



**Dr. John Brandenburg**



**Gordon White**

1  
00:00:19,900 --> 00:00:18,250  
talk about reclaiming this history about

2  
00:00:22,720 --> 00:00:19,910  
our space program and about Mars in

3  
00:00:25,480 --> 00:00:22,730  
particular sure so you're completely

4  
00:00:28,300 --> 00:00:25,490  
right Alex but in the early 20th century

5  
00:00:31,660 --> 00:00:28,310  
it was sort of self-evident that what we

6  
00:00:33,310 --> 00:00:31,670  
assumed that when we eventually got to

7  
00:00:35,229 --> 00:00:33,320  
Mars or when we built a telescope that

8  
00:00:37,210 --> 00:00:35,239  
was powerful enough to see things that

9  
00:00:38,710 --> 00:00:37,220  
we would see ruins and the remains of a

10  
00:00:45,790 --> 00:00:38,720  
civilization or even one that still

11  
00:00:48,549 --> 00:00:45,800  
existed the data here folks is pretty

12  
00:00:52,030 --> 00:00:48,559  
easy to put your hands on and pretty

13  
00:00:55,000 --> 00:00:52,040

easy to verify some of the extraordinary

14

00:00:58,060 --> 00:00:55,010

things that Brandenburg is saying in

15

00:01:00,189 --> 00:00:58,070

this interview and the truth is you

16

00:01:01,689 --> 00:01:00,199

don't go there because you really can't

17

00:01:04,000 --> 00:01:01,699

handle the truth that's the only thing

18

00:01:06,340 --> 00:01:04,010

that's keeping people back yeah I

19

00:01:08,770 --> 00:01:06,350

couldn't agree more I am told a story on

20

00:01:11,320 --> 00:01:08,780

a podcast that I was on over the weekend

21

00:01:12,969 --> 00:01:11,330

I have a friend of mine very dear friend

22

00:01:14,530 --> 00:01:12,979

she's extremely intelligent she used to

23

00:01:18,490 --> 00:01:14,540

work for the Financial Times and so on

24

00:01:19,810 --> 00:01:18,500

and speaking of Verner von Braun I just

25

00:01:20,530 --> 00:01:19,820

happened to mention that the guy who ran

26

00:01:22,000 --> 00:01:20,540

the Apollo program

27

00:01:23,470 --> 00:01:22,010

now this isn't forbidden history in any

28

00:01:26,020 --> 00:01:23,480

way this is just in the books you'll

29

00:01:27,970 --> 00:01:26,030

find it in Wikipedia was an SS major for

30

00:01:29,560 --> 00:01:27,980

the Nazis and she just couldn't

31

00:01:32,230 --> 00:01:29,570

literally could not handle the truth

32

00:01:34,690 --> 00:01:32,240

like her mess yes right ss I mean this

33

00:01:37,120 --> 00:01:34,700

earth doesn't even count SS when all

34

00:01:38,710 --> 00:01:37,130

that means I mean you know and he joined

35

00:01:40,510 --> 00:01:38,720

this idea that he was a good Nazi is

36

00:01:42,130 --> 00:01:40,520

probably not correct because he was a

37

00:01:45,400 --> 00:01:42,140

believer he joined two years before the

38

00:01:46,810 --> 00:01:45,410

war so he he he left it he wasn't

39

00:01:51,040 --> 00:01:46,820

defending his country he's like no no no

40

00:01:56,750 --> 00:01:54,260

it's clear when we when the dust settles

41

00:01:58,430 --> 00:01:56,760

that whatever you think about that the

42

00:02:00,140 --> 00:01:58,440

government sure took it very seriously

43

00:02:01,910 --> 00:02:00,150

the spaceburn certainly took it very

44

00:02:05,240 --> 00:02:01,920

very seriously that's almost more

45

00:02:07,760 --> 00:02:05,250

important what it is is the sleuthing

46

00:02:10,790 --> 00:02:07,770

around in this spooks and all that stuff

47

00:02:12,560 --> 00:02:10,800

that go on around someone who does this

48

00:02:14,300 --> 00:02:12,570

research that's more important the

49

00:02:16,850 --> 00:02:14,310

outsourcing of the research that's

50

00:02:18,890 --> 00:02:16,860

what's really more important that's

51  
00:02:21,590 --> 00:02:18,900  
absolutely the skeptical angle because

52  
00:02:23,860 --> 00:02:21,600  
those are our data the interpretations

53  
00:02:26,090 --> 00:02:23,870  
of the data are that there are vanished

54  
00:02:27,680 --> 00:02:26,100  
presumably vanished cultures on other

55  
00:02:29,000 --> 00:02:27,690  
planets in the solar system I think

56  
00:02:30,920 --> 00:02:29,010  
that's a very good interpretation I go

57  
00:02:33,350 --> 00:02:30,930  
about halfway there but the actual data

58  
00:02:36,979 --> 00:02:33,360  
we are working with here is that we have

59  
00:02:40,310 --> 00:02:36,989  
an extremely dissociative space research

60  
00:02:42,130 --> 00:02:40,320  
policy in the West where we're

61  
00:02:44,930 --> 00:02:42,140  
pretending it's one thing and actively

62  
00:02:47,690 --> 00:02:44,940  
actively believing and spending untold

63  
00:02:50,240 --> 00:02:47,700

you know billions pursuing this idea

64

00:02:52,100 --> 00:02:50,250

that at least at some stage in the

65

00:02:53,540 --> 00:02:52,110

universe in the solar system's recent

66

00:02:57,150 --> 00:02:53,550

history it was a lot more interesting

67

00:03:01,740 --> 00:03:00,090

on this episode of skeptic oh it is

68

00:03:04,500 --> 00:03:01,750

self-evident in the policy over the last

69

00:03:06,140 --> 00:03:04,510

70 years that an element of particularly

70

00:03:08,490 --> 00:03:06,150

the American military-industrial

71

00:03:11,010 --> 00:03:08,500

establishment up and down believes there

72

00:03:13,140 --> 00:03:11,020

are artificial remains around the solar

73

00:03:14,610 --> 00:03:13,150

system and it is affecting policy it's

74

00:03:17,250 --> 00:03:14,620

affecting internal policy and it's

75

00:03:20,310 --> 00:03:17,260

affecting off-planet policy best

76

00:03:24,630 --> 00:03:20,320

interpretive model for the atmospheric

77

00:03:26,610 --> 00:03:24,640

and sort of soil data is that this is

78

00:03:30,420 --> 00:03:26,620

the result of an ancient nuclear

79

00:03:31,830 --> 00:03:30,430

explosion you're perfectly okay with you

80

00:03:33,090 --> 00:03:31,840

know twenty years down the track it

81

00:03:36,000 --> 00:03:33,100

turns out that there's some kind of

82

00:03:37,410 --> 00:03:36,010

crazy bearing in mind you're a plasma

83

00:03:39,990 --> 00:03:37,420

physicists always about to say some kind

84

00:03:42,380 --> 00:03:40,000

of crazy weird plasma event in space

85

00:03:44,970 --> 00:03:42,390

that could cause it there's probably a

86

00:03:48,540 --> 00:03:44,980

possibility of some unknown natural

87

00:03:51,780 --> 00:03:48,550

phenomenon but the only known phenomenon

88

00:03:52,850 --> 00:03:51,790

is the explosion of a very large nuclear

89

00:04:05,150 --> 00:03:52,860

device

90

00:04:09,390 --> 00:04:07,620

welcome to skeptic Oh where we explore

91

00:04:12,000 --> 00:04:09,400

controversial science with leading

92

00:04:15,090 --> 00:04:12,010

researchers thinkers and their critics

93

00:04:17,420 --> 00:04:15,100

I'm your host Alex Karras and have you

94

00:04:20,039 --> 00:04:17,430

ever seen the show ancient aliens

95

00:04:21,870 --> 00:04:20,049

nuclear annihilation this would have

96

00:04:24,690 --> 00:04:21,880

been an absolutely devastating event

97

00:04:26,130 --> 00:04:24,700

that you have mysterious well on today's

98

00:04:28,740 --> 00:04:26,140

episode we have quite a treat because

99

00:04:31,140 --> 00:04:28,750

one of the scientists that has been

100

00:04:33,360 --> 00:04:31,150

featured on that show several times dr.

101

00:04:36,650 --> 00:04:33,370

John Brandenburg who is a plasma

102

00:04:39,150 --> 00:04:36,660

physicist legit guy who has some very

103

00:04:42,090 --> 00:04:39,160

controversial out there kind of theories

104

00:04:45,480 --> 00:04:42,100

about Mars joined my friend and author

105

00:04:49,800 --> 00:04:45,490

and podcaster Gordon white for an

106

00:04:54,090 --> 00:04:49,810

interview on not only his theories on

107

00:04:57,420 --> 00:04:54,100

Mars but on a whole host of related

108

00:04:58,620 --> 00:04:57,430

topics that have to do with well just a

109

00:05:01,140 --> 00:04:58,630

lot of the things that we talk about

110

00:05:03,090 --> 00:05:01,150

here on skeptic oh this has been an

111

00:05:04,200 --> 00:05:03,100

interesting interview to put together

112

00:05:06,750 --> 00:05:04,210

because there's kind of a lot of

113

00:05:08,969 --> 00:05:06,760

different pieces we have the interview

114

00:05:10,710 --> 00:05:08,979

with Brandenburg that was done by Gordon

115

00:05:12,170 --> 00:05:10,720

and then I really want to do an

116

00:05:15,600 --> 00:05:12,180

interview with Gordon because I think

117

00:05:19,260 --> 00:05:15,610

his interview with John Brandenburg left

118

00:05:22,409 --> 00:05:19,270

a lot of issues that I'm most interested

119

00:05:24,659 --> 00:05:22,419

in kind of uncovered so I went ahead and

120

00:05:27,240 --> 00:05:24,669

talked to Gordon for quite some time and

121

00:05:30,659 --> 00:05:27,250

now I'm going to try and interleave

122

00:05:33,300 --> 00:05:30,669

those pieces in together for you in a

123

00:05:35,640 --> 00:05:33,310

way that I hope makes sense it's a long

124

00:05:37,440 --> 00:05:35,650

interview or a long show and I think it

125

00:05:39,930 --> 00:05:37,450

assumes that you're into this stuff at a

126

00:05:42,750 --> 00:05:39,940

certain level but really there's no way

127

00:05:45,630 --> 00:05:42,760

to talk about this without making those

128

00:05:48,590 --> 00:05:45,640

kind of assumptions so it is long so let

129

00:05:51,750 --> 00:05:48,600

me cut to it and get to first my

130

00:05:54,960 --> 00:05:51,760

introduction with Gordon white author of

131

00:05:57,000 --> 00:05:54,970

starships and Pieces of Eight a new book

132

00:05:59,340 --> 00:05:57,010

that he has it's absolutely fantastic as

133

00:06:03,090 --> 00:05:59,350

a compilation of a lot of essays he's

134

00:06:05,850 --> 00:06:03,100

done on his blog room soup and let's get

135

00:06:08,670 --> 00:06:05,860

to my interview with Gordon and then

136

00:06:12,560 --> 00:06:08,680

that will lead into the interview with

137

00:06:15,120 --> 00:06:12,570

Gordon did with dr. John Brandenburg

138

00:06:16,480 --> 00:06:15,130

today I'm joined by Gordon white the

139

00:06:18,790 --> 00:06:16,490

creator of the

140

00:06:21,159 --> 00:06:18,800

soup blog and podcast and the author of

141

00:06:24,100 --> 00:06:21,169

several books including starships which

142

00:06:26,129 --> 00:06:24,110

you may recall we talked about here on

143

00:06:28,749 --> 00:06:26,139

skeptic oh just a few months ago and

144

00:06:31,029 --> 00:06:28,759

ever since that show and ever since

145

00:06:34,210 --> 00:06:31,039

meeting Gordon I've stayed in touch

146

00:06:35,469 --> 00:06:34,220

because I've really really loved some of

147

00:06:38,110 --> 00:06:35,479

the things that he's bringing forward

148

00:06:39,879 --> 00:06:38,120

and a lot of his ideas so I've pestered

149

00:06:42,930 --> 00:06:39,889

him since then that we ought to do

150

00:06:46,270 --> 00:06:42,940

something together and I eventually

151  
00:06:47,800 --> 00:06:46,280  
wrangled him into doing an interview and

152  
00:06:51,189 --> 00:06:47,810  
he has a great one he's bringing to us

153  
00:06:53,469 --> 00:06:51,199  
today with dr. John Brandenburg and what

154  
00:06:55,960 --> 00:06:53,479  
I really want to do today was not only

155  
00:06:57,879 --> 00:06:55,970  
bring you that interview but talk with

156  
00:06:59,020 --> 00:06:57,889  
Gordon because there's so many things

157  
00:07:02,230 --> 00:06:59,030  
about that interview I thought were

158  
00:07:05,620 --> 00:07:02,240  
fantastic that might slip past you if

159  
00:07:08,110 --> 00:07:05,630  
you're not into this topic so I'm super

160  
00:07:10,120 --> 00:07:08,120  
excited to have Gordon on Gordon welcome

161  
00:07:11,649 --> 00:07:10,130  
to skeptic oh and thanks for joining us

162  
00:07:14,080 --> 00:07:11,659  
and thanks for bringing us this great

163  
00:07:15,640 --> 00:07:14,090

interview with John Brandenburg well it

164

00:07:17,320 --> 00:07:15,650

was an absolute pleasure pretending to

165

00:07:19,809 --> 00:07:17,330

be you for about 90 minutes Alex it was

166

00:07:21,850 --> 00:07:19,819

really fun thank you again no I think

167

00:07:24,430 --> 00:07:21,860

you can't you can't play it off like

168

00:07:26,680 --> 00:07:24,440

that man it's all you good you're gonna

169

00:07:30,430 --> 00:07:26,690

have a googol bad all right I'll take

170

00:07:33,430 --> 00:07:30,440

that so let's set this up a little bit

171

00:07:36,189 --> 00:07:33,440

you know Gordon if folks don't remember

172

00:07:38,950 --> 00:07:36,199

our interview and aren't familiar with

173

00:07:42,070 --> 00:07:38,960

you you're someone who has a broad range

174

00:07:44,770 --> 00:07:42,080

of interest in kind of controversial

175

00:07:48,339 --> 00:07:44,780

archaeology controversial leading-edge

176  
00:07:50,339 --> 00:07:48,349  
history parapsychology and you come at

177  
00:07:53,350 --> 00:07:50,349  
it of course from this thing called

178  
00:07:56,920 --> 00:07:53,360  
chaos magic which is kind of your point

179  
00:07:59,200 --> 00:07:56,930  
of entry but what really kind of brings

180  
00:08:00,510 --> 00:07:59,210  
us together is that although I'm usually

181  
00:08:03,490 --> 00:08:00,520  
coming at things from this kind of

182  
00:08:06,459 --> 00:08:03,500  
consciousness science spirituality thing

183  
00:08:08,980 --> 00:08:06,469  
what seems to really drive both of us if

184  
00:08:12,700 --> 00:08:08,990  
you get to the core of what we're

185  
00:08:15,760 --> 00:08:12,710  
talking about is this common ground on

186  
00:08:18,700 --> 00:08:15,770  
this idea that we ought to be looking at

187  
00:08:20,620 --> 00:08:18,710  
the biggest picture questions if you

188  
00:08:23,200 --> 00:08:20,630

want to call them science questions that

189

00:08:24,490 --> 00:08:23,210

is who are we and why are we here and we

190

00:08:28,089 --> 00:08:24,500

always have to come back to those

191

00:08:30,159 --> 00:08:28,099

questions number one and if that isn't

192

00:08:32,940 --> 00:08:30,169

unique I think what does

193

00:08:36,279 --> 00:08:32,950

really bring us together is our

194

00:08:37,719 --> 00:08:36,289

understanding that that journey to

195

00:08:40,480 --> 00:08:37,729

really say okay we're going to tackle

196

00:08:43,810 --> 00:08:40,490

those big-picture questions is gonna get

197

00:08:46,240 --> 00:08:43,820

messy because once we get in there we

198

00:08:48,009 --> 00:08:46,250

find out how difficult it is to shake

199

00:08:50,889 --> 00:08:48,019

people from their cherished beliefs we

200

00:08:53,079 --> 00:08:50,899

get into all sorts of conspiracies we

201  
00:08:55,420 --> 00:08:53,089  
get into all sorts of distorted and

202  
00:08:58,060 --> 00:08:55,430  
misinformation that's thrown around with

203  
00:09:00,340 --> 00:08:58,070  
history and I just think you know maybe

204  
00:09:03,519 --> 00:09:00,350  
you want to comment on that but I think

205  
00:09:05,860 --> 00:09:03,529  
it's interesting that you your show and

206  
00:09:07,420 --> 00:09:05,870  
your books can come at things from one

207  
00:09:09,220 --> 00:09:07,430  
perspective and I'm really coming at

208  
00:09:12,840 --> 00:09:09,230  
them from another and I thought it's so

209  
00:09:16,569 --> 00:09:12,850  
cool that we've found you know a real

210  
00:09:18,519 --> 00:09:16,579  
kindred kind of way to talk about this

211  
00:09:20,290 --> 00:09:18,529  
that is totally in sync so do you have

212  
00:09:21,850 --> 00:09:20,300  
any thoughts on that yeah I would

213  
00:09:24,069 --> 00:09:21,860

absolutely agree I think we're both

214

00:09:28,050 --> 00:09:24,079

blind men you know fondling the same

215

00:09:31,540 --> 00:09:28,060

elephant at this point in time because

216

00:09:33,879 --> 00:09:31,550

there is if we do and I think this is a

217

00:09:36,430 --> 00:09:33,889

belief we share if we do need to or want

218

00:09:38,920 --> 00:09:36,440

to move the discourse it does actually

219

00:09:43,509 --> 00:09:38,930

need data and evidence behind it and

220

00:09:45,880 --> 00:09:43,519

that that sort of rigor is I think a

221

00:09:48,130 --> 00:09:45,890

shared way of approaching the elephant

222

00:09:50,019 --> 00:09:48,140

and I think that's why there's a general

223

00:09:52,060 --> 00:09:50,029

alignment in a lot of things we're

224

00:09:55,720 --> 00:09:52,070

interested in and their implications and

225

00:09:57,400 --> 00:09:55,730

you're completely right that it doesn't

226

00:10:00,100 --> 00:09:57,410

really matter what angle you come at

227

00:10:03,069 --> 00:10:00,110

this element from what ends up happening

228

00:10:05,290 --> 00:10:03,079

is you quickly discover that money and

229

00:10:08,710 --> 00:10:05,300

power and politics are intimately

230

00:10:11,620 --> 00:10:08,720

involved in it because this is a the

231

00:10:13,870 --> 00:10:11,630

truth with a capital T is it's very

232

00:10:16,769 --> 00:10:13,880

valuable you either get to produce it or

233

00:10:19,689 --> 00:10:16,779

control it and it's one of those sort of

234

00:10:21,699 --> 00:10:19,699

eternal human conditions in a way really

235

00:10:24,309 --> 00:10:21,709

good and you know the reason we're going

236

00:10:26,860 --> 00:10:24,319

to kind of go into a little bit more of

237

00:10:30,189 --> 00:10:26,870

an introduction than I think we normally

238

00:10:32,189 --> 00:10:30,199

would is because I think this interview

239

00:10:35,460 --> 00:10:32,199

that you've done with John Brandenburg

240

00:10:38,680 --> 00:10:35,470

requires a little bit of

241

00:10:41,350 --> 00:10:38,690

contextualization to really make it mean

242

00:10:43,090 --> 00:10:41,360

something so before we start with dr.

243

00:10:43,810 --> 00:10:43,100

Brandenburg's theories which are

244

00:10:45,790 --> 00:10:43,820

extremely

245

00:10:48,910 --> 00:10:45,800

controversial and kind of take us in a

246

00:10:52,240 --> 00:10:48,920

million places how about we introduce

247

00:10:55,450 --> 00:10:52,250

people to who the guy is basic bio do

248

00:10:57,730 --> 00:10:55,460

you want to kind of tell us who he is

249

00:10:59,230 --> 00:10:57,740

and I have his credentials here so if

250

00:11:01,240 --> 00:10:59,240

you want me to read those I can read

251  
00:11:04,450 --> 00:11:01,250  
those as well but tell us who John

252  
00:11:08,350 --> 00:11:04,460  
Brandenburg is sure so dr. Brandenburg

253  
00:11:09,730 --> 00:11:08,360  
is a plasma physicist who has spent any

254  
00:11:12,880 --> 00:11:09,740  
number of years the last several decades

255  
00:11:15,810 --> 00:11:12,890  
occasionally with you know top secret

256  
00:11:19,750 --> 00:11:15,820  
clearance occasionally not working in

257  
00:11:22,330 --> 00:11:19,760  
you know the sort of privatized space

258  
00:11:26,380 --> 00:11:22,340  
program so he's X JPL he's worked on the

259  
00:11:28,090 --> 00:11:26,390  
Clementine mission he's worked in some

260  
00:11:30,910 --> 00:11:28,100  
of the companies that sort of fed into

261  
00:11:33,820 --> 00:11:30,920  
the Reagan Star Wars program and that's

262  
00:11:36,880 --> 00:11:33,830  
his that's been his career in addition

263  
00:11:38,730 --> 00:11:36,890

to that he has been part of the people

264

00:11:40,960 --> 00:11:38,740

in the kind of early eighties

265

00:11:43,420 --> 00:11:40,970

constellated around someone like Richard

266

00:11:45,520 --> 00:11:43,430

Hoagland I call them the Mars nerds and

267

00:11:47,620 --> 00:11:45,530

I say it with affection but this is a

268

00:11:49,360 --> 00:11:47,630

collection of people in that world so

269

00:11:51,730 --> 00:11:49,370

with a science background but

270

00:11:53,170 --> 00:11:51,740

independently researching some of the

271

00:11:55,720 --> 00:11:53,180

anomalous information that started to

272

00:11:58,300 --> 00:11:55,730

come out following 1976

273

00:12:00,010 --> 00:11:58,310

well Voyager sir Voyager 76 following

274

00:12:02,380 --> 00:12:00,020

some of the images we saw of Mars and

275

00:12:05,350 --> 00:12:02,390

that kind of information became quite

276

00:12:08,050 --> 00:12:05,360

controversial in the early 90s and then

277

00:12:11,860 --> 00:12:08,060

a fairly flimsy hit job was put on it

278

00:12:13,810 --> 00:12:11,870

and and it's never really returned to

279

00:12:16,210 --> 00:12:13,820

popular consciousness outside of a few

280

00:12:18,490 --> 00:12:16,220

movies again in the 90s but that's so

281

00:12:20,680 --> 00:12:18,500

dr. Brandenburg is a real life

282

00:12:24,640 --> 00:12:20,690

up-and-down scientist and out of the

283

00:12:25,660 --> 00:12:24,650

hard science variety who is also and

284

00:12:27,700 --> 00:12:25,670

this is one of the things friendly

285

00:12:29,890 --> 00:12:27,710

enough we've spoken about this with

286

00:12:32,170 --> 00:12:29,900

other potential with regards to other

287

00:12:36,070 --> 00:12:32,180

potential guests Alex but there are

288

00:12:38,950 --> 00:12:36,080

aspects of him as a person that lead me

289

00:12:42,250 --> 00:12:38,960

to have a kind of different layer of

290

00:12:44,200 --> 00:12:42,260

trust with him in that he he freely

291

00:12:46,300 --> 00:12:44,210

admits that and I think this is you know

292

00:12:48,280 --> 00:12:46,310

fair and a nice thing to say about

293

00:12:50,710 --> 00:12:48,290

somebody freely admits he's a patriot he

294

00:12:52,900 --> 00:12:50,720

freely admits that he's a Christian so

295

00:12:55,180 --> 00:12:52,910

what we're dealing with someone who not

296

00:12:56,210 --> 00:12:55,190

only knows his apples but like his God

297

00:12:58,160 --> 00:12:56,220

won't let him lie

298

00:13:02,210 --> 00:12:58,170

now whether or not he's your God or mine

299

00:13:03,950 --> 00:13:02,220

like that I do believe that counts for

300

00:13:07,400 --> 00:13:03,960

something especially when you're dealing

301

00:13:09,950 --> 00:13:07,410

with the world of such circuitous Co

302

00:13:11,470 --> 00:13:09,960

Intel and and disinformation you have

303

00:13:13,790 --> 00:13:11,480

someone who is an up and down

304

00:13:17,390 --> 00:13:13,800

all-american Christian who also happens

305

00:13:19,420 --> 00:13:17,400

to be very good and very and has the

306

00:13:22,340 --> 00:13:19,430

personality type of a hard scientist

307

00:13:24,050 --> 00:13:22,350

yeah and there's a couple of different

308

00:13:26,930 --> 00:13:24,060

interesting aspects of that that we can

309

00:13:29,630 --> 00:13:26,940

get into let me just fill in one detail

310

00:13:32,690 --> 00:13:29,640

I mean you say hard scientists if you

311

00:13:35,630 --> 00:13:32,700

scan the internet for this guy you're

312

00:13:37,900 --> 00:13:35,640

liable to see as you always will and

313

00:13:40,550 --> 00:13:37,910

anything that's interesting you know a

314

00:13:44,450 --> 00:13:40,560

lampooning of him in a number of

315

00:13:47,660 --> 00:13:44,460

different ways let's be clear Cal Davis

316

00:13:50,120 --> 00:13:47,670

PhD theoretical plasma physics from

317

00:13:52,880 --> 00:13:50,130

Lawrence Livermore National Laboratories

318

00:13:55,430 --> 00:13:52,890

that's top-notch folks I mean that's the

319

00:13:58,970 --> 00:13:55,440

real deal that's a nerdy scientist

320

00:14:00,800 --> 00:13:58,980

Sandia Labs JPL all the places rubbing

321

00:14:03,470 --> 00:14:00,810

shoulders with Carl Sagan you know

322

00:14:05,510 --> 00:14:03,480

personal relation exchanging emails and

323

00:14:08,690 --> 00:14:05,520

telephone calls and Richard Hoagland

324

00:14:11,720 --> 00:14:08,700

this is the real deal so if you do run

325

00:14:15,560 --> 00:14:11,730

across you know that 90 second Google

326

00:14:18,440 --> 00:14:15,570

search and this guy is portrayed as some

327

00:14:19,820 --> 00:14:18,450

kind of buffoon that's not the case as a

328

00:14:22,130 --> 00:14:19,830

matter of fact you know it just have to

329

00:14:24,200 --> 00:14:22,140

share this little bit of story when I

330

00:14:26,420 --> 00:14:24,210

had a job over the summer when I was in

331

00:14:28,880 --> 00:14:26,430

graduate school with Texas Instruments

332

00:14:30,980 --> 00:14:28,890

in Dallas long long time ago and I

333

00:14:32,420 --> 00:14:30,990

didn't know anything you know I just

334

00:14:35,240 --> 00:14:32,430

didn't know anything and I went there in

335

00:14:36,920 --> 00:14:35,250

I thought Texas Instruments oh they make

336

00:14:39,110 --> 00:14:36,930

these little calculators you know well

337

00:14:41,930 --> 00:14:39,120

no I mean Texas Instruments is a huge

338

00:14:44,000 --> 00:14:41,940

defense contractor you know and when you

339

00:14:46,100 --> 00:14:44,010

get into the belly of the beast there

340

00:14:47,540 --> 00:14:46,110

you like you work in this little world

341

00:14:48,710 --> 00:14:47,550

like I didn't have any kind of clearance

342

00:14:50,570 --> 00:14:48,720

or anything like that so you're in this

343

00:14:53,570 --> 00:14:50,580

little compartmentalized world and then

344

00:14:55,310 --> 00:14:53,580

they're all 90% of is in this glass off

345

00:14:57,380 --> 00:14:55,320

thing you know these people you never

346

00:14:59,660 --> 00:14:57,390

see and never talk to but you did have

347

00:15:04,010 --> 00:14:59,670

some interaction with them and at Texas

348

00:15:06,680 --> 00:15:04,020

Instruments everyone wore their badge of

349

00:15:09,250 --> 00:15:06,690

their ID badge proudly and it was

350

00:15:12,880 --> 00:15:09,260

colored to show both your

351  
00:15:15,610 --> 00:15:12,890  
seniority and your security you know so

352  
00:15:17,620 --> 00:15:15,620  
the gold badgers were the people who had

353  
00:15:19,600 --> 00:15:17,630  
twenty years and the gold badgers with

354  
00:15:23,530 --> 00:15:19,610  
metals would have like 25 or 30 years

355  
00:15:25,660 --> 00:15:23,540  
and when I saw Brandenburg even when I

356  
00:15:28,720 --> 00:15:25,670  
saw him for the first time in some of

357  
00:15:32,170 --> 00:15:28,730  
his video presentations he reminded me

358  
00:15:34,750 --> 00:15:32,180  
of those kind of nerdy kind of guys who

359  
00:15:37,090 --> 00:15:34,760  
were deep into their science and at the

360  
00:15:39,550 --> 00:15:37,100  
same time deep into this

361  
00:15:42,450 --> 00:15:39,560  
military-industrial complex thing that

362  
00:15:46,360 --> 00:15:42,460  
just breeds this kind of a little bit

363  
00:15:47,860 --> 00:15:46,370

goofiness that is kind of hard to really

364

00:15:50,650 --> 00:15:47,870

put your finger on but they kind of

365

00:15:52,330 --> 00:15:50,660

laugh a little bit more that they're

366

00:15:54,820 --> 00:15:52,340

kind of the wrong things sometimes I

367

00:15:57,760 --> 00:15:54,830

just don't have quite the smoothness I

368

00:16:00,790 --> 00:15:57,770

guess that you see with some of the more

369

00:16:03,220 --> 00:16:00,800

slick people who are in the ivory tower

370

00:16:04,840 --> 00:16:03,230

and are generally you know on the TV

371

00:16:08,080 --> 00:16:04,850

circuit and stuff like that and that is

372

00:16:10,030 --> 00:16:08,090

not to disparage him in any way it's

373

00:16:12,190 --> 00:16:10,040

just of course not it's it's a

374

00:16:13,660 --> 00:16:12,200

personality difference with academics

375

00:16:15,970 --> 00:16:13,670

they are the ones that are paid to talk

376

00:16:17,860 --> 00:16:15,980

as in there are those whose job it is to

377

00:16:21,160 --> 00:16:17,870

stand in front of an auditorium of

378

00:16:24,250 --> 00:16:21,170

students and essentially ideally charm

379

00:16:25,870 --> 00:16:24,260

them into learning things at word and

380

00:16:28,870 --> 00:16:25,880

then there are the other scientists who

381

00:16:31,420 --> 00:16:28,880

were there like doing the work and and

382

00:16:33,760 --> 00:16:31,430

you yeah it's it's a personality type

383

00:16:37,810 --> 00:16:33,770

thing he's a great guy I really enjoyed

384

00:16:40,840 --> 00:16:37,820

my chat with him I I follow his data I

385

00:16:42,070 --> 00:16:40,850

believe yeah I don't think he's lying I

386

00:16:43,900 --> 00:16:42,080

can guarantee you that as a matter of

387

00:16:45,330 --> 00:16:43,910

fact I think that I think that's fairly

388

00:16:50,140 --> 00:16:45,340

open-and-shut as to his interpretation

389

00:16:52,300 --> 00:16:50,150

that's his own I depart from him in some

390

00:16:55,300 --> 00:16:52,310

of the interpretations of it but he's a

391

00:16:57,310 --> 00:16:55,310

he says he's certainly a he's a unique

392

00:16:58,390 --> 00:16:57,320

character compared to if you're not

393

00:17:01,320 --> 00:16:58,400

familiar with the world

394

00:17:04,120 --> 00:17:01,330

he's definitely that kind of character

395

00:17:05,410 --> 00:17:04,130

dr. Brandenburg welcome to skeptic oh

396

00:17:07,720 --> 00:17:05,420

thank you very much for your time

397

00:17:08,970 --> 00:17:07,730

oh well it's just it's a great pleasure

398

00:17:11,800 --> 00:17:08,980

and honor to be here

399

00:17:14,110 --> 00:17:11,810

wonderful so we've just been chatting

400

00:17:15,819 --> 00:17:14,120

offline I'm a huge fan of your work I'm

401  
00:17:17,569 --> 00:17:15,829  
a huge fan of your book but for

402  
00:17:20,390 --> 00:17:17,579  
listeners who

403  
00:17:23,630 --> 00:17:20,400  
maybe coming to your research brand-new

404  
00:17:27,010 --> 00:17:23,640  
would you mind giving us a bit of a sort

405  
00:17:30,790 --> 00:17:27,020  
of overview of your background oh I am

406  
00:17:33,410 --> 00:17:30,800  
well I just grew up in America I'm a

407  
00:17:36,620 --> 00:17:33,420  
project of a very standard American

408  
00:17:39,980 --> 00:17:36,630  
upbringing and my father encouraged me

409  
00:17:45,260 --> 00:17:39,990  
to go into physics as my uncle was also

410  
00:17:48,770 --> 00:17:45,270  
a physicist so I my primary um mission

411  
00:17:52,760 --> 00:17:48,780  
in life has been to be a physicist

412  
00:17:56,570 --> 00:17:52,770  
working on plasmas for energy fusion

413  
00:18:00,290 --> 00:17:56,580

energy and and also for national defense

414

00:18:03,049 --> 00:18:00,300

of space and by the way if a plasma

415

00:18:05,299 --> 00:18:03,059

physicist can't work on fusion the first

416

00:18:08,330 --> 00:18:05,309

thing he does is he goes into space it's

417

00:18:12,919 --> 00:18:08,340

like you can't make money shipping cargo

418

00:18:15,640 --> 00:18:12,929

you become a pirate yeah okay so now

419

00:18:18,380 --> 00:18:15,650

that we know who dr. John Brandenburg is

420

00:18:21,169 --> 00:18:18,390

let's move into the main points I think

421

00:18:23,480 --> 00:18:21,179

that come out of the interview and again

422

00:18:25,430 --> 00:18:23,490

I'm going to first talk about those with

423

00:18:28,760 --> 00:18:25,440

Gordon white so the first one would be

424

00:18:31,910 --> 00:18:28,770

this idea of reclaiming history I think

425

00:18:34,040 --> 00:18:31,920

you'll see what I mean here goes when

426

00:18:37,130 --> 00:18:34,050

you joined me to talk about your

427

00:18:40,340 --> 00:18:37,140

fabulous book starships that's what I

428

00:18:43,549 --> 00:18:40,350

felt you had really nailed completely is

429

00:18:46,299 --> 00:18:43,559

this idea that there is a history here

430

00:18:49,130 --> 00:18:46,309

there's a lot of known data points

431

00:18:51,980 --> 00:18:49,140

associated with that history and all we

432

00:18:54,580 --> 00:18:51,990

have to do is connect the dots on those

433

00:18:57,890 --> 00:18:54,590

data points and we can reclaim that

434

00:19:00,169 --> 00:18:57,900

history and I think you tried to do the

435

00:19:02,570 --> 00:19:00,179

same thing in this interview talk about

436

00:19:04,450 --> 00:19:02,580

reclaiming this history about our space

437

00:19:07,490 --> 00:19:04,460

program and about Mars in particular

438

00:19:10,010 --> 00:19:07,500

sure so you're completely right Alex

439

00:19:12,380 --> 00:19:10,020

that in the early 20th century it was

440

00:19:15,350 --> 00:19:12,390

sort of self-evident that what we

441

00:19:17,600 --> 00:19:15,360

assumed that when we eventually got to

442

00:19:19,310 --> 00:19:17,610

Mars or when we built a telescope that

443

00:19:21,260 --> 00:19:19,320

was powerful enough to see things that

444

00:19:22,790 --> 00:19:21,270

we would see ruins and the remains of a

445

00:19:24,770 --> 00:19:22,800

civilization or even one that still

446

00:19:26,930 --> 00:19:24,780

existed and that was normal that was New

447

00:19:28,909 --> 00:19:26,940

York Times stuff it didn't break

448

00:19:29,840 --> 00:19:28,919

civilization there's this kind of meme

449

00:19:32,630 --> 00:19:29,850

in

450

00:19:34,600 --> 00:19:32,640

ufology that the quote-unquote reason

451  
00:19:36,799 --> 00:19:34,610  
why this stuff is covered up is because

452  
00:19:38,600 --> 00:19:36,809  
civilization will collapse that's not

453  
00:19:40,610 --> 00:19:38,610  
correct what we we thought that

454  
00:19:45,620 --> 00:19:40,620  
beforehand but somewhere in the mid 20th

455  
00:19:48,370 --> 00:19:45,630  
century the presence of artificial

456  
00:19:51,320 --> 00:19:48,380  
structures elsewhere in the solar system

457  
00:19:53,360 --> 00:19:51,330  
got became a national security interest

458  
00:19:56,450 --> 00:19:53,370  
and that happened with the formation of

459  
00:19:58,970 --> 00:19:56,460  
NASA NASA emerged NASA is essentially a

460  
00:20:03,799 --> 00:19:58,980  
paramilitary organization in that it is

461  
00:20:05,480 --> 00:20:03,809  
a publicly funded scientific well you

462  
00:20:07,850 --> 00:20:05,490  
know government-funded scientific body

463  
00:20:09,710 --> 00:20:07,860

unless it finds something of national

464

00:20:11,690 --> 00:20:09,720

security importance and then it becomes

465

00:20:13,909 --> 00:20:11,700

military again but the space program for

466

00:20:15,860 --> 00:20:13,919

the first eleven years in the u.s. was

467

00:20:17,960 --> 00:20:15,870

military and NASA emerged out of that

468

00:20:21,320 --> 00:20:17,970

and it had you know former SS major

469

00:20:23,630 --> 00:20:21,330

Wernher von Braun as running the Apollo

470

00:20:25,190 --> 00:20:23,640

program and so on so baked into NASA at

471

00:20:26,630 --> 00:20:25,200

the beginning of or the middle of the

472

00:20:31,039 --> 00:20:26,640

twentieth century beginning the Cold War

473

00:20:35,000 --> 00:20:31,049

is this notion that let us explore space

474

00:20:36,320 --> 00:20:35,010

when it becomes when and the clue is

475

00:20:38,450 --> 00:20:36,330

when because this is in NASA's

476  
00:20:40,520 --> 00:20:38,460  
foundational policy documents from the

477  
00:20:43,730 --> 00:20:40,530  
likes of the Brookings Institute when we

478  
00:20:47,240 --> 00:20:43,740  
find something it is of national

479  
00:20:50,360 --> 00:20:47,250  
security implications and that will that

480  
00:20:53,080 --> 00:20:50,370  
will make that top secret so here then

481  
00:21:00,770 --> 00:20:53,090  
is Gordon and dr. John Brandenburg on

482  
00:21:04,130 --> 00:21:00,780  
reclaiming space history Mars arm always

483  
00:21:08,649 --> 00:21:04,140  
fascinated me as a child growing up in

484  
00:21:11,570 --> 00:21:08,659  
the Space Age in America where we were

485  
00:21:14,390 --> 00:21:11,580  
mesmerized by the mercury in the moon

486  
00:21:16,549 --> 00:21:14,400  
race the whole drama of the mercury

487  
00:21:19,850 --> 00:21:16,559  
program the Gemini program finally

488  
00:21:24,350 --> 00:21:19,860

Apollo the landing on the moon and

489

00:21:26,690 --> 00:21:24,360

watching of course the Russians be ahead

490

00:21:29,510 --> 00:21:26,700

at first and then struggle you know the

491

00:21:32,180 --> 00:21:29,520

very brave cosmonauts out there in space

492

00:21:35,960 --> 00:21:32,190

also and finally fall behind with the

493

00:21:37,520 --> 00:21:35,970

destruction of their big n1 rocket so

494

00:21:39,080 --> 00:21:37,530

they couldn't make it make make they

495

00:21:41,510 --> 00:21:39,090

couldn't make it to the moon whereas we

496

00:21:43,220 --> 00:21:41,520

did and in the middle of this is Wernher

497

00:21:46,549 --> 00:21:43,230

von Braun

498

00:21:49,400 --> 00:21:46,559

a rather anomalous character didn't he

499

00:21:51,260 --> 00:21:49,410

used to work for the Nazis sort of the

500

00:21:54,740 --> 00:21:51,270

question that came to my mind when I was

501  
00:21:56,870 --> 00:21:54,750  
a kid and but there he was a now

502  
00:22:00,890 --> 00:21:56,880  
transformed into an all-american hero

503  
00:22:03,530 --> 00:22:00,900  
and he wants to go to the moon but he

504  
00:22:06,470 --> 00:22:03,540  
really wants to go to Mars that is his

505  
00:22:08,960 --> 00:22:06,480  
real goal and then he says something

506  
00:22:13,280 --> 00:22:08,970  
very cryptic in the middle after landing

507  
00:22:17,030 --> 00:22:13,290  
on the moon successfully he says well

508  
00:22:22,039 --> 00:22:17,040  
the first people we should send to Mars

509  
00:22:25,909 --> 00:22:22,049  
should include archaeologists and I

510  
00:22:28,010 --> 00:22:25,919  
remember hearing of that when I was

511  
00:22:29,600 --> 00:22:28,020  
young and thinking that's a peculiar

512  
00:22:37,010 --> 00:22:29,610  
thing to say uh

513  
00:22:39,919 --> 00:22:37,020

but at the time uh the NASA the US

514

00:22:44,060 --> 00:22:39,929

government was heavily influenced by the

515

00:22:48,549 --> 00:22:44,070

work of possible role as it turns out it

516

00:22:52,820 --> 00:22:48,559

and even though many scientists uh

517

00:22:56,140 --> 00:22:52,830

basically discarded the work of Percival

518

00:23:01,360 --> 00:22:56,150

Lowell uh and of course the canals

519

00:23:06,020 --> 00:23:01,370

within the US government uh there was um

520

00:23:08,750 --> 00:23:06,030

a kind of view that well Percival Lowell

521

00:23:13,370 --> 00:23:08,760

may very well have been right because it

522

00:23:16,520 --> 00:23:13,380

Mars gave the appearance of being a a

523

00:23:21,430 --> 00:23:16,530

planet that was once like Earth I mean

524

00:23:23,870 --> 00:23:21,440

we found upon investigation on Mars uh

525

00:23:27,080 --> 00:23:23,880

well the first thing we saw was craters

526

00:23:30,350 --> 00:23:27,090

and that was well we didn't see any

527

00:23:32,630 --> 00:23:30,360

canals we found a lot of craters and so

528

00:23:34,730 --> 00:23:32,640

we're sending probes to Mars in addition

529

00:23:39,500 --> 00:23:34,740

to the big moon right the big drama of

530

00:23:42,169 --> 00:23:39,510

the moon race and it's every every

531

00:23:44,450 --> 00:23:42,179

American knew that our eventual goal was

532

00:23:46,760 --> 00:23:44,460

to go to Mars and all the science

533

00:23:48,740 --> 00:23:46,770

fiction movies were about going to Mars

534

00:23:51,169 --> 00:23:48,750

and finding civilizations there and

535

00:23:53,000 --> 00:23:51,179

everything like that was all very I

536

00:23:55,400 --> 00:23:53,010

don't know how many great be science

537

00:23:58,610 --> 00:23:55,410

fiction movies I saw about going to Mars

538

00:24:02,960 --> 00:23:58,620

as a kid and Saturday afternoon man

539

00:24:05,270 --> 00:24:02,970

named popcorn the hot dog for lunch that

540

00:24:07,520 --> 00:24:05,280

was that was the way to spend the

541

00:24:10,550 --> 00:24:07,530

afternoon in my hometown yeah I mean

542

00:24:12,500 --> 00:24:10,560

it's the Verna von Braun quote is

543

00:24:15,020 --> 00:24:12,510

interesting and when you mentioned the

544

00:24:17,210 --> 00:24:15,030

sort of widespread belief in canals of

545

00:24:19,190 --> 00:24:17,220

Mars it really was widespread I mean the

546

00:24:21,260 --> 00:24:19,200

New York Times in I believe it was the

547

00:24:22,910 --> 00:24:21,270

30s was running articles about

548

00:24:25,640 --> 00:24:22,920

hypothetically how we could communicate

549

00:24:28,850 --> 00:24:25,650

with these evident cultures and Mars by

550

00:24:30,800 --> 00:24:28,860

doing things like burning pie into the

551  
00:24:32,330 --> 00:24:30,810  
grasslands in Eurasia so that they could

552  
00:24:33,680 --> 00:24:32,340  
potentially see it so it's always struck

553  
00:24:35,900 --> 00:24:33,690  
me as very interesting and we'll get

554  
00:24:37,190 --> 00:24:35,910  
onto this story in the show it's always

555  
00:24:39,740 --> 00:24:37,200  
struck me as very interesting in the

556  
00:24:42,020 --> 00:24:39,750  
first half of the 20th century it was

557  
00:24:44,570 --> 00:24:42,030  
taken what not maybe first third taken

558  
00:24:47,240 --> 00:24:44,580  
is self-evident and not that big of a

559  
00:24:49,400 --> 00:24:47,250  
deal that there was either in existing

560  
00:24:54,170 --> 00:24:49,410  
culture on Mars or previous cultures on

561  
00:24:56,860 --> 00:24:54,180  
Mars and it's only as we move into the

562  
00:25:00,980 --> 00:24:56,870  
Cold War period or the post-war period

563  
00:25:03,530 --> 00:25:00,990

that that starts to get a bit fishy but

564

00:25:05,540 --> 00:25:03,540

it's important your Wernher von Braun

565

00:25:08,120 --> 00:25:05,550

quote is is correct it's not just there

566

00:25:10,790 --> 00:25:08,130

I mean NASA's founding documents

567

00:25:15,230 --> 00:25:10,800

well necessary think tanks that were

568

00:25:17,750 --> 00:25:15,240

providing sort of strategy to NASA had

569

00:25:21,350 --> 00:25:17,760

in them the expectation that we would

570

00:25:23,240 --> 00:25:21,360

find ruined artifacts it was part of

571

00:25:26,330 --> 00:25:23,250

NASA's DNA from the beginning that we

572

00:25:28,550 --> 00:25:26,340

would our expectation find ruined

573

00:25:30,680 --> 00:25:28,560

artifacts on Mars yeah absolutely

574

00:25:32,960 --> 00:25:30,690

so it's it from the beginning it hasn't

575

00:25:35,690 --> 00:25:32,970

been that out of an idea and and you've

576

00:25:37,490 --> 00:25:35,700

been I mean you you yeah and you were as

577

00:25:39,650 --> 00:25:37,500

you saying you are a plasma physicist

578

00:25:42,680 --> 00:25:39,660

but you have worked in some of the

579

00:25:44,180 --> 00:25:42,690

companies directly over the course of

580

00:25:46,850 --> 00:25:44,190

your career that have been involved in

581

00:25:51,380 --> 00:25:46,860

this kind of you know in his off planet

582

00:25:54,920 --> 00:25:51,390

science yes absolutely I was part of the

583

00:25:59,120 --> 00:25:54,930

Clementine mission to the moon where we

584

00:26:03,170 --> 00:25:59,130

found billions of tons of you know

585

00:26:06,230 --> 00:26:03,180

frozen ice at the holes of the moon

586

00:26:08,000 --> 00:26:06,240

enough to support a large human that the

587

00:26:09,980 --> 00:26:08,010

moon basically has

588

00:26:13,010 --> 00:26:09,990

everything required to sustain a human

589

00:26:14,990 --> 00:26:13,020

population except water and now after

590

00:26:17,030 --> 00:26:15,000

the Clementine mission it became

591

00:26:20,270 --> 00:26:17,040

apparent that it had everything that you

592

00:26:24,260 --> 00:26:20,280

could support a large lunar colony on

593

00:26:27,250 --> 00:26:24,270

the moon because there was an abundance

594

00:26:29,960 --> 00:26:27,260

of water certainly enough for a small

595

00:26:34,040 --> 00:26:29,970

technologically intensive society to

596

00:26:37,700 --> 00:26:34,050

exist there so my background I basically

597

00:26:42,470 --> 00:26:37,710

went to school as to major in physics

598

00:26:46,190 --> 00:26:42,480

and I eventually then went on I was good

599

00:26:49,970 --> 00:26:46,200

at it and then I went on to work on

600

00:26:52,990 --> 00:26:49,980

plasma physics for energy fusion energy

601  
00:26:56,240 --> 00:26:53,000  
a problem that still fascinates me and

602  
00:26:59,450 --> 00:26:56,250  
my goal at the time you must remember

603  
00:27:02,330 --> 00:26:59,460  
that the energy crisis became very acute

604  
00:27:05,840 --> 00:27:02,340  
in our country after the 73 war when the

605  
00:27:09,590 --> 00:27:05,850  
oil was embargoed so too to me to work

606  
00:27:11,300 --> 00:27:09,600  
on energy was part of the my task of

607  
00:27:13,910 --> 00:27:11,310  
defending the country and I've always

608  
00:27:16,310 --> 00:27:13,920  
been a very patriotic sort of care all

609  
00:27:21,680 --> 00:27:16,320  
of my uncles fought in world war ii in

610  
00:27:23,360 --> 00:27:21,690  
the combat so it was a just a family

611  
00:27:27,620 --> 00:27:23,370  
tradition that we would serve the

612  
00:27:31,190 --> 00:27:27,630  
country in one capacity or another so I

613  
00:27:34,340 --> 00:27:31,200

then became a plasma physicist and got

614

00:27:37,600 --> 00:27:34,350

my masters and then PhD after my

615

00:27:42,560 --> 00:27:37,610

finishing my four-year bachelor's degree

616

00:27:45,500 --> 00:27:42,570

then the the funding mysteriously for

617

00:27:48,080 --> 00:27:45,510

fusion energy suddenly kind of dried up

618

00:27:51,800 --> 00:27:48,090

under the Reagan administration and all

619

00:27:53,750 --> 00:27:51,810

of us were basically all of us plasma

620

00:27:56,060 --> 00:27:53,760

physicists who had trained to work on

621

00:27:59,200 --> 00:27:56,070

making a brighter warmer future for

622

00:28:03,260 --> 00:27:59,210

Humanity were basically dragooned into

623

00:28:07,280 --> 00:28:03,270

working on directed-energy weapons for

624

00:28:12,290 --> 00:28:07,290

the Star Wars defense in space and but I

625

00:28:16,130 --> 00:28:12,300

had by that time become very interested

626  
00:28:18,440 --> 00:28:16,140  
in Mars I've become so fascinated with

627  
00:28:20,000 --> 00:28:18,450  
the artifacts that have been apparent

628  
00:28:21,710 --> 00:28:20,010  
artifacts that have been found on Mars

629  
00:28:23,750 --> 00:28:21,720  
in 1970

630  
00:28:26,930 --> 00:28:23,760  
six the face on Mars and the pyramid

631  
00:28:28,910 --> 00:28:26,940  
next to it inside Oh Nia which I found

632  
00:28:31,700 --> 00:28:28,920  
out later was supposed to be the prime

633  
00:28:34,520 --> 00:28:31,710  
landing site of the Viking missions the

634  
00:28:37,490 --> 00:28:34,530  
Viking missions were after our Apollo

635  
00:28:41,510 --> 00:28:37,500  
moon mission success were just a

636  
00:28:46,250 --> 00:28:41,520  
capstone on American kind of space

637  
00:28:47,900 --> 00:28:46,260  
supremacy basically we landed on Mars

638  
00:28:52,340 --> 00:28:47,910

something the Russians had not been

639

00:28:53,870 --> 00:28:52,350

successful at doing and we have so first

640

00:28:56,210 --> 00:28:53,880

thing we did is sample the atmosphere

641

00:28:57,940 --> 00:28:56,220

and look at its isotopic composition

642

00:29:04,310 --> 00:28:57,950

that's where the US government

643

00:29:08,540 --> 00:29:04,320

apparently discovered a big surprise but

644

00:29:10,700 --> 00:29:08,550

also they photographed arm they had

645

00:29:13,130 --> 00:29:10,710

begun photographing Mars at close range

646

00:29:15,260 --> 00:29:13,140

under the Mariners they discovered all

647

00:29:19,640 --> 00:29:15,270

these extinct water channels confirming

648

00:29:22,250 --> 00:29:19,650

this picture of Mars as a past of having

649

00:29:23,990 --> 00:29:22,260

an earth-like past um

650

00:29:26,030 --> 00:29:24,000

the Mariner mission just to jump in

651  
00:29:28,640 --> 00:29:26,040  
there dr. Brenda Berg before we talk

652  
00:29:30,320 --> 00:29:28,650  
about and they're the sort of crazy

653  
00:29:32,510 --> 00:29:30,330  
politics that goes around the

654  
00:29:34,280 --> 00:29:32,520  
photographing of the face of Mars but

655  
00:29:36,590 --> 00:29:34,290  
it's my understanding that our god

656  
00:29:38,210 --> 00:29:36,600  
showed up at JPL photo lab when Mariner

657  
00:29:41,870 --> 00:29:38,220  
was still two weeks out from the planet

658  
00:29:43,880 --> 00:29:41,880  
so from the very beginning from the very

659  
00:29:45,530 --> 00:29:43,890  
beginning we know that they were

660  
00:29:47,720 --> 00:29:45,540  
expecting to find something that needed

661  
00:29:52,130 --> 00:29:47,730  
to be they were expecting to find a dead

662  
00:29:54,050 --> 00:29:52,140  
civilization on Mars I talked to people

663  
00:29:56,780 --> 00:29:54,060

who had retired from Jet Propulsion lab

664

00:29:59,210 --> 00:29:56,790

who where they were helping on the

665

00:30:03,160 --> 00:29:59,220

common time mission of the Moon by that

666

00:30:07,760 --> 00:30:03,170

time in late 80s and they said that the

667

00:30:10,370 --> 00:30:07,770

yes the Mariner 9 was was going to go

668

00:30:12,320 --> 00:30:10,380

into close orbit around Mars and take

669

00:30:15,470 --> 00:30:12,330

very high-resolution pictures of the

670

00:30:18,830 --> 00:30:15,480

surface and suddenly armed guards showed

671

00:30:20,870 --> 00:30:18,840

up at all the photo labs so that no

672

00:30:24,620 --> 00:30:20,880

photographs could come out of there

673

00:30:29,330 --> 00:30:24,630

without official sanction in other words

674

00:30:35,710 --> 00:30:29,340

the mission to Mars became partly

675

00:30:38,889 --> 00:30:35,720

classified and armed and yes it is

676  
00:30:41,989 --> 00:30:38,899  
evidence that the US government expected

677  
00:30:45,129 --> 00:30:41,999  
or at least entertained a strong

678  
00:30:47,960 --> 00:30:45,139  
possibility they were going to find a

679  
00:30:50,450 --> 00:30:47,970  
dead civilization on Mars one thing they

680  
00:30:52,999 --> 00:30:50,460  
had found out from the earlier flyby

681  
00:30:55,729 --> 00:30:53,009  
missions of Mars is even those were

682  
00:30:58,159 --> 00:30:55,739  
craters on Mars there were a lot less

683  
00:31:00,710 --> 00:30:58,169  
craters than they actually had reason to

684  
00:31:04,549 --> 00:31:00,720  
expect and Carl Sagan pointed out this

685  
00:31:09,049 --> 00:31:04,559  
meant some past erosion like on earth

686  
00:31:11,239 --> 00:31:09,059  
had occurred on massive our own herd on

687  
00:31:13,909 --> 00:31:11,249  
Mars other words Mars did not look like

688  
00:31:16,070 --> 00:31:13,919

the moon it looked it was actually

689

00:31:17,659 --> 00:31:16,080

rather sparsely cratered and next it's

690

00:31:20,090 --> 00:31:17,669

next to the asteroid belt you would

691

00:31:22,430 --> 00:31:20,100

expected it to be heavily cratered if it

692

00:31:24,409 --> 00:31:22,440

didn't have an earth-like past but since

693

00:31:26,539 --> 00:31:24,419

it was only sparsely created that meant

694

00:31:28,669 --> 00:31:26,549

something had gone through just like an

695

00:31:32,090 --> 00:31:28,679

eraser on a chalkboard erased all of the

696

00:31:38,479 --> 00:31:32,100

old craters so only a few new ones that

697

00:31:41,720 --> 00:31:38,489

had been able to be preserved so the

698

00:31:43,539 --> 00:31:41,730

u.s. government expected or at least

699

00:31:46,099 --> 00:31:43,549

thought there was a strong possibility

700

00:31:49,639 --> 00:31:46,109

they would find a dead civilization on

701  
00:31:51,830 --> 00:31:49,649  
Mars we'll go on to the next point

702  
00:31:54,680 --> 00:31:51,840  
thinking of the movie a few good men

703  
00:31:57,109 --> 00:31:54,690  
where Jack Nicholson is on the stand and

704  
00:31:59,419 --> 00:31:57,119  
Tom Cruise is saying I want the truth

705  
00:32:01,149 --> 00:31:59,429  
and he says you can hand all that truth

706  
00:32:03,200 --> 00:32:01,159  
you don't need sneers in the cab and

707  
00:32:06,889 --> 00:32:03,210  
what I think it's so awesome about that

708  
00:32:10,190 --> 00:32:06,899  
is we live in a you can't handle the

709  
00:32:12,619 --> 00:32:10,200  
truth world and by that I mean we accept

710  
00:32:15,470 --> 00:32:12,629  
that we can't handle the truth and when

711  
00:32:17,180 --> 00:32:15,480  
they tell us move on you don't you don't

712  
00:32:20,930 --> 00:32:17,190  
want to know this what they're really

713  
00:32:23,899 --> 00:32:20,940

saying is true you really don't want to

714

00:32:26,359 --> 00:32:23,909

know the truth I found that on this show

715

00:32:28,460 --> 00:32:26,369

is that you know you encounter people

716

00:32:30,440 --> 00:32:28,470

and and we encounter them in day to day

717

00:32:32,149 --> 00:32:30,450

life or you encounter when you do an

718

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

interview show like this and you talk to

719

00:32:36,590 --> 00:32:34,169

people who have opposing views and you

720

00:32:40,070 --> 00:32:36,600

go what about the data and they just

721

00:32:42,680 --> 00:32:40,080

don't want to go there so if you want to

722

00:32:44,210 --> 00:32:42,690

talk about 9/11 and you want to talk

723

00:32:45,590 --> 00:32:44,220

about it's proven that there was

724

00:32:47,730 --> 00:32:45,600

foreknowledge because there is all this

725

00:32:50,520 --> 00:32:47,740

stock trading and we can go and look

726

00:32:51,810 --> 00:32:50,530

at it they don't want to go there

727

00:32:54,870 --> 00:32:51,820

because they don't want to even

728

00:32:56,970 --> 00:32:54,880

contemplate the idea that their

729

00:32:59,370 --> 00:32:56,980

government could do some of these things

730

00:33:01,650 --> 00:32:59,380

that they know that their government can

731

00:33:05,040 --> 00:33:01,660

do so it to me it's almost like a

732

00:33:05,640 --> 00:33:05,050

catch-22 in that you can't handle the

733

00:33:12,960 --> 00:33:05,650

truth

734

00:33:16,410 --> 00:33:12,970

rounded around in a circle because the

735

00:33:19,110 --> 00:33:16,420

truth is knowable and that's what I

736

00:33:21,540 --> 00:33:19,120

think was one of your opening remarks to

737

00:33:24,419 --> 00:33:21,550

this interview is that you like to come

738

00:33:27,150 --> 00:33:24,429

back to the data you like to come back

739

00:33:30,150 --> 00:33:27,160

to the history whether it's archeology

740

00:33:34,260 --> 00:33:30,160

or history or whatever and the data here

741

00:33:37,910 --> 00:33:34,270

folks is pretty easy to put your hands

742

00:33:40,830 --> 00:33:37,920

on and pretty easy to verify some of the

743

00:33:43,440 --> 00:33:40,840

extraordinary things that Brandenburg is

744

00:33:46,410 --> 00:33:43,450

saying in this interview and the truth

745

00:33:48,000 --> 00:33:46,420

is you don't go there because you really

746

00:33:49,980 --> 00:33:48,010

can't handle the truth that's the only

747

00:33:52,290 --> 00:33:49,990

thing that's keeping people back yeah I

748

00:33:54,750 --> 00:33:52,300

couldn't agree more I am told a story on

749

00:33:57,270 --> 00:33:54,760

a podcast that I was on over the weekend

750

00:33:58,980 --> 00:33:57,280

I have a friend of mine very different

751  
00:34:00,600 --> 00:33:58,990  
she's extremely intelligent she used to

752  
00:34:04,470 --> 00:34:00,610  
work for the Financial Times and so on

753  
00:34:05,760 --> 00:34:04,480  
and speaking of Verner von Braun I just

754  
00:34:06,510 --> 00:34:05,770  
happened to mention that the guy who ran

755  
00:34:08,010 --> 00:34:06,520  
the Apollo program

756  
00:34:09,419 --> 00:34:08,020  
now this isn't forbidden history in any

757  
00:34:12,000 --> 00:34:09,429  
way this is just in the books you'll

758  
00:34:13,919 --> 00:34:12,010  
find it in Wikipedia was an SS major for

759  
00:34:15,480 --> 00:34:13,929  
the Nazis and she just couldn't

760  
00:34:18,570 --> 00:34:15,490  
literally could not handle the truth

761  
00:34:21,210 --> 00:34:18,580  
like her mind just rejected it SS when

762  
00:34:22,980 --> 00:34:21,220  
all that means I mean you know and he

763  
00:34:24,899 --> 00:34:22,990

joined this idea that he was a good Nazi

764

00:34:26,520 --> 00:34:24,909

is probably not correct because he was a

765

00:34:29,790 --> 00:34:26,530

believer he joined two years before the

766

00:34:31,200 --> 00:34:29,800

war so he people he left it he wasn't

767

00:34:32,970 --> 00:34:31,210

defending his country he's like no no no

768

00:34:36,720 --> 00:34:32,980

mr. Hitler I think I like what you do

769

00:34:39,180 --> 00:34:36,730

and that just messed with her head she

770

00:34:40,830 --> 00:34:39,190

and it's to your point about not being

771

00:34:43,530 --> 00:34:40,840

able to handle the truth

772

00:34:45,389 --> 00:34:43,540

uh this is it's almost a Gnostic

773

00:34:49,139 --> 00:34:45,399

realization but their reality of people

774

00:34:52,340 --> 00:34:49,149

it's extremely dissociative to sort of

775

00:34:55,290 --> 00:34:52,350

experience that the a government or a

776

00:34:56,550 --> 00:34:55,300

faction within the government sees this

777

00:34:59,849 --> 00:34:56,560

and when it comes to what we're talking

778

00:35:01,050 --> 00:34:59,859

about in space here's how one thing is

779

00:35:04,230 --> 00:35:01,060

verifiable

780

00:35:06,450 --> 00:35:04,240

can prove based on this conversation and

781

00:35:09,360 --> 00:35:06,460

some casual research afterwards that

782

00:35:12,690 --> 00:35:09,370

there is a section of the anglo-american

783

00:35:16,380 --> 00:35:12,700

military that up and down believes there

784

00:35:18,870 --> 00:35:16,390

are artificial remains elsewhere in the

785

00:35:20,460 --> 00:35:18,880

solar system whether there are or not is

786

00:35:24,120 --> 00:35:20,470

actually frankly open to interpretation

787

00:35:25,410 --> 00:35:24,130

but the policy changes it is self

788

00:35:27,480 --> 00:35:25,420

evident in the policy over the last

789

00:35:28,830 --> 00:35:27,490

seventy years that an element of

790

00:35:31,500 --> 00:35:28,840

particularly the American

791

00:35:32,790 --> 00:35:31,510

military-industrial establishment up and

792

00:35:35,610 --> 00:35:32,800

down believes there are artificial

793

00:35:37,320 --> 00:35:35,620

remains around the solar system and it

794

00:35:38,760 --> 00:35:37,330

is affecting policy it's affecting

795

00:35:43,140 --> 00:35:38,770

internal policy and it's affecting

796

00:35:46,260 --> 00:35:43,150

off-planet policy real science and the

797

00:35:49,080 --> 00:35:46,270

big leagues especially when there's big

798

00:35:53,700 --> 00:35:49,090

things at stake like the human place in

799

00:35:55,890 --> 00:35:53,710

the cosmos uh it gets very personal and

800

00:35:58,020 --> 00:35:55,900

people don't always play by the rules

801  
00:36:00,060 --> 00:35:58,030  
you're taught in grade school about how

802  
00:36:02,310 --> 00:36:00,070  
science the scientific method works oh

803  
00:36:04,950 --> 00:36:02,320  
yes you're singing The Skeptical theme

804  
00:36:07,740 --> 00:36:04,960  
song here it's more sometimes it's more

805  
00:36:09,630 --> 00:36:07,750  
like silverback gorillas roaring at each

806  
00:36:12,210 --> 00:36:09,640  
other in the forest and pounding their

807  
00:36:15,630 --> 00:36:12,220  
chests at each other than it is a

808  
00:36:19,200 --> 00:36:15,640  
scientific discourse absolutely now

809  
00:36:21,090 --> 00:36:19,210  
let's go back to wynn to 1976 where i

810  
00:36:25,470 --> 00:36:21,100  
think i'm in agreement on this this is

811  
00:36:28,530 --> 00:36:25,480  
when at a US government or deep state

812  
00:36:32,370 --> 00:36:28,540  
level they have definitive proof yes

813  
00:36:34,320 --> 00:36:32,380

that that suddenly they know they they

814

00:36:37,110 --> 00:36:34,330

in fact take a picture of the of the

815

00:36:40,530 --> 00:36:37,120

face of Cydonia everybody sees it looks

816

00:36:42,780 --> 00:36:40,540

like a face at a certain level the US

817

00:36:44,220 --> 00:36:42,790

government has been expecting to find

818

00:36:48,420 --> 00:36:44,230

something like that in fact they found

819

00:36:50,880 --> 00:36:48,430

two pyramids at Elysium earlier and they

820

00:36:53,220 --> 00:36:50,890

actually took two pictures I have them

821

00:36:56,040 --> 00:36:53,230

in the book they came back around and

822

00:36:59,130 --> 00:36:56,050

with great difficulty managed to snap

823

00:37:01,320 --> 00:36:59,140

pictures of the pyramids at morning

824

00:37:05,100 --> 00:37:01,330

where the earlier picture was in late

825

00:37:09,180 --> 00:37:05,110

afternoon uh and confirmed that it these

826  
00:37:12,140 --> 00:37:09,190  
were pyramids I think to anyone anyone

827  
00:37:15,210 --> 00:37:12,150  
in the US government we're talking

828  
00:37:16,500 --> 00:37:15,220  
administrators and military officials

829  
00:37:19,980 --> 00:37:16,510  
would just look at this and say well

830  
00:37:22,410 --> 00:37:19,990  
that looks like a pyramid to me and so

831  
00:37:27,210 --> 00:37:22,420  
you know Penn State they knew that they

832  
00:37:31,290 --> 00:37:27,220  
had discovered their earlier expectation

833  
00:37:33,030 --> 00:37:31,300  
was being rewarded by the time of 1976

834  
00:37:37,740 --> 00:37:33,040  
when they took a picture of the face on

835  
00:37:39,930 --> 00:37:37,750  
Mars at Cydonia and then one month later

836  
00:37:42,720 --> 00:37:39,940  
they brought the spacecraft again around

837  
00:37:45,780 --> 00:37:42,730  
and took a second confirming shot at a

838  
00:37:50,700 --> 00:37:45,790

different lighting of the famous frame

839

00:37:53,520 --> 00:37:50,710

78 13 and this clearly shows there's a

840

00:37:57,240 --> 00:37:53,530

pyramid a five sided pyramid near the

841

00:38:01,170 --> 00:37:57,250

face within about five kilometers and so

842

00:38:05,010 --> 00:38:01,180

they're there for in fact everything is

843

00:38:08,280 --> 00:38:05,020

settled at that point in the minds of

844

00:38:09,030 --> 00:38:08,290

people who are used to doing science in

845

00:38:12,870 --> 00:38:09,040

the big leagues

846

00:38:15,089 --> 00:38:12,880

that means bingo we have it absolutely

847

00:38:16,560 --> 00:38:15,099

from from the minds of people who don't

848

00:38:19,589 --> 00:38:16,570

understand science very well like

849

00:38:21,240 --> 00:38:19,599

science journalists that's not actually

850

00:38:24,060 --> 00:38:21,250

the case because when you're talking

851  
00:38:26,160 --> 00:38:24,070  
about additional photos of Cydonia some

852  
00:38:28,530 --> 00:38:26,170  
of the other anecdotes you have in a

853  
00:38:30,180 --> 00:38:28,540  
book into around your involvement with

854  
00:38:32,250 --> 00:38:30,190  
independent Mars researchers like

855  
00:38:36,990 --> 00:38:32,260  
Richard Hoagland and Vince DiPietro

856  
00:38:38,820 --> 00:38:37,000  
Vince almost came to blows over you know

857  
00:38:41,010 --> 00:38:38,830  
some of the some of the attempted

858  
00:38:42,060 --> 00:38:41,020  
takedowns of the cydonia face I think

859  
00:38:43,260 --> 00:38:42,070  
it's probably important that we talk

860  
00:38:45,630 --> 00:38:43,270  
about that because I'm just thinking of

861  
00:38:47,430 --> 00:38:45,640  
the listeners out there who may have may

862  
00:38:49,380 --> 00:38:47,440  
have been following along the last thing

863  
00:38:51,150 --> 00:38:49,390

they will remember about the face on

864

00:38:52,620 --> 00:38:51,160

Mars I'm just thinking in their head now

865

00:38:54,060 --> 00:38:52,630

they're like hang on didn't didn't we

866

00:38:56,160 --> 00:38:54,070

take another photo and it was just a

867

00:38:58,859 --> 00:38:56,170

funny shaped Hill so I think we need to

868

00:39:01,980 --> 00:38:58,869

tell that story just say that we no no

869

00:39:06,810 --> 00:39:01,990

no that was it take down so it was yeah

870

00:39:09,180 --> 00:39:06,820

it was an intense of reaction from the

871

00:39:12,390 --> 00:39:09,190

kind of academic types running JPL and

872

00:39:15,990 --> 00:39:12,400

they're probably also following orders

873

00:39:19,380 --> 00:39:16,000

you know suppress this idea the the US

874

00:39:22,220 --> 00:39:19,390

government for a long time decided to

875

00:39:25,349 --> 00:39:22,230

you know hold off the inevitable

876

00:39:28,230 --> 00:39:25,359

basically they it was funny they're

877

00:39:28,740 --> 00:39:28,240

there their actions were the right hand

878

00:39:32,670 --> 00:39:28,750

and the left

879

00:39:34,200 --> 00:39:32,680

and the right hand of the government was

880

00:39:38,250 --> 00:39:34,210

distributing all these photos to

881

00:39:40,320 --> 00:39:38,260

everybody making them available they

882

00:39:42,320 --> 00:39:40,330

clearly showed evidence for a dead

883

00:39:48,060 --> 00:39:42,330

civilization on Mars and the left hand

884

00:39:50,720 --> 00:39:48,070

the more programmatic big science Empire

885

00:39:54,270 --> 00:39:50,730

building a sort of part of science was

886

00:39:55,710 --> 00:39:54,280

adamant that this was nothing that is a

887

00:39:58,620 --> 00:39:55,720

funny-shaped hill there's nothing

888

00:40:00,990 --> 00:39:58,630

unusual about it and in fact when

889

00:40:04,470 --> 00:40:01,000

DiPietro and Mullen are found a second

890

00:40:06,840 --> 00:40:04,480

image of the face of Cydonia from the

891

00:40:08,670 --> 00:40:06,850

Viking which you know clearly shows a

892

00:40:10,950 --> 00:40:08,680

face and then there's a pyramid right

893

00:40:13,170 --> 00:40:10,960

next to it and you can actually then go

894

00:40:16,550 --> 00:40:13,180

back to the original discovery frame and

895

00:40:19,080 --> 00:40:16,560

find the same pyramid in fact so they

896

00:40:23,280 --> 00:40:19,090

the initial reaction from Jet Propulsion

897

00:40:24,740 --> 00:40:23,290

lab was DiPietro timon are liars they

898

00:40:28,980 --> 00:40:24,750

have made this up

899

00:40:31,410 --> 00:40:28,990

and even though within their own photo

900

00:40:36,180 --> 00:40:31,420

nasa photo catalogues the image was in

901  
00:40:38,550 --> 00:40:36,190  
the nasa photo catalogs and I even found

902  
00:40:42,750 --> 00:40:38,560  
it in a photo mosaic of you know

903  
00:40:44,940 --> 00:40:42,760  
published in 1979 when DiPietro Molenaar

904  
00:40:47,810 --> 00:40:44,950  
had already you know published before

905  
00:40:52,440 --> 00:40:47,820  
Pete Ramone are actually went to press

906  
00:40:56,490 --> 00:40:52,450  
they found a we found a scientific

907  
00:40:58,050 --> 00:40:56,500  
article with 78 13 and the face of the

908  
00:41:00,920 --> 00:40:58,060  
pyramid right in the middle of a photo

909  
00:41:04,650 --> 00:41:00,930  
mosaic you you have to look for it but

910  
00:41:06,390 --> 00:41:04,660  
so so we had is almost Alice in

911  
00:41:09,090 --> 00:41:06,400  
Wonderland and mad tea-party

912  
00:41:14,790 --> 00:41:09,100  
uh there is no it there is no additional

913  
00:41:17,550 --> 00:41:14,800

picture um um you know this is nonsense

914

00:41:19,560 --> 00:41:17,560

let us move let us move on to the

915

00:41:21,690 --> 00:41:19,570

science and well that's that's such a

916

00:41:23,690 --> 00:41:21,700

very good way of putting it because they

917

00:41:26,070 --> 00:41:23,700

brought out some big guns I mean I

918

00:41:27,600 --> 00:41:26,080

obviously have a higher opinion of Carl

919

00:41:30,600 --> 00:41:27,610

Sagan than I do

920

00:41:32,010 --> 00:41:30,610

he appears in the book now and then and

921

00:41:35,340 --> 00:41:32,020

there's a very interesting anecdote

922

00:41:38,700 --> 00:41:35,350

because my own sort of research has been

923

00:41:41,930 --> 00:41:38,710

on Paleolithic star lore and that kind

924

00:41:44,120 --> 00:41:41,940

of thing so Carl Sagan is

925

00:41:46,599 --> 00:41:44,130

person who tends to flip-flop what was a

926

00:41:50,150 --> 00:41:46,609

person who tends to flip-flop based on

927

00:41:51,589 --> 00:41:50,160

presumably what certain pay masses would

928

00:41:54,380 --> 00:41:51,599

like him to say you have a very

929

00:41:57,380 --> 00:41:54,390

interesting Anika well we're all subject

930

00:41:58,670 --> 00:41:57,390

as a cooler to some extent Gordon does

931

00:42:00,170 --> 00:41:58,680

any sane I would say you'll bring me

932

00:42:02,059 --> 00:42:00,180

there I've heard I've heard the

933

00:42:05,660 --> 00:42:02,069

admonition Brandenburg shut your mouth

934

00:42:09,020 --> 00:42:05,670

and earlier gold yes more than once in

935

00:42:11,120 --> 00:42:09,030

my career well this is going to be a I

936

00:42:14,270 --> 00:42:11,130

mean there's there's a story you

937

00:42:17,720 --> 00:42:14,280

described in death on Mars where um Karl

938

00:42:19,640 --> 00:42:17,730

rings you up and he's because you know

939

00:42:21,230 --> 00:42:19,650

you have these images that he thinks

940

00:42:23,690 --> 00:42:21,240

would be interesting I think there were

941

00:42:24,829 --> 00:42:23,700

the Utopia images and you said you send

942

00:42:27,319 --> 00:42:24,839

them out you don't do the right thing of

943

00:42:29,809 --> 00:42:27,329

course I will send these off and he

944

00:42:31,520 --> 00:42:29,819

never got them and you both know no he

945

00:42:34,250 --> 00:42:31,530

never did and you both know what that

946

00:42:38,529 --> 00:42:34,260

means you're both aware well we we both

947

00:42:42,170 --> 00:42:38,539

I had it was it was a it was almost a

948

00:42:44,539 --> 00:42:42,180

comical episode when I had arrived at a

949

00:42:48,260 --> 00:42:44,549

new I taken a new position in Washington

950

00:42:51,500 --> 00:42:48,270

DC at a defense contractor aerospace

951  
00:42:53,319 --> 00:42:51,510  
contractor and I had just started there

952  
00:42:58,130 --> 00:42:53,329  
we were frantically running around

953  
00:42:59,720 --> 00:42:58,140  
selling research projects on the new SDI

954  
00:43:02,720 --> 00:42:59,730  
or Strategic Defense Initiative

955  
00:43:07,010 --> 00:43:02,730  
space-based defense which I believed in

956  
00:43:11,210 --> 00:43:07,020  
very fervently and um uh basically I

957  
00:43:14,089 --> 00:43:11,220  
keep getting calls Carl Sagan's has

958  
00:43:16,309 --> 00:43:14,099  
called I had a particularly lovely

959  
00:43:19,309 --> 00:43:16,319  
office manager I was always pleased when

960  
00:43:21,400 --> 00:43:19,319  
she would walk up to me and say dr.

961  
00:43:24,319 --> 00:43:21,410  
Brennan Berg Carl Sagan has called you

962  
00:43:25,819 --> 00:43:24,329  
and so I would always call his office

963  
00:43:28,339 --> 00:43:25,829

back we would play what was called

964

00:43:32,000 --> 00:43:28,349

telephone tag in those days since no one

965

00:43:35,180 --> 00:43:32,010

had cell phones or even beepers and this

966

00:43:37,970 --> 00:43:35,190

went on for two weeks until finally I

967

00:43:41,299 --> 00:43:37,980

was in a conference with my boss we were

968

00:43:44,210 --> 00:43:41,309

you know making a research proposal to

969

00:43:46,760 --> 00:43:44,220

the Pentagon and we were planning that

970

00:43:50,450 --> 00:43:46,770

in the office the lovely office manager

971

00:43:52,940 --> 00:43:50,460

Darlene walked into our his office and

972

00:43:55,220 --> 00:43:52,950

says John has a phone call and the boss

973

00:43:57,020 --> 00:43:55,230

is extremely irritated inside

974

00:44:01,700 --> 00:43:57,030

who is it from and she says it's from

975

00:44:04,130 --> 00:44:01,710

Carl Sagan and he he's awestruck at this

976  
00:44:06,650 --> 00:44:04,140  
because Carl Sagan was a you know major

977  
00:44:10,040 --> 00:44:06,660  
media figure at the time and here he is

978  
00:44:13,040 --> 00:44:10,050  
calling for you know to talk to is this

979  
00:44:15,530 --> 00:44:13,050  
new employee who had some had some

980  
00:44:20,780 --> 00:44:15,540  
difficulties involving Mars in his last

981  
00:44:26,470 --> 00:44:20,790  
job yeah yeah and then she says and he's

982  
00:44:29,030 --> 00:44:26,480  
being snippy says my boss just laughs

983  
00:44:31,430 --> 00:44:29,040  
well John better talk to him and so I go

984  
00:44:34,069 --> 00:44:31,440  
and talk to him and I had sent him the

985  
00:44:36,680 --> 00:44:34,079  
new pictures from utopia which show two

986  
00:44:39,770 --> 00:44:36,690  
new faces one that looks just like the

987  
00:44:42,280 --> 00:44:39,780  
face inside onea these are all those

988  
00:44:46,310 --> 00:44:42,290

pictures the discovery pictures and

989

00:44:48,319 --> 00:44:46,320

those the new confirmatory pictures from

990

00:44:51,890 --> 00:44:48,329

the later space probes are now are shown

991

00:44:54,319 --> 00:44:51,900

in the book death on Mars and so I go to

992

00:44:56,150 --> 00:44:54,329

the office and Harry I'm speaking with

993

00:44:57,560 --> 00:44:56,160

him privately and I said well what did

994

00:45:01,040 --> 00:44:57,570

you think of the new pictures and he

995

00:45:04,700 --> 00:45:01,050

says I never got them and we most do

996

00:45:07,099 --> 00:45:04,710

this long moment of silence recognizing

997

00:45:09,530 --> 00:45:07,109

that the US government is now involved

998

00:45:14,599 --> 00:45:09,540

in this and they want us to know they're

999

00:45:16,250 --> 00:45:14,609

involved this is an honestly dr.

1000

00:45:19,240 --> 00:45:16,260

Brandenburg this is a classic sceptical

1001  
00:45:22,819 --> 00:45:19,250  
story because you have media-friendly

1002  
00:45:26,480 --> 00:45:22,829  
science mouthpieces that stick to an

1003  
00:45:30,710 --> 00:45:26,490  
agenda now back to my conversation with

1004  
00:45:33,770 --> 00:45:30,720  
Gordon the point is that the folks who

1005  
00:45:37,130 --> 00:45:33,780  
are in charge of the Machine believe

1006  
00:45:41,390 --> 00:45:37,140  
it's true and at the same time they are

1007  
00:45:43,609 --> 00:45:41,400  
engaged in a rigorous disinformation

1008  
00:45:46,099 --> 00:45:43,619  
campaign to say exactly the opposite

1009  
00:45:48,950 --> 00:45:46,109  
right so they believe it and at the same

1010  
00:45:51,200 --> 00:45:48,960  
time they're they're just as strongly as

1011  
00:45:53,030 --> 00:45:51,210  
possible doing everything they can to

1012  
00:45:55,250 --> 00:45:53,040  
discredit anyone who says that that's

1013  
00:45:57,050 --> 00:45:55,260

what they believe in to miss inform the

1014

00:46:00,859 --> 00:45:57,060

public and all that so it is this kind

1015

00:46:03,380 --> 00:46:00,869

of crazy world absolutely absolutely

1016

00:46:05,450 --> 00:46:03,390

one of the things which maybe this can

1017

00:46:07,280 --> 00:46:05,460

be edited to immediately afterwards but

1018

00:46:08,870 --> 00:46:07,290

the things I found interesting dr.

1019

00:46:10,910 --> 00:46:08,880

Brandenburg is and is familiar with

1020

00:46:12,980 --> 00:46:10,920

Jacques Vallee as I am but few people

1021

00:46:14,720 --> 00:46:12,990

are because you know I I would have a

1022

00:46:20,420 --> 00:46:14,730

little statue of Herman candles if I

1023

00:46:22,640 --> 00:46:20,430

could his experience as a alongside the

1024

00:46:25,340 --> 00:46:22,650

very famous Blue Book report in in the

1025

00:46:28,730 --> 00:46:25,350

60s and 70s into JM J Allen Hynek sort

1026

00:46:30,560 --> 00:46:28,740

of review of the UFO phenomena his

1027

00:46:32,480 --> 00:46:30,570

experience with that in his first time

1028

00:46:34,850 --> 00:46:32,490

going to Washington after he'd sort of

1029

00:46:37,520 --> 00:46:34,860

had passport to Magana published in jail

1030

00:46:40,640 --> 00:46:37,530

and hi next Oh everyone in the CIA and

1031

00:46:43,280 --> 00:46:40,650

whatever who he was speaking to had his

1032

00:46:45,080 --> 00:46:43,290

book in their briefcase now for

1033

00:46:46,460 --> 00:46:45,090

immediatly that was very dismaying for

1034

00:46:47,830 --> 00:46:46,470

him because it realized he suddenly

1035

00:46:49,940 --> 00:46:47,840

realized he knew more than they did

1036

00:46:51,890 --> 00:46:49,950

they're carrying his book around and

1037

00:46:53,300 --> 00:46:51,900

they're asking him questions the second

1038

00:46:55,490 --> 00:46:53,310

thing that he quickly realized over the

1039

00:46:58,130 --> 00:46:55,500

next sort of several years is that one

1040

00:47:00,710 --> 00:46:58,140

of the ways the the sort of insidious

1041

00:47:03,260 --> 00:47:00,720

component of the disinfo that comes with

1042

00:47:06,200 --> 00:47:03,270

this policy is they outsource the

1043

00:47:09,500 --> 00:47:06,210

research and I think when dr.

1044

00:47:12,050 --> 00:47:09,510

Brandenburg says quote unquote they want

1045

00:47:14,050 --> 00:47:12,060

this information out if they did I would

1046

00:47:16,690 --> 00:47:14,060

suggest they go to the New York Times

1047

00:47:19,820 --> 00:47:16,700

what they've done is given it to

1048

00:47:22,550 --> 00:47:19,830

brilliant rigorous oddball groups

1049

00:47:23,780 --> 00:47:22,560

because I mean you've run a P&L you know

1050

00:47:26,390 --> 00:47:23,790

what it's like you don't want the dog

1051  
00:47:28,280 --> 00:47:26,400  
project on your books but you do need

1052  
00:47:32,600 --> 00:47:28,290  
the research anyway and that was dr.

1053  
00:47:34,970 --> 00:47:32,610  
valets conclusion to why why you know

1054  
00:47:36,260 --> 00:47:34,980  
why FBI agents would show up to a UFO

1055  
00:47:38,570 --> 00:47:36,270  
conference in the middle of nowhere

1056  
00:47:40,580 --> 00:47:38,580  
they're not they're in some kind of

1057  
00:47:42,890 --> 00:47:40,590  
mysterious way that maybe someone's

1058  
00:47:45,380 --> 00:47:42,900  
burst out with some secrets they're

1059  
00:47:47,780 --> 00:47:45,390  
actually there because we're in a area

1060  
00:47:50,300 --> 00:47:47,790  
where we have to outsource the research

1061  
00:47:51,830 --> 00:47:50,310  
because the disinfo component that comes

1062  
00:47:53,180 --> 00:47:51,840  
with the national security implications

1063  
00:47:55,190 --> 00:47:53,190

makes it very difficult to otherwise

1064

00:47:57,890 --> 00:47:55,200

navigate and what's interesting about

1065

00:48:00,260 --> 00:47:57,900

that is if you listen carefully to this

1066

00:48:04,250 --> 00:48:00,270

interview at least what I heard was

1067

00:48:07,250 --> 00:48:04,260

actually a realization by Brandenburg

1068

00:48:09,170 --> 00:48:07,260

that that was going on I don't think he

1069

00:48:11,750 --> 00:48:09,180

had really quite thought of it in that

1070

00:48:13,610 --> 00:48:11,760

way and then you kept repeating that

1071

00:48:16,370 --> 00:48:13,620

outsourcing the research a couple times

1072

00:48:18,650 --> 00:48:16,380

and then he said yeah they outsourced

1073

00:48:21,320 --> 00:48:18,660

the research to me and then when it was

1074

00:48:22,579 --> 00:48:21,330

time in that that is the story goes you

1075

00:48:24,529 --> 00:48:22,589

know then it

1076  
00:48:26,989 --> 00:48:24,539  
comes time to publish it he doesn't even

1077  
00:48:29,839 --> 00:48:26,999  
know to publish it and they give him the

1078  
00:48:31,880 --> 00:48:29,849  
signal the signal is nothing information

1079  
00:48:33,440 --> 00:48:31,890  
and he still doesn't catch on so then

1080  
00:48:36,469 --> 00:48:33,450  
they nudge him a little bit further and

1081  
00:48:38,900 --> 00:48:36,479  
they go you know you really ought to

1082  
00:48:41,359 --> 00:48:38,910  
publish that and he still isn't quite

1083  
00:48:42,920 --> 00:48:41,369  
kind of caught on to it which relates

1084  
00:48:46,339 --> 00:48:42,930  
back to this other thing and again not

1085  
00:48:49,009 --> 00:48:46,349  
to disparage dr. Brandenburg but is part

1086  
00:48:50,809 --> 00:48:49,019  
of that script of outsourcing the

1087  
00:48:53,989 --> 00:48:50,819  
research a lot of times what they'll do

1088  
00:48:56,450 --> 00:48:53,999

is and you know this better than I do so

1089

00:48:59,749 --> 00:48:56,460

jump in here but they will target people

1090

00:49:03,380 --> 00:48:59,759

that are somewhat imperfect in certain

1091

00:49:06,170 --> 00:49:03,390

ways that would make them a vehicle to

1092

00:49:09,190 --> 00:49:06,180

tell the story and also a vehicle that

1093

00:49:12,200 --> 00:49:09,200

tells the story in a way that they can

1094

00:49:14,299 --> 00:49:12,210

undermine or discredit or distance

1095

00:49:15,859 --> 00:49:14,309

themselves from I I didn't get to talk

1096

00:49:19,039 --> 00:49:15,869

about this with dr. Brandenburg but I

1097

00:49:20,930 --> 00:49:19,049

think it's his faith I think the fact

1098

00:49:23,150 --> 00:49:20,940

that he is an up-and-down Christian and

1099

00:49:24,499 --> 00:49:23,160

makes no bones about it and I mention

1100

00:49:27,469 --> 00:49:24,509

this news presentation and I've

1101

00:49:29,420 --> 00:49:27,479

completely respect that but that's the

1102

00:49:34,430 --> 00:49:29,430

thing that the materialists were kind of

1103

00:49:36,529 --> 00:49:34,440

stab at and go oh look charlie church it

1104

00:49:39,019 --> 00:49:36,539

doesn't matter that he is a he is a is a

1105

00:49:41,420 --> 00:49:39,029

proper scientist he got all the degrees

1106

00:49:44,719 --> 00:49:41,430

and experience you want he's a Christian

1107

00:49:47,029 --> 00:49:44,729

and I think that's why he gets to be

1108

00:49:48,799 --> 00:49:47,039

kind of the Nexus of some of the the

1109

00:49:51,440 --> 00:49:48,809

Mars atmospheric research because he's

1110

00:49:52,180 --> 00:49:51,450

got a really easy knife hole in his back

1111

00:49:55,219 --> 00:49:52,190

already

1112

00:49:56,690 --> 00:49:55,229

so the third point that I kind of

1113

00:49:59,599 --> 00:49:56,700

outlined that I thought we might kind of

1114

00:50:00,829 --> 00:49:59,609

kick around is this idea I jotted down

1115

00:50:02,809 --> 00:50:00,839

the idea you know the first rule of

1116

00:50:04,940 --> 00:50:02,819

Fight Club first rule of Fight Club is

1117

00:50:07,599 --> 00:50:04,950

you don't talk about Fight Club and in

1118

00:50:09,950 --> 00:50:07,609

Brandenburg's case what's just

1119

00:50:11,630 --> 00:50:09,960

fascinating about this interview and if

1120

00:50:13,309 --> 00:50:11,640

you're not careful it doesn't even seem

1121

00:50:15,920 --> 00:50:13,319

like it's the focus of the interview but

1122

00:50:19,489 --> 00:50:15,930

for me it was the one of the really big

1123

00:50:22,069 --> 00:50:19,499

payoffs are these stories about how the

1124

00:50:23,539 --> 00:50:22,079

game is really played and we were just

1125

00:50:25,130 --> 00:50:23,549

alluding to that just a minute ago when

1126  
00:50:27,529 --> 00:50:25,140  
we're saying you know outsourcing the

1127  
00:50:31,450 --> 00:50:27,539  
research I mean that's how the game is

1128  
00:50:34,759 --> 00:50:31,460  
played the junior college professor who

1129  
00:50:36,280 --> 00:50:34,769  
you tell that story they will have heard

1130  
00:50:38,590 --> 00:50:36,290  
this story probably because will

1131  
00:50:41,200 --> 00:50:38,600  
leave it after the interview but let's

1132  
00:50:43,810 --> 00:50:41,210  
emphasize that it's just it's just a jaw

1133  
00:50:45,610 --> 00:50:43,820  
drop I kind of wonder if issue me did I

1134  
00:50:46,960 --> 00:50:45,620  
wonder if he thought if dr. Brandenburg

1135  
00:50:49,360 --> 00:50:46,970  
himself thought he was going crazy

1136  
00:50:50,800 --> 00:50:49,370  
where wouldn't you know halfway through

1137  
00:50:52,390 --> 00:50:50,810  
this research because I certainly do I

1138  
00:50:54,250 --> 00:50:52,400

think wondering if I'm going crazy keeps

1139

00:50:55,270 --> 00:50:54,260

me saying I'm sure it's sort of very

1140

00:50:58,000 --> 00:50:55,280

similar for you Alex

1141

00:50:59,920 --> 00:50:58,010

and when he was in Washington one of the

1142

00:51:01,260 --> 00:50:59,930

one of his close friends at the time he

1143

00:51:04,000 --> 00:51:01,270

was interested in the Mars research

1144

00:51:06,480 --> 00:51:04,010

pretended to be a community college

1145

00:51:09,400 --> 00:51:06,490

astronomy professor

1146

00:51:12,640 --> 00:51:09,410

here's that actual story from Gordon's

1147

00:51:15,130 --> 00:51:12,650

interview with dr. John Brandenburg so

1148

00:51:17,890 --> 00:51:15,140

we were both waiting for a tap on the

1149

00:51:20,140 --> 00:51:17,900

shoulder but as since Vince had already

1150

00:51:23,260 --> 00:51:20,150

encountered this and he had received no

1151

00:51:25,600 --> 00:51:23,270

tap on the shoulder it was basically the

1152

00:51:27,280 --> 00:51:25,610

government wanted us to know that they

1153

00:51:30,010 --> 00:51:27,290

were aware of our research

1154

00:51:33,640 --> 00:51:30,020

well absolutely interest it was it tells

1155

00:51:38,140 --> 00:51:33,650

us to well tell the story of Larry from

1156

00:51:43,950 --> 00:51:38,150

Community College Oh Oh fabulous yes we

1157

00:51:46,720 --> 00:51:43,960

had we uh many people were of kind of

1158

00:51:50,020 --> 00:51:46,730

interested in our work many scientists

1159

00:51:51,760 --> 00:51:50,030

and would us occasionally and even

1160

00:51:54,280 --> 00:51:51,770

accompany us to scientific conferences

1161

00:51:56,320 --> 00:51:54,290

and eventually a group of scientists

1162

00:51:59,680 --> 00:51:56,330

form the Society for planetary SETI

1163

00:52:01,750 --> 00:51:59,690

research um and so then one of these

1164

00:52:03,820 --> 00:52:01,760

scientists who is very interested with a

1165

00:52:06,280 --> 00:52:03,830

local astronomy professor in the

1166

00:52:09,790 --> 00:52:06,290

community college uh well just call

1167

00:52:11,590 --> 00:52:09,800

Larry he's good guy uh I you know I've

1168

00:52:13,600 --> 00:52:11,600

gotten to know him a few beers with him

1169

00:52:18,510 --> 00:52:13,610

he's a good good fellow more than a few

1170

00:52:20,770 --> 00:52:18,520

is over the years and he was constantly

1171

00:52:22,420 --> 00:52:20,780

chumming around with us and would go to

1172

00:52:24,190 --> 00:52:22,430

conferences with us and we were

1173

00:52:26,470 --> 00:52:24,200

constantly sharing everything we found

1174

00:52:28,390 --> 00:52:26,480

we considered that there were no secrets

1175

00:52:30,460 --> 00:52:28,400

at this point we were just sharing what

1176

00:52:32,170 --> 00:52:30,470

we found and we were documenting it by

1177

00:52:36,970 --> 00:52:32,180

going to conferences and presenting it

1178

00:52:41,050 --> 00:52:36,980

and um finally we're down town in

1179

00:52:43,480 --> 00:52:41,060

Washington DC at a Mars conference about

1180

00:52:46,780 --> 00:52:43,490

going to Mars Carl Sagan later showed up

1181

00:52:49,260 --> 00:52:46,790

and we both Vista Pedro and I both met

1182

00:52:51,930 --> 00:52:49,270

uh shook hands with him

1183

00:52:55,620 --> 00:52:51,940

and uh you know we had a brief but very

1184

00:52:58,650 --> 00:52:55,630

but cordial meeting there but as we're

1185

00:53:02,160 --> 00:52:58,660

standing there in the hallway outside in

1186

00:53:06,420 --> 00:53:02,170

between talks uh an airforce Colonel

1187

00:53:11,360 --> 00:53:06,430

walks up who apparently insta Pedro had

1188

00:53:15,450 --> 00:53:11,370

known in a you know stencil Oh to Vince

1189

00:53:19,320 --> 00:53:15,460

Vince introduces me and then before

1190

00:53:21,780 --> 00:53:19,330

Vince can introduce Larry um the Carl

1191

00:53:23,310 --> 00:53:21,790

basically says Larry good to see you

1192

00:53:29,340 --> 00:53:23,320

here how are things at Defense

1193

00:53:31,620 --> 00:53:29,350

Intelligence Agency and Larry was a real

1194

00:53:33,570 --> 00:53:31,630

pro he didn't even bat an eyelash he

1195

00:53:34,320 --> 00:53:33,580

says they're they're just going great

1196

00:53:39,030 --> 00:53:34,330

colonel

1197

00:53:40,950 --> 00:53:39,040

thank you for asking and what I realized

1198

00:53:42,630 --> 00:53:40,960

then is if there was going to be a tap

1199

00:53:46,920 --> 00:53:42,640

on the shoulder we would have already

1200

00:53:51,240 --> 00:53:46,930

felt it instead they were basically by

1201  
00:53:55,050 --> 00:53:51,250  
not interfering waving us ahead and the

1202  
00:53:56,790 --> 00:53:55,060  
NASA data center at Goddard which is in

1203  
00:54:01,170 --> 00:53:56,800  
Washington DC Goddard Space Flight

1204  
00:54:06,900 --> 00:54:01,180  
Center was very generous in providing us

1205  
00:54:10,650 --> 00:54:06,910  
with all sorts of data so we were we

1206  
00:54:12,450 --> 00:54:10,660  
were basically being encouraged public

1207  
00:54:14,580 --> 00:54:12,460  
so there was a great great game was

1208  
00:54:16,740 --> 00:54:14,590  
going on as your very carefully used to

1209  
00:54:18,450 --> 00:54:16,750  
call it the great game absolutely I

1210  
00:54:20,640 --> 00:54:18,460  
don't know if your I don't know if

1211  
00:54:23,070 --> 00:54:20,650  
you've read dr. fellows recently

1212  
00:54:25,740 --> 00:54:23,080  
published his journals in three volumes

1213  
00:54:28,410 --> 00:54:25,750

forbidden science and a similar thing

1214

00:54:31,920 --> 00:54:28,420

happened in this world 60s and 70s with

1215

00:54:36,120 --> 00:54:31,930

ufology which is essentially outsourcing

1216

00:54:38,160 --> 00:54:36,130

research whoever is interested in the

1217

00:54:41,070 --> 00:54:38,170

sort of independent research going on

1218

00:54:43,560 --> 00:54:41,080

they don't go to too much trouble to

1219

00:54:44,880 --> 00:54:43,570

conceal that interest and to the point

1220

00:54:46,320 --> 00:54:44,890

where when octave la would go to

1221

00:54:48,600 --> 00:54:46,330

Washington they would have his books

1222

00:54:50,280 --> 00:54:48,610

like challenge to science in a briefcase

1223

00:54:52,590 --> 00:54:50,290

which he found a bit dismaying cuz it

1224

00:54:54,260 --> 00:54:52,600

meant that he knew more than they did so

1225

00:54:57,510 --> 00:54:54,270

so much for their government conspiracy

1226

00:55:03,540 --> 00:54:57,520

but the the model was so ill by the way

1227

00:55:05,910 --> 00:55:03,550

I I when I I did not believe in you UFOs

1228

00:55:09,660 --> 00:55:05,920

at the time when I began my Mars

1229

00:55:13,140 --> 00:55:09,670

research I had basically adopted the

1230

00:55:14,400 --> 00:55:13,150

view that if I'm working for the

1231

00:55:17,250 --> 00:55:14,410

government and the government says

1232

00:55:19,560 --> 00:55:17,260

there's no UFOs therefore since I want

1233

00:55:23,450 --> 00:55:19,570

to be accepted as a serious scientist I

1234

00:55:26,760 --> 00:55:23,460

should not you know I should just accept

1235

00:55:28,740 --> 00:55:26,770

the conventional wisdom in graduate

1236

00:55:32,550 --> 00:55:28,750

school you know we were actually told at

1237

00:55:35,340 --> 00:55:32,560

one point if anyone asks you if work

1238

00:55:36,990 --> 00:55:35,350

drive like in the movie in the show Star

1239

00:55:38,460 --> 00:55:37,000

Trek is possible you're to say

1240

00:55:40,410 --> 00:55:38,470

absolutely not nothing bill

1241

00:55:43,500 --> 00:55:40,420

faster-than-light et cetera et cetera

1242

00:55:46,740 --> 00:55:43,510

we were actually recruited in graduate

1243

00:55:51,030 --> 00:55:46,750

school to defend mainstream scientific

1244

00:55:55,800 --> 00:55:51,040

views and were expected to portray that

1245

00:55:59,370 --> 00:55:55,810

to the public if anyone asked us and so

1246

00:56:01,140 --> 00:55:59,380

I actually basically said well the

1247

00:56:03,390 --> 00:56:01,150

government investigate UFOs and there

1248

00:56:06,030 --> 00:56:03,400

was nothing to it despite having seen

1249

00:56:07,650 --> 00:56:06,040

some UFOs when I was a kid he got a

1250

00:56:13,110 --> 00:56:07,660

report in the paper everyone everyone

1251

00:56:17,490 --> 00:56:13,120

saw it over my town and but but there

1252

00:56:19,860 --> 00:56:17,500

was a great deal of scientific orthodoxy

1253

00:56:24,200 --> 00:56:19,870

and discipline imposed on people who

1254

00:56:27,150 --> 00:56:24,210

were part of the academia and part of

1255

00:56:29,750 --> 00:56:27,160

government science that we weren't

1256

00:56:33,750 --> 00:56:29,760

supposed to believe in certain things um

1257

00:56:36,420 --> 00:56:33,760

and then uh well in fact you know even

1258

00:56:37,800 --> 00:56:36,430

talking about big things like Bigfoot up

1259

00:56:40,530 --> 00:56:37,810

in the woods this could get you a

1260

00:56:42,480 --> 00:56:40,540

reputation for not being a serious

1261

00:56:44,190 --> 00:56:42,490

scientist and then of course you're

1262

00:56:49,800 --> 00:56:44,200

going to get passed over at the next job

1263

00:56:53,490 --> 00:56:49,810

interview and so um I had actually by

1264

00:56:58,260 --> 00:56:53,500

the time I was investigating Mars I did

1265

00:57:03,000 --> 00:56:58,270

not believe there was anything to the

1266

00:57:07,470 --> 00:57:03,010

UFO phenomena and it was partly because

1267

00:57:10,500 --> 00:57:07,480

I I thought I want to be taken seriously

1268

00:57:15,420 --> 00:57:10,510

as a scientist and you know that is a

1269

00:57:16,840 --> 00:57:15,430

forbidden subject and so armed what

1270

00:57:21,080 --> 00:57:16,850

happened then

1271

00:57:23,270 --> 00:57:21,090

later was that the people in the UFO

1272

00:57:25,520 --> 00:57:23,280

field recognized that finding a dead

1273

00:57:27,530 --> 00:57:25,530

civilization on Mars very much confirmed

1274

00:57:30,890 --> 00:57:27,540

the you know what's called the et

1275

00:57:35,330 --> 00:57:30,900

hypothesis that the core phenomenon of

1276

00:57:38,060 --> 00:57:35,340

UFOs is extraterrestrial and so I would

1277

00:57:41,030 --> 00:57:38,070

go to UFO conferences finally and give

1278

00:57:43,400 --> 00:57:41,040

papers on Mars which everyone loved and

1279

00:57:46,000 --> 00:57:43,410

I would look around since I was also

1280

00:57:47,990 --> 00:57:46,010

working closely with Pentagon and

1281

00:57:50,540 --> 00:57:48,000

positions agency and all these other

1282

00:57:52,700 --> 00:57:50,550

agencies on the Star Wars thing it would

1283

00:57:54,470 --> 00:57:52,710

show up in meetings and I would look

1284

00:57:56,090 --> 00:57:54,480

around these conferences and realize

1285

00:57:58,100 --> 00:57:56,100

that half of the people at this

1286

00:58:00,740 --> 00:57:58,110

conference looked lecture from various

1287

00:58:02,540 --> 00:58:00,750

intelligence agencies in fact there's

1288

00:58:04,750 --> 00:58:02,550

such that are in fact subsidizing the

1289

00:58:07,850 --> 00:58:04,760

conference by all of the buying tickets

1290

00:58:09,830 --> 00:58:07,860

well yeah that's that's essentially that

1291

00:58:11,540 --> 00:58:09,840

was dr. villas hypothesis as well which

1292

00:58:12,980 --> 00:58:11,550

is what you have here is an outsource of

1293

00:58:16,460 --> 00:58:12,990

research and I think that's what

1294

00:58:17,810 --> 00:58:16,470

happened with it areas yeah I think

1295

00:58:18,500 --> 00:58:17,820

that's what happened with you I think

1296

00:58:20,150 --> 00:58:18,510

that's what happened with the

1297

00:58:21,920 --> 00:58:20,160

independent Mars researchers because

1298

00:58:26,450 --> 00:58:21,930

this stuff is strategically important

1299

00:58:28,130 --> 00:58:26,460

and it's too it's too hot to have

1300

00:58:31,670 --> 00:58:28,140

government money attached to it so this

1301  
00:58:35,050 --> 00:58:31,680  
is how you do it so max Gordon and I

1302  
00:58:37,900 --> 00:58:35,060  
talked a little bit about that data

1303  
00:58:41,210 --> 00:58:37,910  
versus the interpretation of that data

1304  
00:58:44,840 --> 00:58:41,220  
that data being that the government

1305  
00:58:46,850 --> 00:58:44,850  
really is doing this stuff and the

1306  
00:58:49,310 --> 00:58:46,860  
interpretation that data being well

1307  
00:58:51,350 --> 00:58:49,320  
whatever you want it to be that's

1308  
00:58:54,050 --> 00:58:51,360  
absolutely the skeptical angle because

1309  
00:58:56,320 --> 00:58:54,060  
those are our data the interpretations

1310  
00:58:58,550 --> 00:58:56,330  
of the data are that there are vanished

1311  
00:58:59,960 --> 00:58:58,560  
presumably vanished cultures on other

1312  
00:59:01,460 --> 00:58:59,970  
planets in the solar system I think

1313  
00:59:03,410 --> 00:59:01,470

that's a very good interpretation I go

1314

00:59:05,810 --> 00:59:03,420

about halfway there but the actual data

1315

00:59:09,470 --> 00:59:05,820

we are working with here is that we have

1316

00:59:12,770 --> 00:59:09,480

an extremely dissociative space research

1317

00:59:14,590 --> 00:59:12,780

policy in in in the West where we're

1318

00:59:17,390 --> 00:59:14,600

pretending it's one thing and actively

1319

00:59:20,540 --> 00:59:17,400

actively believing and spending untold

1320

00:59:22,700 --> 00:59:20,550

you know billions pursuing this idea

1321

00:59:24,560 --> 00:59:22,710

that at least at some stage in the

1322

00:59:26,030 --> 00:59:24,570

universe in the solar system's recent

1323

00:59:26,810 --> 00:59:26,040

history it was a lot more interesting

1324

00:59:27,270 --> 00:59:26,820

than it is today

1325

00:59:31,020 --> 00:59:27,280

I

1326  
00:59:34,740 --> 00:59:31,030  
add as we talk about that Mars Death

1327  
00:59:39,210 --> 00:59:34,750  
Star hypothesis kind of thing that is

1328  
00:59:42,360 --> 00:59:39,220  
the core of Brandenburg's conclusion to

1329  
00:59:44,190 --> 00:59:42,370  
me in a way it does connect with some of

1330  
00:59:47,670 --> 00:59:44,200  
the stuff that I've looked at in terms

1331  
00:59:52,590 --> 00:59:47,680  
of near-death experience in spirituality

1332  
00:59:55,950 --> 00:59:52,600  
in general in that we cross the chasm to

1333  
00:59:59,070 --> 00:59:55,960  
where we can't really even grasp

1334  
01:00:00,810 --> 00:59:59,080  
conceptually what that means and I kind

1335  
01:00:03,890 --> 01:00:00,820  
of felt the same way here when we're

1336  
01:00:06,570 --> 01:00:03,900  
talking about 500 million years ago a

1337  
01:00:10,080 --> 01:00:06,580  
civilization being destroyed and it

1338  
01:00:12,930 --> 01:00:10,090

totally throws out all our understanding

1339

01:00:15,600 --> 01:00:12,940

of who we are of our relationship to

1340

01:00:18,300 --> 01:00:15,610

other beings and it tells it it's like

1341

01:00:20,760 --> 01:00:18,310

you know I can't really I can't really

1342

01:00:24,180 --> 01:00:20,770

go there in any kind of way that that

1343

01:00:27,000 --> 01:00:24,190

makes sense there's just too much but at

1344

01:00:31,110 --> 01:00:27,010

the same time the adventure of leading

1345

01:00:33,090 --> 01:00:31,120

up to the chasm is certainly an awesome

1346

01:00:35,340 --> 01:00:33,100

one and that's what I think he brought

1347

01:00:37,080 --> 01:00:35,350

us with this interview whether people

1348

01:00:41,430 --> 01:00:37,090

want to jump to that other side and say

1349

01:00:45,030 --> 01:00:41,440

yep somebody wiped out Mars 250 or 500

1350

01:00:48,330 --> 01:00:45,040

million years ago or not is is also very

1351

01:00:50,280 --> 01:00:48,340

interesting to speculate about okay in

1352

01:00:52,620 --> 01:00:50,290

this final segment from Gordon's

1353

01:00:55,530 --> 01:00:52,630

interview he talks to dr. John

1354

01:00:58,710 --> 01:00:55,540

Brandenburg about his theory and about

1355

01:01:01,920 --> 01:00:58,720

his very solid data it would seem that

1356

01:01:06,420 --> 01:01:01,930

supports this idea that Mars was

1357

01:01:09,500 --> 01:01:06,430

destroyed by a nuclear blast

1358

01:01:14,760 --> 01:01:09,510

dr. Brandenburg what is xenon 1 to 9

1359

01:01:17,670 --> 01:01:14,770

xenon 129 is one of the five or so

1360

01:01:21,390 --> 01:01:17,680

stable isotopes of xenon in other words

1361

01:01:23,730 --> 01:01:21,400

it lasts forever and one of the

1362

01:01:29,690 --> 01:01:23,740

interesting things about nuclear fission

1363

01:01:34,430 --> 01:01:29,700

is it creates um it creates principally

1364

01:01:38,250 --> 01:01:34,440

two isotopes like strontium 90 and also

1365

01:01:40,470 --> 01:01:38,260

iodine 137 these are two very nasty

1366

01:01:43,200 --> 01:01:40,480

isotopes because one gets in your bones

1367

01:01:45,210 --> 01:01:43,210

the other one gets in your thyroid after

1368

01:01:49,620 --> 01:01:45,220

a nuclear explosion and they they cause

1369

01:01:53,940 --> 01:01:49,630

cancer later and so but a whole spectrum

1370

01:01:55,920 --> 01:01:53,950

of isotopes are produced in a nuclear

1371

01:02:02,069 --> 01:01:55,930

explosion that involves a lot of nuclear

1372

01:02:07,230 --> 01:02:02,079

fission and arm however by looking at

1373

01:02:11,280 --> 01:02:07,240

the distribution of xenon isotopes that

1374

01:02:13,170 --> 01:02:11,290

are produced in the reactions you can

1375

01:02:16,230 --> 01:02:13,180

actually tell a great deal about the

1376

01:02:21,380 --> 01:02:16,240

physics the detailed physics of the

1377

01:02:26,430 --> 01:02:21,390

nuclear reactions and as it turns out

1378

01:02:29,240 --> 01:02:26,440

fast neutrons associated with nuclear

1379

01:02:33,020 --> 01:02:29,250

explosions or plutonium production

1380

01:02:40,260 --> 01:02:33,030

produce a great deal of xenon 129

1381

01:02:44,730 --> 01:02:40,270

and this is a this is sort of a open

1382

01:02:47,400 --> 01:02:44,740

secret let's say it is not a classified

1383

01:02:50,099 --> 01:02:47,410

thing per se but the government is

1384

01:02:52,170 --> 01:02:50,109

bashful about confirming it however it's

1385

01:02:53,700 --> 01:02:52,180

very easy to see in the atmosphere of

1386

01:02:56,819 --> 01:02:53,710

the earth if you take atmospheric

1387

01:02:59,339 --> 01:02:56,829

measurements of the xenon isotopes in

1388

01:03:01,920 --> 01:02:59,349

the Earth's atmosphere they look very

1389

01:03:07,490 --> 01:03:01,930

much like the same that you get from the

1390

01:03:11,160 --> 01:03:07,500

solar wind from Jupiter uh from

1391

01:03:14,700 --> 01:03:11,170

meteorites all have the same kind of

1392

01:03:17,520 --> 01:03:14,710

basic distribution one is a peak at 129

1393

01:03:19,710 --> 01:03:17,530

the as a peak at 132 these are the

1394

01:03:22,410 --> 01:03:19,720

atomic numbers of the isotopes

1395

01:03:24,030 --> 01:03:22,420

they're both stable that's what

1396

01:03:28,470 --> 01:03:24,040

everything in the solar system looks

1397

01:03:30,330 --> 01:03:28,480

like however if you look at the chain

1398

01:03:33,510 --> 01:03:30,340

there's been a change in the Earth's

1399

01:03:37,140 --> 01:03:33,520

atmosphere since 1945 and almost all of

1400

01:03:39,870 --> 01:03:37,150

that change in being on 1/29 and this is

1401

01:03:42,570 --> 01:03:39,880

due to open air nuclear testing and uh

1402

01:03:45,390 --> 01:03:42,580

the production of plutonium which has to

1403

01:03:47,550 --> 01:03:45,400

be done with fast neutrons a new regular

1404

01:03:50,160 --> 01:03:47,560

nuclear reactor producing power uses

1405

01:03:56,040 --> 01:03:50,170

slow neutrons because that's the way to

1406

01:03:59,070 --> 01:03:56,050

maximize the fission reactivity of the

1407

01:04:01,589 --> 01:03:59,080

uranium they use slow neutrons but if

1408

01:04:03,990 --> 01:04:01,599

you're making nuclear weapons or setting

1409

01:04:09,089 --> 01:04:04,000

them off you use fast neutrons because

1410

01:04:12,420 --> 01:04:09,099

it's an explosion or near so so what

1411

01:04:15,920 --> 01:04:12,430

happened is that they published the data

1412

01:04:18,030 --> 01:04:15,930

on the shortly after landing on Mars and

1413

01:04:20,580 --> 01:04:18,040

sampling the Mars atmosphere they

1414

01:04:22,589 --> 01:04:20,590

actually published this data on the

1415

01:04:27,570 --> 01:04:22,599

Earth's atmosphere showing the spike in

1416

01:04:31,320 --> 01:04:27,580

was Ino and so what happened is the US

1417

01:04:34,020 --> 01:04:31,330

government landed on Mars sampled the

1418

01:04:37,200 --> 01:04:34,030

Martian atmosphere where almost all the

1419

01:04:40,589 --> 01:04:37,210

xenon is 129 it's different than any

1420

01:04:43,099 --> 01:04:40,599

other planet or meteorite or anything

1421

01:04:46,980 --> 01:04:43,109

else that we've sampled they knew

1422

01:04:49,430 --> 01:04:46,990

instantly after making that atmosphere

1423

01:04:53,390 --> 01:04:49,440

example that there have been a vast

1424

01:04:56,070 --> 01:04:53,400

nuclear explosion on Mars a very violent

1425

01:05:00,980 --> 01:04:56,080

release of nuclear energy with fast

1426

01:05:04,500 --> 01:05:00,990

Neutron physics had occurred on Mars so

1427

01:05:07,950 --> 01:05:04,510

we have we have a xenon range that is

1428

01:05:12,270 --> 01:05:07,960

observable in the entire solar system we

1429

01:05:14,970 --> 01:05:12,280

have xenon 129 which is which is not

1430

01:05:17,460 --> 01:05:14,980

naturally occurring is exclusively a

1431

01:05:20,390 --> 01:05:17,470

weapon signature and we have a ballad

1432

01:05:26,490 --> 01:05:20,400

let's say let's say it's it's normally

1433

01:05:30,660 --> 01:05:26,500

equal to Z non 132 in its distribution

1434

01:05:33,290 --> 01:05:30,670

when you get a large excess of xenon 129

1435

01:05:37,310 --> 01:05:33,300

vs you can basically ratio xenon

1436

01:05:39,770 --> 01:05:37,320

1:29 - xenon 1:32 that's what tells you

1437

01:05:41,990 --> 01:05:39,780

it's a weapon signature gotcha and we

1438

01:05:44,510 --> 01:05:42,000

know that because we have atmosphere

1439

01:05:46,610 --> 01:05:44,520

examples from before we were using

1440

01:05:49,490 --> 01:05:46,620

nuclear weapons on earth where we have a

1441

01:05:51,380 --> 01:05:49,500

kind of normal ratio between these two

1442

01:05:55,130 --> 01:05:51,390

and then we have that we have a

1443

01:05:58,010 --> 01:05:55,140

subsequent one after 1945 and then on

1444

01:05:59,660 --> 01:05:58,020

since with the amount of kind of bombs

1445

01:06:02,180 --> 01:05:59,670

we've dropped and plutonium we've

1446

01:06:04,250 --> 01:06:02,190

recognized on this planet and we find

1447

01:06:05,720 --> 01:06:04,260

that exact same one of the exact same we

1448

01:06:09,370 --> 01:06:05,730

actually find a more alarming ratio if I

1449

01:06:13,250 --> 01:06:09,380

read you correctly but we find that same

1450

01:06:17,450 --> 01:06:13,260

produc a predominance of xenon 129 in

1451

01:06:19,700 --> 01:06:17,460

the change of the atmosphere so to be

1452

01:06:21,860 --> 01:06:19,710

clear let's just put that together with

1453

01:06:25,640 --> 01:06:21,870

the stuff we've been talking about over

1454

01:06:28,970 --> 01:06:25,650

the course of the last hour the sort of

1455

01:06:32,870 --> 01:06:28,980

western space program began in earnest

1456

01:06:36,440 --> 01:06:32,880

with the belief or strong supposition

1457

01:06:40,760 --> 01:06:36,450

that there were artificial structures on

1458

01:06:43,340 --> 01:06:40,770

Mars over the course but over the course

1459

01:06:46,760 --> 01:06:43,350

of that discovery you have things like

1460

01:06:48,860 --> 01:06:46,770

armed guards showing up at photo labs we

1461

01:06:50,450 --> 01:06:48,870

have move on and and over the course of

1462

01:06:52,520 --> 01:06:50,460

that statement Verner von braun

1463

01:06:54,800 --> 01:06:52,530

suggesting the archaeologist should be

1464

01:06:57,340 --> 01:06:54,810

sent to Mars and absolutely a mission we

1465

01:07:00,110 --> 01:06:57,350

also find out that Mars was earth-like

1466

01:07:01,520 --> 01:07:00,120

yeah and you and yourself had something

1467

01:07:03,710 --> 01:07:01,530

to do with it by the way that's why it's

1468

01:07:06,260 --> 01:07:03,720

red we'll get to that in a minute we

1469

01:07:09,170 --> 01:07:06,270

will and then we find out two big clues

1470

01:07:11,390 --> 01:07:09,180

that Mars was like Earth of the past is

1471

01:07:14,060 --> 01:07:11,400

not only the river channels but it's

1472

01:07:17,960 --> 01:07:14,070

very redness yeah and and then we find

1473

01:07:19,790 --> 01:07:17,970

out that it has a well what's left of

1474

01:07:23,350 --> 01:07:19,800

its atmosphere but it has an atmospheric

1475

01:07:26,930 --> 01:07:23,360

signature that is associated with

1476

01:07:28,790 --> 01:07:26,940

weapons it has a weapon signature in its

1477

01:07:31,910 --> 01:07:28,800

atmosphere yeah and that's what you

1478

01:07:35,570 --> 01:07:31,920

found that's right and sent by by

1479

01:07:40,340 --> 01:07:35,580

subsequently we have now found that the

1480

01:07:43,970 --> 01:07:40,350

other shoe on the distribution is

1481

01:07:45,530 --> 01:07:43,980

Krypton get another inert gas when it

1482

01:07:50,840 --> 01:07:45,540

has a specific

1483

01:07:54,440 --> 01:07:50,850

um distribution of isotopes favoring

1484

01:07:58,570 --> 01:07:54,450

light isotopes arm that is actually also

1485

01:08:01,160 --> 01:07:58,580

a signature of it is it's a secondary

1486

01:08:03,140 --> 01:08:01,170

yeah it's a companion dairy piece of

1487

01:08:04,940 --> 01:08:03,150

evidence it's like finding the bullet in

1488

01:08:07,850 --> 01:08:04,950

the wall and then oh yes here's the

1489

01:08:09,740 --> 01:08:07,860

shell casing from the gun that was you

1490

01:08:11,600 --> 01:08:09,750

know from the cartridge that was fired

1491

01:08:12,470 --> 01:08:11,610

you found the bullet that's the xenon

1492

01:08:14,630 --> 01:08:12,480

129

1493

01:08:17,750 --> 01:08:14,640

there should be a shell casing around

1494

01:08:21,020 --> 01:08:17,760

here that's the Krypton isotopes yes and

1495

01:08:23,570 --> 01:08:21,030

yes they verify see this is that's why

1496

01:08:25,130 --> 01:08:23,580

Iowa in the Navigator rig so I would

1497

01:08:26,630 --> 01:08:25,140

neither that's an excellent analogy

1498

01:08:30,260 --> 01:08:26,640

because what I know people listening and

1499

01:08:33,620 --> 01:08:30,270

thinking is how have you run down the

1500

01:08:34,970 --> 01:08:33,630

options there must be some even just for

1501

01:08:37,940 --> 01:08:34,980

doing you know proper scientific

1502

01:08:41,500 --> 01:08:37,950

diligence doctor Brandenburg are there

1503

01:08:44,780 --> 01:08:41,510

genuinely any other naturally-occurring

1504

01:08:48,320 --> 01:08:44,790

reasons for this ratio and the presence

1505

01:08:51,470 --> 01:08:48,330

of Krypton according to anyone you

1506

01:08:53,539 --> 01:08:51,480

spoken to or any one nuclear physicist

1507

01:08:56,230 --> 01:08:53,549

or anyone who has attempted to challenge

1508

01:09:00,200 --> 01:08:56,240

your data because you looked didn't you

1509

01:09:04,340 --> 01:09:00,210

yes I did you certainly when putting

1510

01:09:07,460 --> 01:09:04,350

forth such an extraordinary hypothesis

1511

01:09:09,920 --> 01:09:07,470

you want to make sure as a scientist

1512

01:09:13,520 --> 01:09:09,930

that your Ducks I care very deeply about

1513

01:09:15,500 --> 01:09:13,530

my reputation as a scientist and I will

1514

01:09:17,630 --> 01:09:15,510

also tell you that I'm a veteran of many

1515

01:09:20,210 --> 01:09:17,640

scientific disputes that I have actually

1516

01:09:22,730 --> 01:09:20,220

been in the center of and I've won

1517

01:09:27,340 --> 01:09:22,740

almost every one of them I'm used to

1518

01:09:33,620 --> 01:09:27,350

winning these what sometimes becomes

1519

01:09:36,770 --> 01:09:33,630

brawls in the scientific Valley I'm I'm

1520

01:09:39,800 --> 01:09:36,780

a two-fisted scientist who's not afraid

1521

01:09:44,750 --> 01:09:39,810

to step out in the alley over these

1522

01:09:47,510 --> 01:09:44,760

things and um I'm used to winning but

1523

01:09:49,550 --> 01:09:47,520

I'm very careful I'm very careful

1524

01:09:53,230 --> 01:09:49,560

I've waited I've known of this

1525

01:09:58,420 --> 01:09:53,240

possibility for 30 years it's taken me

1526

01:10:01,450 --> 01:09:58,430

that long to basically make certain

1527

01:10:05,260 --> 01:10:01,460

of the evidence find the evidence make

1528

01:10:07,270 --> 01:10:05,270

certain of it but you know all we can

1529

01:10:09,340 --> 01:10:07,280

ultimately do is take our best shot we

1530

01:10:12,010 --> 01:10:09,350

don't I was not on Mars when all this

1531

01:10:15,790 --> 01:10:12,020

happened I don't really know but we can

1532

01:10:19,210 --> 01:10:15,800

surmise there was a very violent nuclear

1533

01:10:25,870 --> 01:10:19,220

explosion on Mars from this evidence the

1534

01:10:28,510 --> 01:10:25,880

Xenon the Krypton plus other arm we

1535

01:10:31,630 --> 01:10:28,520

found a big radioactive scar on Mars of

1536

01:10:35,320 --> 01:10:31,640

when you when you radiate of the ground

1537

01:10:38,620 --> 01:10:35,330

um in a nuclear explosion with neutrons

1538

01:10:42,430 --> 01:10:38,630

it makes the potassium in element a

1539

01:10:45,480 --> 01:10:42,440

widespread element on earth it makes

1540

01:10:51,300 --> 01:10:45,490

that a radioactive and it stays

1541

01:10:54,430 --> 01:10:51,310

radioactive for it has a half-life of

1542

01:11:01,420 --> 01:10:54,440

roughly a billion years so it has a very

1543

01:11:05,500 --> 01:11:01,430

long memory and so if you had a big

1544

01:11:08,230 --> 01:11:05,510

nuclear explosion you would see a large

1545

01:11:11,740 --> 01:11:08,240

area of Mars slightly above normal

1546

01:11:14,650 --> 01:11:11,750

radioactivity in potassium because the

1547

01:11:17,440 --> 01:11:14,660

long-lived isotope and that's in fact

1548

01:11:21,160 --> 01:11:17,450

what we find sound that in its near

1549

01:11:22,600 --> 01:11:21,170

Cydonia well we're about to get to some

1550

01:11:25,120 --> 01:11:22,610

of the more alarming parts of it but I

1551

01:11:28,360 --> 01:11:25,130

just want to make sure that we all the

1552

01:11:30,840 --> 01:11:28,370

objections that people might have which

1553

01:11:32,920 --> 01:11:30,850

is you're still leaving the door open

1554

01:11:36,040 --> 01:11:32,930

basically what we have the best

1555

01:11:41,080 --> 01:11:36,050

interpretive model for the atmospheric

1556

01:11:44,020 --> 01:11:41,090

and sort of soil data on Mars the best

1557

01:11:46,930 --> 01:11:44,030

one available is that this is the result

1558

01:11:49,840 --> 01:11:46,940

of an ancient nuclear explosion you're

1559

01:11:51,400 --> 01:11:49,850

perfectly okay with you know 20 years

1560

01:11:54,550 --> 01:11:51,410

down the track it turns out that there's

1561

01:11:56,020 --> 01:11:54,560

some kind of crazy bearing in mind your

1562

01:11:58,600 --> 01:11:56,030

plasma physicists always about to say

1563

01:12:00,280 --> 01:11:58,610

some kind of crazy weird plasma event in

1564

01:12:03,580 --> 01:12:00,290

space that could cause it I think

1565

01:12:07,110 --> 01:12:03,590

there's a possibility of some unknown

1566

01:12:08,629 --> 01:12:07,120

natural phenomenon but the only known

1567

01:12:12,109 --> 01:12:08,639

phenomenon

1568

01:12:14,270 --> 01:12:12,119

unfortunately it's not natural but is it

1569

01:12:17,209 --> 01:12:14,280

is not a natural phenomena but it's

1570

01:12:20,689 --> 01:12:17,219

certainly well known phenomenon is the

1571

01:12:24,109 --> 01:12:20,699

explosion of a very large nuclear device

1572

01:12:26,270 --> 01:12:24,119

in a in a standard hydrogen bomb now in

1573

01:12:29,330 --> 01:12:26,280

the Arsenal's of all of the nations of

1574

01:12:32,180 --> 01:12:29,340

Earth they take a hydrogen bomb and then

1575

01:12:36,410 --> 01:12:32,190

to boost its yield they double its yield

1576

01:12:39,500 --> 01:12:36,420

by wrapping it in uranium so that the

1577

01:12:43,000 --> 01:12:39,510

fast neutrons from the fusion reaction

1578

01:12:47,000 --> 01:12:43,010

go out and split even normally inert

1579

01:12:49,129 --> 01:12:47,010

uranium 238 the the reaction is so

1580

01:12:52,720 --> 01:12:49,139

violent and the neutrons are so powerful

1581

01:12:58,040 --> 01:12:52,730

they even can fission

1582

01:13:01,600 --> 01:12:58,050

they can even fission lead so what they

1583

01:13:04,910 --> 01:13:01,610

did is they wrap the hydrogen bomb in

1584

01:13:08,530 --> 01:13:04,920

uranium or thorium or a mixture of the

1585

01:13:11,750 --> 01:13:08,540

two they generally prefer uranium

1586

01:13:14,870 --> 01:13:11,760

because it's more it's more reactive and

1587

01:13:18,310 --> 01:13:14,880

this doubles the yield of the hydrogen

1588

01:13:20,899 --> 01:13:18,320

bomb so you actually have a fission

1589

01:13:22,580 --> 01:13:20,909

triggering a fusion reaction the fission

1590

01:13:25,700 --> 01:13:22,590

rate bought the small atomic bomb

1591

01:13:28,450 --> 01:13:25,710

triggers the hydrogen bomb reaction and

1592

01:13:32,450 --> 01:13:28,460

then the hydrogen bomb in turn are

1593

01:13:35,149 --> 01:13:32,460

triggers a very large fission reaction

1594

01:13:40,430 --> 01:13:35,159

which actually is half of the energy of

1595

01:13:42,740 --> 01:13:40,440

the total yield and um so it just by

1596

01:13:46,990 --> 01:13:42,750

changing the material of the jacket of

1597

01:13:51,649 --> 01:13:47,000

the bomb you double the yield and um

1598

01:13:54,530 --> 01:13:51,659

it's a it creates an enormous amount of

1599

01:13:59,270 --> 01:13:54,540

nuclear fallout which then would poison

1600

01:14:02,479 --> 01:13:59,280

all life fusion by itself doesn't create

1601

01:14:04,760 --> 01:14:02,489

that much residual radioactivity that's

1602

01:14:07,939 --> 01:14:04,770

harmful to life that's why the neutron

1603

01:14:11,390 --> 01:14:07,949

bomb was almost a pure fusion bomb it's

1604

01:14:18,020 --> 01:14:16,010

but when you wrap the bomb in to dump

1605

01:14:21,110 --> 01:14:18,030

you know to boost what's called boosted

1606

01:14:25,810 --> 01:14:21,120

fission boosting its yield it makes it

1607

01:14:28,340 --> 01:14:25,820

very dirty and it will so the blast the

1608

01:14:30,440 --> 01:14:28,350

radiate initial radiation will kill

1609

01:14:33,580 --> 01:14:30,450

everything they'll blow the atmosphere

1610

01:14:37,580 --> 01:14:33,590

off Mars and then the fallout from these

1611

01:14:39,980 --> 01:14:37,590

this enormous nuclear weapon will poison

1612

01:14:43,030 --> 01:14:39,990

all remaining advanced life on Mars

1613

01:14:45,710 --> 01:14:43,040

nothing but primitive life will survive

1614

01:14:49,130 --> 01:14:45,720

twice this state if buried deep in the

1615

01:14:51,470 --> 01:14:49,140

soil yeah and why then this is the this

1616

01:14:54,410 --> 01:14:51,480

is where it gets a bit alarming why are

1617

01:15:00,980 --> 01:14:54,420

they no craters from from these events

1618

01:15:05,330 --> 01:15:00,990

on Mars oh well um you look at the that

1619

01:15:09,560 --> 01:15:05,340

you you you basically here garden is

1620

01:15:11,210 --> 01:15:09,570

what you have you have evidence for the

1621

01:15:12,760 --> 01:15:11,220

enormous nuclear explosion on Mars

1622

01:15:16,700 --> 01:15:12,770

evidence for past earth-like conditions

1623

01:15:19,220 --> 01:15:16,710

evidence for a what appears to be based

1624

01:15:21,260 --> 01:15:19,230

on an earth reference a primitive

1625

01:15:26,000 --> 01:15:21,270

civilization however its technological

1626

01:15:28,760 --> 01:15:26,010

level is unknown it appears based on the

1627

01:15:31,670 --> 01:15:28,770

artifacts we find it was it resembles

1628

01:15:34,400 --> 01:15:31,680

ancient age so you find Mars was like

1629

01:15:36,350 --> 01:15:34,410

Earth in every way it was even inhabited

1630

01:15:39,740 --> 01:15:36,360

then there was this big nuclear

1631

01:15:46,190 --> 01:15:39,750

explosion then you find the radioactive

1632

01:15:53,090 --> 01:15:46,200

scar of near Cydonia you find a smaller

1633

01:15:56,120 --> 01:15:53,100

one roughly maybe 20% of the yield of

1634

01:15:59,390 --> 01:15:56,130

the first one near utopia where we found

1635

01:16:01,130 --> 01:15:59,400

the other two phases and somebody asked

1636

01:16:03,200 --> 01:16:01,140

me well why did you go from nuclear

1637

01:16:04,900 --> 01:16:03,210

physics then back to these artifacts and

1638

01:16:07,460 --> 01:16:04,910

I said because I can read a map

1639

01:16:10,160 --> 01:16:07,470

it's a rare talent nowadays what

1640

01:16:12,590 --> 01:16:10,170

everybody using GPS but I said I can

1641

01:16:15,710 --> 01:16:12,600

read a map I know the radioactive scar

1642

01:16:18,710 --> 01:16:15,720

is here here is Cydonia just downwind of

1643

01:16:22,880 --> 01:16:18,720

it with the prevailing Coriolis winds on

1644

01:16:24,800 --> 01:16:22,890

Mars and here is the other scar and it's

1645

01:16:28,700 --> 01:16:24,810

just up when

1646

01:16:33,320 --> 01:16:28,710

of utopia or rather it's actually called

1647

01:16:36,620 --> 01:16:33,330

galaxias chaos that's official name this

1648

01:16:40,580 --> 01:16:36,630

is a name picked by NASA not by me

1649

01:16:42,980 --> 01:16:40,590

and uh so they the fallout from these

1650

01:16:45,470 --> 01:16:42,990

two nuclear weapons would have gone

1651

01:16:47,270 --> 01:16:45,480

directly downwind two boys and

1652

01:16:53,120 --> 01:16:47,280

everything that we survived the initial

1653

01:16:56,360 --> 01:16:53,130

blast at Cydonia and in utopium so but

1654

01:16:57,760 --> 01:16:56,370

there is no crater at either spot this

1655

01:17:00,500 --> 01:16:57,770

means it was an airburst

1656

01:17:04,040 --> 01:17:00,510

there's no craters at Hiroshima or

1657

01:17:06,290 --> 01:17:04,050

Nagasaki and that's because if you

1658

01:17:09,590 --> 01:17:06,300

everyone knows that if you want to

1659

01:17:12,380 --> 01:17:09,600

inflict maximum damage on white civilian

1660

01:17:14,900 --> 01:17:12,390

structures you set off your nuclear

1661

01:17:17,150 --> 01:17:14,910

weapon in midair this maximizes the

1662

01:17:19,070 --> 01:17:17,160

shock damage if you set it off on the

1663

01:17:21,650 --> 01:17:19,080

ground most of the energy goes into the

1664

01:17:25,220 --> 01:17:21,660

ground and exhibit crater but that's

1665

01:17:29,720 --> 01:17:25,230

that localizes the damage if you want

1666

01:17:33,980 --> 01:17:29,730

the damage to be more widespread and uh

1667

01:17:35,990 --> 01:17:33,990

and more ferocious then you go for the

1668

01:17:38,690 --> 01:17:36,000

intense shockwave in the air and that

1669

01:17:41,360 --> 01:17:38,700

means in air burst so this is standard

1670

01:17:43,730 --> 01:17:41,370

doctrine as illustrated by how the

1671

01:17:49,400 --> 01:17:43,740

nuclear weapons were employed Nagasaki

1672

01:17:54,440 --> 01:17:49,410

and Hiroshima unfortunately and so this

1673

01:17:56,900 --> 01:17:54,450

means that whoever did this this this

1674

01:17:59,480 --> 01:17:56,910

looks like standard employment of a

1675

01:18:01,790 --> 01:17:59,490

nuclear weapon using basic laws of

1676

01:18:06,080 --> 01:18:01,800

physics to maximize damage against

1677

01:18:09,980 --> 01:18:06,090

civilian areas and then you say well if

1678

01:18:12,230 --> 01:18:09,990

it was a nuclear war on Mars involving

1679

01:18:13,970 --> 01:18:12,240

the Martians they would have just fired

1680

01:18:15,050 --> 01:18:13,980

a whole bunch of little weapons they

1681

01:18:18,680 --> 01:18:15,060

wouldn't have blown up their entire

1682

01:18:22,220 --> 01:18:18,690

planet especially why loft a big weapon

1683

01:18:25,190 --> 01:18:22,230

into midair which wants to wait as much

1684

01:18:26,600 --> 01:18:25,200

as the Empire State Building when just

1685

01:18:29,330 --> 01:18:26,610

setting it off on the ground would have

1686

01:18:32,180 --> 01:18:29,340

been sufficient and that's where you

1687

01:18:33,570 --> 01:18:32,190

realize oh the Martians did not do this

1688

01:18:36,940 --> 01:18:33,580

to themselves

1689

01:18:40,320 --> 01:18:36,950

so you're basically led by the evidence

1690

01:18:44,500 --> 01:18:40,330

to a very specific frightening scenario

1691

01:18:46,240 --> 01:18:44,510

that is that someone else we know we're

1692

01:18:50,190 --> 01:18:46,250

not alone in the universe we know there

1693

01:18:56,820 --> 01:18:53,560

two of these inner interstellar inner

1694

01:18:59,680 --> 01:18:56,830

inner extraterrestrial intelligences

1695

01:19:01,960 --> 01:18:59,690

interacted on Mars there was an

1696

01:19:04,410 --> 01:19:01,970

indigenous species on Mars apparently

1697

01:19:09,460 --> 01:19:04,420

that built a primitive civilization

1698

01:19:12,970 --> 01:19:09,470

someone else came along and dropped two

1699

01:19:16,060 --> 01:19:12,980

very large nuclear weapons on Mars

1700

01:19:19,290 --> 01:19:16,070

apparently to sterilize the planet they

1701

01:19:22,450 --> 01:19:19,300

wanted to do a Death Star on this thing

1702

01:19:26,050 --> 01:19:22,460

just like we're talking someone like the

1703

01:19:30,160 --> 01:19:26,060

Daleks or governor Tarkin in Star Wars

1704

01:19:34,630 --> 01:19:30,170

who is asked well you know why hits

1705

01:19:36,940 --> 01:19:34,640

alder and he says well the other planet

1706

01:19:40,479 --> 01:19:36,950

you specified Tatooine is too remote to

1707

01:19:43,420 --> 01:19:40,489

be a good example yeah so we're talking

1708

01:19:46,750 --> 01:19:43,430

someone doing this to set an example

1709

01:19:50,440 --> 01:19:46,760

perhaps to potentially be [h\_\_h] yeah like

1710

01:19:52,570 --> 01:19:50,450

I want to be clear yeah because you're

1711

01:19:54,130 --> 01:19:52,580

ever that your actual data are so good

1712

01:19:56,320 --> 01:19:54,140

and so compelling I want to be clear

1713

01:19:59,950 --> 01:19:56,330

that in this is the final yet we are

1714

01:20:02,470 --> 01:19:59,960

letting you a specific dreadful scenario

1715

01:20:04,810 --> 01:20:02,480

yeah this is a new it's an internment

1716

01:20:06,640 --> 01:20:04,820

wiped out by a spacefaring species yes

1717

01:20:09,070 --> 01:20:06,650

it's it well because I want to play

1718

01:20:12,160 --> 01:20:09,080

devil's advocate on that for in a bit

1719

01:20:16,960 --> 01:20:12,170

but I just want to illustrate for the

1720

01:20:19,840 --> 01:20:16,970

listeners that the data stops at nuclear

1721

01:20:23,200 --> 01:20:19,850

Airbus at like airburst nucleus where it

1722

01:20:25,330 --> 01:20:23,210

stops that's where and and so we look at

1723

01:20:27,070 --> 01:20:25,340

the data we have and go okay now we need

1724

01:20:28,600 --> 01:20:27,080

to interpret this and and your

1725

01:20:30,880 --> 01:20:28,610

interpretation is one of a sort of

1726

01:20:34,270 --> 01:20:30,890

broadly Bronze Age culture and Mars

1727

01:20:35,710 --> 01:20:34,280

being destroyed by another culture but

1728

01:20:37,840 --> 01:20:35,720

and that's I mean it's a good

1729

01:20:41,479 --> 01:20:37,850

interpretation and I'm need some

1730

01:20:45,109 --> 01:20:41,489

convincing now by the way Gordon I'm I'm

1731

01:20:48,109 --> 01:20:45,119

I'm well enough experienced enough

1732

01:20:53,779 --> 01:20:48,119

scientists to know there may be some

1733

01:20:56,810 --> 01:20:53,789

strange esoteric plasma ball lightning

1734

01:21:02,830 --> 01:20:56,820

falling out of space from some solar

1735

01:21:07,339 --> 01:21:02,840

storm uh you know but we have never seen

1736

01:21:09,739 --> 01:21:07,349

anything like this absolutely not and

1737

01:21:11,919 --> 01:21:09,749

when we have seen any living space and

1738

01:21:14,589 --> 01:21:11,929

and and we have been observing space

1739

01:21:17,479 --> 01:21:14,599

since the eighteen since the Middle Ages

1740

01:21:20,149 --> 01:21:17,489

anything like that that occurred in the

1741

01:21:22,910 --> 01:21:20,159

solar system we would have seen it and

1742

01:21:26,239 --> 01:21:22,920

made note of it nothing like that is

1743

01:21:28,370 --> 01:21:26,249

ever there is no no natural phenomena

1744

01:21:33,560 --> 01:21:28,380

that can account for this unfortunately

1745

01:21:36,049 --> 01:21:33,570

the only known phenomena is what we have

1746

01:21:38,419 --> 01:21:36,059

created on earth with our own hydrogen

1747

01:21:40,220 --> 01:21:38,429

bomb explosions absolutely

1748

01:21:43,310 --> 01:21:40,230

they were air for a lot of them are air

1749

01:21:44,839 --> 01:21:43,320

burst when we come to the interpretation

1750

01:21:49,189 --> 01:21:44,849

piece however I mean here's a devil's

1751

01:21:52,790 --> 01:21:49,199

advocate one for you one I mean I'm not

1752

01:21:54,589 --> 01:21:52,800

I'm not sure I the Bronte's thing is a

1753

01:21:56,330 --> 01:21:54,599

guess it's a good one given what's left

1754

01:21:58,640 --> 01:21:56,340

I mean the oh you and I would both agree

1755

01:22:01,339 --> 01:21:58,650

that the next step would be to actually

1756

01:22:03,379 --> 01:22:01,349

go and look yeah like we will only know

1757

01:22:07,580 --> 01:22:03,389

if we go and look which we should

1758

01:22:09,799 --> 01:22:07,590

obviously but by this I mean even if

1759

01:22:11,720 --> 01:22:09,809

they were because we're talking based on

1760

01:22:14,299 --> 01:22:11,730

your interpretation of the the half-life

1761

01:22:16,910 --> 01:22:14,309

here we're talking 250 billion years ago

1762

01:22:18,919 --> 01:22:16,920

to maybe half a billion but before they

1763

01:22:20,600 --> 01:22:18,929

were here I may about half a billion but

1764

01:22:23,839 --> 01:22:20,610

I would guess about half a billion years

1765

01:22:25,149 --> 01:22:23,849

ago which means even if they were Bronze

1766

01:22:27,169 --> 01:22:25,159

Age they would have been here by now

1767

01:22:27,799 --> 01:22:27,179

they would have got here by now and we

1768

01:22:30,620 --> 01:22:27,809

wouldn't exist

1769

01:22:33,470 --> 01:22:30,630

so exactly it would be we would be

1770

01:22:35,270 --> 01:22:33,480

Martians well we wouldn't exist which

1771

01:22:37,879 --> 01:22:35,280

actually this is kind of the devil's

1772

01:22:40,459 --> 01:22:37,889

advocate base so maybe the bombs were a

1773

01:22:42,140 --> 01:22:40,469

mercy if you look at it that way maybe

1774

01:22:45,560 --> 01:22:42,150

the bombs were a mercy maybe you're

1775

01:22:47,810 --> 01:22:45,570

dealing with a species that looks at

1776

01:22:49,310 --> 01:22:47,820

time differently it's a hypothetical I'm

1777

01:22:51,950 --> 01:22:49,320

just I'm putting it out there it's

1778

01:22:55,490 --> 01:22:51,960

obvious that when you when you when you

1779

01:22:58,430 --> 01:22:55,500

bring in the idea of intelligence

1780

01:23:01,970 --> 01:22:58,440

and technology the possibilities just

1781

01:23:03,980 --> 01:23:01,980

become myriad they do there's there's

1782

01:23:07,850 --> 01:23:03,990

there's just an infinite range of

1783

01:23:10,070 --> 01:23:07,860

possibilities um you know I write

1784

01:23:13,100 --> 01:23:10,080

science fiction so I can kind of be in

1785

01:23:18,560 --> 01:23:13,110

touch with that that range of

1786

01:23:22,130 --> 01:23:18,570

possibilities and um but based on known

1787

01:23:25,550 --> 01:23:22,140

phenomenon this is the interpretation we

1788

01:23:28,490 --> 01:23:25,560

arrive at with a fairly high degree of

1789

01:23:30,590 --> 01:23:28,500

confidence but we have to go there we

1790

01:23:33,650 --> 01:23:30,600

have to send people there to dig through

1791

01:23:35,840 --> 01:23:33,660

the ruins and find out what exactly

1792

01:23:39,260 --> 01:23:35,850

happened you know was there some prior

1793

01:23:41,960 --> 01:23:39,270

encounter in under this hypothesis did

1794

01:23:44,720 --> 01:23:41,970

this species that destroyed Mars come to

1795

01:23:46,550 --> 01:23:44,730

Mars and say we would like to colonize

1796

01:23:50,780 --> 01:23:46,560

part of your planet please give us

1797

01:23:53,570 --> 01:23:50,790

permission and the Martians perhaps said

1798

01:23:55,160 --> 01:23:53,580

hell no or was it like minority we

1799

01:23:57,980 --> 01:23:55,170

report did they say that the Martians

1800

01:24:00,860 --> 01:23:57,990

would actually become an even more

1801  
01:24:03,200 --> 01:24:00,870  
dangerous interplanetary species your

1802  
01:24:05,540 --> 01:24:03,210  
first encounter with this data just to

1803  
01:24:06,950 --> 01:24:05,550  
come back to the nuclear physicists who

1804  
01:24:09,710 --> 01:24:06,960  
actually look at it and see this as

1805  
01:24:11,480 --> 01:24:09,720  
self-evident your first encounter was in

1806  
01:24:13,520 --> 01:24:11,490  
was in a queue for a Xerox machine I

1807  
01:24:16,310 --> 01:24:13,530  
believe with this informations a current

1808  
01:24:19,160 --> 01:24:16,320  
yes and I was working at a government

1809  
01:24:23,720 --> 01:24:19,170  
laboratory where nuclear weapons were

1810  
01:24:26,540 --> 01:24:23,730  
designed built um you know for testing

1811  
01:24:28,880 --> 01:24:26,550  
they were the main kind of they handled

1812  
01:24:33,100 --> 01:24:28,890  
the engineering aspects of nuclear

1813  
01:24:36,260 --> 01:24:33,110

weapons for both production of

1814

01:24:39,530 --> 01:24:36,270

deployment but also for you know to if

1815

01:24:43,460 --> 01:24:39,540

if Lawrence Livermore Lab where I went

1816

01:24:46,340 --> 01:24:43,470

to school designs a hydrogen bomb then

1817

01:24:49,070 --> 01:24:46,350

they would send it to Sandia Labs as you

1818

01:24:51,110 --> 01:24:49,080

know please build this and Sandia Labs

1819

01:24:54,470 --> 01:24:51,120

would work out all the you know the

1820

01:24:58,120 --> 01:24:54,480

details of which what size bolts to use

1821

01:25:01,060 --> 01:24:58,130

on it etc etc these things are important

1822

01:25:04,300 --> 01:25:01,070

and you know the Devils in the details

1823

01:25:06,760 --> 01:25:04,310

even in a hydrogen bomb and so Sandia

1824

01:25:10,060 --> 01:25:06,770

Labs had a very good reputation for

1825

01:25:13,330 --> 01:25:10,070

being extremely competent and they also

1826  
01:25:15,430 --> 01:25:13,340  
ran several programs uh and I only found

1827  
01:25:18,880 --> 01:25:15,440  
this later they were involved also in

1828  
01:25:20,830 --> 01:25:18,890  
atmospheric monitoring of they monitors

1829  
01:25:24,070 --> 01:25:20,840  
Earth's atmosphere to look for various

1830  
01:25:26,170 --> 01:25:24,080  
isotopes to see for one thing if

1831  
01:25:29,230 --> 01:25:26,180  
somebody else sets off a hydrogen bomb

1832  
01:25:31,480 --> 01:25:29,240  
underground and then the gas gases

1833  
01:25:33,310 --> 01:25:31,490  
leaked to the surface eventually will

1834  
01:25:35,140 --> 01:25:33,320  
change the if you're if you have very

1835  
01:25:37,450 --> 01:25:35,150  
sensitive monitoring the atmosphere you

1836  
01:25:39,310 --> 01:25:37,460  
can detect this that there has been a

1837  
01:25:44,500 --> 01:25:39,320  
nuclear test someplace and you can

1838  
01:25:45,970 --> 01:25:44,510

estimate its yield etc etc so as I'm

1839

01:25:50,440 --> 01:25:45,980

standing in line in those days

1840

01:25:52,510 --> 01:25:50,450

everything Xerox machines are very very

1841

01:25:56,260 --> 01:25:52,520

important and if I'm standing in line to

1842

01:25:59,530 --> 01:25:56,270

Xerox a Mars article about the isotopes

1843

01:26:02,740 --> 01:25:59,540

in the Mars atmosphere I wasn't really

1844

01:26:04,390 --> 01:26:02,750

very interested in the xenon and Krypton

1845

01:26:06,040 --> 01:26:04,400

isotopes on Mars

1846

01:26:09,820 --> 01:26:06,050

I was basically interested in the

1847

01:26:12,160 --> 01:26:09,830

nitrogen oxygen carbon that indicated

1848

01:26:14,590 --> 01:26:12,170

that Mars had lost a considerable amount

1849

01:26:18,790 --> 01:26:14,600

of its atmosphere over the from the past

1850

01:26:20,560 --> 01:26:18,800

and so I was chatting with this fellow

1851

01:26:24,780 --> 01:26:20,570

as we're standing in line to use the

1852

01:26:28,000 --> 01:26:24,790

Xerox machine and I mentioned xenon 129

1853

01:26:30,340 --> 01:26:28,010

is e non 129 on Mars is very peculiar

1854

01:26:32,680 --> 01:26:30,350

it's much different than our earth or in

1855

01:26:36,610 --> 01:26:32,690

the meteorites or the solar wind from

1856

01:26:39,790 --> 01:26:36,620

the Sun and he does this big double take

1857

01:26:43,510 --> 01:26:39,800

he raises his eyebrows very genial kind

1858

01:26:45,160 --> 01:26:43,520

of technical fellow just kind of kind of

1859

01:26:47,170 --> 01:26:45,170

got projected the image of just being an

1860

01:26:50,860 --> 01:26:47,180

all-around serious science you know

1861

01:26:53,590 --> 01:26:50,870

hard-working scientist and all and he

1862

01:26:56,470 --> 01:26:53,600

does this he loses his smile he says

1863

01:27:00,070 --> 01:26:56,480

could I see that and he looks at the

1864

01:27:02,800 --> 01:27:00,080

data presented in the scientific article

1865

01:27:06,280 --> 01:27:02,810

it was the book scientific results of

1866

01:27:09,100 --> 01:27:06,290

the Viking expedition and showed the

1867

01:27:11,950 --> 01:27:09,110

distribution of xenon 129

1868

01:27:14,590 --> 01:27:11,960

relative to like earth and

1869

01:27:16,959 --> 01:27:14,600

just tells me he hands the book back to

1870

01:27:21,130 --> 01:27:16,969

me and he says someone nuked them then

1871

01:27:23,440 --> 01:27:21,140

he just nods and then he looks around a

1872

01:27:25,209 --> 01:27:23,450

little bit and says looks like he was

1873

01:27:28,120 --> 01:27:25,219

becoming uncomfortable and he realizes

1874

01:27:30,090 --> 01:27:28,130

he's in an unclassified part of the

1875

01:27:32,590 --> 01:27:30,100

laboratory it's the library

1876

01:27:34,620 --> 01:27:32,600

he shouldn't be having he shouldn't be

1877

01:27:37,930 --> 01:27:34,630

speaking of such things in such an area

1878

01:27:40,000 --> 01:27:37,940

so he just excuses himself he puts down

1879

01:27:43,120 --> 01:27:40,010

his book that he was going to Xerox and

1880

01:27:45,490 --> 01:27:43,130

he just leaves and it's quitting time

1881

01:27:48,010 --> 01:27:45,500

you know the place is getting darker and

1882

01:27:50,229 --> 01:27:48,020

they're turning off lights and stuff so

1883

01:27:53,700 --> 01:27:50,239

I just realized oh he just told me

1884

01:27:56,590 --> 01:27:53,710

something that is classified or

1885

01:27:59,320 --> 01:27:56,600

confidential and he shouldn't be talking

1886

01:28:01,300 --> 01:27:59,330

about that in an open unclear an area

1887

01:28:04,060 --> 01:28:01,310

like this and this happened periodically

1888

01:28:07,540 --> 01:28:04,070

it you know I was admonished once John

1889

01:28:11,020 --> 01:28:07,550

you shouldn't say that word in this area

1890

01:28:14,020 --> 01:28:11,030

because it's a term you know this is for

1891

01:28:19,120 --> 01:28:14,030

a classified process or something and

1892

01:28:21,520 --> 01:28:19,130

you know and it was just uh I I prided

1893

01:28:23,650 --> 01:28:21,530

myself on being very good about security

1894

01:28:25,360 --> 01:28:23,660

matters well yeah that was going to be

1895

01:28:27,640 --> 01:28:25,370

the last piece I mean if that's the

1896

01:28:30,310 --> 01:28:27,650

beginning of your kind of story of

1897

01:28:32,229 --> 01:28:30,320

investigating the bombs when you were

1898

01:28:34,720 --> 01:28:32,239

confident enough in it you sent it to

1899

01:28:36,670 --> 01:28:34,730

the Pentagon I I didn't know enough

1900

01:28:39,130 --> 01:28:36,680

about nuclear physics at the time I was

1901

01:28:41,830 --> 01:28:39,140

a trained as a plasma physicist uh you

1902

01:28:43,780 --> 01:28:41,840

know basically electromagnetism yeah

1903

01:28:46,030 --> 01:28:43,790

well let's jump to the end of it because

1904

01:28:48,459 --> 01:28:46,040

I think this is quite important this is

1905

01:28:50,860 --> 01:28:48,469

quite important to for other people to

1906

01:28:53,380 --> 01:28:50,870

understand once you had actually run

1907

01:28:56,020 --> 01:28:53,390

down well from this beginning moment

1908

01:28:57,790 --> 01:28:56,030

once you'd actually run down the other

1909

01:29:00,340 --> 01:28:57,800

possibilities of what this could be

1910

01:29:01,690 --> 01:29:00,350

you actually submitted your research to

1911

01:29:01,930 --> 01:29:01,700

the Pentagon beforehand tell us about

1912

01:29:05,170 --> 01:29:01,940

that

1913

01:29:08,020 --> 01:29:05,180

yes once I learned enough about

1914

01:29:12,790 --> 01:29:08,030

nuclear physics vince DiPietro urged me

1915

01:29:14,709 --> 01:29:12,800

to contact the pentagon and tell them he

1916

01:29:17,950 --> 01:29:14,719

basically said John we have to come

1917

01:29:19,780 --> 01:29:17,960

forth with this and I thought well we

1918

01:29:22,570 --> 01:29:19,790

have to contact the Pentagon first to

1919

01:29:25,840 --> 01:29:22,580

see if it's classified because I had a

1920

01:29:29,990 --> 01:29:25,850

security clearance I didn't want to

1921

01:29:33,770 --> 01:29:30,000

violating you know and so we I call

1922

01:29:36,470 --> 01:29:33,780

Larry are are basically government

1923

01:29:38,810 --> 01:29:36,480

informant I figure well he's obviously

1924

01:29:41,120 --> 01:29:38,820

sent here by somebody who's interested

1925

01:29:43,100 --> 01:29:41,130

in this stuff so I called Larry in and

1926

01:29:46,730 --> 01:29:43,110

Larry came to the place where I was

1927

01:29:49,370 --> 01:29:46,740

working and we I had reserved the

1928

01:29:51,830 --> 01:29:49,380

conference room for about an hour I gave

1929

01:29:55,130 --> 01:29:51,840

him a full briefing and he took careful

1930

01:29:57,680 --> 01:29:55,140

notes and appeared fascinated this all

1931

01:30:00,470 --> 01:29:57,690

appeared to be news to him and then he

1932

01:30:02,480 --> 01:30:00,480

said okay I will report this at the

1933

01:30:05,630 --> 01:30:02,490

Defense Intelligence Agency so he did

1934

01:30:07,760 --> 01:30:05,640

and I we didn't hear anything in for

1935

01:30:11,570 --> 01:30:07,770

like six months and then a friend of

1936

01:30:14,830 --> 01:30:11,580

mine who I had grown up with who also he

1937

01:30:17,360 --> 01:30:14,840

worked for Office of Naval Intelligence

1938

01:30:20,000 --> 01:30:17,370

so he was part of the Defense

1939

01:30:21,860 --> 01:30:20,010

Intelligence world and he and I would

1940

01:30:23,510 --> 01:30:21,870

just get together socially because we've

1941

01:30:26,200 --> 01:30:23,520

grown up together we were both working

1942

01:30:29,930 --> 01:30:26,210

in Washington DC we were having uh

1943

01:30:32,060 --> 01:30:29,940

sitting on his very the porch of this

1944

01:30:34,580 --> 01:30:32,070

very pleasantly situated house in

1945

01:30:37,720 --> 01:30:34,590

Northern Virginia looking out over his

1946

01:30:40,820 --> 01:30:37,730

lawn and having a few beers and he said

1947

01:30:43,310 --> 01:30:40,830

John that nuclear stuff you found on

1948

01:30:45,230 --> 01:30:43,320

Mars you should really publish that no

1949

01:30:49,180 --> 01:30:45,240

in fact he did put it that way said he

1950

01:30:51,980 --> 01:30:49,190

said why don't you publish that and from

1951

01:30:55,610 --> 01:30:51,990

talking with him earlier I you know I

1952

01:30:59,180 --> 01:30:55,620

knew that he was very much informed on

1953

01:31:04,250 --> 01:30:59,190

all these matters and he remains my good

1954

01:31:06,380 --> 01:31:04,260

friends so I just said okay I'll do it

1955

01:31:08,510 --> 01:31:06,390

and then I had to figure out how to get

1956

01:31:10,850 --> 01:31:08,520

it into the literature so they it

1957

01:31:12,590 --> 01:31:10,860

wouldn't be immediately rejected and I

1958

01:31:15,110 --> 01:31:12,600

opted for the idea that was a natural

1959

01:31:18,980 --> 01:31:15,120

nuclear reactor on Mars it had gone

1960

01:31:21,860 --> 01:31:18,990

unstable and had a fast like I had done

1961

01:31:23,390 --> 01:31:21,870

at Chernobyl so that got accepted but

1962

01:31:26,110 --> 01:31:23,400

people who actually were at the

1963

01:31:28,480 --> 01:31:26,120

conferences told me they said well xenon

1964

01:31:31,160 --> 01:31:28,490

spectrum is wrong

1965

01:31:32,840 --> 01:31:31,170

that's not a unstable nuclear reactor

1966

01:31:37,560 --> 01:31:32,850

that's a bomb

1967

01:31:40,710 --> 01:31:37,570

so I gradually then was able to

1968

01:31:42,600 --> 01:31:40,720

ascertain that it could not have been a

1969

01:31:43,980 --> 01:31:42,610

natural nuclear explosion besides the

1970

01:31:47,630 --> 01:31:43,990

natural nuclear explosion would have

1971

01:31:51,360 --> 01:31:47,640

left a big crater on Mars and so I

1972

01:31:53,850 --> 01:31:51,370

that's how I basically got it into the

1973

01:31:56,520 --> 01:31:53,860

literature what we basically reported it

1974

01:31:58,680 --> 01:31:56,530

to the Pentagon uh in their

1975

01:32:00,810 --> 01:31:58,690

characteristic fashion of covering their

1976

01:32:02,940 --> 01:32:00,820

tracks everything was kind of done

1977

01:32:06,210 --> 01:32:02,950

unofficially they said go ahead and

1978

01:32:10,290 --> 01:32:06,220

publish so I did first as a natural

1979

01:32:12,690 --> 01:32:10,300

event on Mars which then did not fit the

1980

01:32:14,430 --> 01:32:12,700

data I almost wanted to believe it

1981

01:32:18,450 --> 01:32:14,440

myself you know that it was a natural

1982

01:32:22,230 --> 01:32:18,460

event a freak natural event this is Mars

1983

01:32:24,720 --> 01:32:22,240

after all but man I was reluctantly I

1984

01:32:28,260 --> 01:32:24,730

was forced back to the original

1985

01:32:31,440 --> 01:32:28,270

conclusion that this was the destruction

1986

01:32:34,950 --> 01:32:31,450

of Mars by somebody else somebody much

1987

01:32:39,060 --> 01:32:34,960

more advanced from space and that's

1988

01:32:41,160 --> 01:32:39,070

actually quite a good place to draw this

1989

01:32:44,280 --> 01:32:41,170

to a close but all that that implies

1990

01:32:46,740 --> 01:32:44,290

about our own place in the universe by

1991

01:32:47,460 --> 01:32:46,750

the way absolutely and that's a very

1992

01:32:51,800 --> 01:32:47,470

here we are

1993

01:32:54,030 --> 01:32:51,810

hey we're holding a rock concert in the

1994

01:32:56,130 --> 01:32:54,040

abandoned ghost town that is the

1995

01:32:58,980 --> 01:32:56,140

universe we're holding a rock concert

1996

01:33:01,950 --> 01:32:58,990

and having a big bonfire anyone who

1997

01:33:03,330 --> 01:33:01,960

wants to find us can find us all right

1998

01:33:04,590 --> 01:33:03,340

so now people are gonna have to go and

1999

01:33:06,120 --> 01:33:04,600

buy your book dr. Brenda Burke or

2000

01:33:07,770 --> 01:33:06,130

otherwise they won't get to sleep they

2001  
01:33:09,810 --> 01:33:07,780  
won't get to sleep up tomorrow we have

2002  
01:33:13,530 --> 01:33:09,820  
to go to Mars well awesome yeah

2003  
01:33:15,660 --> 01:33:13,540  
brilliant all right so we might not go

2004  
01:33:16,590 --> 01:33:15,670  
to to find your book well you can go to

2005  
01:33:20,040 --> 01:33:16,600  
my website

2006  
01:33:24,180 --> 01:33:20,050  
life on Mars dot pub just think of a

2007  
01:33:27,660 --> 01:33:24,190  
good English pub and so life on Mars one

2008  
01:33:31,830 --> 01:33:27,670  
word dot pub has all of the data the

2009  
01:33:34,020 --> 01:33:31,840  
latest data and uh I will be going to

2010  
01:33:37,380 --> 01:33:34,030  
another scientific conference I've had a

2011  
01:33:40,050 --> 01:33:37,390  
paper accepted to speak on this so I'm

2012  
01:33:41,850 --> 01:33:40,060  
going to go do that I'm being you know

2013  
01:33:43,860 --> 01:33:41,860

basically waved ahead the government

2014

01:33:45,450 --> 01:33:43,870

wants this to come out not officially

2015

01:33:48,150 --> 01:33:45,460

but it wants it to come out

2016

01:33:49,380 --> 01:33:48,160

absolutely well on that note all these

2017

01:33:50,430 --> 01:33:49,390

information and the links to the books

2018

01:33:53,400 --> 01:33:50,440

and everything will be in the show notes

2019

01:33:55,800 --> 01:33:53,410

of course so a doctor dr. Brandenburg

2020

01:33:57,540 --> 01:33:55,810

this has been fascinating thank you very

2021

01:34:00,480 --> 01:33:57,550

much for your time and good luck

2022

01:34:02,580 --> 01:34:00,490

presenting the paper thank you very much

2023

01:34:05,880 --> 01:34:02,590

and also of course there's what death on

2024

01:34:08,730 --> 01:34:05,890

Mars the book from available on

2025

01:34:11,340 --> 01:34:08,740

amazon.com death on Mars wonderful

2026  
01:34:12,630 --> 01:34:11,350  
thanks once again Gordon thank you so

2027  
01:34:17,190 --> 01:34:12,640  
much for having me on your show

2028  
01:34:21,240 --> 01:34:17,200  
bye-bye bye so next Gordon and I wrap

2029  
01:34:22,590 --> 01:34:21,250  
things up it was a real joy to speak to

2030  
01:34:25,650 --> 01:34:22,600  
dr. Brandenburg about his research

2031  
01:34:27,810 --> 01:34:25,660  
because there the atmospheric

2032  
01:34:29,550 --> 01:34:27,820  
information or the his interpretation is

2033  
01:34:32,610 --> 01:34:29,560  
not even interpretation the atmospheric

2034  
01:34:34,500 --> 01:34:32,620  
data speak for themselves but outside of

2035  
01:34:37,080 --> 01:34:34,510  
that it does it's almost like in de

2036  
01:34:41,400 --> 01:34:37,090  
stuff because it is a it is a data point

2037  
01:34:43,470 --> 01:34:41,410  
that invites you to speculate about the

2038  
01:34:46,470 --> 01:34:43,480

kind of nature or story of the universe

2039

01:34:49,170 --> 01:34:46,480

in a way that I hope people like listen

2040

01:34:52,260 --> 01:34:49,180

listen to the interview and and sit with

2041

01:34:54,960 --> 01:34:52,270

the fact that at the moment that is the

2042

01:34:57,510 --> 01:34:54,970

best hypothesis as to who did it and why

2043

01:35:00,660 --> 01:34:57,520

and so on as I said to dr. Brennan

2044

01:35:02,340 --> 01:35:00,670

because he has a a I don't want to say

2045

01:35:05,520 --> 01:35:02,350

melodramatic but his view of what

2046

01:35:07,290 --> 01:35:05,530

happened on Mars is is his own if

2047

01:35:08,670 --> 01:35:07,300

there's nothing to do with his data but

2048

01:35:10,350 --> 01:35:08,680

like that it could have been a planet of

2049

01:35:16,790 --> 01:35:10,360

pedophiles like we don't actually know

2050

01:35:19,620 --> 01:35:16,800

right yeah Sodom and Gomorrah yeah

2051  
01:35:22,590 --> 01:35:19,630  
that's the thing and once you start down

2052  
01:35:24,540 --> 01:35:22,600  
that path of a speculation there's

2053  
01:35:26,100 --> 01:35:24,550  
there's just no way into it it got about

2054  
01:35:28,500 --> 01:35:26,110  
an accident you know it could have been

2055  
01:35:30,330 --> 01:35:28,510  
a huge didn't stacks it could have been

2056  
01:35:32,280 --> 01:35:30,340  
from a kind of magical perspective I

2057  
01:35:35,250 --> 01:35:32,290  
think the destruction of Mars has

2058  
01:35:37,740 --> 01:35:35,260  
something to do with us on earth I don't

2059  
01:35:39,660 --> 01:35:37,750  
as I said to dr. Brandenburg it like as

2060  
01:35:41,280 --> 01:35:39,670  
you say oh you know the universe has

2061  
01:35:43,740 --> 01:35:41,290  
people that destroy other civilizations

2062  
01:35:45,210 --> 01:35:43,750  
in us if we would not be here if someone

2063  
01:35:47,910 --> 01:35:45,220

hadn't bombed Mars Mars would have got

2064

01:35:49,700 --> 01:35:47,920

here and we wouldn't exist so I don't

2065

01:35:51,540 --> 01:35:49,710

know how and that's my speculation

2066

01:35:58,130 --> 01:35:51,550

obviously that has nothing to do with

2067

01:35:59,490 --> 01:35:58,140

the data but it these data invite quiet

2068

01:36:01,680 --> 01:35:59,500

consideration

2069

01:36:05,730 --> 01:36:01,690

neatly followed by drinks and thrashing

2070

01:36:07,980 --> 01:36:05,740

ideas around right you talk about it you

2071

01:36:09,480 --> 01:36:07,990

can't handle the truth moment digest

2072

01:36:12,030 --> 01:36:09,490

that one that you just said you know

2073

01:36:13,710 --> 01:36:12,040

what if at the end of the day okay

2074

01:36:15,690 --> 01:36:13,720

yeah that's horrible you wouldn't be

2075

01:36:18,210 --> 01:36:15,700

here unless it happens which I don't

2076

01:36:20,580 --> 01:36:18,220

know it's just fun to speculate on that

2077

01:36:22,710 --> 01:36:20,590

so we'll kind of leave it at that the

2078

01:36:26,130 --> 01:36:22,720

one tiny bit I was going to add there is

2079

01:36:30,150 --> 01:36:26,140

that there really isn't a lot of

2080

01:36:32,310 --> 01:36:30,160

controversy around the hard data that

2081

01:36:36,240 --> 01:36:32,320

he's found in the difference of these

2082

01:36:41,160 --> 01:36:36,250

isotopes and it's so telling from a kind

2083

01:36:45,360 --> 01:36:41,170

of skeptical versus the pseudo skeptic

2084

01:36:48,090 --> 01:36:45,370

standpoint is go folks look at the

2085

01:36:50,490 --> 01:36:48,100

pseudo skeptics who attack this and see

2086

01:36:53,340 --> 01:36:50,500

if they ever attack that they don't

2087

01:36:55,760 --> 01:36:53,350

touch it they don't touch they do not

2088

01:36:58,650 --> 01:36:55,770

it's all personal attack it's all

2089

01:37:01,980 --> 01:36:58,660

sneering and giggling and all this tell

2090

01:37:05,460 --> 01:37:01,990

us about the isotopes tell us about the

2091

01:37:08,220 --> 01:37:05,470

plasma physics his interpretation that

2092

01:37:10,470 --> 01:37:08,230

remains unshaken find anyone who said

2093

01:37:11,760 --> 01:37:10,480

otherwise and accredit to him as a

2094

01:37:15,420 --> 01:37:11,770

scientist because I sort of was really

2095

01:37:18,510 --> 01:37:15,430

pulling on it going is there any even

2096

01:37:21,510 --> 01:37:18,520

sort of theoretical plasma event you

2097

01:37:23,790 --> 01:37:21,520

could think of on paper that the Sun or

2098

01:37:25,200 --> 01:37:23,800

something could do that could have

2099

01:37:28,380 --> 01:37:25,210

triggered it and it's like well it is

2100

01:37:30,390 --> 01:37:28,390

always possible but but the reality is

2101  
01:37:31,560 --> 01:37:30,400  
we have no idea how that would work we

2102  
01:37:35,970 --> 01:37:31,570  
haven't seen it anywhere else in the

2103  
01:37:38,970 --> 01:37:35,980  
universe at all as for like for our

2104  
01:37:40,320 --> 01:37:38,980  
available data the the fact that it is a

2105  
01:37:42,540 --> 01:37:40,330  
weapon signature in the Martian

2106  
01:37:44,880 --> 01:37:42,550  
atmosphere is is simply the best match

2107  
01:37:47,610 --> 01:37:44,890  
and we have our own planet the before

2108  
01:37:51,020 --> 01:37:47,620  
and after of using nuclear bombs both in

2109  
01:37:53,730 --> 01:37:51,030  
testing and in war we have that as our

2110  
01:37:56,400 --> 01:37:53,740  
you know a B test to show that this is

2111  
01:37:57,630 --> 01:37:56,410  
what a weapon signature looks like but

2112  
01:38:00,030 --> 01:37:57,640  
even at the end is like look it

2113  
01:38:02,370 --> 01:38:00,040

obviously could be where I think he's

2114

01:38:05,730 --> 01:38:02,380

correct is we'd have to leave it at that

2115

01:38:08,310 --> 01:38:05,740

we'd have to leave it at well there

2116

01:38:10,440 --> 01:38:08,320

could be a natural process that

2117

01:38:12,030 --> 01:38:10,450

generates this particular fast-moving

2118

01:38:12,609 --> 01:38:12,040

xenon 129

2119

01:38:15,639 --> 01:38:12,619

I said

2120

01:38:18,399 --> 01:38:15,649

in an atmosphere that we don't know yet

2121

01:38:22,149 --> 01:38:18,409

if it wasn't for the previous 70 years

2122

01:38:24,069 --> 01:38:22,159

of policy towards Mars so it's not a

2123

01:38:26,379 --> 01:38:24,079

it's not a data point that stands alone

2124

01:38:28,959 --> 01:38:26,389

it's a data point that you put next to

2125

01:38:32,129 --> 01:38:28,969

what we've just described and you start

2126  
01:38:34,839 --> 01:38:32,139  
to get a very interesting response

2127  
01:38:36,489 --> 01:38:34,849  
that's a great that's a great point and

2128  
01:38:39,639 --> 01:38:36,499  
I think we'll end it there

2129  
01:38:42,009 --> 01:38:39,649  
we'll do a quick cut and we'll figure

2130  
01:38:45,729 --> 01:38:42,019  
out how to incorporate this in and I

2131  
01:38:47,889 --> 01:38:45,739  
will now invite Gordon white back to

2132  
01:38:50,770 --> 01:38:47,899  
skeptic oh we've just finished up this

2133  
01:38:53,529 --> 01:38:50,780  
interview and Gordon traditionally what

2134  
01:38:55,839 --> 01:38:53,539  
I like to do is kind of throw out a

2135  
01:38:59,919 --> 01:38:55,849  
question to the audience that they might

2136  
01:39:01,899 --> 01:38:59,929  
want to wrestle around with a little bit

2137  
01:39:03,879 --> 01:39:01,909  
and I'm going to invite you on the spot

2138  
01:39:07,839 --> 01:39:03,889

I didn't ask you really to prepare for

2139

01:39:12,129 --> 01:39:07,849

this so what is one question that you

2140

01:39:14,500 --> 01:39:12,139

think we could dialogue about from this

2141

01:39:17,049 --> 01:39:14,510

interview with the skeptical audience

2142

01:39:19,299 --> 01:39:17,059

just one or two come to mind yeah I

2143

01:39:20,469 --> 01:39:19,309

think the the classic sceptical piece

2144

01:39:24,339 --> 01:39:20,479

when people have listened to the

2145

01:39:28,119 --> 01:39:24,349

interview is the role of Carl Sagan and

2146

01:39:30,129 --> 01:39:28,129

the kind of public versus background

2147

01:39:31,779 --> 01:39:30,139

science that was going on in the late

2148

01:39:33,790 --> 01:39:31,789

70s early 80s is we're kind of

2149

01:39:35,709 --> 01:39:33,800

repositioning our ideas around it that's

2150

01:39:37,239 --> 01:39:35,719

what I want people to talk about and

2151

01:39:39,609 --> 01:39:37,249

also think about the implications of the

2152

01:39:42,459 --> 01:39:39,619

fact that we rebooted his show with a

2153

01:39:45,489 --> 01:39:42,469

similar mouthpiece very recently

2154

01:39:47,739 --> 01:39:45,499

it's that media-friendly science versus

2155

01:39:49,379 --> 01:39:47,749

actual science and and and what people

2156

01:39:52,799 --> 01:39:49,389

think about that in relation to space

2157

01:39:55,419 --> 01:39:52,809

perfect so back to the agenda who's

2158

01:39:57,759 --> 01:39:55,429

writing the script who's controlling the

2159

01:40:00,069 --> 01:39:57,769

agenda that's a great question a great

2160

01:40:02,379 --> 01:40:00,079

way to leave it Gordon again thank you

2161

01:40:04,959 --> 01:40:02,389

so much for bringing us this terrific

2162

01:40:06,669 --> 01:40:04,969

interview and for sharing all these

2163

01:40:10,049 --> 01:40:06,679

thoughts that you have with us about it

2164

01:40:13,529 --> 01:40:10,059

I think it's added a real sense of

2165

01:40:16,750 --> 01:40:13,539

closure and a real sense of context to

2166

01:40:19,419 --> 01:40:16,760

everything that dr. Brandenburg said so

2167

01:40:21,639 --> 01:40:19,429

thank you so much oh you're very welcome

2168

01:40:23,080 --> 01:40:21,649

and a shout-out to dr. Brandenburg for

2169

01:40:24,790 --> 01:40:23,090

his time as well thank you very much it

2170

01:40:27,700 --> 01:40:24,800

was my pleasure

2171

01:40:30,520 --> 01:40:27,710

so there you have it not a whole lot to

2172

01:40:32,740 --> 01:40:30,530

add to that please do join me on The

2173

01:40:35,080 --> 01:40:32,750

Skeptical forum or send me a note if

2174

01:40:37,420 --> 01:40:35,090

you'd like to comment on the questions

2175

01:40:39,730 --> 01:40:37,430

that Gordon teed up from this interview

2176

01:40:41,920 --> 01:40:39,740

of course you can find out all the

2177

01:40:47,080 --> 01:40:41,930

information you would want about skeptic

2178

01:40:49,240 --> 01:40:47,090

Oh at our website ske PTI ke o calm I

2179

01:40:51,880 --> 01:40:49,250

hope you enjoyed the show if you do

2180

01:40:55,150 --> 01:40:51,890

please share it with your friends with

2181

01:40:57,430 --> 01:40:55,160

everyone else this I think is important

2182

01:41:00,700 --> 01:40:57,440

information that I don't know is out

2183

01:41:02,980 --> 01:41:00,710

there in any other way so I sure hope

2184

01:41:04,630 --> 01:41:02,990

you do take the opportunity to share

2185

01:41:07,150 --> 01:41:04,640

this with someone who might be

2186

01:41:09,910 --> 01:41:07,160

interested in it I have a number of

2187

01:41:12,850 --> 01:41:09,920

exciting shows coming up that I can't

2188

01:41:15,820 --> 01:41:12,860

wait to bring to you so do stick around