:27,109 --> 01:57:25,280

keller on the penn space club i'm not

3265

01:57:28,790 --> 01:57:27,119

sure what that's about but you have to

3266

01:57:30,790 --> 01:57:28,800

check it out it ought to be a fun show

3267

01:57:34,690 --> 01:57:30,800

talk to you next week and remember to

3268

01:57:43,250 --> 01:57:34,700

keep your eyes to the sky