

1
00:00:06,160 --> 00:00:13,679
welcome to the skeptic zone the podcast

2
00:00:09,099 --> 00:00:13,679
from Australia for science and reason

3
00:00:22,640 --> 00:00:28,230
hello and welcome to the skeptic zone

4
00:00:25,289 --> 00:00:32,460
episode number 253 for the 25th of

5
00:00:28,230 --> 00:00:35,429
august 2013 Richard Saunders here with

6
00:00:32,460 --> 00:00:36,899
you from Sydney Australia and that

7
00:00:35,429 --> 00:00:40,009
little rattle were you heard in the

8
00:00:36,899 --> 00:00:42,929
background was Fred the cat hello Fred

9
00:00:40,009 --> 00:00:45,628
coming up on this week's show we speak

10
00:00:42,929 --> 00:00:47,820
to Julie ladder The Skeptical vet now we

11
00:00:45,628 --> 00:00:49,349
spoke to Julie a couple of years ago

12
00:00:47,820 --> 00:00:52,049
when she was living on the island of San

13
00:00:49,350 --> 00:00:54,210
kits studying to be a vet well she's

14
00:00:52,049 --> 00:00:55,529
almost there she's almost there and

15
00:00:54,210 --> 00:00:58,469
she's going to fill us in on her

16
00:00:55,530 --> 00:01:01,410
progress over the last few years has she

17
00:00:58,469 --> 00:01:02,820
encountered any whooo whooo as she

18
00:01:01,409 --> 00:01:06,090
encountered any mystical or magical

19
00:01:02,820 --> 00:01:08,759
thinking in her at training to be a vet

20
00:01:06,090 --> 00:01:10,590
find out at the top of the show after

21
00:01:08,759 --> 00:01:14,009
that it's a week in science from the

22
00:01:10,590 --> 00:01:17,189
Royal Institution of Australia and dr.

23
00:01:14,009 --> 00:01:18,629
Paul Willis week in science I wonder

24
00:01:17,189 --> 00:01:21,359
what's been happening this week in

25
00:01:18,629 --> 00:01:23,189
science and after that Maynard spooky

26
00:01:21,359 --> 00:01:26,760
action with a final of his three part

27
00:01:23,189 --> 00:01:29,759
series interviewing malo Cassetti who

28
00:01:26,760 --> 00:01:32,580
worked for NASA for many years mala is

29

00:01:29,760 --> 00:01:34,920
going to give his thoughts on the

30
00:01:32,579 --> 00:01:37,829
so-called moon landing hoax and boy does

31
00:01:34,920 --> 00:01:40,920
he have a zinger a real zinger as to why

32
00:01:37,829 --> 00:01:43,469
the moon landing almost certainly

33
00:01:40,920 --> 00:01:48,180
happened and to round off the show we

34
00:01:43,469 --> 00:01:50,969
can have the audio of a video tribute to

35
00:01:48,180 --> 00:01:54,450
dr. Eugenie Scott now dr. Scott was

36
00:01:50,969 --> 00:01:57,298
inducted into the iig the independent

37
00:01:54,450 --> 00:02:01,890
investigations groups Hall of Fame in

38
00:01:57,299 --> 00:02:06,000
Hollywood California not so long ago and

39
00:02:01,890 --> 00:02:09,030
we must think I IG and John rail for the

40
00:02:06,000 --> 00:02:11,159
use of this this audio clip at the end

41
00:02:09,030 --> 00:02:14,549
of the show you'll be hearing about

42
00:02:11,159 --> 00:02:16,049
Eugenie Scott and I've noticed I've been

43
00:02:14,549 --> 00:02:19,500

looking at the calendar and I've noticed

44

00:02:16,049 --> 00:02:22,799

that next week the skeptic zone turns

45

00:02:19,500 --> 00:02:24,569

five years old I can't believe it five

46

00:02:22,799 --> 00:02:26,159

years old five years ago the skeptic

47

00:02:24,569 --> 00:02:28,370

zone was launched at dragoncon in

48

00:02:26,159 --> 00:02:30,659

Atlanta Georgia sorry I can't be there

49

00:02:28,370 --> 00:02:32,159

this year would be fun to be there for

50

00:02:30,659 --> 00:02:33,060

the fifth anniversary of the skeptic

51

00:02:32,159 --> 00:02:35,250

zone

52

00:02:33,060 --> 00:02:36,840

and I think the only reason the skeptic

53

00:02:35,250 --> 00:02:38,449

zone has been going for so long is

54

00:02:36,840 --> 00:02:41,159

because of the very generous

55

00:02:38,449 --> 00:02:43,229

contributions by listeners just like you

56

00:02:41,159 --> 00:02:45,180

if you want to chip in for the skeptic

57

00:02:43,229 --> 00:02:50,250

zone only cost out less than a dollar a

58
00:02:45,180 --> 00:02:52,860
week head to www skeptic zone TV and you

59
00:02:50,250 --> 00:02:55,019
too can chip in to help the skeptic zone

60
00:02:52,860 --> 00:02:57,269
carry on now it's come to my attention

61
00:02:55,019 --> 00:02:59,519
that one of my favorite shows from when

62
00:02:57,269 --> 00:03:01,260
I was growing up the curiosity show and

63
00:02:59,519 --> 00:03:03,659
I'm sure many of my Australian listeners

64
00:03:01,259 --> 00:03:06,810
will remember the curiosity show you can

65
00:03:03,659 --> 00:03:09,479
now seem a lot of the curiosity show on

66
00:03:06,810 --> 00:03:11,280
YouTube in fact the curiosity show has

67
00:03:09,479 --> 00:03:14,459
its own YouTube channel go to youtube

68
00:03:11,280 --> 00:03:16,620
and then curiosity show one word and

69
00:03:14,459 --> 00:03:20,489
you'll find out more or you could look

70
00:03:16,620 --> 00:03:22,469
at the show notes for this episode the

71
00:03:20,489 --> 00:03:25,620
curiosity show what a great show that

72
00:03:22,469 --> 00:03:27,780
was and you can even buy the DVD set

73
00:03:25,620 --> 00:03:30,719
from the curiosity show I thoroughly

74
00:03:27,780 --> 00:03:33,780
recommend it and coming up soon for

75
00:03:30,719 --> 00:03:37,349
those people in victoria in melbourne

76
00:03:33,780 --> 00:03:40,019
and down on the peninsula there i'll be

77
00:03:37,349 --> 00:03:45,169
speaking at the maury alec sporting club

78
00:03:40,019 --> 00:03:49,019
on tuesday the third of sep tember from

79
00:03:45,169 --> 00:03:51,988
730 p.m. and if you want to attend my

80
00:03:49,019 --> 00:03:54,450
talk looking into the mind of the true

81
00:03:51,989 --> 00:03:56,579
believers are the best thing to do would

82
00:03:54,449 --> 00:03:59,099
be to go to the australian skeptics

83
00:03:56,579 --> 00:04:01,439
website skeptics calm today you and

84
00:03:59,099 --> 00:04:04,409
click the link for Richard Saunders talk

85
00:04:01,439 --> 00:04:07,199
how you have to sort of go through the

86

00:04:04,409 --> 00:04:09,568
meetup page and get your tickets that

87
00:04:07,199 --> 00:04:11,399
way it's only four dollars and I might

88
00:04:09,568 --> 00:04:13,828
even go myself I've always wanted to

89
00:04:11,400 --> 00:04:16,530
hear this this guy talk anyway more

90
00:04:13,829 --> 00:04:19,829
information at skeptics calm da to you

91
00:04:16,529 --> 00:04:23,189
and for sydney people stayed tuned stay

92
00:04:19,829 --> 00:04:25,110
tuned on the skeptics website the

93
00:04:23,189 --> 00:04:28,620
australian skeptics website for news

94
00:04:25,110 --> 00:04:31,740
about an upcoming visit from dr. pamela

95
00:04:28,620 --> 00:04:34,350
gay we hope to have details very soon a

96
00:04:31,740 --> 00:04:37,288
visit by dr. pamela gay the wonderful

97
00:04:34,350 --> 00:04:40,500
famous astronomer all right well it's

98
00:04:37,288 --> 00:04:42,719
time for me to run downstairs run

99
00:04:40,500 --> 00:04:44,779
downstairs open up the pantry and look

100
00:04:42,720 --> 00:04:49,860

for

101

00:04:44,779 --> 00:04:52,349

tuna curry oh yes tuna curry I can I can

102

00:04:49,860 --> 00:05:11,699

taste it now all I do that I hope you

103

00:04:52,350 --> 00:05:14,129

enjoy the skeptic zone and joining me

104

00:05:11,699 --> 00:05:17,069

now all the way from beautiful Illinois

105

00:05:14,129 --> 00:05:20,879

a state that I am I must visit one day

106

00:05:17,069 --> 00:05:24,360

it's our old friend the skeptical vet we

107

00:05:20,879 --> 00:05:26,189

might say Julie ladder hello Julie ah hi

108

00:05:24,360 --> 00:05:27,689

now it's been a while since we've spoken

109

00:05:26,189 --> 00:05:30,060

to on the skeptic zone and I think the

110

00:05:27,689 --> 00:05:34,170

last time I spoke to you you are in that

111

00:05:30,060 --> 00:05:37,709

romantic paradise of some kids how did

112

00:05:34,170 --> 00:05:40,590

that all go that went beautifully and I

113

00:05:37,709 --> 00:05:43,139

miss it terribly it's weird when you get

114

00:05:40,589 --> 00:05:47,009

homesick for an island that you lived on

115
00:05:43,139 --> 00:05:48,418
for two and a half years but I am well I

116
00:05:47,009 --> 00:05:50,399
remember seeing some of the photographs

117
00:05:48,418 --> 00:05:52,620
you are posting from some kids that did

118
00:05:50,399 --> 00:05:54,389
look like a tropical paradise with you

119
00:05:52,620 --> 00:05:57,899
and many a swimming pool I seem to

120
00:05:54,389 --> 00:06:00,719
remember flying Paula ocean yeah this

121
00:05:57,899 --> 00:06:03,870
Oliver now of course you went to some

122
00:06:00,720 --> 00:06:07,110
kids to do to follow your dream I guess

123
00:06:03,870 --> 00:06:10,110
it was which is to become a vet and I

124
00:06:07,110 --> 00:06:12,030
understand quite a lot of people do a

125
00:06:10,110 --> 00:06:13,710
similar sort of thing some kids is quite

126
00:06:12,029 --> 00:06:15,299
famous for its veterinary students I

127
00:06:13,709 --> 00:06:18,149
understand yeah wrath students are

128
00:06:15,300 --> 00:06:20,730
really well known we particularly tend

129
00:06:18,149 --> 00:06:22,859
to perform very well in clinics so we do

130
00:06:20,730 --> 00:06:25,800
the three years of our kind of lecture

131
00:06:22,860 --> 00:06:28,500
based didactic learning and then we do a

132
00:06:25,800 --> 00:06:30,629
year of clinical education and we're

133
00:06:28,500 --> 00:06:35,069
pretty well known for for rocking

134
00:06:30,629 --> 00:06:36,990
clinics so far that that's been my

135
00:06:35,069 --> 00:06:41,519
experience I've been doing fairly well

136
00:06:36,990 --> 00:06:43,650
and in my clinical rotations and I was

137
00:06:41,519 --> 00:06:48,060
really scared when I started that I was

138
00:06:43,649 --> 00:06:50,609
going to be kind of shown up by the by

139
00:06:48,060 --> 00:06:53,339
the Illinois students and made to look a

140
00:06:50,610 --> 00:06:55,680
fool but no I'm keeping up fairly well

141
00:06:53,339 --> 00:06:58,689
and holding up my end so

142
00:06:55,680 --> 00:07:00,400
turned out well so this is your fourth

143

00:06:58,689 --> 00:07:02,709
year now you're a fourth-year vetri

144
00:07:00,399 --> 00:07:04,779
student you must have had something

145
00:07:02,709 --> 00:07:06,668
interesting experiences to say the least

146
00:07:04,779 --> 00:07:09,399
along the way in those that in those

147
00:07:06,668 --> 00:07:12,969
years looking at all sorts of animals

148
00:07:09,399 --> 00:07:16,659
yeah one of the really cool things being

149
00:07:12,970 --> 00:07:18,850
done in st. Kitts is um Ross had a kind

150
00:07:16,660 --> 00:07:21,160
of partnership with the local farmers

151
00:07:18,850 --> 00:07:22,960
they have a breed of sheep down there

152
00:07:21,160 --> 00:07:24,699
called the Barbados black-bellied sheep

153
00:07:22,959 --> 00:07:27,779
and the hair sheet instead of a wool

154
00:07:24,699 --> 00:07:30,069
sheet so they're produced for meat and

155
00:07:27,779 --> 00:07:32,349
we had a farmer that we would partner

156
00:07:30,069 --> 00:07:35,978
with where we would take a herd of his

157
00:07:32,350 --> 00:07:38,080

sheep for a semester and we would do

158

00:07:35,978 --> 00:07:40,269

very very minor procedures on them and

159

00:07:38,079 --> 00:07:42,969

then during that time we were also

160

00:07:40,269 --> 00:07:44,918

feeding them and getting them fat and so

161

00:07:42,970 --> 00:07:46,510

it is kind of an exchange where will

162

00:07:44,918 --> 00:07:48,129

fatten up your sheep if you'll let our

163

00:07:46,509 --> 00:07:49,509

students practice on them and then you

164

00:07:48,129 --> 00:07:52,709

can have them back before they go to

165

00:07:49,509 --> 00:07:55,709

slaughter so it's actually really cool

166

00:07:52,709 --> 00:07:59,228

kind of arrangement they have going on

167

00:07:55,709 --> 00:08:02,379

see it seems like it's a mutually

168

00:07:59,228 --> 00:08:05,579

beneficial arrangement yeah it was kind

169

00:08:02,379 --> 00:08:10,750

of sad because you know we named her she

170

00:08:05,579 --> 00:08:12,250

it was Carl oh he came whenever he saw

171

00:08:10,750 --> 00:08:14,829

us we just say his name and he come

172

00:08:12,250 --> 00:08:16,629

running over to us and it was kind of

173

00:08:14,829 --> 00:08:22,120

like having a little dog that you know

174

00:08:16,629 --> 00:08:23,769

is gonna become mutton nobody well to be

175

00:08:22,120 --> 00:08:26,560

indelicate yeah you're absolutely right

176

00:08:23,769 --> 00:08:29,889

i guess that's uh that's what was coming

177

00:08:26,560 --> 00:08:32,229

that was gonna be happening now what

178

00:08:29,889 --> 00:08:34,330

about other animals let's think about

179

00:08:32,229 --> 00:08:36,158

the more the more common animals you

180

00:08:34,330 --> 00:08:38,589

dissociate with a vet in a city for

181

00:08:36,158 --> 00:08:40,990

example cats and dogs and rabbits and

182

00:08:38,589 --> 00:08:42,190

budgies and parrots and all that sort of

183

00:08:40,990 --> 00:08:46,209

thing how do you get on with those

184

00:08:42,190 --> 00:08:48,730

animals I I get along with them very

185

00:08:46,208 --> 00:08:52,088

very well I have three cats of my own

186
00:08:48,730 --> 00:08:54,550
and I grew up with dogs I love exotics I

187
00:08:52,089 --> 00:08:57,250
have a leopard gecko I used to own rat i

188
00:08:54,549 --> 00:09:00,759
fostered for an exotic rescue for seven

189
00:08:57,250 --> 00:09:03,909
years so I've had every kind of lizard

190
00:09:00,759 --> 00:09:05,769
snake creepy crawly thing through my

191
00:09:03,909 --> 00:09:07,870
house that you can think of except for

192
00:09:05,769 --> 00:09:10,929
spiders because my husband would never

193
00:09:07,870 --> 00:09:12,519
come down off the furniture and I get

194
00:09:10,929 --> 00:09:14,349
along with pretty much everything that's

195
00:09:12,519 --> 00:09:18,490
that well I guess you have to if you

196
00:09:14,350 --> 00:09:20,170
really do want to be a vet you wouldn't

197
00:09:18,490 --> 00:09:21,460
want to have a phobia against animals

198
00:09:20,169 --> 00:09:23,949
that's for sure well there are some

199
00:09:21,460 --> 00:09:26,050
people who really don't like certain

200

00:09:23,950 --> 00:09:27,490
species and they have that option that

201
00:09:26,049 --> 00:09:29,289
they never have to practice on them

202
00:09:27,490 --> 00:09:30,730
after vespoli you do have to kind of

203
00:09:29,289 --> 00:09:31,778
have to be a jack of all trades while

204
00:09:30,730 --> 00:09:35,920
you're into that school and do

205
00:09:31,778 --> 00:09:37,870
everything but after that's cool you can

206
00:09:35,919 --> 00:09:39,639
go I'm only going to do cats and there

207
00:09:37,870 --> 00:09:41,500
are people who do feel I'd only practice

208
00:09:39,639 --> 00:09:43,838
or equine only practice and all they see

209
00:09:41,500 --> 00:09:46,659
is horses so you have that option once

210
00:09:43,839 --> 00:09:48,400
you graduate I'm glad to hear it I think

211
00:09:46,659 --> 00:09:50,799
I'd have to specialize on gets

212
00:09:48,399 --> 00:09:53,980
myself I'm quite attached to the ones to

213
00:09:50,799 --> 00:09:57,849
run around this house yeah that's a

214
00:09:53,980 --> 00:09:59,350

little limited for me what's your

215

00:09:57,850 --> 00:10:02,350

favorite animal then of all the animals

216

00:09:59,350 --> 00:10:05,019

that you've dealt with examined looked

217

00:10:02,350 --> 00:10:06,550

at pushed prodded and probed do you have

218

00:10:05,019 --> 00:10:09,009

one that you particularly like or you

219

00:10:06,549 --> 00:10:11,289

particularly like to treat I love rats

220

00:10:09,009 --> 00:10:14,019

right so in some they're like little

221

00:10:11,289 --> 00:10:15,939

dogs I just love them I can't have them

222

00:10:14,019 --> 00:10:19,088

unfortunately my husband's really really

223

00:10:15,940 --> 00:10:21,900

really allergic oh yeah we found that

224

00:10:19,089 --> 00:10:25,060

out when he moved in with me engaged

225

00:10:21,899 --> 00:10:28,000

with a HEPA filter and an extra bedroom

226

00:10:25,059 --> 00:10:32,859

we managed to make it work for until

227

00:10:28,000 --> 00:10:38,110

they they went on their way but I love

228

00:10:32,860 --> 00:10:39,909

rats i really like lizards I have a

229
00:10:38,110 --> 00:10:42,250
leopard gecko tattooed on my foot so I'd

230
00:10:39,909 --> 00:10:44,528
better like them and cats I'm gonna have

231
00:10:42,250 --> 00:10:47,440
three cats so obviously I really like

232
00:10:44,528 --> 00:10:49,570
that and has it been um much what you

233
00:10:47,440 --> 00:10:52,029
would expect when you started on this

234
00:10:49,570 --> 00:10:53,800
amazing adventure to become a vet or has

235
00:10:52,028 --> 00:10:55,360
the study being more arduous oh it's

236
00:10:53,799 --> 00:10:58,629
been much more difficult than you would

237
00:10:55,360 --> 00:11:02,139
have imagined oh my goodness I never

238
00:10:58,629 --> 00:11:06,039
anticipated my wildest dreams that it

239
00:11:02,139 --> 00:11:08,740
would be this difficult especially the

240
00:11:06,039 --> 00:11:11,319
subjects like virology where you know

241
00:11:08,740 --> 00:11:14,889
human virology you're studying human

242
00:11:11,320 --> 00:11:17,950
virology it's one species and there's

243
00:11:14,889 --> 00:11:20,299
obviously a number of viruses that we

244
00:11:17,950 --> 00:11:23,300
can become infected with and good

245
00:11:20,299 --> 00:11:25,759
sick but when you compare that to all

246
00:11:23,299 --> 00:11:27,679
the viruses that a dog can get a cat can

247
00:11:25,759 --> 00:11:30,919
get a horse can get a cow can get so

248
00:11:27,679 --> 00:11:34,219
just across the board it's so intense

249
00:11:30,919 --> 00:11:35,719
and it's so difficult I don't know how

250
00:11:34,220 --> 00:11:39,889
to describe it other than is very

251
00:11:35,720 --> 00:11:41,990
arduous and scary Wow would it be easier

252
00:11:39,889 --> 00:11:43,730
just to become a human doctor I don't

253
00:11:41,990 --> 00:11:46,759
want to say that I won't say that you

254
00:11:43,730 --> 00:11:49,580
know we could have this this joking kind

255
00:11:46,759 --> 00:11:51,319
of uh we did we give each other a hard

256
00:11:49,580 --> 00:11:52,700
time MDS and deviouz we kind of give

257

00:11:51,320 --> 00:11:54,680
each other a hard time when we're in

258
00:11:52,700 --> 00:11:55,759
school at least I don't know about once

259
00:11:54,679 --> 00:11:58,309
you're out in the world you're actually

260
00:11:55,759 --> 00:12:00,080
practicing but you know there's this

261
00:11:58,309 --> 00:12:02,929
thing that we like to say in that bed

262
00:12:00,080 --> 00:12:08,000
where reveal we say real doctors treat

263
00:12:02,929 --> 00:12:09,769
more than one species so yeah this is

264
00:12:08,000 --> 00:12:11,570
good natured it's all in good fun but

265
00:12:09,769 --> 00:12:14,210
yeah we do kind of like to give them

266
00:12:11,570 --> 00:12:16,340
everything every once in a while now what

267
00:12:14,210 --> 00:12:18,650
I and we might have discussed this a

268
00:12:16,340 --> 00:12:20,960
couple of years ago but and of course

269
00:12:18,649 --> 00:12:22,909
you had a couple more years since then

270
00:12:20,960 --> 00:12:26,480
both instant kitchen where you are at

271
00:12:22,909 --> 00:12:28,189

the moment what whoo for lack of a

272

00:12:26,480 --> 00:12:31,550

better word have you come across in your

273

00:12:28,190 --> 00:12:37,640

work or superstitions or misconceptions

274

00:12:31,549 --> 00:12:39,500

oh so I know last time I was on the show

275

00:12:37,639 --> 00:12:43,100

we talked about applied kinesiology and

276

00:12:39,500 --> 00:12:48,350

my experiences with that so that was

277

00:12:43,100 --> 00:12:51,889

definitely new tastic but the crazy

278

00:12:48,350 --> 00:12:57,379

thing about that med is that there it's

279

00:12:51,889 --> 00:13:00,970

very accepted right and acupuncture and

280

00:12:57,379 --> 00:13:03,200

chiropractic are huge in that med and

281

00:13:00,970 --> 00:13:06,170

it's been kind of an interesting

282

00:13:03,200 --> 00:13:08,420

experience for me because if you're

283

00:13:06,169 --> 00:13:10,729

skeptical of those things and your

284

00:13:08,419 --> 00:13:12,979

critical of those things you kind of

285

00:13:10,730 --> 00:13:19,340

automatically get labeled as inflexible

286
00:13:12,980 --> 00:13:21,350
and a bit of a hard notes and I've

287
00:13:19,340 --> 00:13:23,570
always considered myself a very pleasant

288
00:13:21,350 --> 00:13:26,750
nice person but I I developed a bit of a

289
00:13:23,570 --> 00:13:31,070
reputation and I just found out recently

290
00:13:26,750 --> 00:13:32,419
so yeah we go we go to ross for two and

291
00:13:31,070 --> 00:13:34,240
a half years on the island and then we

292
00:13:32,419 --> 00:13:36,828
come here for a year

293
00:13:34,240 --> 00:13:38,659
you get paired up with people who you

294
00:13:36,828 --> 00:13:41,689
weren't necessarily like super close

295
00:13:38,659 --> 00:13:44,539
with in your class 2 and so the five of

296
00:13:41,690 --> 00:13:46,250
us came here and one of whom was someone

297
00:13:44,539 --> 00:13:49,939
who I knew but I didn't know very well

298
00:13:46,250 --> 00:13:51,320
and she told me that she never really

299
00:13:49,940 --> 00:13:53,149
got to know me while we were in st.

300
00:13:51,320 --> 00:13:55,459
Kitts even though we sort of ran in the

301
00:13:53,149 --> 00:13:58,730
same circles because she was afraid of

302
00:13:55,458 --> 00:14:00,138
me wow I can't imagine that Julie you're

303
00:13:58,730 --> 00:14:01,909
such a lovely person I'm just trying to

304
00:14:00,139 --> 00:14:05,778
imagine that I was pretty shocked too

305
00:14:01,909 --> 00:14:09,708
like I didn't think I was scary and it's

306
00:14:05,778 --> 00:14:12,919
because she's a witch she does believe

307
00:14:09,708 --> 00:14:20,479
in acupuncture and she's a reiki array

308
00:14:12,919 --> 00:14:22,969
key idea idea idea I see ya I she's a

309
00:14:20,480 --> 00:14:26,060
lovely girl and I really like her and we

310
00:14:22,970 --> 00:14:28,699
get along and we coded dinner and out to

311
00:14:26,059 --> 00:14:31,278
drinks off time and so we get along just

312
00:14:28,698 --> 00:14:34,759
fine I think she was afraid I was gonna

313
00:14:31,278 --> 00:14:36,379
bite her head off and you know if the

314

00:14:34,759 --> 00:14:37,970
professional Curtis day thing where you

315
00:14:36,379 --> 00:14:39,320
kinda have to go okay well I don't

316
00:14:37,970 --> 00:14:41,778
believe in this I'm not really going to

317
00:14:39,320 --> 00:14:44,990
budge on that I'm not going to pretend

318
00:14:41,778 --> 00:14:48,230
I'm okay with it for your comfort but

319
00:14:44,990 --> 00:14:50,299
I'm not gonna sit there and harass you

320
00:14:48,230 --> 00:14:52,399
about it either I'm not gonna change

321
00:14:50,299 --> 00:14:53,509
your mind by yelling at you I think

322
00:14:52,399 --> 00:14:55,909
that's the right attitude to have

323
00:14:53,509 --> 00:14:58,278
because you weren't but absolutely not

324
00:14:55,909 --> 00:14:59,929
but yeah Reiki I haven't heard of but

325
00:14:58,278 --> 00:15:02,509
I'm not surprised that some people out

326
00:14:59,929 --> 00:15:05,059
there using it for pets even the local

327
00:15:02,509 --> 00:15:08,360
the vet local to me just around the

328
00:15:05,059 --> 00:15:09,919

corner which my cats go to there's

329

00:15:08,360 --> 00:15:13,329

a sign they're saying acupuncture

330

00:15:09,919 --> 00:15:15,889

available and I made the mistake of once

331

00:15:13,328 --> 00:15:17,838

questioning that to a vet who was there

332

00:15:15,889 --> 00:15:20,149

and yeah they didn't they didn't they

333

00:15:17,839 --> 00:15:22,910

weren't very impressed but still you

334

00:15:20,149 --> 00:15:24,970

know there's a point where I guess even

335

00:15:22,909 --> 00:15:28,338

the skeptics he just gotta let things

336

00:15:24,970 --> 00:15:30,110

slide a little bit bite your tongue well

337

00:15:28,339 --> 00:15:35,120

we did have a conversation just the

338

00:15:30,110 --> 00:15:38,329

other night actually about she is very

339

00:15:35,120 --> 00:15:41,000

much the sort of that who is going to

340

00:15:38,328 --> 00:15:42,049

offer traditional I don't want say

341

00:15:41,000 --> 00:15:44,399

traditional because then you get into

342

00:15:42,049 --> 00:15:47,409

traditional Chinese medicine

343
00:15:44,399 --> 00:15:49,958
evidence-based medicine what she's going

344
00:15:47,409 --> 00:15:54,338
to practice the best standard of care as

345
00:15:49,958 --> 00:15:57,428
far as our current scientific knowledge

346
00:15:54,339 --> 00:16:01,569
is concerned and she's also going to

347
00:15:57,428 --> 00:16:05,198
offer these other services so I couldn't

348
00:16:01,568 --> 00:16:08,048
really I do have a concern if it's a

349
00:16:05,198 --> 00:16:10,899
monetary issue money comes up a lot in

350
00:16:08,048 --> 00:16:12,938
vet med where the owners say I have X

351
00:16:10,899 --> 00:16:14,948
amount of dollars to spend or I'm tapped

352
00:16:12,938 --> 00:16:17,409
out we can't do any more this is the end

353
00:16:14,948 --> 00:16:19,178
of the road and they might reach that

354
00:16:17,409 --> 00:16:23,528
point sooner if they're spending money

355
00:16:19,178 --> 00:16:27,548
on acupuncture as well as antibiotics so

356
00:16:23,528 --> 00:16:30,338
I kind of have an issue with it but as

357
00:16:27,548 --> 00:16:33,999
long as she's willing to offer best

358
00:16:30,339 --> 00:16:35,949
practices first as a first line of

359
00:16:33,999 --> 00:16:38,619
treatment and then this is a kind of

360
00:16:35,948 --> 00:16:41,139
adjunct then I have less of a problem

361
00:16:38,619 --> 00:16:44,019
with it an interesting dilemma and I'm

362
00:16:41,139 --> 00:16:47,288
sure you're going to follow I find this

363
00:16:44,019 --> 00:16:48,778
rather throughout your career yeah and

364
00:16:47,288 --> 00:16:51,038
you gotta have to choose your battles

365
00:16:48,778 --> 00:16:54,188
yes that's a very good point you will

366
00:16:51,038 --> 00:16:56,828
have to choose your battles now I you've

367
00:16:54,188 --> 00:16:58,629
put it in my mind the image of poor

368
00:16:56,828 --> 00:17:00,668
little cat there on the examining table

369
00:16:58,629 --> 00:17:02,470
and somebody waving their hands

370
00:17:00,668 --> 00:17:06,429
channeling the Reiki energy into the

371

00:17:02,470 --> 00:17:10,240
skin to the cat oh dear and kept looking

372
00:17:06,429 --> 00:17:15,129
up going what are you doing all cats are

373
00:17:10,240 --> 00:17:16,899
skeptical by nature I think very much sir

374
00:17:15,128 --> 00:17:19,808
they're skeptical about you they're

375
00:17:16,898 --> 00:17:22,298
skeptical of their new food pretty much

376
00:17:19,808 --> 00:17:24,428
everything I think you're right now how

377
00:17:22,298 --> 00:17:26,658
long to go before you get that magic

378
00:17:24,429 --> 00:17:29,028
certificate all the room

379
00:17:26,659 --> 00:17:32,960
what if it gets out of there not very

380
00:17:29,028 --> 00:17:35,989
sure i am going to be taking my nav Lee

381
00:17:32,960 --> 00:17:39,679
Oh Lord let me see if I can remember

382
00:17:35,989 --> 00:17:41,808
north american veterinary licensing exam

383
00:17:39,679 --> 00:17:43,759
be sure that because the first i thought

384
00:17:41,808 --> 00:17:46,519
was like national american and that made

385
00:17:43,759 --> 00:17:49,999

no sense um I believe is north american

386

00:17:46,519 --> 00:17:53,269

veterinary lighting singing exam and I'm

387

00:17:49,999 --> 00:17:56,269

taking that in November so coming up

388

00:17:53,269 --> 00:18:01,220

very soon it's about 600 multiple choice

389

00:17:56,269 --> 00:18:05,149

questions a very very long exam covering

390

00:18:01,220 --> 00:18:07,058

dog cat horse cow and some of your

391

00:18:05,148 --> 00:18:11,648

exotic species like birds and reptiles

392

00:18:07,058 --> 00:18:14,058

it's the it's pretty intense it's

393

00:18:11,648 --> 00:18:18,768

pass/fail you become a doctor you don't

394

00:18:14,058 --> 00:18:20,028

and wow that's exciting but what are you

395

00:18:18,769 --> 00:18:26,919

doing talking to me you should be

396

00:18:20,028 --> 00:18:31,608

studying yeah I bought like an online

397

00:18:26,919 --> 00:18:35,528

mock exam I think that you can use I

398

00:18:31,608 --> 00:18:38,118

bought a couple of review books and just

399

00:18:35,528 --> 00:18:40,669

going to be crunch time from now until

400
00:18:38,118 --> 00:18:42,738
November well that's great you know what

401
00:18:40,669 --> 00:18:45,590
Julie I think in the future the way

402
00:18:42,739 --> 00:18:46,940
technology is going when a couple of

403
00:18:45,589 --> 00:18:48,858
years down the track i'll be able to

404
00:18:46,940 --> 00:18:50,929
have a consultation with you for my

405
00:18:48,858 --> 00:18:53,028
cats or whatever animal i have all

406
00:18:50,929 --> 00:18:54,830
virtual i'll put the cat there and

407
00:18:53,028 --> 00:18:56,269
you'll see it on your virtual screen and

408
00:18:54,829 --> 00:18:58,249
you'll be able to recommend the best

409
00:18:56,269 --> 00:19:00,710
best treatment for it I've looked

410
00:18:58,249 --> 00:19:03,048
forward about it oh no the physical exam

411
00:19:00,710 --> 00:19:06,019
is key you've got to get your hands on

412
00:19:03,048 --> 00:19:09,259
the animal doesn't work that way do you

413
00:19:06,019 --> 00:19:10,700
enjoy just interacting with animals I

414
00:19:09,259 --> 00:19:15,470
think you must be the sort of person who

415
00:19:10,700 --> 00:19:18,710
would yeah it's funny because it never

416
00:19:15,470 --> 00:19:20,450
wears off you know every little girl

417
00:19:18,710 --> 00:19:22,369
wants to be a veterinarian which is it

418
00:19:20,450 --> 00:19:24,470
when she's young you should just like

419
00:19:22,368 --> 00:19:26,089
the horsies and the kitties and you know

420
00:19:24,470 --> 00:19:29,028
you kind of lose your mind and that

421
00:19:26,089 --> 00:19:32,178
never goes away you know I still to this

422
00:19:29,028 --> 00:19:34,759
day if I see a horse all school run up

423
00:19:32,179 --> 00:19:36,259
and start cutting it and I still

424
00:19:34,759 --> 00:19:37,430
devolved into like an eight-year-old

425
00:19:36,259 --> 00:19:40,069
little girl

426
00:19:37,430 --> 00:19:42,710
I'm not surprised well look Julie I'm I

427
00:19:40,069 --> 00:19:45,409
don't know whether to wish you luck or

428

00:19:42,710 --> 00:19:48,019
not in a couple of months I don't think

429
00:19:45,410 --> 00:19:49,580
you'll need it I think that I think

430
00:19:48,019 --> 00:19:51,289
you'll be a splendid vet and I look

431
00:19:49,579 --> 00:19:53,960
forward to chatting to you afterwards

432
00:19:51,289 --> 00:19:55,909
maybe and maybe this time next year and

433
00:19:53,960 --> 00:19:59,539
we can catch up and see how you're going

434
00:19:55,910 --> 00:20:02,300
yeah sure well Julie look I'm so pleased

435
00:19:59,539 --> 00:20:04,629
that you have taken up this path in life

436
00:20:02,299 --> 00:20:07,430
because I think it's wonderful that

437
00:20:04,630 --> 00:20:08,930
bright people like you follow medicine

438
00:20:07,430 --> 00:20:12,590
and veteran medicine that's just

439
00:20:08,930 --> 00:20:14,269
fantastic evidence-based and you'll be

440
00:20:12,589 --> 00:20:16,609
able to help out a lot of people and a

441
00:20:14,269 --> 00:20:28,069
lot of animals so Julie letter thank you

442
00:20:16,609 --> 00:20:30,919

very much thank you here's a message

443

00:20:28,069 --> 00:20:33,649
from our friends at 60 second science

444

00:20:30,920 --> 00:20:35,509
the wonderful outreach opportunity

445

00:20:33,650 --> 00:20:38,180
getting students and others to make

446

00:20:35,509 --> 00:20:41,029
science documentaries all in 60 seconds

447

00:20:38,180 --> 00:20:43,789
60 second science is interested in

448

00:20:41,029 --> 00:20:45,319
getting more teachers involved in places

449

00:20:43,789 --> 00:20:49,069
like Canada the United States United

450

00:20:45,319 --> 00:20:50,599
Kingdom anywhere really if you're a

451

00:20:49,069 --> 00:20:52,669
teacher and you want to become involved

452

00:20:50,599 --> 00:20:55,609
in helping to spread science on the

453

00:20:52,670 --> 00:20:57,350
internet Google 60-second science have a

454

00:20:55,609 --> 00:21:00,559
look at some of the entries and maybe

455

00:20:57,349 --> 00:21:03,369
get your school board interested in this

456

00:21:00,559 --> 00:21:03,369
wonderful idea

457
00:21:06,119 --> 00:21:10,719
welcome to a week in science from our

458
00:21:08,950 --> 00:21:13,900
iOS bringing you the science museum

459
00:21:10,720 --> 00:21:16,600
needs a no this week in science saw a

460
00:21:13,900 --> 00:21:28,750
closer look at paper pulp howling wolves

461
00:21:16,599 --> 00:21:31,089
and what's this noise can the

462
00:21:28,750 --> 00:21:33,490
twinkle-twinkle of little stars really

463
00:21:31,089 --> 00:21:35,740
tell us what they are nature this week

464
00:21:33,490 --> 00:21:37,480
reported that the flicker of stars can

465
00:21:35,740 --> 00:21:40,299
be used to measure gravity at its

466
00:21:37,480 --> 00:21:43,029
surface in turn this information can be

467
00:21:40,299 --> 00:21:46,149
used to determine how big and how old

468
00:21:43,029 --> 00:21:49,149
the star is the flickers have also been

469
00:21:46,150 --> 00:21:53,670
converted to sound so you can hear what

470
00:21:49,150 --> 00:21:53,670
a star looks like let's have a listen

471
00:21:58,680 --> 00:22:07,299
why do wolves howl researchers looked at

472
00:22:05,170 --> 00:22:09,070
the social structure of wolf packs and

473
00:22:07,299 --> 00:22:11,919
measured levels of the stress hormone

474
00:22:09,069 --> 00:22:14,169
cortisol when an individual was removed

475
00:22:11,920 --> 00:22:16,420
from the pack they observed the howling

476
00:22:14,170 --> 00:22:18,730
of the Wolves left behind they found

477
00:22:16,420 --> 00:22:20,500
that wolves howl more if they have a

478
00:22:18,730 --> 00:22:23,140
strong relationship with the removed

479
00:22:20,500 --> 00:22:25,630
pack member but that it did not relate

480
00:22:23,140 --> 00:22:27,610
to their stress levels this indicates

481
00:22:25,630 --> 00:22:30,190
that howling is not a simple stress

482
00:22:27,609 --> 00:22:32,439
response but may be used more to

483
00:22:30,190 --> 00:22:34,840
communicate with the missing pack member

484
00:22:32,440 --> 00:22:37,240
you're listening to a week in science

485

00:22:34,839 --> 00:22:41,799
from our iOS are now for science

486
00:22:37,240 --> 00:22:44,079
headlines in 30 seconds a closer look at

487
00:22:41,799 --> 00:22:46,659
paper pulp reveals why it sticks

488
00:22:44,079 --> 00:22:49,059
together and how to reduce the materials

489
00:22:46,660 --> 00:22:51,009
and energy needed to produce a middle

490
00:22:49,059 --> 00:22:53,500
aged people with narrowed arteries who

491
00:22:51,009 --> 00:22:56,079
have had the flu jab have almost half

492
00:22:53,500 --> 00:22:58,089
the risk of heart attack floods due to

493
00:22:56,079 --> 00:23:00,099
climate change in coastal cities will

494
00:22:58,089 --> 00:23:03,730
cost at least one trillion dollars

495
00:23:00,099 --> 00:23:06,699
annually by 2050 and what you see is

496
00:23:03,730 --> 00:23:08,529
what you get we rely more on visual

497
00:23:06,700 --> 00:23:12,160
information when judging a musical

498
00:23:08,529 --> 00:23:13,779
performance than sound it's been a big

499
00:23:12,160 --> 00:23:15,340

week in science policy with

500

00:23:13,779 --> 00:23:17,559

announcements for investment in

501

00:23:15,339 --> 00:23:20,919

regenerative medicine and climate change

502

00:23:17,559 --> 00:23:23,950

on Tuesday night the 27th of August join

503

00:23:20,920 --> 00:23:26,680

our discussion on science policy held

504

00:23:23,950 --> 00:23:29,529

simultaneously in Adelaide and Canberra

505

00:23:26,680 --> 00:23:31,769

an available live online across the

506

00:23:29,529 --> 00:23:34,779

country check our website for details

507

00:23:31,769 --> 00:23:38,970

that's it for this a week in science

508

00:23:34,779 --> 00:23:38,970

I'll see you back here next week

509

00:23:42,359 --> 00:23:45,359

chanson

510

00:23:46,130 --> 00:23:51,540

but gasps yours is an award-winning

511

00:23:48,569 --> 00:23:54,419

weekly science show in French hosted by

512

00:23:51,539 --> 00:23:56,730

a bunch of crazy enthusiasts we are

513

00:23:54,420 --> 00:23:59,070

convinced that the greatest ideas in

514
00:23:56,730 --> 00:24:01,319
science are quite easy to grasp as long

515
00:23:59,069 --> 00:24:03,869
as they're presented with passion using

516
00:24:01,319 --> 00:24:06,119
a vocabulary common to all curious minds

517
00:24:03,869 --> 00:24:08,819
whatever their academic background if

518
00:24:06,119 --> 00:24:11,819
any you don't understand French yet oh

519
00:24:08,819 --> 00:24:13,710
it's never too late all our stories have

520
00:24:11,819 --> 00:24:15,569
a written transcript on the website and

521
00:24:13,710 --> 00:24:17,640
people from all around the world are

522
00:24:15,569 --> 00:24:20,730
using our content to learn Malia's

523
00:24:17,640 --> 00:24:22,980
language our topics range from 0 to

524
00:24:20,730 --> 00:24:25,500
infinity from evolution to artificial

525
00:24:22,980 --> 00:24:28,170
life from electromagnetism to the

526
00:24:25,500 --> 00:24:31,380
science of introverts we just love

527
00:24:28,170 --> 00:24:34,170
mathematics science critical thinking so

528
00:24:31,380 --> 00:24:35,880
do you want to join you can subscribe to

529
00:24:34,170 --> 00:24:38,550
the podcast for free from our website

530
00:24:35,880 --> 00:24:41,220
podcast science starts f-n that's in one

531
00:24:38,549 --> 00:24:43,950
word you also find us on itunes and

532
00:24:41,220 --> 00:24:45,600
soundcloud see you soon hopefully at

533
00:24:43,950 --> 00:24:48,110
louisa korea had the other words or

534
00:24:45,599 --> 00:24:48,109
pedestrians

535
00:24:49,750 --> 00:24:51,779
Oh

536
00:24:56,960 --> 00:25:04,220
here's Maynard spooky action at a

537
00:25:01,680 --> 00:25:04,220
distance

538
00:25:08,690 --> 00:25:15,480
mollica said he has a guy working at

539
00:25:10,798 --> 00:25:17,158
NASA in the the 50 60 70 s you all the

540
00:25:15,480 --> 00:25:22,470
photos I've seen you must have had one

541
00:25:17,159 --> 00:25:23,909
hell of a pocket protector fear pins you

542

00:25:22,470 --> 00:25:29,308
know I'd never had a pocket protector

543
00:25:23,909 --> 00:25:32,730
right I I poured them but I had a lot of

544
00:25:29,308 --> 00:25:35,819
Ruin shirts out that every every guy you

545
00:25:32,730 --> 00:25:37,919
see had a in in the Mission Control seem

546
00:25:35,819 --> 00:25:39,628
to have a huge pocket pit even bigger

547
00:25:37,919 --> 00:25:42,389
than the Revenge of the Nerds movie just

548
00:25:39,628 --> 00:25:43,829
you just keep the did pins leak really

549
00:25:42,388 --> 00:25:45,558
easily then was that the problem or

550
00:25:43,829 --> 00:25:48,210
whether using fountain pen design I

551
00:25:45,558 --> 00:25:50,668
think we were way from fountain pens but

552
00:25:48,210 --> 00:25:55,889
by that time the ballpoint pens were

553
00:25:50,669 --> 00:25:57,538
pretty much in you just run through a

554
00:25:55,888 --> 00:25:58,829
couple of the conspiracies here now you

555
00:25:57,538 --> 00:26:00,990
said your spirit spoke to some people

556
00:25:58,829 --> 00:26:03,749

from the Club of Rome did they look like

557

00:26:00,990 --> 00:26:08,638

people that run the world malo well

558

00:26:03,749 --> 00:26:12,179

actually they were circumstances was I

559

00:26:08,638 --> 00:26:19,528

got a phone call at that time uh this

560

00:26:12,179 --> 00:26:22,200

was in the own 1982 time period I was

561

00:26:19,528 --> 00:26:25,259

the project manager for trying to figure

562

00:26:22,200 --> 00:26:29,069

out how to how the Air Force could

563

00:26:25,259 --> 00:26:32,308

planned missions and fly missions from

564

00:26:29,069 --> 00:26:34,950

colorado springs in something called the

565

00:26:32,308 --> 00:26:38,359

consolidated Space Operations Center and

566

00:26:34,950 --> 00:26:40,980

my job was to take our knowledge and of

567

00:26:38,359 --> 00:26:42,959

what the systems where we have the

568

00:26:40,980 --> 00:26:46,200

Mission Control Center in Houston and

569

00:26:42,960 --> 00:26:49,470

and replicate that if we could or

570

00:26:46,200 --> 00:26:52,139

whatever and so I got a call from

571
00:26:49,470 --> 00:26:55,048
somebody high up in the organization

572
00:26:52,138 --> 00:26:57,178
said there's a few gentlemen from the

573
00:26:55,048 --> 00:27:00,148
Club of Rome that would like a briefing

574
00:26:57,179 --> 00:27:02,759
on how the Air Force is going to do this

575
00:27:00,148 --> 00:27:04,648
so i said i got briefing charts and

576
00:27:02,759 --> 00:27:07,288
everything just tell me where to go and

577
00:27:04,648 --> 00:27:10,469
i'll give him a briefing they were i

578
00:27:07,288 --> 00:27:14,788
believe four members one of them was a

579
00:27:10,470 --> 00:27:18,000
retired Air Force general the other one

580
00:27:14,788 --> 00:27:20,519
was a retired military I can't

581
00:27:18,000 --> 00:27:22,829
member which and the other two gentlemen

582
00:27:20,519 --> 00:27:26,009
were bankers you know I didn't know

583
00:27:22,829 --> 00:27:28,139
really what the Club of Rome was I I

584
00:27:26,009 --> 00:27:31,980
guess in the back of my mind I just

585
00:27:28,140 --> 00:27:35,030
figured well I don't know what I figured

586
00:27:31,980 --> 00:27:37,289
at the time but I was doing my duty and

587
00:27:35,029 --> 00:27:38,970
laid down the charts they asked

588
00:27:37,289 --> 00:27:41,539
questions I think they were rather

589
00:27:38,970 --> 00:27:45,259
pleased gave him a probably about a

590
00:27:41,539 --> 00:27:48,420
one-hour comprehensive briefing they had

591
00:27:45,259 --> 00:27:50,670
questions but i think i was able to

592
00:27:48,420 --> 00:27:53,190
satisfy most of their question those

593
00:27:50,670 --> 00:27:54,750
those those there was no hidden agenda

594
00:27:53,190 --> 00:27:56,519
going on there was the they weren't

595
00:27:54,750 --> 00:27:58,349
trying to put people into space or use

596
00:27:56,519 --> 00:28:00,690
this as some sort of weapon were they I

597
00:27:58,349 --> 00:28:03,869
don't think it was for themselves i

598
00:28:00,690 --> 00:28:07,049
think they were I you know I I never

599

00:28:03,869 --> 00:28:09,719
really understood why they wanted to

600
00:28:07,049 --> 00:28:11,970
know that why they wanted to hear I was

601
00:28:09,720 --> 00:28:14,670
going to be done I suspect that there

602
00:28:11,970 --> 00:28:17,690
was a general in the group an Air Force

603
00:28:14,670 --> 00:28:20,190
general by the way it may have been

604
00:28:17,690 --> 00:28:22,019
conceived by him they were having the

605
00:28:20,190 --> 00:28:24,450
Club of Rome was meeting it out in a

606
00:28:22,019 --> 00:28:26,730
place called The Woodlands outside of

607
00:28:24,450 --> 00:28:28,529
Houston and it was you know maybe an

608
00:28:26,730 --> 00:28:31,230
hour drive from there to the space

609
00:28:28,529 --> 00:28:32,910
center so maybe he just said well I'm

610
00:28:31,230 --> 00:28:34,500
getting bored with whatever's going on I

611
00:28:32,910 --> 00:28:37,410
hear the Air Force is going to do

612
00:28:34,500 --> 00:28:39,359
something with the shuttle um why don't

613
00:28:37,410 --> 00:28:42,450

we go find out maybe the four of them

614

00:28:39,359 --> 00:28:46,500

piled in the car and they set up the

615

00:28:42,450 --> 00:28:50,279

meeting I think it was maybe it a non

616

00:28:46,500 --> 00:28:53,549

sinister I think it was pretty okay kind

617

00:28:50,279 --> 00:28:55,170

of thing and what about the moon landing

618

00:28:53,549 --> 00:28:57,180

hoax you mentioned earlier that there

619

00:28:55,170 --> 00:28:58,890

was intense competition with the Soviets

620

00:28:57,180 --> 00:29:00,960

is there any chance that maybe you know

621

00:28:58,890 --> 00:29:02,880

you guys did all this work but rather

622

00:29:00,960 --> 00:29:04,950

than risk the astronauts they faked it

623

00:29:02,880 --> 00:29:07,410

somehow just to beat the Soviets that

624

00:29:04,950 --> 00:29:11,850

way well let me ask you this do you

625

00:29:07,410 --> 00:29:13,680

think the Soviet Union who had had a

626

00:29:11,849 --> 00:29:17,189

great deal of capability i mean we're

627

00:29:13,680 --> 00:29:20,070

talking about a a country and

628
00:29:17,190 --> 00:29:23,549
organization that had the Manhattan

629
00:29:20,069 --> 00:29:26,159
Project secrets before anybody else did

630
00:29:23,549 --> 00:29:29,159
that's true when it infiltrated the

631
00:29:26,160 --> 00:29:31,440
program and and they they were learning

632
00:29:29,160 --> 00:29:31,800
about the manhattan project as it was

633
00:29:31,440 --> 00:29:33,779
going

634
00:29:31,799 --> 00:29:35,909
that's what to Stalin you about at the

635
00:29:33,779 --> 00:29:40,710
Potsdam Conference before anyone told

636
00:29:35,910 --> 00:29:44,400
him Truman Truman was surprised that he

637
00:29:40,710 --> 00:29:48,150
wasn't surprised oh you know yeah well

638
00:29:44,400 --> 00:29:52,170
whatever whatever yeah whatever so

639
00:29:48,150 --> 00:29:54,420
anyway I you know just that fact itself

640
00:29:52,170 --> 00:29:57,390
but I'll tell you the thing that I

641
00:29:54,420 --> 00:30:00,840
always point out is when you talk about

642
00:29:57,390 --> 00:30:03,150
moon landing conspiracies there is a

643
00:30:00,839 --> 00:30:06,470
sizable portion of people around the

644
00:30:03,150 --> 00:30:09,060
world that believe it was a hoax or

645
00:30:06,470 --> 00:30:11,339
either if they don't believe it they're

646
00:30:09,059 --> 00:30:14,309
very suspicious that we landed there in

647
00:30:11,339 --> 00:30:16,619
the United States the polls I've seen is

648
00:30:14,309 --> 00:30:20,179
that summer around nine percent of the

649
00:30:16,619 --> 00:30:25,139
population thinks that it's a hoax

650
00:30:20,180 --> 00:30:27,210
there's another 10 / maybe fifteen

651
00:30:25,140 --> 00:30:29,340
percent or so that are very skeptical

652
00:30:27,210 --> 00:30:31,140
about you know they can't say that it's

653
00:30:29,339 --> 00:30:33,809
a hoax but they don't believe we may

654
00:30:31,140 --> 00:30:37,350
have really done it but there and and by

655
00:30:33,809 --> 00:30:42,359
the way one of the astronaut trainees a

656

00:30:37,349 --> 00:30:44,819
guy named Brian O'Leary was in the

657
00:30:42,359 --> 00:30:48,179
fourth group of astronauts he he later

658
00:30:44,819 --> 00:30:49,950
left the program and he he contended

659
00:30:48,180 --> 00:30:54,029
that you know he was pretty sure that we

660
00:30:49,950 --> 00:30:56,460
faked it and also a former President

661
00:30:54,029 --> 00:30:59,519
Bill Clinton in his memoirs said when he

662
00:30:56,460 --> 00:31:02,279
was a young man he bought the story that

663
00:30:59,519 --> 00:31:05,220
we flew to the moon and landed there but

664
00:31:02,279 --> 00:31:08,879
after he became pretty as a wise wiser

665
00:31:05,220 --> 00:31:12,360
older man as he became president and saw

666
00:31:08,880 --> 00:31:14,220
how the government would work he was not

667
00:31:12,359 --> 00:31:16,469
sure at all that we landed that it was

668
00:31:14,220 --> 00:31:19,230
maybe hopes so do you think this is

669
00:31:16,470 --> 00:31:20,730
people looking back at the technology

670
00:31:19,230 --> 00:31:22,410

and saying no that couldn't have worked

671

00:31:20,730 --> 00:31:25,950

or do you think its people having their

672

00:31:22,410 --> 00:31:30,840

genuine mistrust of government I think a

673

00:31:25,950 --> 00:31:32,759

lot that is it and also one of the

674

00:31:30,839 --> 00:31:35,759

things you mentioned is that it's such a

675

00:31:32,759 --> 00:31:38,789

hard thing to do it might be have been

676

00:31:35,759 --> 00:31:40,740

easier to fake it well my contention is

677

00:31:38,789 --> 00:31:42,359

going back to the words of President

678

00:31:40,740 --> 00:31:44,609

Kennedy says we're going to the moon

679

00:31:42,359 --> 00:31:45,479

that because it's easy but because it's

680

00:31:44,609 --> 00:31:49,109

hard

681

00:31:45,480 --> 00:31:53,130

and I think that's um that's kind of the

682

00:31:49,109 --> 00:31:56,789

fallacy there I I i have my own personal

683

00:31:53,130 --> 00:32:00,000

thought about the how the moon landing

684

00:31:56,789 --> 00:32:03,210

hoax got started you want to hear my

685
00:32:00,000 --> 00:32:06,450
yeah yeah sure but also to add to it is

686
00:32:03,210 --> 00:32:08,759
the fact that we've never been back well

687
00:32:06,450 --> 00:32:11,460
that's you know we're talking about

688
00:32:08,759 --> 00:32:13,200
budgets and money availability that's

689
00:32:11,460 --> 00:32:15,779
one of the big reasons why we haven't

690
00:32:13,200 --> 00:32:18,509
been back well what your personal theory

691
00:32:15,779 --> 00:32:20,428
on how the hoax got going gay ok so here

692
00:32:18,509 --> 00:32:24,298
I am I'm in Mission Control Center I

693
00:32:20,429 --> 00:32:28,769
watched the landing uh I hear the voice

694
00:32:24,298 --> 00:32:32,009
loops and everything and uh during the

695
00:32:28,769 --> 00:32:34,558
landing I was responding I was might my

696
00:32:32,009 --> 00:32:37,009
job was to solve a problem that the

697
00:32:34,558 --> 00:32:39,869
lunar module was overweight and

698
00:32:37,009 --> 00:32:43,019
underperforming and I did analysis

699
00:32:39,869 --> 00:32:46,918
doesn't know that not correct we have

700
00:32:43,019 --> 00:32:48,960
plenty of performance so we I was

701
00:32:46,919 --> 00:32:51,870
particularly interested in the descent

702
00:32:48,960 --> 00:32:57,179
of the lunar stage on to the lunar

703
00:32:51,869 --> 00:33:00,779
module on civil lunar surface now but um

704
00:32:57,179 --> 00:33:03,780
buzz and Neil were were in the module

705
00:33:00,779 --> 00:33:06,240
and Neil Armstrong was the pilot he had

706
00:33:03,779 --> 00:33:08,759
the controls and Buzz was basically

707
00:33:06,240 --> 00:33:11,509
calling off numbers and altitude ins

708
00:33:08,759 --> 00:33:15,240
beaten so forth when he got to the

709
00:33:11,509 --> 00:33:18,029
prescribed landing site he saw boulders

710
00:33:15,240 --> 00:33:20,730
there that were pretty large and he

711
00:33:18,029 --> 00:33:23,190
described him in real time as saying hey

712
00:33:20,730 --> 00:33:24,870
there's boulders as big as well swaggins

713

00:33:23,190 --> 00:33:27,929
I'm going to have to lie on further down

714
00:33:24,869 --> 00:33:30,989
rage which he did but it takes more fuel

715
00:33:27,929 --> 00:33:33,450
to land going out there and the low

716
00:33:30,990 --> 00:33:36,089
level sensor came on and they gave him a

717
00:33:33,450 --> 00:33:40,590
call you got 60 seconds of fuel

718
00:33:36,089 --> 00:33:43,019
remaining well to me as an observer it

719
00:33:40,589 --> 00:33:48,119
seemed like that came on too early by

720
00:33:43,019 --> 00:33:52,168
maybe 30 seconds so after it landed and

721
00:33:48,119 --> 00:33:54,449
he landed successfully uh I went back to

722
00:33:52,169 --> 00:33:57,360
the office got my team together we said

723
00:33:54,450 --> 00:33:59,430
you know I you know I said I got this

724
00:33:57,359 --> 00:34:02,819
feeling it just came on too early

725
00:33:59,430 --> 00:34:04,410
well we we kind of kicked it around and

726
00:34:02,819 --> 00:34:06,240
talked to some of the experts and

727
00:34:04,410 --> 00:34:09,510

everything we kind of felt like Mel was

728

00:34:06,240 --> 00:34:11,219

maybe a dispersion of some type but lo

729

00:34:09,510 --> 00:34:14,930

and behold the same thing happened on

730

00:34:11,219 --> 00:34:19,049

Apollo 12 and the culprit was not

731

00:34:14,929 --> 00:34:23,429

anything that was obvious until tests

732

00:34:19,050 --> 00:34:26,450

were run on the tanks in a simulation of

733

00:34:23,429 --> 00:34:30,869

zero gravity and they realized that that

734

00:34:26,449 --> 00:34:33,449

baffles in the tank didn't keep the fuel

735

00:34:30,869 --> 00:34:37,069

from sloshing around it was accentuated

736

00:34:33,449 --> 00:34:40,230

by the one-sixth gravity and

737

00:34:37,070 --> 00:34:42,930

consequently the the sloshing of the

738

00:34:40,230 --> 00:34:44,789

tanks uncovered the low level sensor I'm

739

00:34:42,929 --> 00:34:48,629

sure you've seen people have experienced

740

00:34:44,789 --> 00:34:50,730

this in their cars when the buzzer goes

741

00:34:48,630 --> 00:34:52,230

off or whatever the warning you're out

742
00:34:50,730 --> 00:34:55,949
of your getting close to getting out of

743
00:34:52,230 --> 00:35:00,630
gas so my thought is if a conspiracy

744
00:34:55,949 --> 00:35:02,879
happened and it was all simulated all

745
00:35:00,630 --> 00:35:05,610
the data that we were getting back since

746
00:35:02,880 --> 00:35:08,910
we were an in on the conspiracy they

747
00:35:05,610 --> 00:35:11,910
stimulated something that really took us

748
00:35:08,909 --> 00:35:14,489
several missions to figure out so they

749
00:35:11,909 --> 00:35:18,029
not only fooled us they also employed

750
00:35:14,489 --> 00:35:22,229
the world's best psychics to say I first

751
00:35:18,030 --> 00:35:24,120
be fuel slashing that these guys are not

752
00:35:22,230 --> 00:35:27,599
aware of that's going to make the low

753
00:35:24,119 --> 00:35:30,630
level light come on early so this also

754
00:35:27,599 --> 00:35:32,730
means that the famous story of Armstrong

755
00:35:30,630 --> 00:35:34,980
almost running out of fuel is incorrect

756
00:35:32,730 --> 00:35:38,460
he had 30 seconds more than they thought

757
00:35:34,980 --> 00:35:41,130
he had exactly exactly but it was

758
00:35:38,460 --> 00:35:43,260
something that we had to correct it did

759
00:35:41,130 --> 00:35:46,170
happen on Apollo 11 and 12 the other

760
00:35:43,260 --> 00:35:51,300
thing to go along with the hoax theory

761
00:35:46,170 --> 00:35:53,059
is the next day back in the office a

762
00:35:51,300 --> 00:35:55,590
couple of the guys that worked for me

763
00:35:53,059 --> 00:35:58,380
went over to the press center now

764
00:35:55,590 --> 00:36:02,490
imagine this we got this big auditorium

765
00:35:58,380 --> 00:36:06,710
it is crammed with reporters from the

766
00:36:02,489 --> 00:36:09,939
television radio print media we have a

767
00:36:06,710 --> 00:36:14,260
famous luminaries in the

768
00:36:09,940 --> 00:36:18,068
in the journalism world Norman Mailer

769
00:36:14,260 --> 00:36:19,690
the famous author he was there so they

770

00:36:18,068 --> 00:36:23,079
go over there and they come back to the

771
00:36:19,690 --> 00:36:25,720
office and they said your people think

772
00:36:23,079 --> 00:36:28,568
that this was all done in Hollywood in

773
00:36:25,719 --> 00:36:32,379
that this crappy video that we saw last

774
00:36:28,568 --> 00:36:36,250
night I was done in Halloween Senate

775
00:36:32,380 --> 00:36:37,960
that it's all been faked and I said what

776
00:36:36,250 --> 00:36:43,989
do you mean by my people and they said

777
00:36:37,960 --> 00:36:48,068
the Italian press for my people but

778
00:36:43,989 --> 00:36:52,539
anyway and then when I realized it you

779
00:36:48,068 --> 00:36:56,710
know that crappy video slow scan black

780
00:36:52,539 --> 00:36:59,529
and white lower low resolution I mean

781
00:36:56,710 --> 00:37:01,780
when you see it you can't even make out

782
00:36:59,530 --> 00:37:06,000
what the hell it is and this was real

783
00:37:01,780 --> 00:37:08,829
time video and by the way Maynard

784
00:37:06,000 --> 00:37:11,800

interesting factor we almost didn't take

785

00:37:08,829 --> 00:37:14,560

that real-time video camera on the lunar

786

00:37:11,800 --> 00:37:17,410

module with us well because it was the

787

00:37:14,559 --> 00:37:19,210

whites concerns there was a weight

788

00:37:17,409 --> 00:37:22,269

concern of course I solve the weight

789

00:37:19,210 --> 00:37:24,940

concern but even with the weight concern

790

00:37:22,269 --> 00:37:30,280

when you put a piece of equipment like a

791

00:37:24,940 --> 00:37:32,019

video camera on on the spacecraft then

792

00:37:30,280 --> 00:37:34,420

you've got to go through all kinds of

793

00:37:32,019 --> 00:37:36,280

training hours and right procedures on

794

00:37:34,420 --> 00:37:37,690

how do you hook the thing up I mean you

795

00:37:36,280 --> 00:37:39,490

just can't have a piece of equipment

796

00:37:37,690 --> 00:37:43,059

that they've never seen before never

797

00:37:39,489 --> 00:37:45,338

pointed and so forth and the people that

798

00:37:43,059 --> 00:37:48,159

want to do not fly it that it's just a

799
00:37:45,338 --> 00:37:50,199
big hassle it doesn't enhance them the

800
00:37:48,159 --> 00:37:53,348
mission it doesn't there's no mission

801
00:37:50,199 --> 00:37:58,269
objectives to say needed broadcast

802
00:37:53,349 --> 00:38:01,480
real-time back to earth and yet it was

803
00:37:58,269 --> 00:38:04,210
recommended that it be left off my

804
00:38:01,480 --> 00:38:07,059
boss's boss Chris Kraft who is the

805
00:38:04,210 --> 00:38:10,720
flight director in charge of flight

806
00:38:07,059 --> 00:38:13,838
operations uh he said I can't believe

807
00:38:10,719 --> 00:38:17,730
what I'm hearing why would we leave it

808
00:38:13,838 --> 00:38:21,880
off because it's like having a camera a

809
00:38:17,730 --> 00:38:23,469
TV camera or movie film camera on the

810
00:38:21,880 --> 00:38:27,300
beach when

811
00:38:23,469 --> 00:38:29,829
a step foot in the world new world and

812
00:38:27,300 --> 00:38:31,599
the still photos from the hasselblad a

813
00:38:29,829 --> 00:38:34,000
fascinating it is weird that some of the

814
00:38:31,599 --> 00:38:35,740
cross-hatching appears above the images

815
00:38:34,000 --> 00:38:38,679
or behind the images sometimes that I

816
00:38:35,739 --> 00:38:42,219
think that's an odd one well that is a

817
00:38:38,679 --> 00:38:45,279
that is very explainable in photography

818
00:38:42,219 --> 00:38:51,579
and it has to do a dynamic range of the

819
00:38:45,280 --> 00:38:54,609
photos but uh and and I've seen this

820
00:38:51,579 --> 00:38:59,319
proven where you take a very bright

821
00:38:54,608 --> 00:39:01,239
object and it almost looks like the the

822
00:38:59,320 --> 00:39:04,630
cross-hatching I mean it's been

823
00:39:01,239 --> 00:39:09,669
simulated in its and of course those

824
00:39:04,630 --> 00:39:12,608
those 70 millimeter format hasselblad

825
00:39:09,670 --> 00:39:15,659
our cameras were you know top dollar

826
00:39:12,608 --> 00:39:17,920
top-of-the-line beautiful camera sack

827

00:39:15,659 --> 00:39:21,460
beautiful cameras and they brought back

828
00:39:17,920 --> 00:39:24,099
beautiful images but uh you know there's

829
00:39:21,460 --> 00:39:27,490
there's a whole mystique build up about

830
00:39:24,099 --> 00:39:31,769
what the glial illiteracy is on the rock

831
00:39:27,489 --> 00:39:35,649
and it's at the hair if somebody's

832
00:39:31,769 --> 00:39:38,380
eyebrow hair that got into the film

833
00:39:35,650 --> 00:39:40,030
processing malo how do you feel about

834
00:39:38,380 --> 00:39:41,950
this is someone who worked on the space

835
00:39:40,030 --> 00:39:43,390
program where will you mention that

836
00:39:41,949 --> 00:39:45,129
never once in a while someone comes up

837
00:39:43,389 --> 00:39:47,679
to you and and pushes the hoax

838
00:39:45,130 --> 00:39:51,990
conspiracy theory at the hoax theory to

839
00:39:47,679 --> 00:39:55,480
you how do you feel well um you know the

840
00:39:51,989 --> 00:39:57,549
invasion of Normandy was I'm sure for

841
00:39:55,480 --> 00:40:02,619

the guys that were involved in that was

842

00:39:57,550 --> 00:40:06,880

a big emotional thing in their life that

843

00:40:02,619 --> 00:40:09,430

probably uh they're like really define

844

00:40:06,880 --> 00:40:12,880

their life now if I were to go around

845

00:40:09,429 --> 00:40:16,329

and say you know it turned out that the

846

00:40:12,880 --> 00:40:17,950

Brits and the Americans made a deal with

847

00:40:16,329 --> 00:40:19,539

the Germans that we were just going to

848

00:40:17,949 --> 00:40:22,389

pretend and we're going to set up a

849

00:40:19,539 --> 00:40:24,009

fruit film crew and nobody was going to

850

00:40:22,389 --> 00:40:27,608

get hurt and we're just going to trade

851

00:40:24,010 --> 00:40:29,950

them more gold blocks or you know

852

00:40:27,608 --> 00:40:34,869

whatever and then you came out with

853

00:40:29,949 --> 00:40:37,299

Normandy invasion a hoax I mean people

854

00:40:34,869 --> 00:40:40,300

would be coming at you with

855

00:40:37,300 --> 00:40:44,140

with the hatchet if you were to propose

856
00:40:40,300 --> 00:40:46,330
that and that's the feeling that do I

857
00:40:44,139 --> 00:40:49,539
mean many people involved at NASA would

858
00:40:46,329 --> 00:40:52,360
have had yeah yeah in it it's you know

859
00:40:49,539 --> 00:40:55,750
you you know really smart people said

860
00:40:52,360 --> 00:40:59,230
boy I saw this program on TV that dead

861
00:40:55,750 --> 00:41:03,010
moon landing was all was all fake they

862
00:40:59,230 --> 00:41:05,559
got proof a photography proof and

863
00:41:03,010 --> 00:41:07,660
everything and but at Monica City this

864
00:41:05,559 --> 00:41:09,159
also brings us into your your journey

865
00:41:07,659 --> 00:41:10,690
through skepticism and critical thinking

866
00:41:09,159 --> 00:41:13,440
and how you're trying to spread it

867
00:41:10,690 --> 00:41:15,849
around your area what is your view on on

868
00:41:13,440 --> 00:41:17,320
getting people to look look to the

869
00:41:15,849 --> 00:41:20,400
evidence basically when something

870
00:41:17,320 --> 00:41:24,720
happens well I had the great opportunity

871
00:41:20,400 --> 00:41:27,639
last year to give the commencement they

872
00:41:24,719 --> 00:41:33,969
addressed to the graduating high school

873
00:41:27,639 --> 00:41:37,299
in my community and I I I gave them I

874
00:41:33,969 --> 00:41:40,149
put a flavor of the space program in and

875
00:41:37,300 --> 00:41:42,850
I the whole thing was about critical

876
00:41:40,150 --> 00:41:47,710
thinking and I give an example of how we

877
00:41:42,849 --> 00:41:50,489
flew to the moon on Apollo 8 and we were

878
00:41:47,710 --> 00:41:52,900
getting pushed off course and we used

879
00:41:50,489 --> 00:41:55,149
detective work work and look for

880
00:41:52,900 --> 00:41:57,280
evidence and we realize that when we

881
00:41:55,150 --> 00:42:02,050
flush the toilet it threw us off course

882
00:41:57,280 --> 00:42:04,570
because it gave us a slight push and I

883
00:42:02,050 --> 00:42:07,269
ended that by saying you know it took

884

00:42:04,570 --> 00:42:10,000
critical thinking and looking for

885
00:42:07,269 --> 00:42:12,880
evidence to find that and I and I

886
00:42:10,000 --> 00:42:16,000
contrasted it by saying what we didn't

887
00:42:12,880 --> 00:42:17,890
do is we didn't call in a tarot card

888
00:42:16,000 --> 00:42:20,019
reader to figure out where we were going

889
00:42:17,889 --> 00:42:23,469
to end up at the end of this mission or

890
00:42:20,019 --> 00:42:25,809
we didn't call the psychic hotline or we

891
00:42:23,469 --> 00:42:31,689
didn't even do something as simple as

892
00:42:25,809 --> 00:42:33,880
looking up the the astrology charts for

893
00:42:31,690 --> 00:42:36,579
the three crew members that were on and

894
00:42:33,880 --> 00:42:41,110
and try to figure out what was going on

895
00:42:36,579 --> 00:42:44,230
because critical thinking is is the

896
00:42:41,110 --> 00:42:48,849
opposite of magical thing and what I

897
00:42:44,230 --> 00:42:50,740
described was magical and it's give that

898
00:42:48,849 --> 00:42:55,360

contrast and I went through other

899

00:42:50,739 --> 00:42:57,759

things about medicines and how the

900

00:42:55,360 --> 00:43:01,079

father of our country died and so forth

901

00:42:57,760 --> 00:43:03,940

and so on to give examples of how

902

00:43:01,079 --> 00:43:06,869

critical thinking can affect what's

903

00:43:03,940 --> 00:43:10,510

going on and like myself you also enjoy

904

00:43:06,869 --> 00:43:12,450

non skeptical podcasts as well and you

905

00:43:10,510 --> 00:43:17,170

like a whole range of things don't you I

906

00:43:12,449 --> 00:43:20,859

do i I don't I don't spend my whole day

907

00:43:17,170 --> 00:43:23,019

listening to podcast but I i live on 75

908

00:43:20,860 --> 00:43:25,000

acres of land so i got a lot of work to

909

00:43:23,019 --> 00:43:30,429

do you could love you you must have a

910

00:43:25,000 --> 00:43:33,280

hell of a ride on mower well I do have a

911

00:43:30,429 --> 00:43:34,989

variety I have a what's called a garden

912

00:43:33,280 --> 00:43:36,970

tractor which is like a big blowing

913
00:43:34,989 --> 00:43:38,739
machine it's got a cup holder you've got

914
00:43:36,969 --> 00:43:42,309
a cup holder on your garden tractor I

915
00:43:38,739 --> 00:43:44,469
know it's a too bumpy ride I mean I'm

916
00:43:42,309 --> 00:43:46,840
running over what kind of wild while

917
00:43:44,469 --> 00:43:49,659
field so forth and I just keep it trim

918
00:43:46,840 --> 00:43:51,250
done around the house look and is the

919
00:43:49,659 --> 00:43:53,289
one image like a lot of people that have

920
00:43:51,250 --> 00:43:54,940
been involved in dramatic programs like

921
00:43:53,289 --> 00:43:56,500
you've been they've got the one photo

922
00:43:54,940 --> 00:43:58,840
that is somewhere in the house that

923
00:43:56,500 --> 00:44:00,579
reminds them of their entire time what

924
00:43:58,840 --> 00:44:03,730
is your photo that reminds you of your

925
00:44:00,579 --> 00:44:07,569
entire time in the space program mercury

926
00:44:03,730 --> 00:44:12,099
flight 10 ma 10 lifting off I've got a

927
00:44:07,570 --> 00:44:15,059
black and white photo of that and I also

928
00:44:12,099 --> 00:44:20,230
have I guess my prized possession is

929
00:44:15,059 --> 00:44:23,650
during the kind of the last part of the

930
00:44:20,230 --> 00:44:26,679
space program after we had flown Mercury

931
00:44:23,650 --> 00:44:31,030
Gemini Apollo and we're getting into

932
00:44:26,679 --> 00:44:35,649
shuttle I was given an award certificate

933
00:44:31,030 --> 00:44:38,859
in on it was a flag a small fabric flag

934
00:44:35,650 --> 00:44:43,559
that was flown to the moon on apollo 17

935
00:44:38,858 --> 00:44:45,969
in that hanging in my in my living room

936
00:44:43,559 --> 00:44:47,619
that sounds like quite an honor you uh

937
00:44:45,969 --> 00:44:49,209
well I you wouldn't want the lucky

938
00:44:47,619 --> 00:44:54,579
people to get any bit of moon rock where

939
00:44:49,210 --> 00:44:58,240
you know and that is kind of a bone of

940
00:44:54,579 --> 00:45:00,730
contention about now here we go let me

941

00:44:58,239 --> 00:45:04,509
good luck someone stole your bit of moon

942
00:45:00,730 --> 00:45:08,679
rock someone no no no I I was

943
00:45:04,510 --> 00:45:10,720
I was first to go into the facility I

944
00:45:08,679 --> 00:45:14,559
knew a friend that worked over there and

945
00:45:10,719 --> 00:45:18,789
he snuck me into into the lunar

946
00:45:14,559 --> 00:45:22,269
receiving laboratory and I got a glance

947
00:45:18,789 --> 00:45:23,949
at the that but he he was very nervous

948
00:45:22,269 --> 00:45:27,070
about it I wasn't supposed to be in

949
00:45:23,949 --> 00:45:29,619
there so he ran me right out but in the

950
00:45:27,070 --> 00:45:32,350
lobby of one of her buildings there at

951
00:45:29,619 --> 00:45:34,420
Johnson Space Center in Houston is a

952
00:45:32,349 --> 00:45:38,739
pretty good-sized moon rock I'm display

953
00:45:34,420 --> 00:45:42,430
behind a plexiglass cube and its really

954
00:45:38,739 --> 00:45:46,989
edit just fascinating me and you know

955
00:45:42,429 --> 00:45:49,299

feel that I contributed to that yeah I I

956

00:45:46,989 --> 00:45:51,699

can't understand that that feeling but

957

00:45:49,300 --> 00:45:53,740

Marlo Cassetti I I could just imagine

958

00:45:51,699 --> 00:45:58,599

you walk past that rock and you go yet I

959

00:45:53,739 --> 00:46:00,099

help get that bit here yeah and when you

960

00:45:58,599 --> 00:46:02,529

look at the advances that have been made

961

00:46:00,099 --> 00:46:04,960

and what you could do now with the

962

00:46:02,530 --> 00:46:06,880

technology now do you ever imagine what

963

00:46:04,960 --> 00:46:10,599

could have been done then if we had the

964

00:46:06,880 --> 00:46:14,829

computing power we have now oh it would

965

00:46:10,599 --> 00:46:16,599

be I mean we had a division of 400

966

00:46:14,829 --> 00:46:20,650

people that kind of probably could be

967

00:46:16,599 --> 00:46:24,099

done by 40 people with the beauty power

968

00:46:20,650 --> 00:46:27,789

uh you know it's very difficult and i

969

00:46:24,099 --> 00:46:32,230

gave a talk at a engineering scholarship

970
00:46:27,789 --> 00:46:34,059
foundation banquet and there were a lot

971
00:46:32,230 --> 00:46:39,670
of young people there and i tried to

972
00:46:34,059 --> 00:46:43,059
give him a flavor of how crude computing

973
00:46:39,670 --> 00:46:46,450
was in that era of the Apollo program uh

974
00:46:43,059 --> 00:46:48,400
when you have a big computer in the only

975
00:46:46,449 --> 00:46:52,899
way you can talk to that computer as you

976
00:46:48,400 --> 00:46:55,990
is you take a box of IBM cards with

977
00:46:52,900 --> 00:46:59,619
punched information on it you submit it

978
00:46:55,989 --> 00:47:02,439
and you pick a pick up the print out the

979
00:46:59,619 --> 00:47:05,619
next morning because it's been waiting

980
00:47:02,440 --> 00:47:08,860
with a hundred other job you don't get a

981
00:47:05,619 --> 00:47:11,889
lot done you do a lot of waiting and a

982
00:47:08,860 --> 00:47:14,440
lot of busy work but you don't have

983
00:47:11,889 --> 00:47:18,608
instant access that you have on let's

984
00:47:14,440 --> 00:47:23,048
say a pc nowadays advanced calculations

985
00:47:18,608 --> 00:47:27,338
I know took 20 minutes of time on a big

986
00:47:23,048 --> 00:47:32,920
machine uh it's a fraction of a second

987
00:47:27,338 --> 00:47:34,599
on a desktop computer mallika City thank

988
00:47:32,920 --> 00:47:37,239
you for telling us about your time with

989
00:47:34,599 --> 00:47:39,068
Mercury Gemini and the Apollo program is

990
00:47:37,239 --> 00:47:40,809
you have a website or somewhere people

991
00:47:39,068 --> 00:47:44,318
can contact or find out more about what

992
00:47:40,809 --> 00:47:46,119
you've got up to no actually I don't you

993
00:47:44,318 --> 00:47:47,980
were you really should even if just a

994
00:47:46,119 --> 00:47:49,450
couple of your photos and a bit of a

995
00:47:47,980 --> 00:47:52,599
blog or something people have loved to

996
00:47:49,449 --> 00:47:55,509
read that well maybe I'll do that now

997
00:47:52,599 --> 00:47:57,420
let you know if I ever get to it when

998

00:47:55,509 --> 00:48:01,210
you've got 70 acres to mow for a start

999
00:47:57,420 --> 00:48:04,059
yeah well actually I I've been involved

1000
00:48:01,210 --> 00:48:07,119
in radio controlled model airplanes and

1001
00:48:04,059 --> 00:48:08,890
our club has a site but I'm you're not

1002
00:48:07,119 --> 00:48:11,380
going to find out much about me on that

1003
00:48:08,889 --> 00:48:12,759
site well lookie might as well give us

1004
00:48:11,380 --> 00:48:14,910
that so we can see what what other

1005
00:48:12,759 --> 00:48:22,690
aeronautics you've been doing lately

1006
00:48:14,909 --> 00:48:27,460
okay you could look on FB our DC dot

1007
00:48:22,690 --> 00:48:36,039
blog spot.com that website again for the

1008
00:48:27,460 --> 00:48:37,599
listeners FB RC v dot blogspot com look

1009
00:48:36,039 --> 00:48:39,480
ma no it's been a great pleasure talking

1010
00:48:37,599 --> 00:48:41,920
to you today about critical thinking

1011
00:48:39,480 --> 00:48:43,539
skepticism and about your experience in

1012
00:48:41,920 --> 00:48:45,099

aeronautics and NASA and I'd love to

1013

00:48:43,539 --> 00:48:46,989
chat to again because we didn't even get

1014

00:48:45,099 --> 00:48:49,410
to the fact that you helped design the

1015

00:48:46,989 --> 00:48:53,829
tail for the hoorka Harrier Jump Jet

1016

00:48:49,409 --> 00:48:57,068
well it was um I I was redesigned the

1017

00:48:53,829 --> 00:48:59,109
horizontal tail because it had a ability

1018

00:48:57,068 --> 00:49:00,639
problem see and that's the kind of

1019

00:48:59,108 --> 00:49:03,219
people that listen to our show people

1020

00:49:00,639 --> 00:49:04,838
mom are low we'll have a chat about that

1021

00:49:03,219 --> 00:49:06,429
another day thank you very much i will

1022

00:49:04,838 --> 00:49:09,248
be in contact it's been a pleasure to

1023

00:49:06,429 --> 00:49:12,088
speak to you sir if the pleasure is all

1024

00:49:09,248 --> 00:49:12,088
mine thank you

1025

00:49:22,539 --> 00:49:27,800
hello this is brian dunning from the

1026

00:49:24,889 --> 00:49:30,259
sceptile cast announcing a new book

1027
00:49:27,800 --> 00:49:33,200
capturing 50 of the very best stories

1028
00:49:30,260 --> 00:49:34,609
thus kept I'd podcast as explored are

1029
00:49:33,199 --> 00:49:36,379
you better able to make good decisions

1030
00:49:34,608 --> 00:49:37,880
about your life when you know the

1031
00:49:36,380 --> 00:49:40,490
science underlying the way the world

1032
00:49:37,880 --> 00:49:43,490
really works are you excited to learn

1033
00:49:40,489 --> 00:49:45,558
new facts new history and gain improved

1034
00:49:43,489 --> 00:49:49,308
insight and context for what we

1035
00:49:45,559 --> 00:49:52,099
experience this book is for you skept

1036
00:49:49,309 --> 00:49:54,410
tied five massacres monsters and

1037
00:49:52,099 --> 00:49:56,568
miracles is a collection of fifty of the

1038
00:49:54,409 --> 00:49:59,269
best episodes of the sceptile podcast

1039
00:49:56,568 --> 00:50:01,338
adapted for print he will be fully

1040
00:49:59,269 --> 00:50:03,559
indexed and referenced but most of all

1041
00:50:01,338 --> 00:50:05,568
each of its 50 chapters will be a

1042
00:50:03,559 --> 00:50:07,970
fascinating peek behind the urban

1043
00:50:05,568 --> 00:50:10,429
legends we've all heard to see what's

1044
00:50:07,969 --> 00:50:12,588
truly going on more than a hundred and

1045
00:50:10,429 --> 00:50:15,230
eighty thousand people enjoy the podcast

1046
00:50:12,588 --> 00:50:17,150
each week but many more missing out in

1047
00:50:15,230 --> 00:50:19,789
part because they read books instead of

1048
00:50:17,150 --> 00:50:22,430
listening to the internet this project

1049
00:50:19,789 --> 00:50:24,679
is being proud funded on Kickstarter the

1050
00:50:22,429 --> 00:50:27,259
web's leading crowdfunding resource a

1051
00:50:24,679 --> 00:50:29,149
pledge of \$25 will get you an

1052
00:50:27,260 --> 00:50:30,950
autographed copy of the book and a

1053
00:50:29,150 --> 00:50:33,130
pledge of only ten dollars will get you

1054
00:50:30,949 --> 00:50:36,469
ebooks to read on your portable device

1055

00:50:33,130 --> 00:50:38,210
also one lucky supporter will have the

1056
00:50:36,469 --> 00:50:40,818
chance to write the foreword for the

1057
00:50:38,210 --> 00:50:43,400
book will this be your opportunity to

1058
00:50:40,818 --> 00:50:45,769
get into worldwide print come to

1059
00:50:43,400 --> 00:50:48,619
sceptile calm and click on the project

1060
00:50:45,769 --> 00:50:51,139
front and center on the web page you can

1061
00:50:48,619 --> 00:50:55,130
also find it at kickstarter com just

1062
00:50:51,139 --> 00:50:57,980
search for sceptile massacres monsters

1063
00:50:55,130 --> 00:51:00,858
and miracles coming soon to all who make

1064
00:50:57,980 --> 00:51:04,088
a modest pledge I'm Brian Dunning from

1065
00:51:00,858 --> 00:51:04,088
sceptile com

1066
00:51:06,940 --> 00:51:12,320
are you aware that in the last 20 years

1067
00:51:09,530 --> 00:51:14,330
there's not had a section on until

1068
00:51:12,320 --> 00:51:15,980
design or creationism that's correct

1069
00:51:14,329 --> 00:51:17,179

what you are discussing now is whether

1070

00:51:15,980 --> 00:51:18,949
you will teach the denigration of

1071

00:51:17,179 --> 00:51:20,868
evolution which is a longtime

1072

00:51:18,949 --> 00:51:22,669
creationist strategy to promote

1073

00:51:20,869 --> 00:51:24,019
creationism through the back door have

1074

00:51:22,670 --> 00:51:26,630
there ever been any evidence of

1075

00:51:24,019 --> 00:51:28,579
evolutionary fraud of course should we

1076

00:51:26,630 --> 00:51:30,800
be allowed to teach that as his ambles

1077

00:51:28,579 --> 00:51:33,019
of bad science certainly just like you

1078

00:51:30,800 --> 00:51:41,480
can teach examples of political

1079

00:51:33,019 --> 00:51:43,730
chicanery thank you in the battle for

1080

00:51:41,480 --> 00:51:46,699
rationality in America especially in

1081

00:51:43,730 --> 00:51:48,650
American education my own subject of

1082

00:51:46,699 --> 00:51:51,710
evolutionary biology is in the front

1083

00:51:48,650 --> 00:51:53,570
line trench and dr. Scott is the

1084
00:51:51,710 --> 00:51:55,909
commanding officer the master strategist

1085
00:51:53,570 --> 00:51:58,220
on our side the general in charge of

1086
00:51:55,909 --> 00:52:00,500
intelligence and strategic planning as

1087
00:51:58,219 --> 00:52:03,829
well as the field officer in charge of

1088
00:52:00,500 --> 00:52:06,469
tactics and battle order yet she does it

1089
00:52:03,829 --> 00:52:09,319
all with the most unmilitary grace and

1090
00:52:06,469 --> 00:52:10,879
charm it's impossible to meet Jeanne

1091
00:52:09,320 --> 00:52:13,580
without loving her whether you agree

1092
00:52:10,880 --> 00:52:15,320
with her or not intelligent design makes

1093
00:52:13,579 --> 00:52:16,549
the claim that there are things out

1094
00:52:15,320 --> 00:52:19,070
there in nature that are just

1095
00:52:16,550 --> 00:52:21,550
categorically unexplainable by natural

1096
00:52:19,070 --> 00:52:24,140
cause therefore they were created

1097
00:52:21,550 --> 00:52:25,789
designed by an intelligent agent and

1098
00:52:24,139 --> 00:52:28,009
nobody's fool the intelligent agent de

1099
00:52:25,789 --> 00:52:30,199
Scott now how can you call that a

1100
00:52:28,010 --> 00:52:32,089
science when your basic organizing

1101
00:52:30,199 --> 00:52:34,309
principle is we can't explain this

1102
00:52:32,088 --> 00:52:36,150
through natural cause what science does

1103
00:52:34,309 --> 00:52:38,670
is explain things through natural

1104
00:52:36,150 --> 00:52:40,380
and the whole idea of intelligent design

1105
00:52:38,670 --> 00:52:42,389
just completely flies in the face of

1106
00:52:40,380 --> 00:52:44,608
that I heard that a Scott was being

1107
00:52:42,389 --> 00:52:46,348
inducted into the IRG I was very excited

1108
00:52:44,608 --> 00:52:48,420
I mean all the times that you've saved

1109
00:52:46,349 --> 00:52:50,309
the enterprise and worked with courage

1110
00:52:48,420 --> 00:52:53,539
bones and it's just it's really a

1111
00:52:50,309 --> 00:52:53,539
fantastic what

1112

00:52:54,480 --> 00:52:59,969
Oh Jeannie Scott all even better oh my

1113
00:52:58,320 --> 00:53:01,109
gosh actually a real hero of mine I've

1114
00:52:59,969 --> 00:53:02,849
been in the number of conventions

1115
00:53:01,108 --> 00:53:05,579
Regina's talking it's always been such a

1116
00:53:02,849 --> 00:53:07,920
pleasure so congratulations but it's

1117
00:53:05,579 --> 00:53:11,369
been my great fortune and pleasure to

1118
00:53:07,920 --> 00:53:13,440
learn Eugenie Scott for I guess about 10

1119
00:53:11,369 --> 00:53:16,380
years now and I'm delighted that she's

1120
00:53:13,440 --> 00:53:19,769
been rewarded and given such recognition

1121
00:53:16,380 --> 00:53:22,710
or who work congratulations Eugenia I

1122
00:53:19,769 --> 00:53:24,300
can't think of anyone that deserves to

1123
00:53:22,710 --> 00:53:26,250
be inducted into a hollow mater more

1124
00:53:24,300 --> 00:53:27,960
than you I just want to say thank you

1125
00:53:26,250 --> 00:53:31,289
thank you for all of the work that

1126
00:53:27,960 --> 00:53:34,079

you've done Eugenie's God the main

1127

00:53:31,289 --> 00:53:36,719

conduit and I'm a controversial I'm going

1128

00:53:34,079 --> 00:53:40,858

to do that congratulations and it's

1129

00:53:36,719 --> 00:53:45,689

well-deserved Eugenie's five is just a

1130

00:53:40,858 --> 00:53:47,369

wonderful perfect person she is email

1131

00:53:45,690 --> 00:53:51,079

she's well known source I think she's

1132

00:53:47,369 --> 00:53:55,380

still an unsung hero because she is my

1133

00:53:51,079 --> 00:53:59,429

idol as a right way of being a good

1134

00:53:55,380 --> 00:54:02,099

skeptic and he could educate I know that

1135

00:53:59,429 --> 00:54:04,289

if ncsc hadn't been around blow these 20

1136

00:54:02,099 --> 00:54:07,679

years or so the situation would be a lot

1137

00:54:04,289 --> 00:54:10,009

worse because frankly we are effective

1138

00:54:07,679 --> 00:54:12,799

the creationists we'll talk again

1139

00:54:10,010 --> 00:54:14,960

this is the best job I've ever had no

1140

00:54:12,800 --> 00:54:17,200

question about it I got the best job in

1141
00:54:14,960 --> 00:54:17,199
the world

1142
00:54:47,880 --> 00:54:51,699
have you heard the one about how the

1143
00:54:49,748 --> 00:54:53,228
Illuminati in conjunction with the US

1144
00:54:51,699 --> 00:54:54,999
government are hiding the existence of

1145
00:54:53,228 --> 00:54:57,278
aliens in order to ensure the supply of

1146
00:54:54,998 --> 00:54:58,748
helium is kept low although the CIA the

1147
00:54:57,278 --> 00:55:00,489
militant wing of the Freemasons are

1148
00:54:58,748 --> 00:55:01,929
working with the elders of zion to take

1149
00:55:00,489 --> 00:55:04,449
control of the population of the world

1150
00:55:01,929 --> 00:55:06,219
through fluoridated chemtrails canberra

1151
00:55:04,449 --> 00:55:07,719
skeptics incorporated on behalf of the

1152
00:55:06,219 --> 00:55:09,400
shadow government will be massing an

1153
00:55:07,719 --> 00:55:11,949
array of dark forces for the Australian

1154
00:55:09,400 --> 00:55:13,719
skeptics national convention 2013 this

1155
00:55:11,949 --> 00:55:15,309
convention has conspired to coincide

1156
00:55:13,719 --> 00:55:17,650
with the 50th anniversary of the

1157
00:55:15,309 --> 00:55:19,298
assassination of John F Kennedy possibly

1158
00:55:17,650 --> 00:55:21,338
the most famous conspiracy theory of all

1159
00:55:19,298 --> 00:55:23,199
time if you've ever wanted to learn

1160
00:55:21,338 --> 00:55:25,119
about the truth behind the death of JFK

1161
00:55:23,199 --> 00:55:27,039
what makes for a good conspiracy theory

1162
00:55:25,119 --> 00:55:29,019
and why they are so prevalent Canberra

1163
00:55:27,039 --> 00:55:30,759
skeptics invites you to attend that is

1164
00:55:29,018 --> 00:55:33,788
of course should you choose to accept it

1165
00:55:30,759 --> 00:55:36,369
come to national skeptics convention org

1166
00:55:33,789 --> 00:55:38,519
and just remember they will be watching

1167
00:55:36,369 --> 00:55:38,519
you

1168
00:55:48,909 --> 00:55:53,750
thank you for listening to the skeptic

1169

00:55:51,440 --> 00:55:56,119
zone now the skeptic so next week we'll

1170
00:55:53,750 --> 00:55:58,460
be coming to you from Melbourne Victoria

1171
00:55:56,119 --> 00:56:00,409
I'll be flying down there very soon

1172
00:55:58,460 --> 00:56:02,690
spending some time with those great

1173
00:56:00,409 --> 00:56:05,449
people down in Victoria getting ready

1174
00:56:02,690 --> 00:56:07,130
for my talk and well I'll be getting

1175
00:56:05,449 --> 00:56:09,649
some interviews and insights from the

1176
00:56:07,130 --> 00:56:12,349
people down in Melbourne in Victoria

1177
00:56:09,650 --> 00:56:14,660
can't wait to see you all there until

1178
00:56:12,349 --> 00:56:20,719
then this is Richard Saunders signing

1179
00:56:14,659 --> 00:56:23,989
off from Sydney Australia you've been

1180
00:56:20,719 --> 00:56:28,519
listening to the skeptic zone visit our

1181
00:56:23,989 --> 00:56:31,009
website at [www.skeptics on TV](http://www.skepticsontv.com) for

1182
00:56:28,519 --> 00:56:33,670
comments contacts and extra video

1183
00:56:31,010 --> 00:56:33,670

reports

1184

00:56:36,719 --> 00:56:38,750

Oh