

1
00:00:06,318 --> 00:00:12,980
welcome to the skeptic zone the podcast

2
00:00:09,480 --> 00:00:16,800
from Australia for science and reason

3
00:00:12,980 --> 00:00:19,278
yuria hosts Richard Saunders and Stefan

4
00:00:16,800 --> 00:00:19,278
Soyka

5
00:00:20,800 --> 00:00:27,019
Richard good morning afternoon evening

6
00:00:23,750 --> 00:00:28,640
morning everything's going Richard I am

7
00:00:27,019 --> 00:00:32,000
looking at a screen right now my

8
00:00:28,640 --> 00:00:34,579
computer of itunes yes yes itunes yes

9
00:00:32,000 --> 00:00:36,859
into the podcast section oh yes the

10
00:00:34,579 --> 00:00:39,140
audio podcast section is yes the audio

11
00:00:36,859 --> 00:00:42,409
science podcast sickness gets better and

12
00:00:39,140 --> 00:00:46,159
we number one number one our number one

13
00:00:42,409 --> 00:00:48,169
science podcast in Australian just in

14
00:00:46,159 --> 00:00:49,789
time for Christmas I love it oh it's why

15
00:00:48,170 --> 00:00:52,340
they've had some fanfare music I play it

16
00:00:49,789 --> 00:00:53,960
right now it sits in my head I'll put

17
00:00:52,340 --> 00:00:57,019
some in in the mix like hear that music

18
00:00:53,960 --> 00:00:59,210
now ah that's glorious or musical is

19
00:00:57,018 --> 00:01:00,408
good well Richard is great to be back in

20
00:00:59,210 --> 00:01:02,030
here we are the number one science

21
00:01:00,408 --> 00:01:04,939
podcast in Australia and and their

22
00:01:02,030 --> 00:01:06,260
booming and booming analytica thank you

23
00:01:04,939 --> 00:01:08,269
listeners for subscribing and

24
00:01:06,260 --> 00:01:10,760
downloading and if you enjoy the show

25
00:01:08,269 --> 00:01:12,289
please go back and download all the

26
00:01:10,760 --> 00:01:13,969
episodes you might not have heard yet

27
00:01:12,290 --> 00:01:16,340
yeah and even you can go back to that

28
00:01:13,969 --> 00:01:18,349
the old tank days too that's right now

29

00:01:16,340 --> 00:01:19,700
I'll show before this one the skeptic

30
00:01:18,349 --> 00:01:21,559
tank which was a lot of fun and the tank

31
00:01:19,700 --> 00:01:23,210
vodcast lots of good stuff good stuff

32
00:01:21,560 --> 00:01:25,368
there so yeah thanks for everyone for

33
00:01:23,209 --> 00:01:27,019
joining us and for participating this

34
00:01:25,368 --> 00:01:29,299
wonderful little experiment of the

35
00:01:27,019 --> 00:01:31,608
skeptic come zone the skeptics own

36
00:01:29,299 --> 00:01:34,310
podcast now this is showed number nine

37
00:01:31,608 --> 00:01:35,959
already for the 19th of December

38
00:01:34,310 --> 00:01:38,750
goodness me we're plowing through them

39
00:01:35,959 --> 00:01:40,938
yeah so what are we going up what a

40
00:01:38,750 --> 00:01:42,920
lineup we have for you we have an

41
00:01:40,938 --> 00:01:45,379
interview with dr. Pamela gay from

42
00:01:42,920 --> 00:01:48,590
astronomy cast calm oh that's a great

43
00:01:45,379 --> 00:01:50,989

site that's a great site last absolutely

44

00:01:48,590 --> 00:01:52,850

yeah and she that they're like a really

45

00:01:50,989 --> 00:01:54,498

got some really Zhaan they're really

46

00:01:52,849 --> 00:01:56,178

good stories really popular and you can

47

00:01:54,498 --> 00:01:57,949

hear all about that i'm sure a lot of

48

00:01:56,179 --> 00:01:59,478

our listeners already know about Pamela

49

00:01:57,950 --> 00:02:01,700

gay and her pod can you think so because

50

00:01:59,478 --> 00:02:03,799

I would think so huge so and what else

51

00:02:01,700 --> 00:02:05,600

and we've got it just for a change it's

52

00:02:03,799 --> 00:02:07,759

a very interesting thing I went down to

53

00:02:05,599 --> 00:02:09,829

the town hall here in Sydney where they

54

00:02:07,759 --> 00:02:13,430

had a protest against internet

55

00:02:09,830 --> 00:02:14,810

censorship oh I source of news about

56

00:02:13,430 --> 00:02:17,450

that and I spoke to a lot of people

57

00:02:14,810 --> 00:02:20,569

including Fiona Patten from the

58
00:02:17,449 --> 00:02:22,310
Australian sex party the sex parties

59
00:02:20,568 --> 00:02:24,109
party that sounds good it's actually a

60
00:02:22,310 --> 00:02:26,000
political party it's not it's not a

61
00:02:24,110 --> 00:02:29,269
party amuse drink champagne everything

62
00:02:26,000 --> 00:02:30,889
probably you do ok so that's they've

63
00:02:29,269 --> 00:02:32,510
formed a new party too yeah fight all

64
00:02:30,889 --> 00:02:34,159
the censorship that's right that's right

65
00:02:32,509 --> 00:02:36,139
so i'll be talking to her and some

66
00:02:34,159 --> 00:02:38,090
people down there d at the town hall

67
00:02:36,139 --> 00:02:39,409
consuming I'll be pretty excited that

68
00:02:38,090 --> 00:02:41,300
was pretty interesting and then we've

69
00:02:39,409 --> 00:02:45,229
got a really great interview with a guy

70
00:02:41,300 --> 00:02:47,030
only known as potholer 54 hot holla 54

71
00:02:45,229 --> 00:02:49,280
actually know about it i watch all these

72
00:02:47,030 --> 00:02:51,129
videos yeah yeah really cool yeah he

73
00:02:49,280 --> 00:02:53,479
does some great arguments on on

74
00:02:51,129 --> 00:02:56,329
creationism vs. science yeah and

75
00:02:53,479 --> 00:02:58,579
evolution vs. yes you know instant yeah

76
00:02:56,330 --> 00:03:01,490
it's instant University of magic and

77
00:02:58,580 --> 00:03:03,740
stuff now he has a new DVD out which you

78
00:03:01,490 --> 00:03:05,420
can download for free off the internet

79
00:03:03,740 --> 00:03:06,800
and details are coming up in that

80
00:03:05,419 --> 00:03:08,419
interview I'm actually in the middle of

81
00:03:06,800 --> 00:03:11,300
downloading it right now I should have

82
00:03:08,419 --> 00:03:13,250
brought you a copy i downloaded i will

83
00:03:11,300 --> 00:03:14,689
thus a lot of bandwidth i just

84
00:03:13,250 --> 00:03:16,849
remembered i brought you a copy on my

85
00:03:14,689 --> 00:03:18,319
USB stick Oh Richard Richard really you

86

00:03:16,849 --> 00:03:20,750
go what a what a glorious day it is

87
00:03:18,319 --> 00:03:23,419
today 10 science and i get x pothole or

88
00:03:20,750 --> 00:03:24,530
dvd you do on a USB stick I suppose we

89
00:03:23,419 --> 00:03:25,819
should get into it shortly but we've

90
00:03:24,530 --> 00:03:27,800
still had a couple more things coming up

91
00:03:25,819 --> 00:03:29,840
we do don't forget we've got our regular

92
00:03:27,800 --> 00:03:32,270
segments to round up with Michael while

93
00:03:29,840 --> 00:03:34,939
hand dr. Rachel reports and our

94
00:03:32,270 --> 00:03:36,140
Christmas think tank oh that Christmas

95
00:03:34,939 --> 00:03:38,060
thing the coast miss think tank now

96
00:03:36,139 --> 00:03:39,889
listen is to keep us number one there

97
00:03:38,060 --> 00:03:42,259
are a few things you can do please tell

98
00:03:39,889 --> 00:03:44,449
your friends yeah about our show the

99
00:03:42,259 --> 00:03:45,979
skeptic zone tell your enemies too yeah

100
00:03:44,449 --> 00:03:47,329

tell you oh yes we've got lots more

101

00:03:45,979 --> 00:03:49,099

people coming into the zone that

102

00:03:47,330 --> 00:03:50,930

wouldn't normally listen to a show like

103

00:03:49,099 --> 00:03:53,659

this because we would actually have some

104

00:03:50,930 --> 00:03:56,000

fun with them and get them to maybe yeah

105

00:03:53,659 --> 00:03:58,789

change them on tomato so also on our

106

00:03:56,000 --> 00:04:00,860

website you can download some PDF flyers

107

00:03:58,789 --> 00:04:02,719

and post them up at your university or

108

00:04:00,860 --> 00:04:04,220

college oh yeah or shopping so that's

109

00:04:02,719 --> 00:04:07,250

right get into the zone or in your own

110

00:04:04,219 --> 00:04:09,109

bathroom or anywhere you want awesome

111

00:04:07,250 --> 00:04:12,939

okay so uh let's get stuck into it I

112

00:04:09,110 --> 00:04:12,940

think so let's go into the zone

113

00:04:15,050 --> 00:04:26,509

a lifetime stargazer dr. Pamela L gay

114

00:04:24,230 --> 00:04:29,689

has followed her obsession to a

115
00:04:26,509 --> 00:04:31,789
profession today dr. gays an associate

116
00:04:29,689 --> 00:04:33,050
research professor of physics at

117
00:04:31,790 --> 00:04:35,470
southern illinois university

118
00:04:33,050 --> 00:04:37,579
edwardsville where she teaches

119
00:04:35,470 --> 00:04:40,820
introductory physics and astronomy

120
00:04:37,579 --> 00:04:43,430
courses she also produces the popular

121
00:04:40,819 --> 00:04:45,949
science podcast astronomy cast with

122
00:04:43,430 --> 00:04:47,689
Fraser Cain each week they take their

123
00:04:45,949 --> 00:04:50,659
international audience on an educational

124
00:04:47,689 --> 00:04:52,610
journey through the cosmos as a

125
00:04:50,660 --> 00:04:55,250
professional astronomer Pamela's

126
00:04:52,610 --> 00:04:58,780
research focuses on variable stars

127
00:04:55,250 --> 00:05:01,370
galaxies evolution and public outreach

128
00:04:58,779 --> 00:05:04,099
teaching by the day she works on

129
00:05:01,370 --> 00:05:06,920
astronomy data by night teaming up with

130
00:05:04,100 --> 00:05:09,620
citizen scientists to find new ways of

131
00:05:06,920 --> 00:05:11,420
understanding our universe in between

132
00:05:09,620 --> 00:05:13,449
she finds times to mentor students

133
00:05:11,420 --> 00:05:16,430
working on observational astronomy

134
00:05:13,449 --> 00:05:19,939
projects through Swinburne astronomy

135
00:05:16,430 --> 00:05:21,918
online podcasting is a creative outlet

136
00:05:19,939 --> 00:05:24,279
that brings together her love of

137
00:05:21,918 --> 00:05:26,870
astronomy with her passion for teaching

138
00:05:24,279 --> 00:05:29,959
making staying current in an

139
00:05:26,870 --> 00:05:34,340
ever-changing field of fun endeavor you

140
00:05:29,959 --> 00:05:40,129
can find her online at WWE strana me

141
00:05:34,339 --> 00:05:44,989
cast calm and at ww start Strider calm

142
00:05:40,129 --> 00:05:47,779
and joining me on the line is Pamela gay

143

00:05:44,990 --> 00:05:50,090
hello Pamela hi Richard how are you

144
00:05:47,779 --> 00:05:51,829
doing I'm doing really well I'm doing

145
00:05:50,089 --> 00:05:53,929
particularly well because I'm so happy

146
00:05:51,829 --> 00:05:56,240
to talk with you it seems a long time

147
00:05:53,930 --> 00:06:00,259
since we've actually have seen each

148
00:05:56,240 --> 00:06:02,600
other at dragoncon of course oh that was

149
00:06:00,259 --> 00:06:04,879
only three months ago but sometimes it

150
00:06:02,600 --> 00:06:06,860
feels like a lifetime ago it was

151
00:06:04,879 --> 00:06:09,709
tremendous fun I can't wait to go back

152
00:06:06,860 --> 00:06:12,230
there next year I really must ask you

153
00:06:09,709 --> 00:06:15,579
straight away what is it about astronomy

154
00:06:12,230 --> 00:06:18,110
that that it engages you so much well

155
00:06:15,579 --> 00:06:21,620
here on our planet Earth we're sort of

156
00:06:18,110 --> 00:06:24,650
confined by what we're able to build

157
00:06:21,620 --> 00:06:26,600

what we're able to do and a plan it's

158

00:06:24,649 --> 00:06:28,649

only so big you can have only so many

159

00:06:26,600 --> 00:06:30,870

different combinations of things

160

00:06:28,649 --> 00:06:35,638

but as we look out across the universe

161

00:06:30,870 --> 00:06:37,560

we are allowed to look across 15 billion

162

00:06:35,639 --> 00:06:40,939

you twelve thirteen point seven plus or

163

00:06:37,560 --> 00:06:43,530

minus point two billion years of history

164

00:06:40,939 --> 00:06:45,000

instead of just the five billion that

165

00:06:43,529 --> 00:06:49,228

were confined to here on the planet

166

00:06:45,000 --> 00:06:51,288

Earth we can look out across billions of

167

00:06:49,228 --> 00:06:54,149

light-years of space and see all the

168

00:06:51,288 --> 00:06:56,430

galaxies and everything within them

169

00:06:54,149 --> 00:06:58,978

across all those billions of light-years

170

00:06:56,430 --> 00:07:01,590

of space instead of just what's stuck on

171

00:06:58,978 --> 00:07:05,219

the surface of the planet Earth and as

172
00:07:01,589 --> 00:07:07,709
we look across this amazing volume the

173
00:07:05,220 --> 00:07:10,199
diversity of things that are waiting to

174
00:07:07,709 --> 00:07:11,638
be discovered is something we can't even

175
00:07:10,199 --> 00:07:13,319
wrap our heads around we're still

176
00:07:11,639 --> 00:07:15,960
finding new things that we've never even

177
00:07:13,319 --> 00:07:18,599
imagined and we've been kind of looking

178
00:07:15,959 --> 00:07:20,549
up for well as long as human beings of

179
00:07:18,600 --> 00:07:22,530
existence there's always something new

180
00:07:20,550 --> 00:07:26,069
to find always something new to learn

181
00:07:22,529 --> 00:07:28,228
always something new to go wait this

182
00:07:26,069 --> 00:07:31,620
over here does this this over here does

183
00:07:28,228 --> 00:07:33,598
this these are related we're still

184
00:07:31,620 --> 00:07:34,949
building and understanding and I love

185
00:07:33,598 --> 00:07:37,439
being part of this process of

186
00:07:34,949 --> 00:07:40,020
understanding how our universe is

187
00:07:37,439 --> 00:07:44,418
changing over billions of years of time

188
00:07:40,019 --> 00:07:47,098
and what since you've been involved in

189
00:07:44,418 --> 00:07:50,370
practicing astronomy what is what what

190
00:07:47,098 --> 00:07:52,019
is one of the most startling changes in

191
00:07:50,370 --> 00:07:55,709
our way of thinking that that has

192
00:07:52,019 --> 00:07:57,329
occurred dark energy it's it's starting

193
00:07:55,709 --> 00:07:59,098
to sound cliché cuz i think that's the

194
00:07:57,329 --> 00:08:02,329
answer pretty much every astronomer is

195
00:07:59,098 --> 00:08:04,469
going to give but back in 1998

196
00:08:02,329 --> 00:08:06,810
everything we thought we knew about the

197
00:08:04,470 --> 00:08:10,050
universe got tossed out the window in

198
00:08:06,810 --> 00:08:13,860
one or actually two wonderful sets of

199
00:08:10,050 --> 00:08:17,819
data we'd always had this picture of the

200

00:08:13,860 --> 00:08:20,729
universe is this expanding thing that

201
00:08:17,819 --> 00:08:22,529
due to its own gravity would perhaps

202
00:08:20,728 --> 00:08:25,649
eventually stop perhaps eventually

203
00:08:22,529 --> 00:08:29,038
crunch in on itself maybe kind of keep

204
00:08:25,649 --> 00:08:30,839
going forever but we never imagined it

205
00:08:29,038 --> 00:08:33,059
would be accelerating itself apart which

206
00:08:30,839 --> 00:08:35,129
turns out to be the actual physics of

207
00:08:33,059 --> 00:08:37,379
the universe we live in and we're not

208
00:08:35,129 --> 00:08:40,588
sure what's due in the bushing we've

209
00:08:37,379 --> 00:08:42,389
given this strange energy that seems to

210
00:08:40,589 --> 00:08:42,659
be accelerating our universe apart the

211
00:08:42,389 --> 00:08:45,360
name

212
00:08:42,658 --> 00:08:49,379
dark energy but we have no clue what it

213
00:08:45,360 --> 00:08:51,028
is and just to have everything we

214
00:08:49,379 --> 00:08:53,339

thought we knew about how the universe

215

00:08:51,028 --> 00:08:56,909

is going to evolve into the future gets

216

00:08:53,339 --> 00:08:59,009

thrown out in one year that's that's

217

00:08:56,909 --> 00:09:01,019

pretty amazing now that's one of the

218

00:08:59,009 --> 00:09:04,680

things I really love about science is

219

00:09:01,019 --> 00:09:07,528

science is willing to basically throw

220

00:09:04,679 --> 00:09:09,958

things out I mean it's it's incredible

221

00:09:07,528 --> 00:09:11,610

because of course from the skeptical

222

00:09:09,958 --> 00:09:15,268

point of view one of the groups of

223

00:09:11,610 --> 00:09:17,250

people we there i say battle with to my

224

00:09:15,269 --> 00:09:20,669

mind people who belittle the universe

225

00:09:17,250 --> 00:09:23,970

and these are the astrologers who who

226

00:09:20,669 --> 00:09:26,610

can't bear the thought that they might

227

00:09:23,970 --> 00:09:27,870

be wrong and they won't throw things out

228

00:09:26,610 --> 00:09:32,220

there for they're stuck with the same

229
00:09:27,870 --> 00:09:33,778
old outdated claptrap they have been for

230
00:09:32,220 --> 00:09:36,480
years and years and years do you get

231
00:09:33,778 --> 00:09:39,110
many of your students asking you these

232
00:09:36,480 --> 00:09:41,310
sort of questions what about astrology

233
00:09:39,110 --> 00:09:42,568
what really gets me is when I have

234
00:09:41,309 --> 00:09:44,698
students come up and they're like I

235
00:09:42,568 --> 00:09:47,789
really need to learn astronomy so that I

236
00:09:44,698 --> 00:09:50,669
can work out fortune for this chart for

237
00:09:47,789 --> 00:09:52,740
that it's like oh oh oh dear I I will

238
00:09:50,669 --> 00:09:54,599
teach you the physics but um hopefully

239
00:09:52,740 --> 00:09:56,159
when I'm done you will no longer feet

240
00:09:54,600 --> 00:10:00,659
feel the need to create a chart for

241
00:09:56,159 --> 00:10:04,289
anything that surprises me yeah well it

242
00:10:00,659 --> 00:10:07,078
happens and it's part of we each grew up

243
00:10:04,289 --> 00:10:10,860
with in a small culture that may not

244
00:10:07,078 --> 00:10:12,929
expose us to science and you can't

245
00:10:10,860 --> 00:10:13,800
really blame a student for believing in

246
00:10:12,929 --> 00:10:15,899
something when they've never been

247
00:10:13,799 --> 00:10:17,458
presented with an alternative when

248
00:10:15,899 --> 00:10:20,458
they've never been presented with the

249
00:10:17,458 --> 00:10:23,489
science the facts of how our universe

250
00:10:20,458 --> 00:10:25,828
functions the physics of well what

251
00:10:23,490 --> 00:10:28,589
actually is a force what actually does

252
00:10:25,828 --> 00:10:32,909
create a physical measurable influence

253
00:10:28,589 --> 00:10:35,790
on anything and so the best way to take

254
00:10:32,909 --> 00:10:38,639
these poor misguided souls and put them

255
00:10:35,789 --> 00:10:41,219
on the path of well skeptical reasoning

256
00:10:38,639 --> 00:10:45,899
is to get them to work out the math of

257

00:10:41,220 --> 00:10:48,839
okay so exactly how much influence can

258
00:10:45,899 --> 00:10:50,850
Jupiter have on a human being how much

259
00:10:48,839 --> 00:10:53,220
influence can a star have on a human

260
00:10:50,850 --> 00:10:55,259
being work out what is the light we're

261
00:10:53,220 --> 00:10:56,490
receiving work out what is the gravity

262
00:10:55,259 --> 00:10:58,500
that we're being influenced

263
00:10:56,490 --> 00:11:01,169
I and then compare it to like a semi

264
00:10:58,500 --> 00:11:03,000
truck driving down the street hmm and

265
00:11:01,169 --> 00:11:06,208
it's in making these everyday

266
00:11:03,000 --> 00:11:08,610
comparisons that you realize well maybe

267
00:11:06,208 --> 00:11:10,649
I need to take into account all the

268
00:11:08,610 --> 00:11:13,470
long-haul truck drivers on the planet as

269
00:11:10,649 --> 00:11:14,940
well in working out my charts and that's

270
00:11:13,470 --> 00:11:17,220
where you start to realize maybe this

271
00:11:14,940 --> 00:11:20,160

isn't something that you can believe in

272

00:11:17,220 --> 00:11:22,860

that's hilarious I mean it's it's one of

273

00:11:20,159 --> 00:11:24,899

the old favorites you know the skeptics

274

00:11:22,860 --> 00:11:28,110

I always have to be you're supposed to

275

00:11:24,899 --> 00:11:30,690

be skeptical of astrology but sort of

276

00:11:28,110 --> 00:11:33,659

like shooting fish in a barrel really to

277

00:11:30,690 --> 00:11:35,520

be skeptical astrology one of the best

278

00:11:33,659 --> 00:11:38,939

practical jokes I think I've ever heard

279

00:11:35,519 --> 00:11:42,409

is one of the faculty who I shan't name

280

00:11:38,940 --> 00:11:44,580

at the University of Texas called up a

281

00:11:42,409 --> 00:11:47,338

exoplanet astronomer someone who studies

282

00:11:44,580 --> 00:11:49,320

planets around other stars demanding to

283

00:11:47,339 --> 00:11:52,740

know the locations of planets orbiting

284

00:11:49,320 --> 00:11:55,470

other stars to work out the astrological

285

00:11:52,740 --> 00:11:57,990

charts for their children's wedding it

286
00:11:55,470 --> 00:12:00,209
was completely a practical joke but when

287
00:11:57,990 --> 00:12:02,129
you start thinking about all the motions

288
00:12:00,208 --> 00:12:04,289
all the objects and then start trying to

289
00:12:02,129 --> 00:12:08,759
understand all the things that we

290
00:12:04,289 --> 00:12:10,799
haven't even detected yet yeah it's it's

291
00:12:08,759 --> 00:12:12,328
Turtles all the way down and about as

292
00:12:10,799 --> 00:12:14,250
believable as turtles all the way down

293
00:12:12,328 --> 00:12:16,559
Oh Pamela I think you've given me in

294
00:12:14,250 --> 00:12:19,379
half I'll listen is an evil idea to set

295
00:12:16,559 --> 00:12:23,328
up a new form of astrology exoplanet

296
00:12:19,379 --> 00:12:25,889
astrology the astrology of the future

297
00:12:23,328 --> 00:12:29,578
well you know if we're gonna settle

298
00:12:25,889 --> 00:12:32,639
alien worlds how many exoplanets have

299
00:12:29,578 --> 00:12:34,889
been discovered to your knowledge I last

300
00:12:32,639 --> 00:12:36,299
I looked we're up well over 200 well

301
00:12:34,889 --> 00:12:38,490
there you go i mean there's bound to be

302
00:12:36,299 --> 00:12:40,379
lots of influences and conjunctions in

303
00:12:38,490 --> 00:12:42,600
the third house of the six meridian of

304
00:12:40,379 --> 00:12:44,669
the second coming of age right and

305
00:12:42,600 --> 00:12:47,339
there's brown dwarf stars and there's

306
00:12:44,669 --> 00:12:48,958
red dwarf stars and all these objects

307
00:12:47,339 --> 00:12:52,050
that aren't necessarily all that far

308
00:12:48,958 --> 00:12:54,629
away and you know at a certain point you

309
00:12:52,049 --> 00:12:58,259
just have to go yeah there's other

310
00:12:54,629 --> 00:13:02,129
things on my planet who have a much

311
00:12:58,259 --> 00:13:03,600
greater effect and we don't care so why

312
00:13:02,129 --> 00:13:05,939
are we carrying about these celestial

313
00:13:03,600 --> 00:13:07,709
objects where's the magic that's right

314

00:13:05,940 --> 00:13:09,960
but I one of the things that we

315
00:13:07,708 --> 00:13:12,659
encounter many times it's

316
00:13:09,960 --> 00:13:16,009
part of our culture at least to grow up

317
00:13:12,659 --> 00:13:19,289
with the Stars what's your star sign and

318
00:13:16,009 --> 00:13:21,990
unless people spend the time in the

319
00:13:19,289 --> 00:13:24,929
effort to to question it or think about

320
00:13:21,990 --> 00:13:27,149
it a lot of times they'll go through

321
00:13:24,929 --> 00:13:28,799
their whole lives just assuming that is

322
00:13:27,149 --> 00:13:30,809
a part of the way that the universe

323
00:13:28,799 --> 00:13:33,179
works that people have star signs and it

324
00:13:30,809 --> 00:13:35,899
works this way or that way and what you

325
00:13:33,179 --> 00:13:40,709
have to start asking is if this is true

326
00:13:35,899 --> 00:13:43,889
why is it that only a certain section of

327
00:13:40,710 --> 00:13:47,340
the people get affected by cholera

328
00:13:43,889 --> 00:13:48,870

outbreaks get affected by tsunamis it's

329

00:13:47,340 --> 00:13:51,899

not only the people that are being

330

00:13:48,870 --> 00:13:54,870

affected by these natural disasters who

331

00:13:51,899 --> 00:13:58,529

have the same star signs you can have

332

00:13:54,870 --> 00:14:02,610

two twins that were born via cesarean

333

00:13:58,529 --> 00:14:05,209

section only moments apart and things in

334

00:14:02,610 --> 00:14:08,250

the universe aren't moving that fast and

335

00:14:05,210 --> 00:14:11,580

yet they'll undergo radically different

336

00:14:08,250 --> 00:14:13,440

lives yeah so if it's your star signs

337

00:14:11,580 --> 00:14:17,000

that matter how is it that you can have

338

00:14:13,440 --> 00:14:19,350

two people who grow up side-by-side

339

00:14:17,000 --> 00:14:22,500

conjoined twins how the heck can

340

00:14:19,350 --> 00:14:24,269

conjoined twins have different days one

341

00:14:22,500 --> 00:14:26,730

might get a crappy email in another one

342

00:14:24,269 --> 00:14:28,289

gets a really good email and yet what

343
00:14:26,730 --> 00:14:30,539
difference have these conjoined twins

344
00:14:28,289 --> 00:14:32,879
really experienced well the astrologers

345
00:14:30,539 --> 00:14:36,750
I've met out there will always have an

346
00:14:32,879 --> 00:14:38,820
answer the lamest answer we get from

347
00:14:36,750 --> 00:14:40,919
people who believe in magical thinking

348
00:14:38,820 --> 00:14:42,390
like astrology or psychics or something

349
00:14:40,919 --> 00:14:43,799
like that is when you put a question to

350
00:14:42,389 --> 00:14:46,289
them like that they'll say oh it doesn't

351
00:14:43,799 --> 00:14:50,339
work that way and this is where I say

352
00:14:46,289 --> 00:14:52,949
what physics and I say okay so take us

353
00:14:50,340 --> 00:14:54,509
on my truck fill it up with refrigerator

354
00:14:52,950 --> 00:14:57,629
magnets that are all oriented in the

355
00:14:54,509 --> 00:14:59,539
same direction and stand in front of it

356
00:14:57,629 --> 00:15:01,860
while its headlights shine on you and

357
00:14:59,539 --> 00:15:04,139
there you have the magnetic field you

358
00:15:01,860 --> 00:15:06,210
have the light you have the gravity and

359
00:15:04,139 --> 00:15:10,319
compare the effects that you're getting

360
00:15:06,210 --> 00:15:11,759
from this random truck to Jupiter I see

361
00:15:10,320 --> 00:15:15,960
Pamela you don't understand its

362
00:15:11,759 --> 00:15:20,129
spiritual energy yeah yeah like I said

363
00:15:15,960 --> 00:15:22,830
shooting fish in a barrel but it does

364
00:15:20,129 --> 00:15:23,610
that's interesting just going back to

365
00:15:22,830 --> 00:15:25,250
something you

366
00:15:23,610 --> 00:15:28,860
earlier about the fate of the universe

367
00:15:25,250 --> 00:15:30,778
when I was telling the other members of

368
00:15:28,860 --> 00:15:33,539
the skeptics own podcast that I'd be

369
00:15:30,778 --> 00:15:35,820
interviewing you our young astronomy

370
00:15:33,539 --> 00:15:38,789
student Tiffany day sent me an email

371

00:15:35,820 --> 00:15:40,470
saying can you please ask pamela in her

372
00:15:38,789 --> 00:15:42,419
opinion according to our current

373
00:15:40,470 --> 00:15:46,350
knowledge what she thinks the ultimate

374
00:15:42,419 --> 00:15:48,899
fate of our universe will be 0 our

375
00:15:46,350 --> 00:15:51,540
universe has such a sad fate in front of

376
00:15:48,899 --> 00:15:56,028
it oh it's it's gonna actually tear

377
00:15:51,539 --> 00:15:57,990
itself apart oh so over time our

378
00:15:56,028 --> 00:16:01,169
universe it's going to just keep

379
00:15:57,990 --> 00:16:04,079
expanding keep expanding forever and as

380
00:16:01,169 --> 00:16:07,019
it does this it's it's going to reach

381
00:16:04,078 --> 00:16:09,120
the point where well we don't think

382
00:16:07,019 --> 00:16:11,730
protons are stable the stuff that makes

383
00:16:09,120 --> 00:16:14,669
up hydrogen atoms there's a proton and

384
00:16:11,730 --> 00:16:15,930
electron in most hydrogen atoms and so

385
00:16:14,669 --> 00:16:18,569

there's going to be some day in the

386

00:16:15,929 --> 00:16:21,328

future where even the stuff that stars

387

00:16:18,570 --> 00:16:26,100

are made of stars to fall apart into

388

00:16:21,328 --> 00:16:28,319

pure energy and so as we have even white

389

00:16:26,100 --> 00:16:30,509

dwarf stars evaporating away as the

390

00:16:28,320 --> 00:16:32,790

protons decay as we have black holes

391

00:16:30,509 --> 00:16:35,399

evaporating away as black holes do via

392

00:16:32,789 --> 00:16:38,939

Hawking radiation we're going to end up

393

00:16:35,399 --> 00:16:42,149

with this soup of energy in a universe

394

00:16:38,940 --> 00:16:45,930

that's expanding such that that energy

395

00:16:42,149 --> 00:16:47,730

gets spread out so much that a firefly

396

00:16:45,929 --> 00:16:50,399

would be the most energetic thing in the

397

00:16:47,730 --> 00:16:52,350

entire universe by orders of magnitude

398

00:16:50,399 --> 00:16:54,509

what happens that's not very happy news

399

00:16:52,350 --> 00:16:57,570

because she's just got two new kittens

400
00:16:54,509 --> 00:16:59,220
so well we have really interviewers to

401
00:16:57,570 --> 00:17:01,050
worry about this so I think we're okay

402
00:16:59,220 --> 00:17:03,000
trillions of all that makes me feel a

403
00:17:01,049 --> 00:17:06,269
lot better can you please tell us a

404
00:17:03,000 --> 00:17:08,789
little bit about the very interesting

405
00:17:06,269 --> 00:17:13,199
and very popular podcast you're involved

406
00:17:08,789 --> 00:17:15,750
with called astronomy cast astronomy

407
00:17:13,199 --> 00:17:17,490
cast is a twice-weekly show that I put

408
00:17:15,750 --> 00:17:20,519
on with Fraser Cain of Universe Today

409
00:17:17,490 --> 00:17:22,828
and our first weekly show we take on a

410
00:17:20,519 --> 00:17:26,189
different topic each week anything from

411
00:17:22,828 --> 00:17:28,168
wise Pluto not a planet to well what is

412
00:17:26,189 --> 00:17:30,480
this relativity stuff that you might

413
00:17:28,169 --> 00:17:31,679
have heard about we take our listeners

414
00:17:30,480 --> 00:17:33,990
on a fact space journey through the

415
00:17:31,679 --> 00:17:35,778
cosmos try and help them understand not

416
00:17:33,990 --> 00:17:37,190
just what we know but why

417
00:17:35,778 --> 00:17:39,138
we know the things we know looking at

418
00:17:37,190 --> 00:17:41,929
the story looking at the data looking at

419
00:17:39,138 --> 00:17:45,648
well what are the facts that allow us to

420
00:17:41,929 --> 00:17:47,599
understand the universe and we realize

421
00:17:45,648 --> 00:17:50,388
that some of our shows cause more

422
00:17:47,598 --> 00:17:53,118
questions than they answer so our second

423
00:17:50,388 --> 00:17:54,918
show each week which admittedly when one

424
00:17:53,118 --> 00:17:57,259
of us sick or traveling may not happen

425
00:17:54,919 --> 00:17:59,929
but our second show most weeks is a

426
00:17:57,259 --> 00:18:02,868
listener questions show where we work to

427
00:17:59,929 --> 00:18:04,190
answer the questions that you or anyone

428

00:18:02,868 --> 00:18:06,259
else who listens to our show might

429
00:18:04,190 --> 00:18:08,028
happen to send in to us well you must

430
00:18:06,259 --> 00:18:09,169
get some very interesting questions

431
00:18:08,028 --> 00:18:10,729
because I know for a fact there are

432
00:18:09,169 --> 00:18:12,049
astronomy students who listen to your

433
00:18:10,729 --> 00:18:13,969
show and I'm sure they do from all

434
00:18:12,048 --> 00:18:17,088
around the world so the questions you

435
00:18:13,969 --> 00:18:20,119
must get are you ever stumped by these

436
00:18:17,088 --> 00:18:23,298
girls there have been some questions

437
00:18:20,118 --> 00:18:25,488
that they're harder than anything I ever

438
00:18:23,298 --> 00:18:27,558
encountered on an exam in graduate

439
00:18:25,489 --> 00:18:28,969
school and I have to admit I've given

440
00:18:27,558 --> 00:18:30,489
false information and had to do

441
00:18:28,969 --> 00:18:34,369
Corrections a couple of different times

442
00:18:30,489 --> 00:18:36,379

no people out there listen to what we

443

00:18:34,368 --> 00:18:38,418

have to say and then ponder it and come

444

00:18:36,378 --> 00:18:43,189

back with the most amazing well what if

445

00:18:38,419 --> 00:18:45,139

well I read can you explain and it keeps

446

00:18:43,190 --> 00:18:46,759

me on my feet every week and that's one

447

00:18:45,138 --> 00:18:48,468

of the great things about podcasting is

448

00:18:46,759 --> 00:18:50,690

it's a constant excuse to learn

449

00:18:48,469 --> 00:18:52,700

something new it's absolutely true and I

450

00:18:50,690 --> 00:18:55,249

speak from experience I enjoyed a very

451

00:18:52,700 --> 00:18:57,528

recent episode of astronomy cast where

452

00:18:55,249 --> 00:18:59,509

you're talking about time and why is it

453

00:18:57,528 --> 00:19:02,690

flowing in one direction and not another

454

00:18:59,509 --> 00:19:05,538

direction and I'm sure I all around the

455

00:19:02,690 --> 00:19:07,729

world all these people like myself or

456

00:19:05,538 --> 00:19:10,128

astronomy students are sitting there or

457
00:19:07,729 --> 00:19:11,989
on the treadmill and their brains is

458
00:19:10,128 --> 00:19:13,928
just snapping and exploding listening to

459
00:19:11,989 --> 00:19:16,429
the stuff it's it's good stuff family

460
00:19:13,929 --> 00:19:18,048
well thank you it's it's something we

461
00:19:16,429 --> 00:19:19,849
have a lot of fun putting together and

462
00:19:18,048 --> 00:19:22,098
I'm glad you're out there listening and

463
00:19:19,848 --> 00:19:24,288
enjoying it certainly are and you also

464
00:19:22,098 --> 00:19:27,769
have a blog of course and where did the

465
00:19:24,288 --> 00:19:30,888
name staffs try to come from alright so

466
00:19:27,769 --> 00:19:36,048
my blog star Strider calm and it comes

467
00:19:30,888 --> 00:19:38,748
from I there was a BBC radio series on

468
00:19:36,048 --> 00:19:40,489
the tokens Lord of the Rings and it

469
00:19:38,749 --> 00:19:43,269
refers to the character Aragorn a

470
00:19:40,489 --> 00:19:45,348
Strider throughout the entire series and

471
00:19:43,269 --> 00:19:46,819
driving back and forth and graduate

472
00:19:45,348 --> 00:19:49,609
school from mcdonald observatory i

473
00:19:46,819 --> 00:19:52,490
listened to the whole BBC Tolkien audio

474
00:19:49,609 --> 00:19:56,289
Oh Lord of the Rings series and decided

475
00:19:52,490 --> 00:19:59,420
to name my college computer Strider and

476
00:19:56,289 --> 00:20:01,849
in trying to come up with a name for my

477
00:19:59,420 --> 00:20:04,039
blog well it's it's a blog that talks

478
00:20:01,849 --> 00:20:06,469
about astronomy and academia so it

479
00:20:04,039 --> 00:20:10,609
became star Strider perfect that that's

480
00:20:06,470 --> 00:20:12,350
uh that's I never knew I never knew that

481
00:20:10,609 --> 00:20:14,689
you know no one's asking me that

482
00:20:12,349 --> 00:20:16,909
question before so cats out of the bag

483
00:20:14,690 --> 00:20:20,570
now the world knows and its stride with

484
00:20:16,910 --> 00:20:22,730
a why first for the the skeptic zone one

485

00:20:20,569 --> 00:20:26,000
of my early influences and one of the

486
00:20:22,730 --> 00:20:27,798
minute the people I credit with getting

487
00:20:26,000 --> 00:20:30,289
me going in this science and skepticism

488
00:20:27,798 --> 00:20:32,808
and what a fascinating world it is is

489
00:20:30,289 --> 00:20:39,409
the light Carl Sagan was he an influence

490
00:20:32,808 --> 00:20:41,509
on YouTube not as much um Carl Sagan I

491
00:20:39,410 --> 00:20:43,250
loved his fiction book contact it was

492
00:20:41,509 --> 00:20:45,470
the first book I really encountered that

493
00:20:43,250 --> 00:20:47,660
had a female role model as an astronomer

494
00:20:45,470 --> 00:20:49,548
in it but for me I think the biggest

495
00:20:47,660 --> 00:20:52,009
influence was actually Timothy Ferriss

496
00:20:49,548 --> 00:20:55,339
who isn't an astronomer but he's a

497
00:20:52,009 --> 00:20:57,200
really good science writer and back when

498
00:20:55,339 --> 00:20:59,298
I was in Middle School my uncle got me a

499
00:20:57,200 --> 00:21:01,610

copy of coming of age in the Milky Way

500

00:20:59,298 --> 00:21:04,160

which was just the coolest title for a

501

00:21:01,609 --> 00:21:06,918

book and I remember sitting the back

502

00:21:04,160 --> 00:21:09,048

seat of my parents car while driving off

503

00:21:06,919 --> 00:21:10,690

to summer camp or something I forget

504

00:21:09,048 --> 00:21:14,210

exactly where we were driving and just

505

00:21:10,690 --> 00:21:16,580

devouring the book and reading about the

506

00:21:14,210 --> 00:21:18,880

women at Harvard College observatory and

507

00:21:16,579 --> 00:21:21,289

their discoveries of variable stars and

508

00:21:18,880 --> 00:21:24,679

now what seems like several lifetimes

509

00:21:21,289 --> 00:21:26,960

later I'm a variable star observer now

510

00:21:24,679 --> 00:21:29,090

Pamela this year was very exciting for

511

00:21:26,960 --> 00:21:31,100

me I got to meet you for a start and I

512

00:21:29,089 --> 00:21:32,990

went to the states i went to dragoncon

513

00:21:31,099 --> 00:21:36,319

in the amazing meeting but when i met

514
00:21:32,990 --> 00:21:37,669
you at DragonCon one of the things that

515
00:21:36,319 --> 00:21:40,369
struck me about you was you were

516
00:21:37,669 --> 00:21:42,919
lurching towards me with a pin in your

517
00:21:40,369 --> 00:21:45,619
hand which you stuck on me this was for

518
00:21:42,919 --> 00:21:46,910
thee and thank you for doing that this

519
00:21:45,619 --> 00:21:48,649
was for the international year of

520
00:21:46,910 --> 00:21:50,630
astronomy which is next year what can

521
00:21:48,650 --> 00:21:52,250
you tell us about that well the

522
00:21:50,630 --> 00:21:55,120
international year of astronomy and I

523
00:21:52,250 --> 00:21:57,859
did pin you with one of our us iya pins

524
00:21:55,119 --> 00:22:00,500
the international year of astronomy is

525
00:21:57,859 --> 00:22:01,829
an international celebration of the

526
00:22:00,500 --> 00:22:04,740
universe it's

527
00:22:01,829 --> 00:22:06,960
our chances professional astronomers and

528
00:22:04,740 --> 00:22:10,380
as astronomy communicators and amateur

529
00:22:06,960 --> 00:22:12,269
astronomers to reach out to everyone who

530
00:22:10,380 --> 00:22:15,059
might not have ever taken the time to

531
00:22:12,269 --> 00:22:17,609
look up and say hey look up let me share

532
00:22:15,058 --> 00:22:20,730
the cosmos with you let me tell you a

533
00:22:17,609 --> 00:22:23,009
little bit about the art the history the

534
00:22:20,730 --> 00:22:25,500
science all the different things that

535
00:22:23,009 --> 00:22:28,829
astronomy I was touched on in the past

536
00:22:25,500 --> 00:22:31,440
400 years since Galileo first started

537
00:22:28,829 --> 00:22:34,079
turning astronomy and astrophysics by

538
00:22:31,440 --> 00:22:37,019
pointing his telescope at the planets

539
00:22:34,079 --> 00:22:39,028
and the Sun it's it's a wonderful event

540
00:22:37,019 --> 00:22:40,859
it's being organized by the

541
00:22:39,028 --> 00:22:43,409
International Astronomical Union and

542

00:22:40,859 --> 00:22:47,158
it's supported by the United Nations and

543
00:22:43,409 --> 00:22:49,049
by UNESCO and there are currently teams

544
00:22:47,159 --> 00:22:52,409
of people around the world in almost

545
00:22:49,048 --> 00:22:54,480
every nation working to plan local

546
00:22:52,409 --> 00:22:56,340
events when one of the things that I'm

547
00:22:54,480 --> 00:22:58,440
working on through the international new

548
00:22:56,339 --> 00:23:01,019
media Task Group is we're going to be

549
00:22:58,440 --> 00:23:03,509
putting together a daily eight to ten

550
00:23:01,019 --> 00:23:06,690
minute podcast called the 365 days

551
00:23:03,509 --> 00:23:09,569
astronomy podcast and we're going to be

552
00:23:06,690 --> 00:23:12,360
working to bring about eight minutes of

553
00:23:09,569 --> 00:23:14,460
content every single day of 2009 out to

554
00:23:12,359 --> 00:23:16,229
the public one of the other really cool

555
00:23:14,460 --> 00:23:19,139
programs is called from the earth to the

556
00:23:16,230 --> 00:23:22,710

universe and it's a public art program

557

00:23:19,138 --> 00:23:26,189

to bring the best images of space to the

558

00:23:22,710 --> 00:23:28,169

public in large format images that will

559

00:23:26,190 --> 00:23:30,419

be set out in public areas there's

560

00:23:28,169 --> 00:23:34,259

already a prototype exhibit up in

561

00:23:30,419 --> 00:23:37,860

Liverpool we have school programs we're

562

00:23:34,259 --> 00:23:41,220

working on producing \$10 telescopes to

563

00:23:37,859 --> 00:23:45,479

get out to the kids of the planet it's

564

00:23:41,220 --> 00:23:47,370

everything from science to art to just

565

00:23:45,480 --> 00:23:50,009

trying to get people to go outside and

566

00:23:47,369 --> 00:23:51,869

shut their lights off and see what the

567

00:23:50,009 --> 00:23:54,269

sky looks like without all the light

568

00:23:51,869 --> 00:23:58,138

pollution that's so that's quite an

569

00:23:54,269 --> 00:23:59,759

undertaking how can our listeners how

570

00:23:58,138 --> 00:24:03,028

can our listeners become involved in

571
00:23:59,759 --> 00:24:06,148
some way well the the best way to find

572
00:24:03,028 --> 00:24:07,398
out what's going on is to go to the

573
00:24:06,148 --> 00:24:09,719
international year of astronomy

574
00:24:07,398 --> 00:24:13,739
international website which is astronomy

575
00:24:09,720 --> 00:24:15,879
2009 o RG and it lists all the different

576
00:24:13,740 --> 00:24:18,308
programs and their individual websites

577
00:24:15,878 --> 00:24:21,428
and if you want to talk to other people

578
00:24:18,308 --> 00:24:22,598
the forums the online discussion boards

579
00:24:21,429 --> 00:24:25,239
for the international year of astronomy

580
00:24:22,598 --> 00:24:28,448
are located over on cloudy night so just

581
00:24:25,239 --> 00:24:30,038
google cloudy nights forums anna you can

582
00:24:28,449 --> 00:24:32,739
find out what people are saying there

583
00:24:30,038 --> 00:24:34,838
and most nations have their own version

584
00:24:32,739 --> 00:24:36,338
of the I way website so for instance

585
00:24:34,838 --> 00:24:41,948
here in the United States we're a truant

586
00:24:36,338 --> 00:24:44,678
we're astronomy 2009 us try googling iya

587
00:24:41,949 --> 00:24:46,239
2009 in your country name or if you go

588
00:24:44,679 --> 00:24:49,509
to the International web website

589
00:24:46,239 --> 00:24:51,068
astronomy 2009 dot o RG you can find the

590
00:24:49,509 --> 00:24:54,038
website for your individual nation

591
00:24:51,068 --> 00:24:56,348
that's fantastic that's fantastic but of

592
00:24:54,038 --> 00:24:58,209
course you don't have to wait for 2009

593
00:24:56,348 --> 00:25:00,368
to enjoy astronomy and you certainly

594
00:24:58,209 --> 00:25:03,190
don't have to wait for 2009 to enjoy

595
00:25:00,368 --> 00:25:06,788
Pamela gay and phasic a non astronomy

596
00:25:03,190 --> 00:25:08,499
cast just to annoy you even more Pamela

597
00:25:06,788 --> 00:25:10,868
if our listeners want to ask you a

598
00:25:08,499 --> 00:25:13,449
question for your astronomy cast what's

599

00:25:10,868 --> 00:25:16,208
the best way they can do that you can

600
00:25:13,449 --> 00:25:19,509
drop us an email at info at astronomy

601
00:25:16,209 --> 00:25:21,038
cast com well thank you for that Pamela

602
00:25:19,509 --> 00:25:22,719
and I'm sure our listeners can come up

603
00:25:21,038 --> 00:25:26,528
with even more questions to stump you

604
00:25:22,719 --> 00:25:29,259
and thank you again for all your efforts

605
00:25:26,528 --> 00:25:31,709
especially without reach because i love

606
00:25:29,259 --> 00:25:34,269
outreach myself i love doing outreach to

607
00:25:31,709 --> 00:25:36,009
bring the magic of science and in your

608
00:25:34,269 --> 00:25:38,440
case the magic of astronomy to as many

609
00:25:36,009 --> 00:25:40,598
people as possible well it's been my

610
00:25:38,440 --> 00:25:41,889
pleasure richard and keep doing what

611
00:25:40,598 --> 00:25:43,148
you're doing we need more people

612
00:25:41,888 --> 00:25:47,638
thinking critically about the world

613
00:25:43,148 --> 00:25:47,638

around them Thank You Pamela thank you

614

00:25:57,789 --> 00:26:03,950

death from the skies is the latest book

615

00:26:00,829 --> 00:26:06,529

by our good friend dr. Phil Plait also

616

00:26:03,950 --> 00:26:08,808

known as the bad astronomer and here

617

00:26:06,529 --> 00:26:11,720

with her take on Phil's latest book his

618

00:26:08,808 --> 00:26:15,259

first year astronomy student and new

619

00:26:11,720 --> 00:26:16,789

skeptic zone member tiffany day as a

620

00:26:15,259 --> 00:26:18,950

current first-year astronomy and

621

00:26:16,789 --> 00:26:20,899

astrophysics student i couldn't think of

622

00:26:18,950 --> 00:26:22,940

a book i've recently been anticipating

623

00:26:20,900 --> 00:26:25,009

more than dr. phillip plates death from

624

00:26:22,940 --> 00:26:27,710

the skies these are the ways the world

625

00:26:25,009 --> 00:26:30,619

will end and man was i not disappointed

626

00:26:27,710 --> 00:26:32,179

in true phil plait style for those who

627

00:26:30,619 --> 00:26:34,669

are familiar with his blog bad astronomy

628
00:26:32,179 --> 00:26:37,340
the book is littered with humor and

629
00:26:34,670 --> 00:26:39,620
witty remarks woven in between detailed

630
00:26:37,339 --> 00:26:41,209
scientific explanations of the various

631
00:26:39,619 --> 00:26:43,099
possible scenarios which could

632
00:26:41,210 --> 00:26:46,490
ultimately lead to the demise of our

633
00:26:43,099 --> 00:26:48,139
little blue planet earth bill covers all

634
00:26:46,490 --> 00:26:51,650
the deadly weapons that astronomy has

635
00:26:48,140 --> 00:26:54,920
unveiled to us asteroid impacts comet

636
00:26:51,650 --> 00:26:58,340
impacts solar flares nearby supernova

637
00:26:54,920 --> 00:27:01,429
explosions gamma ray bursts black holes

638
00:26:58,339 --> 00:27:05,419
and much much more even the ultimate

639
00:27:01,429 --> 00:27:07,400
death of the universe itself yet through

640
00:27:05,420 --> 00:27:09,470
all the doom and gloom of the ways the

641
00:27:07,400 --> 00:27:11,330
universe is trying to kill us we are

642
00:27:09,470 --> 00:27:13,190
constantly reminded that the likelihood

643
00:27:11,329 --> 00:27:15,169
of being engulfed by a gamma ray burst

644
00:27:13,190 --> 00:27:18,320
or sucked into a black hole are

645
00:27:15,170 --> 00:27:20,450
extremely unlikely it's a science

646
00:27:18,319 --> 00:27:22,369
beneath all these hypothetical scenarios

647
00:27:20,450 --> 00:27:25,730
that makes the book so interesting and

648
00:27:22,369 --> 00:27:28,609
or inspiring the reality of the universe

649
00:27:25,730 --> 00:27:31,039
is much more amazing and dangerous than

650
00:27:28,609 --> 00:27:33,289
any doomsday movie or biblical rapture

651
00:27:31,039 --> 00:27:36,619
could ever hope to convey and this book

652
00:27:33,289 --> 00:27:38,480
illustrates that point perfectly yet it

653
00:27:36,619 --> 00:27:40,489
is important to know that despite the

654
00:27:38,480 --> 00:27:43,730
possibility of all this impending doom

655
00:27:40,490 --> 00:27:45,650
we're actually quite safe our small

656

00:27:43,730 --> 00:27:47,750
little planet is in a great location and

657
00:27:45,650 --> 00:27:51,929
our atmosphere works well as a shield

658
00:27:47,750 --> 00:27:53,278
between us and the harsh vacuum of space

659
00:27:51,929 --> 00:27:54,778
I think this book does a really good job

660
00:27:53,278 --> 00:27:57,569
of putting everything into perspective

661
00:27:54,778 --> 00:28:00,990
and realizing how extremely lucky we are

662
00:27:57,569 --> 00:28:02,548
to be alive in the first place although

663
00:28:00,990 --> 00:28:05,249
most of the dangers that lurk in the

664
00:28:02,548 --> 00:28:06,808
universe seemed quite scary Phil reminds

665
00:28:05,249 --> 00:28:08,700
us that it's pretty much certain we

666
00:28:06,808 --> 00:28:11,249
won't experience any of this stuff in

667
00:28:08,700 --> 00:28:14,269
our own lifetimes so there's no need to

668
00:28:11,249 --> 00:28:16,919
get your knickers in a twist with War II

669
00:28:14,269 --> 00:28:19,798
the book is also very nicely worded

670
00:28:16,919 --> 00:28:21,720

without too much scientific jargon so

671

00:28:19,798 --> 00:28:23,638

you don't have to be a PhD astronomy

672

00:28:21,720 --> 00:28:26,940

student to understand the science behind

673

00:28:23,638 --> 00:28:28,798

all the events that are discussed having

674

00:28:26,940 --> 00:28:30,990

myself been studying just this past

675

00:28:28,798 --> 00:28:34,259

semester the details of nuclear fusion

676

00:28:30,990 --> 00:28:36,899

of hydrogen nuclei into helium which is

677

00:28:34,259 --> 00:28:38,399

the sun's source of energy I found the

678

00:28:36,898 --> 00:28:40,648

books explanation of this to be

679

00:28:38,398 --> 00:28:43,558

extremely clear and thorough without

680

00:28:40,648 --> 00:28:46,128

sounding too complicated this is pretty

681

00:28:43,558 --> 00:28:48,450

much echoed throughout the whole book

682

00:28:46,128 --> 00:28:50,099

there really are lots of different

683

00:28:48,450 --> 00:28:53,069

potential ways that the universe could

684

00:28:50,099 --> 00:28:54,898

kill us the only way to fully understand

685
00:28:53,069 --> 00:28:56,819
the reality and the power of these

686
00:28:54,898 --> 00:28:58,709
concepts is to indulge yourself in

687
00:28:56,819 --> 00:29:01,288
astronomy one of the most exhilarating

688
00:28:58,710 --> 00:29:03,778
and downright interesting sciences that

689
00:29:01,288 --> 00:29:07,169
there is and this book is the perfect

690
00:29:03,778 --> 00:29:09,089
tool to use after all astronomy is the

691
00:29:07,169 --> 00:29:12,809
study of space and the universe and

692
00:29:09,089 --> 00:29:14,579
we're living in it in my opinion Phil

693
00:29:12,808 --> 00:29:16,918
plates book does exactly what his blog

694
00:29:14,579 --> 00:29:18,960
bad astronomy does and highlights the

695
00:29:16,919 --> 00:29:21,778
amazement and the wonder of the space

696
00:29:18,960 --> 00:29:23,220
around us while also encouraging us to

697
00:29:21,778 --> 00:29:26,308
fall in love with the science of

698
00:29:23,220 --> 00:29:28,470
astronomy so if you love scary

699
00:29:26,308 --> 00:29:31,440
Armageddon movies about asteroid impacts

700
00:29:28,470 --> 00:29:33,298
and tsunamis and ice ages why not try

701
00:29:31,440 --> 00:29:36,950
the real thing and grab yourself a copy

702
00:29:33,298 --> 00:29:36,950
of death from the skies

703
00:29:50,259 --> 00:29:54,430
I'm Carly Sturgis and for this interview

704
00:29:52,809 --> 00:29:57,099
i'll be talking to a man has been a

705
00:29:54,430 --> 00:29:59,740
journalist for 20 years 14 of those as a

706
00:29:57,099 --> 00:30:02,139
science correspondent his degree is in

707
00:29:59,740 --> 00:30:04,569
geology but whilst working for science

708
00:30:02,140 --> 00:30:06,160
magazine and several science programs he

709
00:30:04,569 --> 00:30:09,000
has tackled a number of different fields

710
00:30:06,160 --> 00:30:11,740
from quantum physics to microbiology

711
00:30:09,000 --> 00:30:14,170
despite this I can't reveal his real

712
00:30:11,740 --> 00:30:17,920
name because he chooses to be anonymous

713

00:30:14,170 --> 00:30:19,960
online he's known as pothole of 54 one

714
00:30:17,920 --> 00:30:22,710
of the most popular science broadcasters

715
00:30:19,960 --> 00:30:25,029
on the free hosting video site YouTube

716
00:30:22,710 --> 00:30:27,220
within a week of him uploading short

717
00:30:25,029 --> 00:30:30,369
films on topics ranging from climate

718
00:30:27,220 --> 00:30:32,950
control evolution human ancestry and the

719
00:30:30,369 --> 00:30:35,649
scientific method he reaches an audience

720
00:30:32,950 --> 00:30:38,319
of hundreds of thousands one on climate

721
00:30:35,650 --> 00:30:41,740
change has recently hit 13 thousand

722
00:30:38,319 --> 00:30:44,619
views just within two weeks pothole of

723
00:30:41,740 --> 00:30:46,690
54 describes his made easy series is

724
00:30:44,619 --> 00:30:48,879
designed to explain the evidence that

725
00:30:46,690 --> 00:30:51,640
shows how we got here from the Big Bang

726
00:30:48,880 --> 00:30:53,530
to human migration Out of Africa and to

727
00:30:51,640 --> 00:30:55,300

counter the unsupported idea that this

728

00:30:53,529 --> 00:30:57,700

somehow happened through the power of an

729

00:30:55,299 --> 00:31:00,730

invisible being originally from England

730

00:30:57,700 --> 00:31:02,980

he has retired to sunny Australia and he

731

00:31:00,730 --> 00:31:05,710

gives us an exclusive for the skeptic

732

00:31:02,980 --> 00:31:08,019

zone firstly I'd like to thank pothole

733

00:31:05,710 --> 00:31:10,769

or 54 for giving us the opportunity to

734

00:31:08,019 --> 00:31:13,389

talk to him here on the skeptic zone

735

00:31:10,769 --> 00:31:15,609

what was the original inspiration for

736

00:31:13,390 --> 00:31:18,460

using YouTube and have you tried working

737

00:31:15,609 --> 00:31:20,169

in other problems and media before well

738

00:31:18,460 --> 00:31:23,440

i was on a christian forum for about a

739

00:31:20,170 --> 00:31:25,630

year but i found it was impossible to

740

00:31:23,440 --> 00:31:27,279

debate subjects like evolution in the

741

00:31:25,630 --> 00:31:28,780

age of the earth because fundamentalists

742
00:31:27,279 --> 00:31:33,430
on the forum simply had no understanding

743
00:31:28,779 --> 00:31:34,990
of basic biology and geology they didn't

744
00:31:33,430 --> 00:31:37,060
know what the theory of evolution said

745
00:31:34,990 --> 00:31:38,920
for example some people thought it meant

746
00:31:37,059 --> 00:31:40,509
that one species could give birth to an

747
00:31:38,920 --> 00:31:43,180
animal of a completely different species

748
00:31:40,509 --> 00:31:45,549
and a lot of people thought that life

749
00:31:43,180 --> 00:31:47,410
came from the Big Bang so instead of

750
00:31:45,549 --> 00:31:49,329
having an intelligent discussion I found

751
00:31:47,410 --> 00:31:51,610
I was having to teach remedial biology

752
00:31:49,329 --> 00:31:53,710
and physics and this happened again and

753
00:31:51,609 --> 00:31:55,779
again as more people joined the forum so

754
00:31:53,710 --> 00:31:58,090
the reason I decided to make a video was

755
00:31:55,779 --> 00:32:00,490
simply to explain all this in an easy

756
00:31:58,089 --> 00:32:02,079
form that people could understand and

757
00:32:00,490 --> 00:32:04,120
then I could refer them to the video

758
00:32:02,079 --> 00:32:07,000
every time I had to repeat my

759
00:32:04,119 --> 00:32:08,859
what do you consider is a useful formula

760
00:32:07,000 --> 00:32:10,509
to keep in mind if you're hoping to

761
00:32:08,859 --> 00:32:14,319
produce youtube videos that are

762
00:32:10,509 --> 00:32:16,240
educational i would say easiest thing

763
00:32:14,319 --> 00:32:18,669
don't just think you can sit in front of

764
00:32:16,240 --> 00:32:21,069
a camera and fluent words will pour out

765
00:32:18,670 --> 00:32:24,130
and mesmerize your audience because that

766
00:32:21,069 --> 00:32:26,710
doesn't happen even stand-ups camera

767
00:32:24,130 --> 00:32:28,780
have to start with the script so write

768
00:32:26,710 --> 00:32:31,750
your script polish it polish it again

769
00:32:28,779 --> 00:32:34,389
polish it again which basically means

770

00:32:31,750 --> 00:32:36,329
cutting any superfluous junk and make

771
00:32:34,390 --> 00:32:39,550
the final script as tight as possible

772
00:32:36,329 --> 00:32:41,169
well considering that more than 120

773
00:32:39,549 --> 00:32:43,509
million americans believe that God

774
00:32:41,170 --> 00:32:45,400
created Adam and Eve more than 10,000

775
00:32:43,509 --> 00:32:47,769
years ago how do you suggest that people

776
00:32:45,400 --> 00:32:49,870
deal with such predominant beliefs that

777
00:32:47,769 --> 00:32:52,240
challenge evolution both online and

778
00:32:49,869 --> 00:32:54,069
offline well I grew up in Britain and I

779
00:32:52,240 --> 00:32:56,769
don't think I ever met anyone who

780
00:32:54,069 --> 00:32:59,109
thought the universe was 6,500 years old

781
00:32:56,769 --> 00:33:02,349
and I was a choir boy at Winchester

782
00:32:59,109 --> 00:33:04,000
Cathedral even the Anglican bishop took

783
00:33:02,349 --> 00:33:05,919
a more metaphorical approach to the

784
00:33:04,000 --> 00:33:07,539

Bible I can only think of one person I

785

00:33:05,920 --> 00:33:10,060

knew at University it was a practicing

786

00:33:07,539 --> 00:33:12,460

Christian and in Australia I've met

787

00:33:10,059 --> 00:33:14,440

quite a few more but I get on very well

788

00:33:12,460 --> 00:33:16,900

with them in the United States as much

789

00:33:14,440 --> 00:33:18,480

more polarization over this issue and I

790

00:33:16,900 --> 00:33:20,740

I think one reason might be the

791

00:33:18,480 --> 00:33:22,870

isolation of so many fundamentalists who

792

00:33:20,740 --> 00:33:25,269

live in communities where everybody

793

00:33:22,869 --> 00:33:28,959

believes in God and everybody around you

794

00:33:25,269 --> 00:33:32,319

your family your community it's just a

795

00:33:28,960 --> 00:33:34,210

given and they probably don't think

796

00:33:32,319 --> 00:33:36,429

they've ever met atheists of course they

797

00:33:34,210 --> 00:33:38,950

have but since no one is really able to

798

00:33:36,430 --> 00:33:41,650

declare their atheism in communities

799

00:33:38,950 --> 00:33:43,450

like that most people think that there

800

00:33:41,650 --> 00:33:45,370

aren't any I think they're genuinely

801

00:33:43,450 --> 00:33:47,230

surprised when I chat to them online and

802

00:33:45,369 --> 00:33:51,129

they discover that I'm polite quite

803

00:33:47,230 --> 00:33:53,259

happy and very sympathetic I don't have

804

00:33:51,130 --> 00:33:55,690

a problem with people's personal beliefs

805

00:33:53,259 --> 00:33:58,480

at all as long as their personal and

806

00:33:55,690 --> 00:34:00,519

their beliefs the only time this becomes

807

00:33:58,480 --> 00:34:03,450

a problem is when people start preaching

808

00:34:00,519 --> 00:34:05,740

their beliefs as the absolute truth and

809

00:34:03,450 --> 00:34:08,139

something that has to be imposed on

810

00:34:05,740 --> 00:34:10,869

others one of the comments on your site

811

00:34:08,139 --> 00:34:13,059

asks you whether you're inspired by the

812

00:34:10,869 --> 00:34:14,500

likes of Carl Sagan and you say that he

813
00:34:13,059 --> 00:34:15,449
was not a formative influence but

814
00:34:14,500 --> 00:34:17,849
certainly someone you

815
00:34:15,449 --> 00:34:19,529
came across later in life so who do your

816
00:34:17,849 --> 00:34:22,679
creditors being a formative influence

817
00:34:19,530 --> 00:34:24,570
when you were growing up two things one

818
00:34:22,679 --> 00:34:26,429
was the moon landing which I avidly

819
00:34:24,570 --> 00:34:29,010
followed as a kid and the other was a

820
00:34:26,429 --> 00:34:30,898
science fiction program in Britain

821
00:34:29,010 --> 00:34:32,669
called doom watch which was about a

822
00:34:30,898 --> 00:34:35,039
government department comprising three

823
00:34:32,668 --> 00:34:36,628
scientists who acted as sort of trouble

824
00:34:35,039 --> 00:34:39,898
shooters for any science related

825
00:34:36,628 --> 00:34:42,029
problems that struck the UK seemed to me

826
00:34:39,898 --> 00:34:43,618
they made science look really cool and I

827

00:34:42,030 --> 00:34:46,109
thought that's what I want to do we're

828
00:34:43,619 --> 00:34:48,000
psychedelic cravats and flared jeans and

829
00:34:46,108 --> 00:34:50,730
zap around the country like Batman with

830
00:34:48,000 --> 00:34:53,699
a slide rule solving all kinds of

831
00:34:50,730 --> 00:34:54,960
science problems recently dr. cow in an

832
00:34:53,699 --> 00:34:56,578
interview with the skeptic zone

833
00:34:54,960 --> 00:34:58,619
expressed some well Dermot that its

834
00:34:56,579 --> 00:35:00,359
evolutionary theory which produces more

835
00:34:58,619 --> 00:35:02,190
opposition than any other scientific

836
00:35:00,358 --> 00:35:04,259
theory so do you think there's more

837
00:35:02,190 --> 00:35:06,059
emotional involvement with evolution

838
00:35:04,260 --> 00:35:10,020
creationism that sparks is sort of

839
00:35:06,059 --> 00:35:12,088
debate quick answer yes long answer well

840
00:35:10,019 --> 00:35:14,670
the emotional reaction to this is really

841
00:35:12,088 --> 00:35:17,429

down to one simple thing evolution means

842

00:35:14,670 --> 00:35:19,579

that we are not as far as fundamentalist

843

00:35:17,429 --> 00:35:21,299

concern means that we're not special

844

00:35:19,579 --> 00:35:22,859

fundamentalists have an absolute

845

00:35:21,300 --> 00:35:24,810

abhorrence of the idea that humans

846

00:35:22,858 --> 00:35:26,519

aren't special that we're animals like

847

00:35:24,809 --> 00:35:28,289

any other animal and that we're

848

00:35:26,519 --> 00:35:30,239

descended from animals they've been

849

00:35:28,289 --> 00:35:32,789

taught for so long that this specialness

850

00:35:30,239 --> 00:35:35,789

is what gives us our purpose in life and

851

00:35:32,789 --> 00:35:37,920

without purpose and specialness in our

852

00:35:35,789 --> 00:35:40,079

lives then our lives are supposedly

853

00:35:37,920 --> 00:35:41,730

empty now you and I can cope very well

854

00:35:40,079 --> 00:35:43,440

with the concept of evolution because we

855

00:35:41,730 --> 00:35:45,420

think our lives can still be rich and

856
00:35:43,440 --> 00:35:47,130
fulfilling and we make our own purpose

857
00:35:45,420 --> 00:35:49,950
in life if we feel we need to have a

858
00:35:47,130 --> 00:35:52,380
purpose but they simply can't do this

859
00:35:49,949 --> 00:35:55,409
and taking away that specialness takes

860
00:35:52,380 --> 00:35:57,329
away their lives and with it their after

861
00:35:55,409 --> 00:36:00,269
lives and that's why they fight the idea

862
00:35:57,329 --> 00:36:01,470
of evolution so vociferously I don't

863
00:36:00,269 --> 00:36:03,300
think evolution is being attacked

864
00:36:01,469 --> 00:36:05,159
because of what Hitler Hitler did I I

865
00:36:03,300 --> 00:36:07,440
think that what Hitler did is being used

866
00:36:05,159 --> 00:36:09,059
as a reason to attack evolution so it's

867
00:36:07,440 --> 00:36:10,500
really the other way around but of

868
00:36:09,059 --> 00:36:12,420
course the attack misses the mark

869
00:36:10,500 --> 00:36:14,849
because Hitler didn't understand the

870
00:36:12,420 --> 00:36:16,440
principle that natural selection it has

871
00:36:14,849 --> 00:36:18,720
nothing to do with genocide or the

872
00:36:16,440 --> 00:36:21,329
triumph of the strong over the weak it's

873
00:36:18,719 --> 00:36:23,309
about survival of the fittest and what

874
00:36:21,329 --> 00:36:25,589
made some humans fitter was their

875
00:36:23,309 --> 00:36:29,130
ability to cooperate and help help one

876
00:36:25,588 --> 00:36:32,219
another along tribes that did this sir

877
00:36:29,130 --> 00:36:34,079
lived so they were fitter tribes that

878
00:36:32,219 --> 00:36:36,328
were selfish and uncooperative fell

879
00:36:34,079 --> 00:36:37,890
apart now the fact that Hitler referred

880
00:36:36,329 --> 00:36:39,720
to the principle of natural selection as

881
00:36:37,889 --> 00:36:41,848
part of his justification for genocide

882
00:36:39,719 --> 00:36:44,129
is a very good reason why we need to

883
00:36:41,849 --> 00:36:46,140
teach natural selection and evolution in

884

00:36:44,130 --> 00:36:49,108
schools so that people understand the

885
00:36:46,139 --> 00:36:50,909
theories properly it appears that people

886
00:36:49,108 --> 00:36:53,098
who believe in intelligent design find

887
00:36:50,909 --> 00:36:55,440
the DNA code less problematic than the

888
00:36:53,099 --> 00:36:57,630
ideas of Darwin and your video certainly

889
00:36:55,440 --> 00:36:59,068
draw upon that so do you have an

890
00:36:57,630 --> 00:37:01,289
explanation for why belief in

891
00:36:59,068 --> 00:37:03,869
intelligent design is Noah so widespread

892
00:37:01,289 --> 00:37:06,269
as in the United States where most of

893
00:37:03,869 --> 00:37:07,289
your viewers come from I think there's a

894
00:37:06,268 --> 00:37:09,058
much greater tradition of

895
00:37:07,289 --> 00:37:11,819
intellectualism if you want to call it

896
00:37:09,059 --> 00:37:13,890
that and critical thinking in Europe the

897
00:37:11,818 --> 00:37:17,099
United States is a pioneering country

898
00:37:13,889 --> 00:37:20,400

and intellectualism over there is seen

899

00:37:17,099 --> 00:37:22,920

as elitist and I think critical thinking

900

00:37:20,400 --> 00:37:25,278

is seen as something subversive but i

901

00:37:22,920 --> 00:37:27,389

have to say there's a clear divide

902

00:37:25,278 --> 00:37:29,068

fundamentalism is strong south of the

903

00:37:27,389 --> 00:37:31,259

mason-dixon line and in what they call

904

00:37:29,068 --> 00:37:33,329

the fly of a country but this is worlds

905

00:37:31,259 --> 00:37:35,719

apart from the America represented by

906

00:37:33,329 --> 00:37:37,890

places like Massachusetts and California

907

00:37:35,719 --> 00:37:40,108

one of the great things about your

908

00:37:37,889 --> 00:37:42,328

youtube series is that you make it

909

00:37:40,108 --> 00:37:44,489

freely available as a resource and the

910

00:37:42,329 --> 00:37:46,109

made easy series of videos are able to

911

00:37:44,489 --> 00:37:48,000

be freely copied and distributed for

912

00:37:46,108 --> 00:37:49,259

educational purposes and you said that

913
00:37:48,000 --> 00:37:52,318
you want to make it available for

914
00:37:49,259 --> 00:37:54,150
schools despite this other elements that

915
00:37:52,318 --> 00:37:55,500
you keep in mind in order to make them

916
00:37:54,150 --> 00:37:57,690
school friendly and is there a

917
00:37:55,500 --> 00:38:00,028
limitation upon at the age range for

918
00:37:57,690 --> 00:38:02,130
schools I made them freely available

919
00:38:00,028 --> 00:38:04,259
because I don't want to make a business

920
00:38:02,130 --> 00:38:06,630
out of this I'm happy if people can

921
00:38:04,259 --> 00:38:09,119
learn something from the videos but

922
00:38:06,630 --> 00:38:11,099
after the made easy series came out I

923
00:38:09,119 --> 00:38:14,818
started getting a lot of dvds from

924
00:38:11,099 --> 00:38:16,318
teachers asking to have copies that they

925
00:38:14,818 --> 00:38:18,568
could show them in schools and colleges

926
00:38:16,318 --> 00:38:21,599
now they're not primarily meant as a

927
00:38:18,568 --> 00:38:24,929
teaching tool for science obviously they

928
00:38:21,599 --> 00:38:27,088
are part of a debating tool opposing the

929
00:38:24,929 --> 00:38:30,538
teaching of intelligent design or the

930
00:38:27,088 --> 00:38:33,210
the idea that creationism is somehow a

931
00:38:30,539 --> 00:38:35,490
science so they're really not meant for

932
00:38:33,210 --> 00:38:37,048
children I think that's rather an odd

933
00:38:35,489 --> 00:38:39,209
thing to say but but that wasn't my

934
00:38:37,048 --> 00:38:41,449
intention so it's a bit reluctant at

935
00:38:39,210 --> 00:38:44,750
first to send the DVDs out to this

936
00:38:41,449 --> 00:38:46,819
I had a conversation with a couple of

937
00:38:44,750 --> 00:38:50,420
teachers and I discovered something

938
00:38:46,820 --> 00:38:52,940
which made me change my mind and what

939
00:38:50,420 --> 00:38:54,349
they told me was that religion is coming

940
00:38:52,940 --> 00:38:56,480
into the science classroom they are

941

00:38:54,349 --> 00:38:58,910
actually discussing these things like it

942
00:38:56,480 --> 00:39:01,400
or not and they say that these videos

943
00:38:58,909 --> 00:39:03,828
helped put the religion science debate

944
00:39:01,400 --> 00:39:05,539
in context in Australia we're heading

945
00:39:03,829 --> 00:39:07,579
towards a national curriculum and it's

946
00:39:05,539 --> 00:39:09,500
caused a lot of debate amongst educators

947
00:39:07,579 --> 00:39:11,329
and politicians about the sort of things

948
00:39:09,500 --> 00:39:13,820
that should be included do you think

949
00:39:11,329 --> 00:39:16,280
that YouTube has a place in helping out

950
00:39:13,820 --> 00:39:19,010
with the education of young people would

951
00:39:16,280 --> 00:39:21,019
you for example endorse the scientists

952
00:39:19,010 --> 00:39:23,839
and schools program as being a useful

953
00:39:21,019 --> 00:39:25,880
strategy I'd love to make science more

954
00:39:23,838 --> 00:39:27,889
fun and more interesting I think we're

955
00:39:25,880 --> 00:39:31,220

all born with a natural curiosity and we

956

00:39:27,889 --> 00:39:33,348

want to know how things work even small

957

00:39:31,219 --> 00:39:35,598

boys throwing stones into a mud puddle

958

00:39:33,349 --> 00:39:37,039

is science it's the kind of science

959

00:39:35,599 --> 00:39:39,680

experiment they're looking to see what

960

00:39:37,039 --> 00:39:41,269

happens if only schools would harness

961

00:39:39,679 --> 00:39:43,159

that and work with it instead of

962

00:39:41,269 --> 00:39:45,949

sticking kids in classrooms and getting

963

00:39:43,159 --> 00:39:48,409

them to recite Newton's laws of motion I

964

00:39:45,949 --> 00:39:51,199

think that they would find fewer kids

965

00:39:48,409 --> 00:39:53,299

dropping out of science because kids

966

00:39:51,199 --> 00:39:55,039

aunt a year seven fascinated and excited

967

00:39:53,300 --> 00:39:57,260

by science and then they leave year ten

968

00:39:55,039 --> 00:40:00,739

bored stiff with it what is going wrong

969

00:39:57,260 --> 00:40:02,540

during those three years I think making

970
00:40:00,739 --> 00:40:04,338
science much more about experimenting

971
00:40:02,539 --> 00:40:05,960
and getting kids to discover things for

972
00:40:04,338 --> 00:40:08,059
themselves and work things out for

973
00:40:05,960 --> 00:40:10,690
themselves I think that's what would

974
00:40:08,059 --> 00:40:12,828
really keep that spark of interest going

975
00:40:10,690 --> 00:40:15,769
now the scientists in Schools program

976
00:40:12,829 --> 00:40:16,818
that you mentioned great idea yeah I did

977
00:40:15,769 --> 00:40:19,099
have a look at this my kids were

978
00:40:16,818 --> 00:40:20,300
involved in another csir own initiative

979
00:40:19,099 --> 00:40:22,910
which was called the double helix

980
00:40:20,300 --> 00:40:25,280
program and they joined a two-day

981
00:40:22,909 --> 00:40:27,769
science program during the holidays it

982
00:40:25,280 --> 00:40:29,569
was great fun because they interacted

983
00:40:27,769 --> 00:40:32,119
with real scientists and did some fun

984
00:40:29,568 --> 00:40:35,420
hands-on experiments and yes I'd love to

985
00:40:32,119 --> 00:40:37,068
see more of that but regarding the

986
00:40:35,420 --> 00:40:40,900
online resources you have to be very

987
00:40:37,068 --> 00:40:43,489
careful a CSIRO website of course is

988
00:40:40,900 --> 00:40:46,608
reliable I'm happy with that but

989
00:40:43,489 --> 00:40:48,709
wikipedia a lot less so I I had a kid

990
00:40:46,608 --> 00:40:52,279
who wrote to me and said that he was

991
00:40:48,710 --> 00:40:53,838
using my videos as a source for a

992
00:40:52,280 --> 00:40:55,069
science essay and I was absolutely

993
00:40:53,838 --> 00:40:57,528
horrified I told

994
00:40:55,068 --> 00:40:59,449
that he shouldn't use an anonymous

995
00:40:57,528 --> 00:41:01,639
youtube video with as a source for

996
00:40:59,449 --> 00:41:03,739
anything I've said the same thing on the

997
00:41:01,639 --> 00:41:05,568
video for what I do do is encourage

998

00:41:03,739 --> 00:41:07,429
people to watch the videos and then

999
00:41:05,568 --> 00:41:09,259
hopefully go out and learn more find out

1000
00:41:07,429 --> 00:41:10,969
more about this I mean and everything

1001
00:41:09,259 --> 00:41:14,179
that I've given there you can find in

1002
00:41:10,969 --> 00:41:16,818
school textbooks and I think a lot of

1003
00:41:14,179 --> 00:41:18,288
people have taken that and gone out and

1004
00:41:16,818 --> 00:41:20,630
learned a lot more about it which is

1005
00:41:18,289 --> 00:41:22,099
fantastic I don't think you'll find many

1006
00:41:20,630 --> 00:41:25,519
people disagreeing about the necessity

1007
00:41:22,099 --> 00:41:27,528
of anonymity online I mean there's such

1008
00:41:25,518 --> 00:41:29,689
elements as personal safety right to a

1009
00:41:27,528 --> 00:41:32,028
choice professional dis Association

1010
00:41:29,690 --> 00:41:33,469
would you ever however consider outing

1011
00:41:32,028 --> 00:41:36,139
yourself and is it really necessary

1012
00:41:33,469 --> 00:41:38,509

anyway are there ventures that tempt you

1013

00:41:36,139 --> 00:41:39,768

to be public about your identity and do

1014

00:41:38,509 --> 00:41:41,269

you find that there's a comfortable

1015

00:41:39,768 --> 00:41:44,298

division that lets you get the job done

1016

00:41:41,268 --> 00:41:47,149

I keep myself anonymous because I still

1017

00:41:44,298 --> 00:41:49,159

broadcast for two major networks in

1018

00:41:47,150 --> 00:41:51,229

particular so apart from the fact that

1019

00:41:49,159 --> 00:41:53,899

I'm very careful in my professional role

1020

00:41:51,228 --> 00:41:55,399

not to expose my personal views I i

1021

00:41:53,900 --> 00:41:57,499

think that there's a danger of

1022

00:41:55,400 --> 00:41:59,119

perception of bias obviously I also

1023

00:41:57,498 --> 00:42:00,798

didn't want fundamentalist hurrain the

1024

00:41:59,119 --> 00:42:02,858

network's I work for complaining that

1025

00:42:00,798 --> 00:42:05,179

they're employing the spawn of the devil

1026

00:42:02,858 --> 00:42:08,058

really there's no reason for me to give

1027
00:42:05,179 --> 00:42:10,778
my name but if I had to give my name for

1028
00:42:08,059 --> 00:42:14,209
some reason yeah I'm sure i'd do it and

1029
00:42:10,778 --> 00:42:15,619
thank you very much to pothole or 54 if

1030
00:42:14,208 --> 00:42:19,219
you would like to get to know more of

1031
00:42:15,619 --> 00:42:22,670
his work online head to youtube com

1032
00:42:19,219 --> 00:42:26,269
forward slash user forward slash

1033
00:42:22,670 --> 00:42:28,338
potholer 54 and if you head to that site

1034
00:42:26,268 --> 00:42:31,189
he will now discover that the updated

1035
00:42:28,338 --> 00:42:33,798
corrected high quality DVD version of

1036
00:42:31,190 --> 00:42:36,170
the made easy series is now ready for

1037
00:42:33,798 --> 00:42:38,748
distribution you have the opportunity to

1038
00:42:36,170 --> 00:42:41,650
download a free copy by following the

1039
00:42:38,748 --> 00:42:41,649
instructions there

1040
00:42:50,248 --> 00:42:56,409
this is brian dunning from skep tide

1041
00:42:53,079 --> 00:42:58,239
calm skep tide is a short weekly podcast

1042
00:42:56,409 --> 00:43:00,608
taking a critical look at the

1043
00:42:58,239 --> 00:43:02,978
pseudo-sciences that infect popular

1044
00:43:00,608 --> 00:43:05,710
culture whenever I'm not locked in the

1045
00:43:02,978 --> 00:43:12,278
recording studio I'm listening to the

1046
00:43:05,710 --> 00:43:15,519
skeptic zone internet censorship on the

1047
00:43:12,278 --> 00:43:18,219
13th of december 2008 about 200 people

1048
00:43:15,518 --> 00:43:20,949
turned up the forecourt of Sydney's town

1049
00:43:18,219 --> 00:43:23,619
hall to protest plans by the government

1050
00:43:20,949 --> 00:43:25,538
to censor the internet this could

1051
00:43:23,619 --> 00:43:28,059
possibly slow the internet down in

1052
00:43:25,539 --> 00:43:30,759
Australia by eighty-seven percent as the

1053
00:43:28,059 --> 00:43:33,579
government or whoever opened every

1054
00:43:30,759 --> 00:43:36,639
single exchange to look for unwarranted

1055

00:43:33,579 --> 00:43:39,519
or illegal content illegal internet

1056
00:43:36,639 --> 00:43:41,558
content is so broadly defined at law

1057
00:43:39,518 --> 00:43:44,618
that it covers everything from facebook

1058
00:43:41,559 --> 00:43:47,619
to myspace to Wikipedia and YouTube I

1059
00:43:44,619 --> 00:43:51,539
went down to the protest to see for

1060
00:43:47,619 --> 00:43:51,539
myself the points being put forward

1061
00:43:54,010 --> 00:43:57,820
now some of you may remember Dave the

1062
00:43:56,139 --> 00:44:00,339
happy singer from an earlier episode of

1063
00:43:57,820 --> 00:44:02,019
the skeptic sunglo David hello Richard

1064
00:44:00,340 --> 00:44:04,180
how are you I'm really well here we are

1065
00:44:02,019 --> 00:44:05,469
in the center of the city downtown

1066
00:44:04,179 --> 00:44:07,389
Sydney and there are some people

1067
00:44:05,469 --> 00:44:09,579
gathered here for the internet protest

1068
00:44:07,389 --> 00:44:11,710
today yeah that's right were protesting

1069
00:44:09,579 --> 00:44:14,319

about the plan to introduce a mandatory

1070

00:44:11,710 --> 00:44:16,599

internet filter by the Communications

1071

00:44:14,320 --> 00:44:18,340

Minister Stephen Conroy it's just insane

1072

00:44:16,599 --> 00:44:20,469

is it I mean apart from the fact that

1073

00:44:18,340 --> 00:44:21,760

it's completely impractical it's going

1074

00:44:20,469 --> 00:44:23,619

to turn us into a laughingstock well

1075

00:44:21,760 --> 00:44:26,740

it's it's completely impractical it's

1076

00:44:23,619 --> 00:44:29,559

it's a dangerous precedent for an

1077

00:44:26,739 --> 00:44:30,969

allegedly free country it's a huge waste

1078

00:44:29,559 --> 00:44:32,380

of taxpayer money and the government

1079

00:44:30,969 --> 00:44:33,939

doesn't seem to be consulting either

1080

00:44:32,380 --> 00:44:36,789

with the industry or with the public on

1081

00:44:33,940 --> 00:44:38,619

this this just seems to be a huge cock

1082

00:44:36,789 --> 00:44:39,969

up and starts finish I tend to agree i

1083

00:44:38,619 --> 00:44:41,710

think it's probably something that

1084
00:44:39,969 --> 00:44:44,469
they've just pasta lating about and I

1085
00:44:41,710 --> 00:44:46,750
think they probably know deep down it's

1086
00:44:44,469 --> 00:44:49,719
just ridiculous and impossible but we'll

1087
00:44:46,750 --> 00:44:52,809
see I think of the important thing today

1088
00:44:49,719 --> 00:44:54,849
is that we get the point across that the

1089
00:44:52,809 --> 00:44:56,619
public is dead against this yeah the

1090
00:44:54,849 --> 00:44:58,569
industry will do its part in explaining

1091
00:44:56,619 --> 00:45:01,960
that this is utterly impractical and

1092
00:44:58,570 --> 00:45:03,250
unworkable and then we're just like us

1093
00:45:01,960 --> 00:45:04,480
we just got to trust the politicians to

1094
00:45:03,250 --> 00:45:08,739
make the right decision on the trust of

1095
00:45:04,480 --> 00:45:11,760
the politicians oh you know the show is

1096
00:45:08,739 --> 00:45:13,869
called the skipper loser over the

1097
00:45:11,760 --> 00:45:16,150
highlights I think must get to Scism is

1098
00:45:13,869 --> 00:45:19,289
an incompatible with my optimism or make

1099
00:45:16,150 --> 00:45:21,340
a good point Dave thank you no problem

1100
00:45:19,289 --> 00:45:23,139
and there are more people gathering

1101
00:45:21,340 --> 00:45:24,550
around here as I look around it's still

1102
00:45:23,139 --> 00:45:26,980
pretty hot and sticky incident today

1103
00:45:24,550 --> 00:45:29,200
hello hey you ain't fun what's your name

1104
00:45:26,980 --> 00:45:31,030
naive and why are you here today I'm

1105
00:45:29,199 --> 00:45:34,869
here to protest the censorship of the

1106
00:45:31,030 --> 00:45:36,010
internet which is wrong pretty much in a

1107
00:45:34,869 --> 00:45:39,609
nutshell they're going to take away

1108
00:45:36,010 --> 00:45:40,780
things like well what they consider the

1109
00:45:39,610 --> 00:45:42,940
bad stuff but what they're going to do

1110
00:45:40,780 --> 00:45:45,220
is there accidentally going to censor 20

1111
00:45:42,940 --> 00:45:47,019
million sites things like breast cancer

1112

00:45:45,219 --> 00:45:49,299
research and things like that because if

1113
00:45:47,019 --> 00:45:51,309
it has a picture of a breast that can be

1114
00:45:49,300 --> 00:45:53,440
classified as prawn and quite frankly

1115
00:45:51,309 --> 00:45:55,809
it's wrong if it's going to censor

1116
00:45:53,440 --> 00:45:59,170
things like a medical issue absolutely

1117
00:45:55,809 --> 00:46:01,299
so absolutely yeah and as I was thinking

1118
00:45:59,170 --> 00:46:02,860
before it's as if they could really do

1119
00:46:01,300 --> 00:46:04,360
this I mean it's going to be such a mess

1120
00:46:02,860 --> 00:46:05,710
if they try to bring it in well to be

1121
00:46:04,360 --> 00:46:07,329
quite frank they'd be going along the

1122
00:46:05,710 --> 00:46:08,860
same lines as China like if you go over

1123
00:46:07,329 --> 00:46:10,449
to China and you search something like

1124
00:46:08,860 --> 00:46:11,740
tanaman square pictures you will get

1125
00:46:10,449 --> 00:46:13,089
pictures of the tamanna and square but

1126
00:46:11,739 --> 00:46:14,559

you will not get any of the information

1127

00:46:13,090 --> 00:46:16,510
about the students or anything that

1128

00:46:14,559 --> 00:46:18,579
night that it's wrong government's

1129

00:46:16,510 --> 00:46:20,140
trying to censor things like I don't

1130

00:46:18,579 --> 00:46:22,119
know the issues that face people today

1131

00:46:20,139 --> 00:46:23,650
like as I said the medical issues and

1132

00:46:22,119 --> 00:46:25,059
things like that it's just I don't

1133

00:46:23,650 --> 00:46:27,130
understand why they would be doing it

1134

00:46:25,059 --> 00:46:28,929
like I think they're doing it for some

1135

00:46:27,130 --> 00:46:30,130
sort of weird popularity grab or

1136

00:46:28,929 --> 00:46:31,449
something well it's not going to be a

1137

00:46:30,130 --> 00:46:32,800
popularity grab it's actually going to

1138

00:46:31,449 --> 00:46:34,539
kill their popularity if you think about

1139

00:46:32,800 --> 00:46:37,060
it because a lot of the people use the

1140

00:46:34,539 --> 00:46:40,509
internet like every day for different

1141
00:46:37,059 --> 00:46:41,889
things like they're actually locking

1142
00:46:40,510 --> 00:46:43,780
things like chat sites and things like

1143
00:46:41,889 --> 00:46:45,429
that like the ways that people stay in

1144
00:46:43,780 --> 00:46:46,990
contact with their family like yeah

1145
00:46:45,429 --> 00:46:48,039
because there are certain I know certain

1146
00:46:46,989 --> 00:46:49,239
people who stay in contact through

1147
00:46:48,039 --> 00:46:51,420
certain forums and things like that

1148
00:46:49,239 --> 00:46:53,729
which I had the risk of being there

1149
00:46:51,420 --> 00:46:55,260
they do cover controversial issues yeah

1150
00:46:53,730 --> 00:47:00,858
to be quite honest in this day and age

1151
00:46:55,260 --> 00:47:00,859
it's not how should I put this it's not

1152
00:47:01,050 --> 00:47:05,318
everything is not perfect and if they're

1153
00:47:03,880 --> 00:47:07,660
going to try and sense the internet so

1154
00:47:05,318 --> 00:47:09,309
maybe cushion everything it's not right

1155
00:47:07,659 --> 00:47:10,539
you have to expose people to certain

1156
00:47:09,309 --> 00:47:11,469
issues otherwise they're not going to be

1157
00:47:10,539 --> 00:47:13,088
able to cope with it in the day-to-day

1158
00:47:11,469 --> 00:47:14,828
life if they are faced with it

1159
00:47:13,088 --> 00:47:17,259
absolutely and the rest of the first

1160
00:47:14,829 --> 00:47:18,880
world will be will be laughing at us

1161
00:47:17,260 --> 00:47:20,940
well pretty much in a nutshell they are

1162
00:47:18,880 --> 00:47:23,950
probably already laughing at it like

1163
00:47:20,940 --> 00:47:25,269
what are you gonna do yeah well we're

1164
00:47:23,949 --> 00:47:30,129
here today to do something about that

1165
00:47:25,269 --> 00:47:32,349
straight thank you very much and I'm

1166
00:47:30,130 --> 00:47:36,160
with Fiona Patten now with a wonderful

1167
00:47:32,349 --> 00:47:39,250
yellow t-shirt this is boat 16 party ova

1168
00:47:36,159 --> 00:47:41,139
you we're serious about sex goodness me

1169

00:47:39,250 --> 00:47:42,969
now what brings you here today well

1170
00:47:41,139 --> 00:47:45,699
we're the Australian sex parties so of

1171
00:47:42,969 --> 00:47:47,078
course the internet filter which is

1172
00:47:45,699 --> 00:47:48,879
going to want some of the only legal

1173
00:47:47,079 --> 00:47:52,420
content that it's going to ban or

1174
00:47:48,880 --> 00:47:55,030
blacklist is adult erotic material so

1175
00:47:52,420 --> 00:47:57,849
we're there to defend that the users and

1176
00:47:55,030 --> 00:48:00,400
and the providers of that adult material

1177
00:47:57,849 --> 00:48:01,720
that's right because it's as far as I

1178
00:48:00,400 --> 00:48:03,789
know in this country it's a completely

1179
00:48:01,719 --> 00:48:05,649
legitimate industry it is a completely

1180
00:48:03,789 --> 00:48:07,210
legal industry and the material that

1181
00:48:05,650 --> 00:48:09,160
they're talking about blacklisting I

1182
00:48:07,210 --> 00:48:10,329
mean this is not the the you know if you

1183
00:48:09,159 --> 00:48:12,879

don't want your children to see it this

1184

00:48:10,329 --> 00:48:15,490
is blacklisted so even adults can't

1185

00:48:12,880 --> 00:48:18,190
access its material that is in magazines

1186

00:48:15,489 --> 00:48:20,828
in news agents currently that's legal

1187

00:48:18,190 --> 00:48:23,050
for any adult buy from from an informant

1188

00:48:20,829 --> 00:48:25,150
from a newsagent or an adult shop and

1189

00:48:23,050 --> 00:48:27,430
now on the internet that material will

1190

00:48:25,150 --> 00:48:30,099
be deemed at the same the same as a

1191

00:48:27,429 --> 00:48:32,348
child sexual abuse that's just insane

1192

00:48:30,099 --> 00:48:33,579
look it's totally insane and i think you

1193

00:48:32,349 --> 00:48:34,780
know unfortunately think the

1194

00:48:33,579 --> 00:48:37,000
government's are starting to realize

1195

00:48:34,780 --> 00:48:38,859
this but they are under extraordinary

1196

00:48:37,000 --> 00:48:41,650
pressure from groups like the australian

1197

00:48:38,858 --> 00:48:44,739
christian lobby and family first who

1198
00:48:41,650 --> 00:48:47,170
believe that you know sex is you know is

1199
00:48:44,739 --> 00:48:49,328
the demon and it's a great skate go to

1200
00:48:47,170 --> 00:48:50,510
look at you know controlling speech and

1201
00:48:49,329 --> 00:48:52,250
controlling things let's

1202
00:48:50,510 --> 00:48:54,080
you sex because people don't like to

1203
00:48:52,250 --> 00:48:56,000
talk about it so it's an easy one for

1204
00:48:54,079 --> 00:48:57,230
them to kind of slip through you know

1205
00:48:56,000 --> 00:48:59,420
you don't you don't want to talk about

1206
00:48:57,230 --> 00:49:00,949
debbie does dallas the same as you don't

1207
00:48:59,420 --> 00:49:03,380
want you know there are always people

1208
00:49:00,949 --> 00:49:05,269
out there who want to restrict what we

1209
00:49:03,380 --> 00:49:06,890
do in our own bedrooms that's right you

1210
00:49:05,269 --> 00:49:08,840
know they they have their position and I

1211
00:49:06,889 --> 00:49:10,339
absolutely respect their position but I

1212
00:49:08,840 --> 00:49:13,730
don't see that it tests they have to

1213
00:49:10,340 --> 00:49:14,930
infringe on night on my rights and you

1214
00:49:13,730 --> 00:49:17,630
know if you look at this the policy of

1215
00:49:14,929 --> 00:49:19,159
do no harm they could learn something

1216
00:49:17,630 --> 00:49:21,780
from that they certainly could we'll all

1217
00:49:19,159 --> 00:49:23,789
the best to thank you very much

1218
00:49:21,780 --> 00:49:25,710
and I'm speaking with jury now who put

1219
00:49:23,789 --> 00:49:27,449
all this protest together how do you

1220
00:49:25,710 --> 00:49:28,949
think it went today I think it went

1221
00:49:27,449 --> 00:49:30,779
really well is really encouraging to see

1222
00:49:28,949 --> 00:49:32,879
the turnout and the crowd response to

1223
00:49:30,780 --> 00:49:35,430
the speeches it will get was phenomenal

1224
00:49:32,880 --> 00:49:37,710
day and what's the next big protest you

1225
00:49:35,429 --> 00:49:39,809
have planned next big action is march in

1226

00:49:37,710 --> 00:49:42,090
march where we're going to be convening

1227
00:49:39,809 --> 00:49:43,529
all of the the digital liberty coalition

1228
00:49:42,090 --> 00:49:44,970
branches or all the different state

1229
00:49:43,530 --> 00:49:47,640
groups and we're going to be all

1230
00:49:44,969 --> 00:49:49,199
marching on parliament in canberra

1231
00:49:47,639 --> 00:49:51,659
that's going to be something so that

1232
00:49:49,199 --> 00:49:54,629
what went in much is that that's still

1233
00:49:51,659 --> 00:49:56,609
being planned but marcha marcha law is

1234
00:49:54,630 --> 00:49:58,860
the website there for that particular

1235
00:49:56,610 --> 00:50:00,840
campaign all the information will be

1236
00:49:58,860 --> 00:50:02,519
there so if I was just about to ask you

1237
00:50:00,840 --> 00:50:05,370
what's the best website people can go to

1238
00:50:02,519 --> 00:50:07,409
so much in March or yep or where else

1239
00:50:05,369 --> 00:50:10,259
coming up there's also no censorship dot

1240
00:50:07,409 --> 00:50:13,250

info which is the site that we've been

1241
00:50:10,260 --> 00:50:15,690
running to organize all of like today's

1242
00:50:13,250 --> 00:50:17,789
national actions and so they've got the

1243
00:50:15,690 --> 00:50:20,150
forums there's where we brainstorm ideas

1244
00:50:17,789 --> 00:50:24,139
get thrown up there there's also our

1245
00:50:20,150 --> 00:50:26,550
corporate website DLC jasna you

1246
00:50:24,139 --> 00:50:28,889
obviously we're a nonprofit organization

1247
00:50:26,550 --> 00:50:30,960
so they're just the more business end of

1248
00:50:28,889 --> 00:50:33,259
things there thank you very much thank

1249
00:50:30,960 --> 00:50:33,260
you so much

1250
00:50:34,329 --> 00:50:39,610
oh and if you'd like to know more about

1251
00:50:36,280 --> 00:50:43,680
Dave the happy singer just visit dave

1252
00:50:39,610 --> 00:50:43,680
the happy singer dot-com

1253
00:50:52,579 --> 00:51:00,630
now it's time for dr. Rachel reports

1254
00:50:55,980 --> 00:51:02,639
with dr. Rachel Dunlop hello everyone

1255
00:51:00,630 --> 00:51:04,590
and welcome to dr. Rachel reports and

1256
00:51:02,639 --> 00:51:06,929
today's segment concerns the use of

1257
00:51:04,590 --> 00:51:09,390
alternative medicine where conventional

1258
00:51:06,929 --> 00:51:11,309
medicine was desperately needed and what

1259
00:51:09,389 --> 00:51:13,049
makes this case even more distressing as

1260
00:51:11,309 --> 00:51:14,610
it involves the mistreatment and

1261
00:51:13,050 --> 00:51:17,880
terrible suffering of a defenseless

1262
00:51:14,610 --> 00:51:19,230
child by her brain damaged father now

1263
00:51:17,880 --> 00:51:22,320
many of you may have heard about this

1264
00:51:19,230 --> 00:51:24,900
story it dates back to September 2006 in

1265
00:51:22,320 --> 00:51:27,300
Queensland Australia but only came to

1266
00:51:24,900 --> 00:51:29,400
court this week and it deals with the

1267
00:51:27,300 --> 00:51:31,620
fate of an eleven-year-old girl who was

1268
00:51:29,400 --> 00:51:33,590
admitted to hospital two weeks after

1269
00:51:31,619 --> 00:51:36,239
contracting a serious heart infection

1270
00:51:33,590 --> 00:51:39,269
which manifested as a body temperature

1271
00:51:36,239 --> 00:51:42,059
of 42 degrees Celsius hallucinations

1272
00:51:39,269 --> 00:51:43,800
weakness and difficulty walking and the

1273
00:51:42,059 --> 00:51:46,139
girl who was described by the examining

1274
00:51:43,800 --> 00:51:49,560
doctor as sick as the sickest person

1275
00:51:46,139 --> 00:51:51,659
I've ever seen in 35 years underwent

1276
00:51:49,559 --> 00:51:54,389
emergency heart bypass and valve

1277
00:51:51,659 --> 00:51:55,799
replacement spent some time in a coma

1278
00:51:54,389 --> 00:51:57,900
due to bleeding on the brain and

1279
00:51:55,800 --> 00:52:01,140
remained in hospital for an entire year

1280
00:51:57,900 --> 00:52:04,440
and she now has brain damage uses a

1281
00:52:01,139 --> 00:52:06,179
wheelchair and has reduced vision so how

1282
00:52:04,440 --> 00:52:08,760
do we explain the rapid descent into

1283

00:52:06,179 --> 00:52:10,759
such terrible illness of a young and

1284
00:52:08,760 --> 00:52:13,140
previously healthy eleven-year-old girl

1285
00:52:10,760 --> 00:52:14,970
while according to the court proceedings

1286
00:52:13,139 --> 00:52:17,279
the girl's father reportedly had a

1287
00:52:14,969 --> 00:52:19,379
distrust of conventional medicine and

1288
00:52:17,280 --> 00:52:21,750
instead of seeking assistance from real

1289
00:52:19,380 --> 00:52:24,329
doctors he had been feeding his child

1290
00:52:21,750 --> 00:52:26,550
aglycone nutrient dietary supplement

1291
00:52:24,329 --> 00:52:29,219
which is manufactured and developed by

1292
00:52:26,550 --> 00:52:31,980
manitech incorporated and I'll get on to

1293
00:52:29,219 --> 00:52:33,569
these people in a little while now

1294
00:52:31,980 --> 00:52:36,000
according to a report tended by a

1295
00:52:33,570 --> 00:52:37,980
psychologist in court the fathers belief

1296
00:52:36,000 --> 00:52:41,190
in manitex supplements bordered on

1297
00:52:37,980 --> 00:52:43,230

obsessive and also those reports cited

1298

00:52:41,190 --> 00:52:45,420

that he had an exaggerated view of his

1299

00:52:43,230 --> 00:52:48,119

own knowledge and ability about health

1300

00:52:45,420 --> 00:52:49,530

treatments now the court was also told

1301

00:52:48,119 --> 00:52:52,109

that when his daughter presented in

1302

00:52:49,530 --> 00:52:53,910

hospital her mouth was peeling black and

1303

00:52:52,110 --> 00:52:56,280

clogged from the administration of

1304

00:52:53,909 --> 00:52:58,829

extremely high doses of this manitech

1305

00:52:56,280 --> 00:53:01,440

supplement and as I mentioned earlier

1306

00:52:58,829 --> 00:53:03,150

even more tragically the father himself

1307

00:53:01,440 --> 00:53:05,010

suffered from impaired judgement since

1308

00:53:03,150 --> 00:53:07,170

he had received a brain injury several

1309

00:53:05,010 --> 00:53:09,359

years earlier so what about this

1310

00:53:07,170 --> 00:53:12,420

glyconutrients supplement and who are

1311

00:53:09,358 --> 00:53:14,219

these people manitech manitech

1312
00:53:12,420 --> 00:53:16,019
incorporated if you check their website

1313
00:53:14,219 --> 00:53:18,419
make a range of wellness products

1314
00:53:16,019 --> 00:53:20,639
including skincare growth essentials

1315
00:53:18,420 --> 00:53:23,190
performance nutrition weight loss

1316
00:53:20,639 --> 00:53:25,409
products but their signature product is

1317
00:53:23,190 --> 00:53:28,139
a glycoprotein dietary supplement known

1318
00:53:25,409 --> 00:53:29,818
as ambra toes and according to their

1319
00:53:28,139 --> 00:53:32,608
website it has been called the missing

1320
00:53:29,818 --> 00:53:34,559
link in human nutrition and are quote

1321
00:53:32,608 --> 00:53:36,150
allowing your cells to send and

1322
00:53:34,559 --> 00:53:38,309
translate messages to each other

1323
00:53:36,150 --> 00:53:41,490
enabling them to communicate clearly and

1324
00:53:38,309 --> 00:53:43,858
operate efficiently and this as well

1325
00:53:41,489 --> 00:53:46,500
from their website help support your

1326
00:53:43,858 --> 00:53:48,000
body's immune system now this is all

1327
00:53:46,500 --> 00:53:49,800
marketing jargon designed to make it

1328
00:53:48,000 --> 00:53:51,389
sound like the next miracle cure so

1329
00:53:49,800 --> 00:53:53,970
let's look at the actual science of the

1330
00:53:51,389 --> 00:53:55,379
stuff what is in it well one of the

1331
00:53:53,969 --> 00:53:57,828
components in fact seventy eight percent

1332
00:53:55,380 --> 00:54:01,289
of the components of the tablet

1333
00:53:57,829 --> 00:54:05,068
Umberto's complex capsules is a product

1334
00:54:01,289 --> 00:54:07,199
known as aloe barbadensis and this aloe

1335
00:54:05,068 --> 00:54:08,818
vera gel comes from the leaves of aloe

1336
00:54:07,199 --> 00:54:11,608
barbadensis and it's been used for

1337
00:54:08,818 --> 00:54:14,579
centuries in folk medicine in fact in

1338
00:54:11,608 --> 00:54:16,730
2006 the group of stl in a paper

1339
00:54:14,579 --> 00:54:19,109
published in carbohydrate research

1340

00:54:16,730 --> 00:54:21,900
isolated the many components of this

1341
00:54:19,108 --> 00:54:24,230
aloe vera gel to determine which parts

1342
00:54:21,900 --> 00:54:27,108
actually had a therapeutic effect and

1343
00:54:24,230 --> 00:54:29,608
they reported that the processing and

1344
00:54:27,108 --> 00:54:32,338
conservation of this aloe vera gel is

1345
00:54:29,608 --> 00:54:34,828
critical in maintaining the active

1346
00:54:32,338 --> 00:54:36,509
ingredient stability they said that

1347
00:54:34,829 --> 00:54:38,670
since poor storage results in the

1348
00:54:36,510 --> 00:54:42,180
breakdown of the potent compounds to

1349
00:54:38,670 --> 00:54:44,460
simple sugars and glucose and they said

1350
00:54:42,179 --> 00:54:46,289
and I quote therefore no reasonable

1351
00:54:44,460 --> 00:54:49,199
biological activity can be anticipated

1352
00:54:46,289 --> 00:54:51,179
from such a gel or products derived from

1353
00:54:49,199 --> 00:54:54,059
it if it's not maintained in this

1354
00:54:51,179 --> 00:54:56,969

special manner now one of the other

1355

00:54:54,059 --> 00:54:59,789

components in these Umberto's capsules

1356

00:54:56,969 --> 00:55:01,828

is called large bark and this stuff

1357

00:54:59,789 --> 00:55:04,170

actually can't be digested by the human

1358

00:55:01,829 --> 00:55:07,589

body so its main effect is to just give

1359

00:55:04,170 --> 00:55:09,269

you flatulence what fun so unlike

1360

00:55:07,588 --> 00:55:11,219

pharmaceutical medicines strict

1361

00:55:09,269 --> 00:55:12,960

regulations are not in place to

1362

00:55:11,219 --> 00:55:14,598

determine the exact composition of

1363

00:55:12,960 --> 00:55:17,599

alternative medicine products

1364

00:55:14,599 --> 00:55:19,249

in Australia so unless you yourself were

1365

00:55:17,599 --> 00:55:20,809

to take one of these tablets and do the

1366

00:55:19,248 --> 00:55:23,659

analysis there is no way of knowing

1367

00:55:20,809 --> 00:55:25,640

exactly how much or how conserved the

1368

00:55:23,659 --> 00:55:27,679

active ingredient remains in these pills

1369
00:55:25,639 --> 00:55:30,170
but then we've come to expect this from

1370
00:55:27,679 --> 00:55:32,419
alternative medicine haven't we but what

1371
00:55:30,170 --> 00:55:34,630
makes this case different is contained

1372
00:55:32,420 --> 00:55:37,720
in the history of manitech itself

1373
00:55:34,630 --> 00:55:40,608
earlier this year in the u.s. they lost

1374
00:55:37,719 --> 00:55:44,209
11.25 million dollar class action suit

1375
00:55:40,608 --> 00:55:46,038
in 2007 the Texas Attorney General

1376
00:55:44,210 --> 00:55:48,079
charged them with unlawful misleading

1377
00:55:46,039 --> 00:55:50,359
sales practices including making

1378
00:55:48,079 --> 00:55:52,460
exaggerated claims about the therapeutic

1379
00:55:50,358 --> 00:55:56,150
benefits of their dietary supplements as

1380
00:55:52,460 --> 00:55:58,068
a method to increase sales and documents

1381
00:55:56,150 --> 00:56:00,470
filed in the Travis County District

1382
00:55:58,068 --> 00:56:02,869
Court revealed that manitech scheme was

1383
00:56:00,469 --> 00:56:05,118
to exploit families including those

1384
00:56:02,869 --> 00:56:07,940
challenged by cancer down syndrome

1385
00:56:05,119 --> 00:56:10,400
cystic fibrosis and other serious

1386
00:56:07,940 --> 00:56:12,650
illnesses and if you do a Google search

1387
00:56:10,400 --> 00:56:15,108
for manitech you can find them cited on

1388
00:56:12,650 --> 00:56:17,869
various can watch websites and they even

1389
00:56:15,108 --> 00:56:19,518
have a scathing Wikipedia page even more

1390
00:56:17,869 --> 00:56:22,219
deceitful is their attempt to hijack

1391
00:56:19,518 --> 00:56:26,179
Nobel prize-winning science but in this

1392
00:56:22,219 --> 00:56:28,159
case they actually got it wrong in 1999

1393
00:56:26,179 --> 00:56:30,858
the nobel prize for physiology or

1394
00:56:28,159 --> 00:56:33,518
medicine was awarded to dr. gunther blow

1395
00:56:30,858 --> 00:56:36,199
bell for his work with glycoproteins

1396
00:56:33,518 --> 00:56:38,298
someone at manitech got a little bit

1397

00:56:36,199 --> 00:56:42,078
mixed up and changed the prize to the

1398
00:56:38,298 --> 00:56:44,509
nobel peace prize and the year to 1994

1399
00:56:42,079 --> 00:56:46,999
now thankfully the scientists involved

1400
00:56:44,509 --> 00:56:48,679
did not take this lying down and issued

1401
00:56:46,998 --> 00:56:53,238
manitech with a cease and desist notice

1402
00:56:48,679 --> 00:56:55,489
and on sep tember 13 2007 two respected

1403
00:56:53,239 --> 00:56:57,528
glycobiology authored a scathing

1404
00:56:55,489 --> 00:57:01,219
critique of manitech which was published

1405
00:56:57,528 --> 00:57:03,108
online for the journal glycobiology it

1406
00:57:01,219 --> 00:57:05,028
was subsequently withdrawn due to

1407
00:57:03,108 --> 00:57:06,858
complaints from the company but it has

1408
00:57:05,028 --> 00:57:10,190
since been republished in glycobiology

1409
00:57:06,858 --> 00:57:12,170
this year this scathing critique was

1410
00:57:10,190 --> 00:57:15,528
when the proverbial began to hit the fan

1411
00:57:12,170 --> 00:57:18,139

and on november the second 2007 another

1412

00:57:15,528 --> 00:57:19,699

critical analysis of manitex tactics was

1413

00:57:18,139 --> 00:57:22,429

published in the highly respected

1414

00:57:19,699 --> 00:57:23,899

peer-reviewed journal science and this

1415

00:57:22,429 --> 00:57:26,058

article detailed the company's

1416

00:57:23,900 --> 00:57:28,099

underhanded attempts to infiltrate the

1417

00:57:26,059 --> 00:57:30,050

legitimate scientific community

1418

00:57:28,099 --> 00:57:32,960

including the story of a retired

1419

00:57:30,050 --> 00:57:35,360

professor and manitech consultant who

1420

00:57:32,960 --> 00:57:38,059

modified the 2006 addition of a

1421

00:57:35,360 --> 00:57:40,640

respected science textbook known as

1422

00:57:38,059 --> 00:57:42,920

Harper's Illustrated biochemistry to

1423

00:57:40,639 --> 00:57:45,829

suggest the benefits of glycan nutrient

1424

00:57:42,920 --> 00:57:47,809

supplements one of the eminent glyka

1425

00:57:45,829 --> 00:57:51,559

biologists involved in this action has

1426
00:57:47,809 --> 00:57:53,630
been cited as saying quote it's none of

1427
00:57:51,559 --> 00:57:55,460
our business as glycobiology if

1428
00:57:53,630 --> 00:57:58,160
nutraceutical companies want to sell

1429
00:57:55,460 --> 00:58:00,079
bark extract when they begin to tie it

1430
00:57:58,159 --> 00:58:02,299
to our discipline then it becomes a

1431
00:58:00,079 --> 00:58:05,090
problem so this is not to detract from

1432
00:58:02,300 --> 00:58:07,070
the tragedy of this sad event in court

1433
00:58:05,090 --> 00:58:09,710
on Tuesday in Australia the girl's

1434
00:58:07,070 --> 00:58:11,840
father pleaded guilty to one count of

1435
00:58:09,710 --> 00:58:14,990
grievous bodily harm and will serve six

1436
00:58:11,840 --> 00:58:16,700
months in jail whilst her mother was

1437
00:58:14,989 --> 00:58:18,799
sentenced to 12 months jail for child

1438
00:58:16,699 --> 00:58:21,230
cruelty but was immediately released on

1439
00:58:18,800 --> 00:58:23,210
bail the victims in this case are a

1440
00:58:21,230 --> 00:58:25,490
brain-damaged wheelchair-bound 11 year

1441
00:58:23,210 --> 00:58:28,730
old and a no doubt heartbroken brain

1442
00:58:25,489 --> 00:58:30,559
injured father meanwhile dr. Robert a

1443
00:58:28,730 --> 00:58:32,869
still not the chief scientific officer

1444
00:58:30,559 --> 00:58:36,279
and senior vice president of manitech

1445
00:58:32,869 --> 00:58:41,449
incorporated quietly collapse his us

1446
00:58:36,280 --> 00:58:43,190
311514 ein dollars annual wage with 23

1447
00:58:41,449 --> 00:58:45,409
thousand four hundred dollars in bonuses

1448
00:58:43,190 --> 00:58:47,659
and I'll leave the final word with

1449
00:58:45,409 --> 00:58:49,670
manitech themselves if you visit their

1450
00:58:47,659 --> 00:58:52,399
website you'll find this disclaimer on

1451
00:58:49,670 --> 00:58:54,800
their products this product is not

1452
00:58:52,400 --> 00:58:57,769
intended to diagnose treat cure or

1453
00:58:54,800 --> 00:59:00,019
prevent any disease that says it all and

1454

00:58:57,769 --> 00:59:02,150
for all the relevant links and further

1455
00:59:00,019 --> 00:59:04,940
reading about this story please head to

1456
00:59:02,150 --> 00:59:07,190
skeptics on TV and click on the zone

1457
00:59:04,940 --> 00:59:09,769
blog to find my accompanying blog for

1458
00:59:07,190 --> 00:59:13,269
this story and until next time this has

1459
00:59:09,769 --> 00:59:13,269
been dr. rachey reports

1460
00:59:20,009 --> 00:59:24,099
hello my name is my koala and and

1461
00:59:22,599 --> 00:59:26,079
welcome to the roundup where I share

1462
00:59:24,099 --> 00:59:28,239
news and views will interest skeptics

1463
00:59:26,079 --> 00:59:30,400
humanists secularists and followers of

1464
00:59:28,239 --> 00:59:31,960
the flying spaghetti monster I must

1465
00:59:30,400 --> 00:59:33,009
admit I smoked when I heard the trial

1466
00:59:31,960 --> 00:59:34,720
for Wayne been two self-proclaimed

1467
00:59:33,009 --> 00:59:36,728
Messiah and cult leaders started this

1468
00:59:34,719 --> 00:59:38,679

month Australians might recall watching

1469

00:59:36,728 --> 00:59:40,659

a documentary earlier this year on four

1470

00:59:38,679 --> 00:59:42,909

corners about bent called the end of the

1471

00:59:40,659 --> 00:59:47,018

world cult let's listen to some wise

1472

00:59:42,909 --> 00:59:50,828

words from bent one day by myself was in

1473

00:59:47,018 --> 00:59:53,949

my trailer and I sat down in my chair

1474

00:59:50,829 --> 00:59:57,970

just relaxing and there was nothing on

1475

00:59:53,949 --> 01:00:02,598

my mind in particular and then God said

1476

00:59:57,969 --> 01:00:09,738

to me you are Messiah

1477

01:00:02,599 --> 01:00:13,519

I am the embodiment of God I am divinity

1478

01:00:09,739 --> 01:00:15,858

and humanity combined like David Koresh

1479

01:00:13,518 --> 01:00:17,659

of burning blazing Waco Fame Wayne been

1480

01:00:15,858 --> 01:00:20,929

started out as a seventh-day Adventist

1481

01:00:17,659 --> 01:00:22,429

preacher bent the leader of the Lord our

1482

01:00:20,929 --> 01:00:24,649

righteousness church who believes he's

1483
01:00:22,429 --> 01:00:26,509
the second coming of Jesus is accused of

1484
01:00:24,650 --> 01:00:28,818
molesting children whom he says he was

1485
01:00:26,509 --> 01:00:30,769
only healing he was charged with lying

1486
01:00:28,818 --> 01:00:33,380
there good with two nude underage girls

1487
01:00:30,768 --> 01:00:35,568
one of the girls said bent a man in his

1488
01:00:33,380 --> 01:00:37,940
60s kissed her on the lips and breasts

1489
01:00:35,568 --> 01:00:40,099
naturally been said the encounter was a

1490
01:00:37,940 --> 01:00:42,829
religious experience not a sexual one

1491
01:00:40,099 --> 01:00:44,150
Jeff bent the son of wine band has said

1492
01:00:42,829 --> 01:00:46,039
his father did lay naked with the

1493
01:00:44,150 --> 01:00:48,229
children but said he's never had sexual

1494
01:00:46,039 --> 01:00:50,028
contact with minors at all ever he's

1495
01:00:48,228 --> 01:00:52,129
been very careful to protect and respect

1496
01:00:50,028 --> 01:00:54,498
people he's been with and who has

1497
01:00:52,130 --> 01:00:56,420
touched and held he compared the

1498
01:00:54,498 --> 01:00:58,488
practice of lying naked with teenagers

1499
01:00:56,420 --> 01:01:00,259
as something akin to a parent holding a

1500
01:00:58,489 --> 01:01:02,838
child and said it was something his

1501
01:01:00,259 --> 01:01:04,519
father was ordered to do by God Jeff

1502
01:01:02,838 --> 01:01:06,498
band also said that God ordered his

1503
01:01:04,518 --> 01:01:09,169
father to take his own wife as a

1504
01:01:06,498 --> 01:01:10,728
spiritual wife so they divorced since

1505
01:01:09,170 --> 01:01:13,068
Jeff believes his father to be the

1506
01:01:10,728 --> 01:01:15,018
Messiah this was a sacrifice who felt he

1507
01:01:13,068 --> 01:01:16,369
had to make for God then

1508
01:01:15,018 --> 01:01:18,199
melodramatically believes his

1509
01:01:16,369 --> 01:01:20,028
persecution will bring about the end of

1510
01:01:18,199 --> 01:01:21,409
the world and claims that the

1511

01:01:20,028 --> 01:01:23,719
investigations into his dubious

1512
01:01:21,409 --> 01:01:26,028
activities of course such things as the

1513
01:01:23,719 --> 01:01:28,670
crisis on Wall Street I wonder if Barack

1514
01:01:26,028 --> 01:01:30,798
Obama knows that when he was arrested in

1515
01:01:28,670 --> 01:01:32,838
May been said that he was stopped eating

1516
01:01:30,798 --> 01:01:34,759
since then he has been in and out of

1517
01:01:32,838 --> 01:01:37,548
jail and been doing some overly dramatic

1518
01:01:34,759 --> 01:01:39,318
and sporadic fasting it's possible the

1519
01:01:37,548 --> 01:01:40,788
space between the collarbone and a

1520
01:01:39,318 --> 01:01:43,159
girl's breasts could be the difference

1521
01:01:40,789 --> 01:01:45,829
between guilt or innocence for this cult

1522
01:01:43,159 --> 01:01:47,358
leader because bents defense lawyer has

1523
01:01:45,829 --> 01:01:49,130
said one of the girls involved in the

1524
01:01:47,358 --> 01:01:50,509
naked fraternizing told her in an

1525
01:01:49,130 --> 01:01:52,670

interview that the kissing happened

1526

01:01:50,509 --> 01:01:55,119

closer to her clavicle and not on her

1527

01:01:52,670 --> 01:01:57,259

breasts this may make all the difference

1528

01:01:55,119 --> 01:01:58,849

then said at one point he wouldn't

1529

01:01:57,259 --> 01:02:00,588

participate in the legal proceedings

1530

01:01:58,849 --> 01:02:02,989

because he believed he won't get a fair

1531

01:02:00,588 --> 01:02:05,088

trial however he has been silently

1532

01:02:02,989 --> 01:02:07,159

attending his hearing it's interesting

1533

01:02:05,088 --> 01:02:09,139

to note that a man who said he only

1534

01:02:07,159 --> 01:02:12,399

answers to God will soon have to answer

1535

01:02:09,139 --> 01:02:12,400

to a judge and jury

1536

01:02:15,088 --> 01:02:20,288

my second story also comes from the US

1537

01:02:18,219 --> 01:02:23,199

of A this story comes from the Lone Star

1538

01:02:20,289 --> 01:02:24,910

State Texas a judge sentenced to

1539

01:02:23,199 --> 01:02:26,768

religious sects elder to 30 years in

1540
01:02:24,909 --> 01:02:29,429
prison for molesting an eleven-year-old

1541
01:02:26,768 --> 01:02:32,618
girl during a phony cervical cancer exam

1542
01:02:29,429 --> 01:02:35,440
yet a dire Hawkins a house of Yahweh

1543
01:02:32,619 --> 01:02:37,000
elder faced a maximum penalty of life in

1544
01:02:35,440 --> 01:02:39,179
prison after being convicted of

1545
01:02:37,000 --> 01:02:41,768
aggravated sexual assault of a child

1546
01:02:39,179 --> 01:02:43,690
Hawkins has no medical training they

1547
01:02:41,768 --> 01:02:46,028
used a medical instrument to examine the

1548
01:02:43,690 --> 01:02:48,460
girl at a home in 2005 according to

1549
01:02:46,028 --> 01:02:50,139
trial testimony a former house of the

1550
01:02:48,460 --> 01:02:52,179
our way member testified that Hawkins

1551
01:02:50,139 --> 01:02:55,028
actually was worried the girl was not a

1552
01:02:52,179 --> 01:02:56,768
virgin some defense witnesses testified

1553
01:02:55,028 --> 01:02:58,469
at the sentencing hearing that they

1554
01:02:56,768 --> 01:03:00,909
never saw Hawkins abused children

1555
01:02:58,469 --> 01:03:03,459
several became emotional and teary when

1556
01:03:00,909 --> 01:03:05,558
pleading for leniency Hawkins other

1557
01:03:03,460 --> 01:03:08,170
charges including aggravated perjury

1558
01:03:05,559 --> 01:03:10,390
indecent with a child and bigamy will

1559
01:03:08,170 --> 01:03:12,608
remain pending the sex leader

1560
01:03:10,389 --> 01:03:14,710
self-proclaimed prophet ezra Hawkins

1561
01:03:12,608 --> 01:03:17,500
faces trial next year on bigamy and

1562
01:03:14,710 --> 01:03:19,960
child labor charges is accused of having

1563
01:03:17,500 --> 01:03:22,509
more than 20 wives performing polygamous

1564
01:03:19,960 --> 01:03:25,389
weddings enforcing about 40 children to

1565
01:03:22,509 --> 01:03:27,190
work at his 44-acre compound you might

1566
01:03:25,389 --> 01:03:29,018
remember use rail Hawkins claimed the

1567
01:03:27,190 --> 01:03:32,200
world was going to face a nuclear war on

1568

01:03:29,018 --> 01:03:35,439
sep tember 12 2006 let's remember that

1569
01:03:32,199 --> 01:03:39,639
memorable prophecy don't forget write

1570
01:03:35,440 --> 01:03:42,278
down this date sep tember the 12 2006 no

1571
01:03:39,639 --> 01:03:46,739
killer wore yes prophecy shows that

1572
01:03:42,278 --> 01:03:50,500
nuclear war will start September the 12

1573
01:03:46,739 --> 01:03:52,298
2006 remarkably that doomsday scenario

1574
01:03:50,500 --> 01:03:54,400
didn't happen but the official website

1575
01:03:52,298 --> 01:03:56,409
of the house of Yahweh continues to

1576
01:03:54,400 --> 01:03:58,960
insist on the accuracy of its prophecy

1577
01:03:56,409 --> 01:04:01,868
they have since modified their teachings

1578
01:03:58,960 --> 01:04:04,480
by saying that September 12 2006 was

1579
01:04:01,869 --> 01:04:06,220
only the start of a nine-month period at

1580
01:04:04,480 --> 01:04:09,429
the end of that time the prophesized

1581
01:04:06,219 --> 01:04:11,048
nuclear war would start wrong again we

1582
01:04:09,429 --> 01:04:13,058

look forward to seeing what occurs to

1583

01:04:11,048 --> 01:04:17,038

this juby asst leader and how many other

1584

01:04:13,059 --> 01:04:17,039

foul prophecies this group announces

1585

01:04:19,179 --> 01:04:24,259

hi this is Richard Saunders with a quick

1586

01:04:21,889 --> 01:04:27,228

message putting out the skeptic zone

1587

01:04:24,259 --> 01:04:29,239

every week is a great deal of fun we

1588

01:04:27,228 --> 01:04:31,669

really do it for the love of it but our

1589

01:04:29,239 --> 01:04:34,789

web space does cost a little bit of

1590

01:04:31,670 --> 01:04:36,739

money and other production costs to what

1591

01:04:34,789 --> 01:04:39,920

we're asking for is a donation of just

1592

01:04:36,739 --> 01:04:42,199

two dollars that's it two dollars and

1593

01:04:39,920 --> 01:04:44,619

only if you want to there's a donate

1594

01:04:42,199 --> 01:04:48,079

button on the skeptic zone homepage

1595

01:04:44,619 --> 01:04:50,479

www.mtv and if you like the show and

1596

01:04:48,079 --> 01:05:01,249

only if you want to your two dollars

1597
01:04:50,478 --> 01:05:04,248
will go a long way thanks very much join

1598
01:05:01,248 --> 01:05:17,268
us now for drinking skeptically in the

1599
01:05:04,248 --> 01:05:18,649
think tank cheers everybody welcome to

1600
01:05:17,268 --> 01:05:21,169
the think tank we're here at our

1601
01:05:18,650 --> 01:05:26,449
favorite Club conveniently located near

1602
01:05:21,170 --> 01:05:29,150
my place Wow how convenient with joining

1603
01:05:26,449 --> 01:05:31,188
meters yes sorry joining me today yeah

1604
01:05:29,150 --> 01:05:34,939
we have Amanda Rose hello Amanda hello

1605
01:05:31,188 --> 01:05:37,879
with a mouthful of chips Tiffany day hi

1606
01:05:34,938 --> 01:05:40,399
and Rachel done well hello everybody and

1607
01:05:37,880 --> 01:05:44,599
Tiffany a big formal welcome to the

1608
01:05:40,400 --> 01:05:47,329
skeptic zone thank you very much thank

1609
01:05:44,599 --> 01:05:50,220
you for having me I'm very excited now

1610
01:05:47,329 --> 01:05:54,000
it's come to my attention that the

1611
01:05:50,219 --> 01:05:56,279
the skeptics in Arizona the northern

1612
01:05:54,000 --> 01:05:58,829
Arizona skeptics have started their own

1613
01:05:56,280 --> 01:06:02,340
skeptics in the pub which we think is a

1614
01:05:58,829 --> 01:06:04,079
good idea that's a great idea and they

1615
01:06:02,340 --> 01:06:06,510
are apparently going to be meeting on

1616
01:06:04,079 --> 01:06:10,348
the twentieth of this month at the

1617
01:06:06,510 --> 01:06:13,260
Bigfoot barbecue at 7pm now I couldn't

1618
01:06:10,349 --> 01:06:15,210
imagine a Flagstaff in Flagstaff I

1619
01:06:13,260 --> 01:06:17,220
should say that in flakes up Arizona I

1620
01:06:15,210 --> 01:06:20,070
couldn't think of a better place the

1621
01:06:17,219 --> 01:06:25,199
Bigfoot things were the Bigfoot public

1622
01:06:20,070 --> 01:06:27,990
you the big saw a BBQ big coochie dancer

1623
01:06:25,199 --> 01:06:29,759
he doesn't look so Abby how do we know

1624
01:06:27,989 --> 01:06:35,358
about that Richard is because of amanda

1625

01:06:29,760 --> 01:06:35,359
sister right it's a long story

1626
01:06:41,079 --> 01:06:44,610
our destruction of fun

1627
01:06:45,519 --> 01:06:52,309
come to my mentioning Flagstaff last

1628
01:06:48,860 --> 01:06:54,620
week the organizer got in touch rises so

1629
01:06:52,309 --> 01:06:57,259
that was really good cool so people are

1630
01:06:54,619 --> 01:06:59,889
listening to the podcast surprisingly

1631
01:06:57,260 --> 01:07:03,310
enough okay so all your people in

1632
01:06:59,889 --> 01:07:07,250
Flagstaff you can go to the meetup com

1633
01:07:03,309 --> 01:07:10,670
look for the northern Arizona skeptics

1634
01:07:07,250 --> 01:07:12,949
or head along to the Bigfoot barbecue on

1635
01:07:10,670 --> 01:07:15,010
the twentieth of this month which is

1636
01:07:12,949 --> 01:07:19,159
about when this podcast goes up Morris

1637
01:07:15,010 --> 01:07:21,350
at 7pm and I wish I could go me too me

1638
01:07:19,159 --> 01:07:23,779
too and while we're shouting up to

1639
01:07:21,349 --> 01:07:26,239

people i'm going to shout out to a Jason

1640

01:07:23,780 --> 01:07:27,830

holder in Indiana thanks for listening

1641

01:07:26,239 --> 01:07:29,869

to the show Jason and thanks for giving

1642

01:07:27,829 --> 01:07:33,829

me a an encouraging message earlier

1643

01:07:29,869 --> 01:07:37,279

today Oh Jason thanks for listening now

1644

01:07:33,829 --> 01:07:38,719

dr. Rachel you are eager as ever to

1645

01:07:37,280 --> 01:07:41,720

impart your great wisdom and knowledge

1646

01:07:38,719 --> 01:07:43,819

suzl oh I've got a fantastic story about

1647

01:07:41,719 --> 01:07:45,038

Tom Cruise our favorite favorite

1648

01:07:43,820 --> 01:07:47,588

celebrity

1649

01:07:45,039 --> 01:07:51,400

don't we all love tompa love shampoo

1650

01:07:47,588 --> 01:07:54,338

he's just so great as me he apologized

1651

01:07:51,400 --> 01:07:55,929

this week we to Matt Lauer and many of

1652

01:07:54,338 --> 01:07:59,528

you would know Matt Lauer is one of the

1653

01:07:55,929 --> 01:08:01,630

hosts on the today show in America he

1654
01:07:59,528 --> 01:08:04,900
apologized for criticizing brooke

1655
01:08:01,630 --> 01:08:06,880
shields back in 2005 after she had a

1656
01:08:04,900 --> 01:08:09,489
baby and she talked about how many

1657
01:08:06,880 --> 01:08:12,189
personnel depressions and as is the

1658
01:08:09,489 --> 01:08:15,539
belief of Scientologists and most of you

1659
01:08:12,188 --> 01:08:18,338
guys most relations wouldn't notice that

1660
01:08:15,539 --> 01:08:21,449
Scientologists don't believe in mental

1661
01:08:18,338 --> 01:08:24,640
illness or treatment by psychiatry or

1662
01:08:21,449 --> 01:08:26,800
pharmaceuticals for psychiatry and he

1663
01:08:24,640 --> 01:08:28,000
made a scathing criticism of brooke

1664
01:08:26,800 --> 01:08:29,980
shields saying that there's no such

1665
01:08:28,000 --> 01:08:31,569
thing as personnel depression she's just

1666
01:08:29,979 --> 01:08:34,779
making it up and she should just go and

1667
01:08:31,569 --> 01:08:36,520
get a hug kind of stuff anyway he he

1668
01:08:34,779 --> 01:08:40,088
hasn't appeared on The Today Show since

1669
01:08:36,520 --> 01:08:41,410
then but he appeared on Monday and to

1670
01:08:40,088 --> 01:08:44,170
sit with his first interview with Matt

1671
01:08:41,409 --> 01:08:47,920
Lauer and he actually made a semi

1672
01:08:44,170 --> 01:08:49,750
apology hmm he said and I quote in

1673
01:08:47,920 --> 01:08:51,338
looking at myself I thought man that

1674
01:08:49,750 --> 01:08:53,020
came across as arrogant that's one of

1675
01:08:51,338 --> 01:08:56,289
those things you go okay I could have

1676
01:08:53,020 --> 01:08:57,760
absolutely handled that better good all

1677
01:08:56,289 --> 01:08:59,829
right moving right along here's an

1678
01:08:57,760 --> 01:09:01,989
interesting one now I have a pre doubt a

1679
01:08:59,829 --> 01:09:03,579
picture here to show you all I showed

1680
01:09:01,989 --> 01:09:05,800
Tiffany a little earlier while we were

1681
01:09:03,579 --> 01:09:09,850
having them a big treat I'll act

1682

01:09:05,800 --> 01:09:11,650
surprised yo thank you she likes it now

1683
01:09:09,850 --> 01:09:14,560
Rachel you're a medical type person I

1684
01:09:11,649 --> 01:09:17,139
know that and Amanda you know a thing or

1685
01:09:14,560 --> 01:09:20,440
two know what what do you see there is

1686
01:09:17,140 --> 01:09:21,609
I'm holding for Jesus no it's Mary you

1687
01:09:20,439 --> 01:09:24,338
can see that straight away are you

1688
01:09:21,609 --> 01:09:26,020
better than me I wasn't married what I'm

1689
01:09:24,338 --> 01:09:28,329
holding up folks is actually the France

1690
01:09:26,020 --> 01:09:30,700
care but he'd in the brain is fair to

1691
01:09:28,329 --> 01:09:32,949
marry this is a brain scan of a lady

1692
01:09:30,699 --> 01:09:35,229
called Pamela lateral natural thank you

1693
01:09:32,949 --> 01:09:36,970
let Ramon and she's from Florida and

1694
01:09:35,229 --> 01:09:40,419
this is only just coming to news she had

1695
01:09:36,970 --> 01:09:43,060
a brain scan and she was saying that the

1696
01:09:40,420 --> 01:09:44,949

she was old apparently as a lot of

1697

01:09:43,060 --> 01:09:46,630

people in the states do find themselves

1698

01:09:44,949 --> 01:09:49,000

in the situation where there

1699

01:09:46,630 --> 01:09:51,369

they struggle to pay medical bills yes

1700

01:09:49,000 --> 01:10:03,460

those are their medical system lacking

1701

01:09:51,369 --> 01:10:05,829

in this country we is that your

1702

01:10:03,460 --> 01:10:09,819

Glaswegian no that's not my best time

1703

01:10:05,829 --> 01:10:11,590

here so I don't have to go anyway yes so

1704

01:10:09,819 --> 01:10:14,109

a lot of people do have trouble paying

1705

01:10:11,590 --> 01:10:15,819

medical bills in the United States so

1706

01:10:14,109 --> 01:10:18,219

she had a brain scan and lo and behold

1707

01:10:15,819 --> 01:10:20,380

as I hold it up here yes I can see a

1708

01:10:18,219 --> 01:10:22,750

figure of cloaked figure and it does

1709

01:10:20,380 --> 01:10:24,850

look like a Sith Lord it really does

1710

01:10:22,750 --> 01:10:28,238

it's peridot Leah but yes he doesn't

1711
01:10:24,850 --> 01:10:29,829
like legendary I was actually searching

1712
01:10:28,238 --> 01:10:31,299
for Jesus or Marik's I thought it's got

1713
01:10:29,829 --> 01:10:33,279
to be one of the two and I couldn't see

1714
01:10:31,300 --> 01:10:36,360
it thank you sir not until short

1715
01:10:33,279 --> 01:10:39,939
immediately actually I must admit I seat

1716
01:10:36,359 --> 01:10:41,649
variants I was looking at it right close

1717
01:10:39,939 --> 01:10:44,488
to my face can you see it now I can see

1718
01:10:41,649 --> 01:10:48,488
it now really yet oh and by the way

1719
01:10:44,488 --> 01:10:50,919
christmas is coming isn't it nice and

1720
01:10:48,488 --> 01:10:52,479
sweet still he's suing her I'm also

1721
01:10:50,920 --> 01:10:54,369
wearing a silly hat mrs. but you just

1722
01:10:52,479 --> 01:10:57,229
can't see it they put some photos I

1723
01:10:54,369 --> 01:10:59,809
hospital shall we

1724
01:10:57,229 --> 01:11:01,519
once again everyone I'm sorry to have to

1725
01:10:59,810 --> 01:11:05,060
announce this to you the world is going

1726
01:11:01,520 --> 01:11:07,910
to end Oh again again does this happen a

1727
01:11:05,060 --> 01:11:09,800
lot yeah last time was too traumatic now

1728
01:11:07,909 --> 01:11:12,859
it's happening again it is going to

1729
01:11:09,800 --> 01:11:14,300
happen again it's amazing the repair

1730
01:11:12,859 --> 01:11:19,039
mechanisms up to what that the world

1731
01:11:14,300 --> 01:11:24,949
seems to have it's from let me just see

1732
01:11:19,039 --> 01:11:27,409
it's leland Freeborn of parowan Utah and

1733
01:11:24,949 --> 01:11:31,059
he has a small group of followers known

1734
01:11:27,409 --> 01:11:33,639
as the para when profit

1735
01:11:31,060 --> 01:11:35,860
Master again that's my patience don't

1736
01:11:33,640 --> 01:11:38,140
put this in the podcast but neither do

1737
01:11:35,859 --> 01:11:42,039
they reach him neither do they are you

1738
01:11:38,140 --> 01:11:45,160
saying okay this comes from a gentleman

1739

01:11:42,039 --> 01:11:48,489
by the name of Leland Freeborn of Utah

1740
01:11:45,159 --> 01:11:51,789
and the US and he has a small group of

1741
01:11:48,489 --> 01:11:56,380
followers who call him the para one

1742
01:11:51,789 --> 01:11:57,640
prophet and he has decided that riots in

1743
01:11:56,380 --> 01:11:59,890
the United States will begin before

1744
01:11:57,640 --> 01:12:01,869
Christmas and this is a direct result of

1745
01:11:59,890 --> 01:12:06,030
barack obama winning the presidential

1746
01:12:01,869 --> 01:12:08,319
election obviously and the old line

1747
01:12:06,029 --> 01:12:10,569
Soviet guard will jump on the

1748
01:12:08,319 --> 01:12:14,049
opportunity and new purse killing a

1749
01:12:10,569 --> 01:12:17,710
hundred million people or more yeah so

1750
01:12:14,050 --> 01:12:19,390
oh the journalists los angeles times

1751
01:12:17,710 --> 01:12:21,850
reported by the name of peter king we

1752
01:12:19,390 --> 01:12:24,100
traveled to peter to ciety Freeborn time

1753
01:12:21,850 --> 01:12:26,440

to get some details about this and it

1754

01:12:24,100 --> 01:12:30,500
turns out and you'll all be surprised to

1755

01:12:26,439 --> 01:12:33,439
do this freeborn has predicted

1756

01:12:30,500 --> 01:12:36,199
you know end of the world things before

1757

01:12:33,439 --> 01:12:40,159
get out he wasn't wore off well they

1758

01:12:36,199 --> 01:12:44,149
didn't come true not really no no fur

1759

01:12:40,159 --> 01:12:49,399
but he's but he did say that um it's not

1760

01:12:44,149 --> 01:12:51,739
an exact science but he's actually

1761

01:12:49,399 --> 01:12:54,109
quoted in this article as a survivalist

1762

01:12:51,739 --> 01:12:58,149
who keeps iodine handy in order to ward

1763

01:12:54,109 --> 01:12:58,149
off the effects of radiation anyway uh

1764

01:12:59,289 --> 01:13:03,439
apparently yes this is going to happen

1765

01:13:01,699 --> 01:13:05,809
over Christmas and there's actually a

1766

01:13:03,439 --> 01:13:07,879
comment in here from Ben Radford who

1767

01:13:05,810 --> 01:13:09,380
most of us would know it was bet he was

1768
01:13:07,880 --> 01:13:12,079
interviewed on our show two weeks ago

1769
01:13:09,380 --> 01:13:13,579
yeah not two weeks ago and he says that

1770
01:13:12,079 --> 01:13:16,340
failed doomsday predictions are nothing

1771
01:13:13,579 --> 01:13:17,960
new there have been thousands of people

1772
01:13:16,340 --> 01:13:20,510
predicting the imminent end of the world

1773
01:13:17,960 --> 01:13:22,180
dating back to at least two thousand

1774
01:13:20,510 --> 01:13:24,940
eight hundred bc

1775
01:13:22,180 --> 01:13:27,369
I guess what we're still here barrel

1776
01:13:24,939 --> 01:13:29,109
roll that's right but of course as we

1777
01:13:27,369 --> 01:13:31,090
know from Tiffany earlier in the show

1778
01:13:29,109 --> 01:13:33,460
with a great review of death from the

1779
01:13:31,090 --> 01:13:37,000
skies the world's not going to end in a

1780
01:13:33,460 --> 01:13:39,039
puff of smoke caused by God's is it no

1781
01:13:37,000 --> 01:13:41,319
it's no it's not don't be so optimistic

1782
01:13:39,039 --> 01:13:42,519
Tiffany because apparently if you wake

1783
01:13:41,319 --> 01:13:44,380
up on Christmas Day and you're still

1784
01:13:42,520 --> 01:13:46,960
alive so for Australians that would be

1785
01:13:44,380 --> 01:13:48,850
about 17 hours later so we all die in

1786
01:13:46,960 --> 01:13:51,909
sequence it's already at the time yeah

1787
01:13:48,850 --> 01:13:53,260
well I guess if the nuclear attack make

1788
01:13:51,909 --> 01:13:55,090
repairs in the States it's going to take

1789
01:13:53,260 --> 01:13:57,699
a while to for the radioactive fallout

1790
01:13:55,090 --> 01:14:02,260
to come here right so we would die

1791
01:13:57,699 --> 01:14:04,569
earlier that is true no later yes later

1792
01:14:02,260 --> 01:14:06,250
because if we die on Chris happen there

1793
01:14:04,569 --> 01:14:07,779
on Christmas Day re bottom doing here by

1794
01:14:06,250 --> 01:14:10,270
the time the fallout register which will

1795
01:14:07,779 --> 01:14:13,869
be Christmas Day they're not everyone's

1796

01:14:10,270 --> 01:14:15,610
day their crimes 28 hours behind in some

1797
01:14:13,869 --> 01:14:19,269
parts of the states depending on where

1798
01:14:15,609 --> 01:14:21,939
you go 20 hours really 1720

1799
01:14:19,270 --> 01:14:23,620
ok we have attained on me sorry for you

1800
01:14:21,939 --> 01:14:29,589
listeners in the states to know you're

1801
01:14:23,619 --> 01:14:32,079
behind heavenly anyway in 2012 the whole

1802
01:14:29,590 --> 01:14:34,029
world is expected to end as opposed to

1803
01:14:32,079 --> 01:14:36,939
oh yeah well I don't know what's the

1804
01:14:34,029 --> 01:14:40,210
difference pedantic according to

1805
01:14:36,939 --> 01:14:42,849
hotlanta wayne bent he is the son of God

1806
01:14:40,210 --> 01:14:44,980
apparently but he is also predicted the

1807
01:14:42,850 --> 01:14:48,579
world was going to end previously about

1808
01:14:44,979 --> 01:14:50,109
a year ago but happy Christmas everyone

1809
01:14:48,579 --> 01:14:52,840
and make sure you get your presents

1810
01:14:50,109 --> 01:14:55,659

early because the world's gonna end yeah

1811

01:14:52,840 --> 01:14:57,250

happy christmas happy christmas happy

1812

01:14:55,659 --> 01:15:00,819

the world's going around here have been

1813

01:14:57,250 --> 01:15:03,729

questioned don't worry the statistics

1814

01:15:00,819 --> 01:15:06,369

show that is unlikely based on previous

1815

01:15:03,729 --> 01:15:09,279

results so glad to eat in the packet

1816

01:15:06,369 --> 01:15:11,140

science i'm very glad to you know it's

1817

01:15:09,279 --> 01:15:13,389

not just funny things that happen in the

1818

01:15:11,140 --> 01:15:16,329

United States at this time of the year

1819

01:15:13,390 --> 01:15:18,850

yeah something will happen down in a

1820

01:15:16,329 --> 01:15:21,789

suburb next to your place last week what

1821

01:15:18,850 --> 01:15:23,590

what'd you hear about this there was

1822

01:15:21,789 --> 01:15:27,039

some black magic glowing way did you

1823

01:15:23,590 --> 01:15:29,949

have anything to do with that tell me

1824

01:15:27,039 --> 01:15:33,939

more whoo okay well it actually happened

1825
01:15:29,949 --> 01:15:35,380
in between 2001 2005 but a woman has

1826
01:15:33,939 --> 01:15:37,779
been charged with aggravated sexual

1827
01:15:35,380 --> 01:15:40,480
assault for committing having social

1828
01:15:37,779 --> 01:15:43,859
intercourse without consent after posing

1829
01:15:40,479 --> 01:15:46,799
as a black magic feel

1830
01:15:43,859 --> 01:15:49,049
and this occurred in Sam Hill which is a

1831
01:15:46,800 --> 01:15:52,079
suburb Mitch next two most most of it

1832
01:15:49,050 --> 01:15:54,659
yeah your local train station it is yeah

1833
01:15:52,079 --> 01:15:57,149
okay so it was a husband and wife team

1834
01:15:54,659 --> 01:15:59,609
and they've been charged with 79

1835
01:15:57,149 --> 01:16:02,969
offenses in relation to one warm at work

1836
01:15:59,609 --> 01:16:05,099
and they would prearranged prayer

1837
01:16:02,970 --> 01:16:10,100
sessions at various motels and hotels

1838
01:16:05,100 --> 01:16:11,910
across Sydney and then commit sexual

1839
01:16:10,100 --> 01:16:15,420
intercourse with these people without

1840
01:16:11,909 --> 01:16:17,729
their consent of group that's right yeah

1841
01:16:15,420 --> 01:16:19,829
what was the pre-tax then where'd the

1842
01:16:17,729 --> 01:16:23,009
black man she coming yeah yeah I'm just

1843
01:16:19,829 --> 01:16:25,529
so they would face the women thought

1844
01:16:23,010 --> 01:16:28,739
that they were cursed that's right it

1845
01:16:25,529 --> 01:16:31,529
was it was a church group yeah and they

1846
01:16:28,739 --> 01:16:33,359
encouraged this idea that the women were

1847
01:16:31,529 --> 01:16:37,439
cursed

1848
01:16:33,359 --> 01:16:40,679
then offered their services to get rid

1849
01:16:37,439 --> 01:16:43,019
of the curse which involved allegedly

1850
01:16:40,679 --> 01:16:45,989
you know driving and allegedly of course

1851
01:16:43,020 --> 01:16:48,119
these sort of things and many thousands

1852
01:16:45,988 --> 01:16:49,829
of dollars as well for each well it says

1853

01:16:48,118 --> 01:16:51,238
here fifty thousand dollars from the

1854
01:16:49,829 --> 01:16:54,868
couple

1855
01:16:51,238 --> 01:16:57,118
with intent to steal it yeah so they've

1856
01:16:54,868 --> 01:16:58,979
appeared in court so I guess we'll find

1857
01:16:57,118 --> 01:16:59,469
out whether it's alleged or not be

1858
01:16:58,979 --> 01:17:03,748
pretty

1859
01:16:59,469 --> 01:17:06,760
what I wonder is why all the coup

1860
01:17:03,748 --> 01:17:09,340
legitimate psychics out there I know it

1861
01:17:06,760 --> 01:17:13,119
does give them a bad well yeah of course

1862
01:17:09,340 --> 01:17:15,550
now why aren't they forming vigilante

1863
01:17:13,118 --> 01:17:17,889
groups or protest groups or watch groups

1864
01:17:15,550 --> 01:17:20,170
to weed out the fakes in their industry

1865
01:17:17,889 --> 01:17:23,139
that's a really good point Richard why

1866
01:17:20,170 --> 01:17:27,130
don't they do it yeah that's a good

1867
01:17:23,139 --> 01:17:30,578

point soon because um oh sorry how could

1868

01:17:27,130 --> 01:17:33,248

you possibly tell the fakes he said

1869

01:17:30,578 --> 01:17:36,158

being facetious what are you inferring

1870

01:17:33,248 --> 01:17:38,889

rich in your pocket is real oh you're on

1871

01:17:36,158 --> 01:17:43,558

yours and mine is that's right he

1872

01:17:38,889 --> 01:17:46,840

doesn't yeah ah him yeah break you guys

1873

01:17:43,559 --> 01:17:49,690

know I wonder mm-hmm Ray had a rating

1874

01:17:46,840 --> 01:17:51,578

how do you know no I heard more ed I've

1875

01:17:49,689 --> 01:17:53,498

had ratings I've had more reading so

1876

01:17:51,578 --> 01:17:54,908

you've had hot dinners poking that's

1877

01:17:53,498 --> 01:17:56,788

what they know I know you're having

1878

01:17:54,908 --> 01:17:59,259

point but you know I've had readings

1879

01:17:56,788 --> 01:18:01,179

although my ones real how would you know

1880

01:17:59,260 --> 01:18:03,460

there's another comeback to that people

1881

01:18:01,179 --> 01:18:05,260

say how can you knock this person

1882
01:18:03,460 --> 01:18:06,969
without going to the mall whatever I say

1883
01:18:05,260 --> 01:18:10,869
well you know I don't have to visit the

1884
01:18:06,969 --> 01:18:13,630
South Pole to know it's cold aren't you

1885
01:18:10,868 --> 01:18:17,198
a smarty I am it must be that clever hat

1886
01:18:13,630 --> 01:18:21,130
you wear it is it good yeah nice to see

1887
01:18:17,198 --> 01:18:22,238
this mom or Richard before we go we're

1888
01:18:21,130 --> 01:18:25,059
going to mention the poll on the website

1889
01:18:22,238 --> 01:18:27,759
oh thank you dr. Rachel for reminding me

1890
01:18:25,059 --> 01:18:30,400
we're very interested listeners to know

1891
01:18:27,760 --> 01:18:34,369
how you found out about us and if you go

1892
01:18:30,399 --> 01:18:38,000
to our website [www.skeptic zone](http://www.skepticzone.com)

1893
01:18:34,369 --> 01:18:40,909
and scroll down you'll find out Paul yes

1894
01:18:38,000 --> 01:18:43,159
with how did you find out about it was a

1895
01:18:40,909 --> 01:18:45,859
friend or is it a Google search or

1896
01:18:43,159 --> 01:18:48,170
advertising whatever so please run to

1897
01:18:45,859 --> 01:18:50,210
our website scroll down and click the

1898
01:18:48,170 --> 01:18:52,069
appropriate box and just tonight this is

1899
01:18:50,210 --> 01:18:53,960
you have to scroll down almost to the

1900
01:18:52,069 --> 01:18:56,239
bottom of the page to keep going it's on

1901
01:18:53,960 --> 01:18:58,100
the left hand side of the page and

1902
01:18:56,239 --> 01:19:00,229
you'll you'll see it when you get to the

1903
01:18:58,100 --> 01:19:02,450
bottom line 21 so if you could do that

1904
01:19:00,229 --> 01:19:04,789
it would help us and we would appreciate

1905
01:19:02,449 --> 01:19:06,109
that very much we were too because so

1906
01:19:04,789 --> 01:19:08,989
far just myself and Richard have

1907
01:19:06,109 --> 01:19:11,119
incident other people to it oh really I

1908
01:19:08,989 --> 01:19:13,849
didn't check it today we only just put

1909
01:19:11,119 --> 01:19:15,710
it up so from our favorite Club

1910

01:19:13,850 --> 01:19:20,500
conveniently located just down the road

1911
01:19:15,710 --> 01:19:24,109
from my place you had to come to tech

1912
01:19:20,500 --> 01:19:27,289
and the club that don't allow women with

1913
01:19:24,109 --> 01:19:31,279
phones in yeah oh hang on an angel

1914
01:19:27,289 --> 01:19:35,869
jealous ringing Mary okay we made every

1915
01:19:31,279 --> 01:19:37,340
min flip-flops shoes dollars yeah like

1916
01:19:35,869 --> 01:19:40,849
beach wit so when he turned up in a

1917
01:19:37,340 --> 01:19:42,850
thong and they wouldn't let him let me

1918
01:19:40,850 --> 01:19:46,850
in last time wearing thongs and I had

1919
01:19:42,850 --> 01:19:49,610
heels in my bag we good people in the US

1920
01:19:46,850 --> 01:19:53,829
Tiffany where's to thongs and amanda

1921
01:19:49,609 --> 01:19:53,829
rose thank you for coming along

1922
01:19:54,189 --> 01:20:01,879
Hahnville nigga a contrasting colors she

1923
01:19:58,250 --> 01:20:04,819
does not that I know and listen his

1924
01:20:01,880 --> 01:20:08,920

uncle cuddle next year this has been the

1925

01:20:04,819 --> 01:20:08,920
think tank for 2008 cheers

1926

01:20:30,238 --> 01:20:35,198
Richard as an innocent bystander

1927

01:20:32,069 --> 01:20:37,719
listening to that show I can see now why

1928

01:20:35,198 --> 01:20:39,729
we number one I wear naman it's awesome

1929

01:20:37,719 --> 01:20:41,980
what a show thank you again to Pamela

1930

01:20:39,729 --> 01:20:44,169
gay I really appreciated her giving me

1931

01:20:41,979 --> 01:20:47,169
the time and as a thank you I send her a

1932

01:20:44,170 --> 01:20:48,908
copy of my origami DVD Oh lovely 3d

1933

01:20:47,170 --> 01:20:53,039
origami an excellent DVD which you

1934

01:20:48,908 --> 01:20:53,039
combine the in the surf in the shotgun

1935

01:20:53,099 --> 01:20:58,119
yeah nothing like a shameless plug or

1936

01:20:56,050 --> 01:21:00,039
nothing like James bike and a copy of my

1937

01:20:58,118 --> 01:21:02,618
good friend and our voiceover man Jamal

1938

01:21:00,039 --> 01:21:04,929
sure his latest poetry DVD oh yes I said

1939
01:21:02,618 --> 01:21:07,359
in a family guy excellent now listen is

1940
01:21:04,929 --> 01:21:09,368
also and i'm sure most of you know about

1941
01:21:07,359 --> 01:21:10,988
this there's a really great website we'd

1942
01:21:09,368 --> 01:21:13,839
like to talk about called what's the

1943
01:21:10,988 --> 01:21:16,419
harm dot net yeah what a sight that is a

1944
01:21:13,840 --> 01:21:18,789
sight when people ask you are yeah i

1945
01:21:16,420 --> 01:21:21,158
believe in sticking camels up my nose or

1946
01:21:18,789 --> 01:21:22,810
in my years yes the hammam you can go to

1947
01:21:21,158 --> 01:21:25,598
what's that I'm got then you find out

1948
01:21:22,810 --> 01:21:27,219
the quantifiable homes being done by all

1949
01:21:25,599 --> 01:21:28,960
these things it's excellent scuffle

1950
01:21:27,219 --> 01:21:30,069
sorts of things like numerology just

1951
01:21:28,960 --> 01:21:31,359
looking at site now yeah it's really

1952
01:21:30,069 --> 01:21:34,329
good people have actually been killed

1953
01:21:31,359 --> 01:21:36,130
within the infant schwa bench wash my

1954
01:21:34,329 --> 01:21:38,529
jammies thanks ray and all of the rest

1955
01:21:36,130 --> 01:21:40,480
of that stuff it's an excellent service

1956
01:21:38,529 --> 01:21:42,939
the harm net what's the harm net and

1957
01:21:40,479 --> 01:21:45,669
some a lot of lucky listeners out there

1958
01:21:42,939 --> 01:21:47,738
by now will be going to their post boxes

1959
01:21:45,670 --> 01:21:49,658
and getting the latest edition of the

1960
01:21:47,738 --> 01:21:51,488
Australian skeptics magazine the skeptic

1961
01:21:49,658 --> 01:21:53,109
yes which has just come out great bag

1962
01:21:51,488 --> 01:21:54,848
too late man lots of content in there

1963
01:21:53,109 --> 01:21:56,679
were a riveting read you have lots of

1964
01:21:54,849 --> 01:21:58,239
contributors and of course if you are

1965
01:21:56,679 --> 01:22:02,050
overseas you can visit the Australian

1966
01:21:58,238 --> 01:22:04,839
skeptics website which is www text com

1967

01:22:02,050 --> 01:22:07,480
au you can subscribe to the skeptic

1968
01:22:04,840 --> 01:22:10,630
magazine and in fact you can download

1969
01:22:07,479 --> 01:22:12,638
past issues issues that's right we are

1970
01:22:10,630 --> 01:22:15,039
nothing to hide we're here we given it

1971
01:22:12,639 --> 01:22:16,989
away so not a great show Richard that's

1972
01:22:15,039 --> 01:22:18,429
let's come back in a couple weeks time

1973
01:22:16,988 --> 01:22:20,529
yeah you and I'll be back in a couple of

1974
01:22:18,429 --> 01:22:22,420
weeks time in the new year in the new

1975
01:22:20,529 --> 01:22:24,939
year but as a christmas special on

1976
01:22:22,420 --> 01:22:28,090
Boxing Day which is the 26th of December

1977
01:22:24,939 --> 01:22:30,158
we have an interview with Derek and

1978
01:22:28,090 --> 01:22:32,260
swoopy from skeptic ality ah great

1979
01:22:30,158 --> 01:22:34,269
Campbell they are yes they're excellent

1980
01:22:32,260 --> 01:22:36,550
i will have a great Christmas thank yous

1981
01:22:34,270 --> 01:22:38,940

Devin will be listening on Boxing Day by

1982

01:22:36,550 --> 01:22:38,940

vanilla

1983

01:22:40,250 --> 01:22:46,649

you've been listening to the skeptic

1984

01:22:42,659 --> 01:22:50,430

zone visit our website at [www skeptics](http://www.skeptics)

1985

01:22:46,649 --> 01:22:53,389

on TV for comments contacts and extra

1986

01:22:50,430 --> 01:22:53,390

video reports

1987

01:22:53,630 --> 01:22:57,969

skin

1988

01:22:55,939 --> 01:22:57,969

Oh

1989

01:23:04,590 --> 01:23:06,590

Oh

1990

01:23:11,738 --> 01:23:13,799

you