



Space law

EPISODE 21.20

S

W

1
00:00:14,910 --> 00:00:03,070
greetings citizens and welcome to

2
00:00:26,950 --> 00:00:14,920
[Music]

3
00:00:28,550 --> 00:00:26,960
i'm jason mcclellan thanks for hanging

4
00:00:30,230 --> 00:00:28,560
out with me

5
00:00:32,150 --> 00:00:30,240
i don't know about you but i'm

6
00:00:33,590 --> 00:00:32,160
tremendously fascinated by the subject

7
00:00:36,310 --> 00:00:33,600
of space law

8
00:00:37,910 --> 00:00:36,320
the issues of who controls space what

9
00:00:40,310 --> 00:00:37,920
laws govern space

10
00:00:42,470 --> 00:00:40,320
who enforces those laws and how would

11
00:00:45,029 --> 00:00:42,480
they even go about doing that

12
00:00:45,990 --> 00:00:45,039
and how would earth impose laws work in

13
00:00:48,229 --> 00:00:46,000

space and on

14

00:00:50,150 --> 00:00:48,239

alien worlds anyway especially in a

15

00:00:52,630 --> 00:00:50,160

situation where extraterrestrial

16

00:00:54,549 --> 00:00:52,640

civilizations enter the equation

17

00:01:00,610 --> 00:00:54,559

let's spend some time today exploring

18

00:01:05,189 --> 00:01:03,670

[Music]

19

00:01:06,710 --> 00:01:05,199

i love exploring ufos and

20

00:01:09,109 --> 00:01:06,720

extraterrestrial life

21

00:01:09,750 --> 00:01:09,119

but as a space geek i also enjoy

22

00:01:12,550 --> 00:01:09,760

pondering

23

00:01:13,429 --> 00:01:12,560

other related space issues and space law

24

00:01:16,710 --> 00:01:13,439

is one of those

25

00:01:18,710 --> 00:01:16,720

issues that has fascinated me for years

26

00:01:21,510 --> 00:01:18,720

i wrote an article about this topic for

27

00:01:23,109 --> 00:01:21,520

open minds magazine back in 2013.

28

00:01:24,710 --> 00:01:23,119

i've also talked about it on a couple

29

00:01:26,469 --> 00:01:24,720

different shows over the years

30

00:01:27,749 --> 00:01:26,479

but some recent news related to the

31

00:01:29,830 --> 00:01:27,759

subject of space law

32

00:01:31,350 --> 00:01:29,840

enticed me to want to talk about it for

33

00:01:33,270 --> 00:01:31,360

a little bit today with you

34

00:01:35,350 --> 00:01:33,280

we'll talk about that news in a bit but

35

00:01:36,789 --> 00:01:35,360

first let's take a quick glance at space

36

00:01:39,429 --> 00:01:36,799

law overall

37

00:01:40,789 --> 00:01:39,439

space law is a developing topic that's

38

00:01:42,789 --> 00:01:40,799

certainly gained momentum

39

00:01:44,630 --> 00:01:42,799

in the past decade during this modern

40

00:01:46,389 --> 00:01:44,640

space race we're in

41

00:01:48,310 --> 00:01:46,399

we have several private companies

42

00:01:49,749 --> 00:01:48,320

looking to profit from space in various

43

00:01:52,310 --> 00:01:49,759

ways

44

00:01:53,670 --> 00:01:52,320

laws regulating businesses here on earth

45

00:01:57,190 --> 00:01:53,680

are plentiful

46

00:01:59,429 --> 00:01:57,200

but what about in space well

47

00:02:00,630 --> 00:01:59,439

laws regulating space activities do

48

00:02:03,670 --> 00:02:00,640

exist

49

00:02:05,109 --> 00:02:03,680

but these laws are fairly new and very

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00:02:06,789 --> 00:02:05,119

little about these laws

51
00:02:09,430 --> 00:02:06,799
has been universally established

52
00:02:12,309 --> 00:02:09,440
regarding their scope or application

53
00:02:13,830 --> 00:02:12,319
there's also ambiguity about who must

54
00:02:15,589 --> 00:02:13,840
obey these laws

55
00:02:17,670 --> 00:02:15,599
with private companies pushing forward

56
00:02:19,030 --> 00:02:17,680
with plans like placing structures on

57
00:02:21,750 --> 00:02:19,040
celestial bodies

58
00:02:23,750 --> 00:02:21,760
and mining asteroids for resources these

59
00:02:25,270 --> 00:02:23,760
activities certainly raise new legal

60
00:02:27,110 --> 00:02:25,280
issues and concerns

61
00:02:29,190 --> 00:02:27,120
but lawmakers have been debating space

62
00:02:32,309 --> 00:02:29,200
law for decades

63
00:02:33,910 --> 00:02:32,319

the 1967 treaty on principles governing

64

00:02:36,229 --> 00:02:33,920

the activities of states in the

65

00:02:38,309 --> 00:02:36,239

exploration and use of outer space

66

00:02:40,710 --> 00:02:38,319

including the moon and other celestial

67

00:02:41,990 --> 00:02:40,720

bodies commonly referred to as the outer

68

00:02:45,350 --> 00:02:42,000

space treaty

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00:02:47,509 --> 00:02:45,360

is the foundation of existing space law

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00:02:49,190 --> 00:02:47,519

although other space treaties exist the

71

00:02:51,990 --> 00:02:49,200

outer space treaty is the most

72

00:02:53,589 --> 00:02:52,000

important in his book the privatization

73

00:02:55,430 --> 00:02:53,599

of space exploration

74

00:02:57,750 --> 00:02:55,440

george washington university law school

75

00:03:00,630 --> 00:02:57,760

professor louis d solomon explains

76
00:03:01,589 --> 00:03:00,640
quote more than 100 nations including

77
00:03:04,790 --> 00:03:01,599
the united states

78
00:03:06,869 --> 00:03:04,800
have signed the 1967 outer space treaty

79
00:03:08,550 --> 00:03:06,879
far more than any other space-related

80
00:03:11,750 --> 00:03:08,560
treaty end quote

81
00:03:13,589 --> 00:03:11,760
and therefore quote all space activities

82
00:03:15,589 --> 00:03:13,599
whether public or private

83
00:03:18,470 --> 00:03:15,599
must be considered in light of the outer

84
00:03:21,149 --> 00:03:18,480
space treaty end quote the united

85
00:03:24,630 --> 00:03:21,159
nations office of outer space affairs or

86
00:03:26,630 --> 00:03:24,640
unoosa is the quote secretariat for the

87
00:03:28,789 --> 00:03:26,640
legal subcommittee of the united nations

88
00:03:31,509 --> 00:03:28,799

committee on the peaceful uses of outer

89

00:03:33,750 --> 00:03:31,519

space or copuos

90

00:03:35,350 --> 00:03:33,760

which is the primary international forum

91

00:03:37,350 --> 00:03:35,360

for the development of laws and

92

00:03:39,990 --> 00:03:37,360

principles governing outer space

93

00:03:42,309 --> 00:03:40,000

end quote here's how the unoosa

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00:03:44,149 --> 00:03:42,319

describes the outer space treaty

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00:03:46,309 --> 00:03:44,159

the outer space treaty provides the

96

00:03:46,949 --> 00:03:46,319

basic framework on international space

97

00:03:49,509 --> 00:03:46,959

law

98

00:03:51,589 --> 00:03:49,519

including the following principles the

99

00:03:53,750 --> 00:03:51,599

exploration and use of outer space

100

00:03:54,789 --> 00:03:53,760

shall be carried out for the benefit and

101
00:03:56,630 --> 00:03:54,799
in the interests of

102
00:04:00,149 --> 00:03:56,640
all countries and shall be the

103
00:04:01,990 --> 00:04:00,159
providence of all mankind

104
00:04:05,350 --> 00:04:02,000
outer space shall be free for

105
00:04:07,589 --> 00:04:05,360
exploration and use by all states

106
00:04:10,309 --> 00:04:07,599
outer space is not subject to national

107
00:04:13,110 --> 00:04:10,319
appropriation by claims of sovereignty

108
00:04:14,789 --> 00:04:13,120
by means of use or occupation or by any

109
00:04:17,110 --> 00:04:14,799
other means

110
00:04:19,110 --> 00:04:17,120
states shall not place nuclear weapons

111
00:04:21,430 --> 00:04:19,120
or other weapons of mass destruction

112
00:04:23,510 --> 00:04:21,440
in orbit or on celestial bodies or

113
00:04:24,950 --> 00:04:23,520

station them in outer space in any other

114

00:04:27,030 --> 00:04:24,960

manner

115

00:04:28,629 --> 00:04:27,040

the moon and other celestial bodies

116

00:04:31,510 --> 00:04:28,639

shall be used exclusively

117

00:04:34,950 --> 00:04:31,520

for peaceful purposes astronauts shall

118

00:04:36,790 --> 00:04:34,960

be regarded as the envoys of mankind

119

00:04:37,990 --> 00:04:36,800

states shall be responsible for national

120

00:04:39,110 --> 00:04:38,000

space activities

121

00:04:40,950 --> 00:04:39,120

where they're carried out by

122

00:04:42,550 --> 00:04:40,960

governmental or non-governmental

123

00:04:44,629 --> 00:04:42,560

entities

124

00:04:46,390 --> 00:04:44,639

states shall be liable for damage caused

125

00:04:48,469 --> 00:04:46,400

by their space objects

126
00:04:49,830 --> 00:04:48,479
and states shall avoid harmful

127
00:04:52,550 --> 00:04:49,840
contamination of space

128
00:04:53,990 --> 00:04:52,560
and celestial bodies this

129
00:04:55,590 --> 00:04:54,000
straightforward framework

130
00:04:57,510 --> 00:04:55,600
sounds pretty restrictive when it comes

131
00:04:59,189 --> 00:04:57,520
to business in space

132
00:05:01,590 --> 00:04:59,199
let's talk about property ownership in

133
00:05:03,909 --> 00:05:01,600
space and see if that fits within these

134
00:05:05,749 --> 00:05:03,919
existing legal parameters

135
00:05:07,909 --> 00:05:05,759
governments and private companies have

136
00:05:09,909 --> 00:05:07,919
expressed interest in establishing bases

137
00:05:11,270 --> 00:05:09,919
and even colonies on the moon and on

138
00:05:13,909 --> 00:05:11,280

mars

139

00:05:16,469 --> 00:05:13,919

one notable example of this is the now

140

00:05:18,870 --> 00:05:16,479

defunct non-profit company mars one

141

00:05:20,310 --> 00:05:18,880

which planned to colonize mars their

142

00:05:21,909 --> 00:05:20,320

aggressive timeline had them

143

00:05:22,469 --> 00:05:21,919

establishing a permanent human

144

00:05:26,070 --> 00:05:22,479

settlement

145

00:05:27,350 --> 00:05:26,080

on mars in 2023 things didn't work out

146

00:05:29,029 --> 00:05:27,360

so well for the company

147

00:05:32,150 --> 00:05:29,039

and it declared bankruptcy and

148

00:05:33,990 --> 00:05:32,160

liquidated its assets back in 2019

149

00:05:35,749 --> 00:05:34,000

but before that happened the company had

150

00:05:37,909 --> 00:05:35,759

these grand plans

151
00:05:39,909 --> 00:05:37,919
and its website proudly claimed that

152
00:05:42,950 --> 00:05:39,919
quote the mars one foundation will

153
00:05:45,189 --> 00:05:42,960
own the mars settlement end quote

154
00:05:46,629 --> 00:05:45,199
had this colony gone forward would that

155
00:05:49,670 --> 00:05:46,639
have actually been the case

156
00:05:50,629 --> 00:05:49,680
legally article two of the outer space

157
00:05:53,670 --> 00:05:50,639
treaty states

158
00:05:55,270 --> 00:05:53,680
quote outer space including the moon and

159
00:05:57,430 --> 00:05:55,280
other celestial bodies

160
00:05:59,270 --> 00:05:57,440
is not subject to national appropriation

161
00:06:02,469 --> 00:05:59,280
by claims of sovereignty

162
00:06:03,350 --> 00:06:02,479
by means of use or occupation or by any

163
00:06:06,230 --> 00:06:03,360

other means

164

00:06:07,749 --> 00:06:06,240

end quote there are some who strictly

165

00:06:09,590 --> 00:06:07,759

interpret this provision

166

00:06:11,029 --> 00:06:09,600

to mean that although governments can't

167

00:06:12,950 --> 00:06:11,039

claim property rights

168

00:06:14,309 --> 00:06:12,960

private companies may indeed claim

169

00:06:15,990 --> 00:06:14,319

ownership

170

00:06:17,430 --> 00:06:16,000

but when we look at article six of the

171

00:06:19,909 --> 00:06:17,440

outer space treaty

172

00:06:20,629 --> 00:06:19,919

it lays out that quote state parties to

173

00:06:22,710 --> 00:06:20,639

the treaty

174

00:06:25,189 --> 00:06:22,720

shall bear international responsibility

175

00:06:26,710 --> 00:06:25,199

for national activities in outer space

176
00:06:28,870 --> 00:06:26,720
including the moon and other celestial

177
00:06:29,670 --> 00:06:28,880
bodies whether such activities are

178
00:06:31,749 --> 00:06:29,680
carried on

179
00:06:33,590 --> 00:06:31,759
by governmental agencies or by

180
00:06:35,510 --> 00:06:33,600
non-governmental agencies

181
00:06:37,029 --> 00:06:35,520
and for assuring that national

182
00:06:39,189 --> 00:06:37,039
activities are carried out

183
00:06:41,029 --> 00:06:39,199
in conformity with the provisions set

184
00:06:42,710 --> 00:06:41,039
forth in the present treaty

185
00:06:44,150 --> 00:06:42,720
the activities of non-governmental

186
00:06:45,510 --> 00:06:44,160
entities in outer space

187
00:06:48,070 --> 00:06:45,520
including the moon and other celestial

188
00:06:49,589 --> 00:06:48,080

bodies shall require authorization and

189

00:06:51,350 --> 00:06:49,599

continuing supervision

190

00:06:53,110 --> 00:06:51,360

by the appropriate state party to the

191

00:06:54,710 --> 00:06:53,120

treaty end quote

192

00:06:56,469 --> 00:06:54,720

it seems like those who argue that the

193

00:06:58,230 --> 00:06:56,479

outer space treaty doesn't regulate the

194

00:07:01,029 --> 00:06:58,240

activities of private companies

195

00:07:02,390 --> 00:07:01,039

overlook the importance of article six

196

00:07:04,230 --> 00:07:02,400

addressing this issue

197

00:07:06,230 --> 00:07:04,240

in his book the development of outer

198

00:07:07,830 --> 00:07:06,240

space sovereignty and property rights in

199

00:07:10,150 --> 00:07:07,840

international space law

200

00:07:12,550 --> 00:07:10,160

thomas gengale the executive director of

201
00:07:14,629 --> 00:07:12,560
aerospace think tank ops alaska

202
00:07:16,550 --> 00:07:14,639
cites lawrence a cooper an attorney

203
00:07:17,189 --> 00:07:16,560
specializing in space law who states

204
00:07:18,710 --> 00:07:17,199
quote

205
00:07:20,230 --> 00:07:18,720
some have argued that the outer space

206
00:07:22,309 --> 00:07:20,240
treaty's broad definitions

207
00:07:23,670 --> 00:07:22,319
allow individual appropriation of space

208
00:07:26,150 --> 00:07:23,680
and celestial bodies

209
00:07:28,070 --> 00:07:26,160
because it only specifically prohibits

210
00:07:30,150 --> 00:07:28,080
appropriation by states

211
00:07:31,670 --> 00:07:30,160
however states are responsible for the

212
00:07:33,510 --> 00:07:31,680
actions of individuals

213
00:07:35,189 --> 00:07:33,520

and property claims must occur through

214

00:07:37,350 --> 00:07:35,199

the state's property laws

215

00:07:40,390 --> 00:07:37,360

therefore individuals may not claim

216

00:07:42,550 --> 00:07:40,400

space or celestial bodies end quote

217

00:07:44,710 --> 00:07:42,560

this essentially means that all parties

218

00:07:45,670 --> 00:07:44,720

in space are bound by the outer space

219

00:07:49,110 --> 00:07:45,680

treaty

220

00:07:49,510 --> 00:07:49,120

the government binds their citizens

221

00:07:51,830 --> 00:07:49,520

through

222

00:07:53,350 --> 00:07:51,840

laws and other means so how does this

223

00:07:55,589 --> 00:07:53,360

affect a company planning to

224

00:07:58,710 --> 00:07:55,599

own a settlement or a base on another

225

00:08:01,029 --> 00:07:58,720

world like mars one plan to do on mars

226

00:08:02,869 --> 00:08:01,039

using the outer space treaty there's a

227

00:08:03,189 --> 00:08:02,879

strong argument that these companies

228

00:08:06,390 --> 00:08:03,199

have

229

00:08:07,830 --> 00:08:06,400

no legal claim to the alien land where

230

00:08:09,990 --> 00:08:07,840

they place their structures

231

00:08:11,029 --> 00:08:10,000

but they would however retain the

232

00:08:12,869 --> 00:08:11,039

property rights

233

00:08:14,629 --> 00:08:12,879

of whatever material that company

234

00:08:16,390 --> 00:08:14,639

launches into space

235

00:08:17,909 --> 00:08:16,400

article 8 of the outer space treaty

236

00:08:19,670 --> 00:08:17,919

addresses this stating

237

00:08:21,670 --> 00:08:19,680

quote a state party to the treaty on

238

00:08:23,029 --> 00:08:21,680

whose registry an object launches into

239

00:08:25,110 --> 00:08:23,039

outer space is carried

240

00:08:26,710 --> 00:08:25,120

shall retain jurisdiction and control

241

00:08:29,830 --> 00:08:26,720

over such object

242

00:08:32,469 --> 00:08:29,840

and over any personnel thereof while in

243

00:08:34,230 --> 00:08:32,479

outer space or on a celestial body

244

00:08:34,709 --> 00:08:34,240

ownership of objects launch into outer

245

00:08:37,110 --> 00:08:34,719

space

246

00:08:38,709 --> 00:08:37,120

including objects landed or constructed

247

00:08:40,870 --> 00:08:38,719

on a celestial body

248

00:08:42,550 --> 00:08:40,880

and of their component parts is not

249

00:08:43,029 --> 00:08:42,560

affected by their presence in outer

250

00:08:45,110 --> 00:08:43,039

space

251
00:08:46,389 --> 00:08:45,120
or on a celestial body or by their

252
00:08:49,190 --> 00:08:46,399
return to the earth

253
00:08:49,910 --> 00:08:49,200
in quote that explains that a company

254
00:08:52,949 --> 00:08:49,920
will retain

255
00:08:55,030 --> 00:08:52,959
ownership of habitats storage units or

256
00:08:56,070 --> 00:08:55,040
any other equipment used for a colony or

257
00:08:58,630 --> 00:08:56,080
a base

258
00:09:00,230 --> 00:08:58,640
but as article 8 explains companies are

259
00:09:01,990 --> 00:09:00,240
required to register

260
00:09:03,910 --> 00:09:02,000
all its equipment and proposed

261
00:09:05,350 --> 00:09:03,920
activities with a country before

262
00:09:07,430 --> 00:09:05,360
launching into space

263
00:09:09,190 --> 00:09:07,440

and that country is responsible for

264

00:09:11,990 --> 00:09:09,200

ensuring the company adheres to the

265

00:09:13,910 --> 00:09:12,000

outer space treaty

266

00:09:15,350 --> 00:09:13,920

so following what's laid out in the

267

00:09:17,430 --> 00:09:15,360

outer space treaty

268

00:09:19,509 --> 00:09:17,440

private companies technically retain

269

00:09:21,590 --> 00:09:19,519

ownership of physical structures and

270

00:09:23,829 --> 00:09:21,600

other property in space

271

00:09:24,710 --> 00:09:23,839

but there's a catch the outer space

272

00:09:28,310 --> 00:09:24,720

treaty suggests

273

00:09:29,030 --> 00:09:28,320

that all astronauts can freely use and

274

00:09:32,310 --> 00:09:29,040

access

275

00:09:35,430 --> 00:09:32,320

structures vehicles and other equipment

276

00:09:38,230 --> 00:09:35,440
on other worlds article 12 details

277

00:09:38,870 --> 00:09:38,240
quote all stations installations

278

00:09:40,630 --> 00:09:38,880
equipment

279

00:09:42,949 --> 00:09:40,640
and space vehicles on the moon and other

280

00:09:44,630 --> 00:09:42,959
celestial bodies shall be open to

281

00:09:45,670 --> 00:09:44,640
representatives of other state parties

282

00:09:49,269 --> 00:09:45,680
to the treaty

283

00:09:51,190 --> 00:09:49,279
on a basis of reciprocity end quote

284

00:09:53,350 --> 00:09:51,200
i'm not sure how that would work

285

00:09:54,949 --> 00:09:53,360
especially from a commercial perspective

286

00:09:56,470 --> 00:09:54,959
let's look at a different angle of this

287

00:09:57,750 --> 00:09:56,480
discussion that's related to property

288

00:10:00,230 --> 00:09:57,760

ownership in space

289

00:10:02,949 --> 00:10:00,240

and that's the legality of mining and

290

00:10:05,030 --> 00:10:02,959

owning natural resources in space

291

00:10:06,470 --> 00:10:05,040

this was an actively hot topic eight or

292

00:10:08,550 --> 00:10:06,480

so years ago

293

00:10:10,310 --> 00:10:08,560

companies like planetary resources and

294

00:10:12,310 --> 00:10:10,320

deep space industries

295

00:10:14,230 --> 00:10:12,320

neither of which exist anymore we're

296

00:10:16,310 --> 00:10:14,240

boldly pushing forward with plans to

297

00:10:18,150 --> 00:10:16,320

mine resources from asteroids

298

00:10:19,509 --> 00:10:18,160

and space mining remains a business

299

00:10:20,470 --> 00:10:19,519

activity of interest to several

300

00:10:23,110 --> 00:10:20,480

companies

301
00:10:24,790 --> 00:10:23,120
including amazon ceo jeff bezos space

302
00:10:26,710 --> 00:10:24,800
firm blue origin

303
00:10:28,710 --> 00:10:26,720
but regardless of whether we're talking

304
00:10:29,590 --> 00:10:28,720
about mining asteroids or mining the

305
00:10:32,230 --> 00:10:29,600
moon

306
00:10:34,230 --> 00:10:32,240
these are celestial bodies and therefore

307
00:10:36,310 --> 00:10:34,240
they fall under the outer space treaty's

308
00:10:38,150 --> 00:10:36,320
prohibition of ownership

309
00:10:39,829 --> 00:10:38,160
but in these cases we're concerned with

310
00:10:42,310 --> 00:10:39,839
the ownership of resources

311
00:10:43,829 --> 00:10:42,320
extracted from these celestial bodies so

312
00:10:45,829 --> 00:10:43,839
how does that work

313
00:10:48,230 --> 00:10:45,839

referring back to lewis d solomon's book

314

00:10:50,550 --> 00:10:48,240

the privatization of space exploration

315

00:10:52,470 --> 00:10:50,560

he explains that quote although it may

316

00:10:53,430 --> 00:10:52,480

be argued that resources on the moon or

317

00:10:55,430 --> 00:10:53,440

an asteroid

318

00:10:57,030 --> 00:10:55,440

are part of the land surface and cannot

319

00:10:58,949 --> 00:10:57,040

be treated separately from it

320

00:11:01,110 --> 00:10:58,959

thereby barring private entities from

321

00:11:03,350 --> 00:11:01,120

claiming ownership of mineral resources

322

00:11:05,110 --> 00:11:03,360

in place once mined from a space

323

00:11:05,750 --> 00:11:05,120

facility and its accompanying safety

324

00:11:08,150 --> 00:11:05,760

zone

325

00:11:09,670 --> 00:11:08,160

these resources seemingly become subject

326

00:11:12,550 --> 00:11:09,680

to private ownership

327

00:11:14,150 --> 00:11:12,560

end quote thomas gengale adds quote the

328

00:11:17,110 --> 00:11:14,160

outer space treaty does not

329

00:11:19,269 --> 00:11:17,120

forbid in-situ resource utilization

330

00:11:21,110 --> 00:11:19,279

space is treated like a commons

331

00:11:22,550 --> 00:11:21,120

astronauts have brought home space rocks

332

00:11:24,150 --> 00:11:22,560

and taken title to them

333

00:11:26,949 --> 00:11:24,160

if you want resources on mars or the

334

00:11:29,269 --> 00:11:26,959

moon take them end quote

335

00:11:31,590 --> 00:11:29,279

that's an interesting approach well

336

00:11:33,509 --> 00:11:31,600

proponents of private resource ownership

337

00:11:34,150 --> 00:11:33,519

often cite article 1 of the outer space

338

00:11:35,829 --> 00:11:34,160

treaty

339

00:11:37,509 --> 00:11:35,839

which states that asteroids and other

340

00:11:39,910 --> 00:11:37,519

celestial bodies quote

341

00:11:41,030 --> 00:11:39,920

shall be free for exploration and use

342

00:11:44,230 --> 00:11:41,040

end quote

343

00:11:46,069 --> 00:11:44,240

okay that's cool but article 1

344

00:11:47,590 --> 00:11:46,079

also poses potential problems for

345

00:11:50,230 --> 00:11:47,600

resource ownership

346

00:11:51,350 --> 00:11:50,240

it adds that quote exploration and use

347

00:11:52,710 --> 00:11:51,360

of outer space

348

00:11:54,389 --> 00:11:52,720

including the moon and other celestial

349

00:11:56,470 --> 00:11:54,399

bodies shall be carried out

350

00:11:58,710 --> 00:11:56,480

for the benefit and in the interest of

351

00:12:00,949 --> 00:11:58,720

all countries in quote

352

00:12:02,870 --> 00:12:00,959

it's kind of difficult to argue how a

353

00:12:03,990 --> 00:12:02,880

private company's mining of resources

354

00:12:06,790 --> 00:12:04,000

for profit

355

00:12:08,550 --> 00:12:06,800

fits the spirit of quote for the benefit

356

00:12:11,670 --> 00:12:08,560

and in the interest of all countries

357

00:12:12,150 --> 00:12:11,680

end quote as you can see the outer space

358

00:12:14,389 --> 00:12:12,160

treaty

359

00:12:16,470 --> 00:12:14,399

lays some groundwork for space law but

360

00:12:18,629 --> 00:12:16,480

there are plenty of ambiguities

361

00:12:20,389 --> 00:12:18,639

and it wasn't really written with

362

00:12:22,230 --> 00:12:20,399

business in mind

363

00:12:23,509 --> 00:12:22,240

the agreement governing the activities

364

00:12:26,069 --> 00:12:23,519

of states on the moon

365

00:12:28,389 --> 00:12:26,079

and other celestial bodies referred to

366

00:12:30,310 --> 00:12:28,399

as the moon agreement of 1979

367

00:12:31,750 --> 00:12:30,320

was an attempt to address issues like

368

00:12:32,470 --> 00:12:31,760

questions pertaining to resource

369

00:12:34,150 --> 00:12:32,480

ownership

370

00:12:36,389 --> 00:12:34,160

the moon agreement makes the issue very

371

00:12:38,790 --> 00:12:36,399

clear it explicitly states

372

00:12:40,230 --> 00:12:38,800

quote neither the surface nor the

373

00:12:42,389 --> 00:12:40,240

subsurface of the moon

374

00:12:43,750 --> 00:12:42,399

nor any part thereof of natural

375

00:12:46,470 --> 00:12:43,760

resources in place

376

00:12:48,470 --> 00:12:46,480

shall become property of any state

377

00:12:50,310 --> 00:12:48,480

international intergovernmental or

378

00:12:53,590 --> 00:12:50,320

non-governmental entity

379

00:12:55,990 --> 00:12:53,600

or of any natural person end quote

380

00:12:57,750 --> 00:12:56,000

although this is considerably clear on

381

00:12:59,030 --> 00:12:57,760

the issue of resource ownership than the

382

00:13:01,269 --> 00:12:59,040

outer space treaty

383

00:13:02,470 --> 00:13:01,279

the moon agreement is for all intents

384

00:13:04,710 --> 00:13:02,480

and purposes

385

00:13:06,710 --> 00:13:04,720

completely irrelevant with respect to

386

00:13:08,710 --> 00:13:06,720

accepted space law

387

00:13:09,829 --> 00:13:08,720

unfortunately it's considered a failed

388

00:13:12,389 --> 00:13:09,839

treaty

389

00:13:13,509 --> 00:13:12,399

only 13 nations ratified it and none of

390

00:13:15,750 --> 00:13:13,519

those nations

391

00:13:17,509 --> 00:13:15,760

are engaged in manned space exploration

392

00:13:20,150 --> 00:13:17,519

so nobody takes it seriously

393

00:13:21,750 --> 00:13:20,160

and not surprisingly various countries

394

00:13:23,990 --> 00:13:21,760

have taken it upon themselves

395

00:13:24,870 --> 00:13:24,000

to create their own laws to suit their

396

00:13:28,230 --> 00:13:24,880

own needs

397

00:13:29,990 --> 00:13:28,240

and justify their actions in 2015

398

00:13:31,350 --> 00:13:30,000

the u.s commercial space launch

399

00:13:33,190 --> 00:13:31,360

competitiveness act

400

00:13:35,030 --> 00:13:33,200

also referred to as the space act was

401
00:13:36,949 --> 00:13:35,040
signed into law in the united states by

402
00:13:38,949 --> 00:13:36,959
president barack obama

403
00:13:40,629 --> 00:13:38,959
this bill was intended to expedite

404
00:13:42,470 --> 00:13:40,639
private space exploration

405
00:13:45,030 --> 00:13:42,480
and it specifically mentions space

406
00:13:47,269 --> 00:13:45,040
mining some believe the space act

407
00:13:49,509 --> 00:13:47,279
resolves the existing legal ambiguities

408
00:13:50,870 --> 00:13:49,519
and clears the way for companies to mine

409
00:13:53,430 --> 00:13:50,880
space resources

410
00:13:54,790 --> 00:13:53,440
title iv the space act states quote a

411
00:13:56,790 --> 00:13:54,800
united states citizen

412
00:13:58,310 --> 00:13:56,800
engaged in commercial recovery of an

413
00:14:00,870 --> 00:13:58,320

asteroid resource

414

00:14:01,990 --> 00:14:00,880

or a space resource under this chapter

415

00:14:04,389 --> 00:14:02,000

shall be entitled to any

416

00:14:05,269 --> 00:14:04,399

asteroid resource or space resource

417

00:14:08,790 --> 00:14:05,279

obtained

418

00:14:11,189 --> 00:14:08,800

including to possess own transport use

419

00:14:12,949 --> 00:14:11,199

and sell the asteroid resource or space

420

00:14:13,990 --> 00:14:12,959

resource obtained in accordance with

421

00:14:15,670 --> 00:14:14,000

applicable law

422

00:14:17,269 --> 00:14:15,680

including the international obligations

423

00:14:19,269 --> 00:14:17,279

of the united states end quote

424

00:14:21,030 --> 00:14:19,279

but the wall street journal's law blog

425

00:14:23,110 --> 00:14:21,040

pointed out that this legislation

426
00:14:24,069 --> 00:14:23,120
quote met with some questions about

427
00:14:25,750 --> 00:14:24,079
whether congress

428
00:14:27,829 --> 00:14:25,760
and the president have the authority to

429
00:14:28,230 --> 00:14:27,839
assign such rights under international

430
00:14:31,829 --> 00:14:28,240
law

431
00:14:33,670 --> 00:14:31,839
end quote similarly in 2017

432
00:14:35,350 --> 00:14:33,680
the small european country of luxembourg

433
00:14:37,110 --> 00:14:35,360
drafted its own legal framework

434
00:14:38,470 --> 00:14:37,120
addressing private property rights to

435
00:14:40,310 --> 00:14:38,480
space resources

436
00:14:42,629 --> 00:14:40,320
but even the luxembourg council of state

437
00:14:44,150 --> 00:14:42,639
recognizes that it's unclear whether

438
00:14:46,550 --> 00:14:44,160

international space law

439

00:14:49,110 --> 00:14:46,560

allows for a country to grant rights to

440

00:14:51,430 --> 00:14:49,120

natural resources mined in space

441

00:14:52,790 --> 00:14:51,440

in april of 2020 the united states made

442

00:14:54,710 --> 00:14:52,800

another independent move

443

00:14:57,430 --> 00:14:54,720

in an attempt to further justify

444

00:14:59,030 --> 00:14:57,440

american mining of space resources

445

00:15:01,910 --> 00:14:59,040

president donald trump signed an

446

00:15:03,590 --> 00:15:01,920

executive order boldly asserting quote

447

00:15:05,750 --> 00:15:03,600

americans should have the right to

448

00:15:08,069 --> 00:15:05,760

engage in commercial exploration

449

00:15:08,790 --> 00:15:08,079

recovery and use of resources in outer

450

00:15:11,269 --> 00:15:08,800

space

451
00:15:11,990 --> 00:15:11,279
consistent with applicable law outer

452
00:15:14,550 --> 00:15:12,000
space is

453
00:15:15,910 --> 00:15:14,560
a legally and physically unique domain

454
00:15:18,230 --> 00:15:15,920
of human activity

455
00:15:19,750 --> 00:15:18,240
and the united states does not view it

456
00:15:23,590 --> 00:15:19,760
as a global commons

457
00:15:25,829 --> 00:15:23,600
end quote space law is a mess

458
00:15:27,030 --> 00:15:25,839
space is kind of like the wild west and

459
00:15:29,749 --> 00:15:27,040
private companies are

460
00:15:31,430 --> 00:15:29,759
itching to join the space gold rush

461
00:15:32,470 --> 00:15:31,440
while there is some semblance of space

462
00:15:34,550 --> 00:15:32,480
law in place

463
00:15:35,829 --> 00:15:34,560

this legal framework was formulated back

464

00:15:37,590 --> 00:15:35,839

in the 1960s

465

00:15:39,350 --> 00:15:37,600

when most space activities were thought

466

00:15:42,629 --> 00:15:39,360

of as far off

467

00:15:44,550 --> 00:15:42,639

unrealistic science fiction dreams

468

00:15:46,870 --> 00:15:44,560

the outer space treaty is more than 50

469

00:15:49,030 --> 00:15:46,880

years old and critics have repeatedly

470

00:15:51,350 --> 00:15:49,040

pointed out the necessity for lawmakers

471

00:15:52,550 --> 00:15:51,360

to revisit the treaty to modify and

472

00:15:55,030 --> 00:15:52,560

expand the framework

473

00:15:57,110 --> 00:15:55,040

for modern space law making it fit this

474

00:16:00,069 --> 00:15:57,120

new space age we live in

475

00:16:01,990 --> 00:16:00,079

and it looks like maybe things are

476

00:16:04,389 --> 00:16:02,000

moving in that direction

477

00:16:06,470 --> 00:16:04,399

on august 24th of this year canadian

478

00:16:07,269 --> 00:16:06,480

media outlet the globe and mail reported

479

00:16:09,670 --> 00:16:07,279

that quote

480

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

a canadian-led effort endorsed by more

481

00:16:14,150 --> 00:16:11,680

than 140 scientists

482

00:16:15,910 --> 00:16:14,160

former politicians and diplomats is

483

00:16:17,749 --> 00:16:15,920

asking the united nations

484

00:16:19,110 --> 00:16:17,759

to take the lead on drafting an

485

00:16:21,030 --> 00:16:19,120

international treaty

486

00:16:23,189 --> 00:16:21,040

that would set uniform rules for mining

487

00:16:25,189 --> 00:16:23,199

in space end quote

488

00:16:26,870 --> 00:16:25,199

the outer space institute is the driving

489

00:16:28,790 --> 00:16:26,880

force behind this effort

490

00:16:31,030 --> 00:16:28,800

and aside from having a pretty sweet

491

00:16:32,790 --> 00:16:31,040

name the outer space institute

492

00:16:34,310 --> 00:16:32,800

is a canadian-based international

493

00:16:37,189 --> 00:16:34,320

institute dedicated to space

494

00:16:39,110 --> 00:16:37,199

studies it's the issue of individual

495

00:16:40,790 --> 00:16:39,120

countries making up their own laws

496

00:16:43,189 --> 00:16:40,800

related to space resources

497

00:16:44,629 --> 00:16:43,199

that really prompted this initiative the

498

00:16:46,870 --> 00:16:44,639

globe and mail explains

499

00:16:48,150 --> 00:16:46,880

quote signatories to the request for the

500

00:16:49,910 --> 00:16:48,160

un to intervene

501
00:16:51,269 --> 00:16:49,920
believe space must be regulated

502
00:16:54,150 --> 00:16:51,279
internationally

503
00:16:55,189 --> 00:16:54,160
similarly to antarctica or the world

504
00:16:57,910 --> 00:16:55,199
seabeds

505
00:16:58,790 --> 00:16:57,920
and all countries including non-space

506
00:17:01,110 --> 00:16:58,800
faring ones

507
00:17:02,470 --> 00:17:01,120
get a say in decision making the

508
00:17:04,150 --> 00:17:02,480
alternative they warned could be a

509
00:17:04,789 --> 00:17:04,160
splintered approach where companies

510
00:17:07,029 --> 00:17:04,799
conduct

511
00:17:07,829 --> 00:17:07,039
flag of convenience resource extraction

512
00:17:09,829 --> 00:17:07,839
in space

513
00:17:12,470 --> 00:17:09,839

under whichever country has the least

514

00:17:14,549 --> 00:17:12,480

onerous rules end quote

515

00:17:15,909 --> 00:17:14,559

will anything come of this we'll just

516

00:17:18,789 --> 00:17:15,919

have to wait and see

517

00:17:19,909 --> 00:17:18,799

i sure hope so space law needs lots of

518

00:17:21,990 --> 00:17:19,919

attention

519

00:17:24,390 --> 00:17:22,000

again space is like the wild west right

520

00:17:25,270 --> 00:17:24,400

now i fully expect that several

521

00:17:27,350 --> 00:17:25,280

companies

522

00:17:29,350 --> 00:17:27,360

and or nations will push forward with

523

00:17:31,430 --> 00:17:29,360

space mining efforts despite legal

524

00:17:33,029 --> 00:17:31,440

ambiguities or objections from other

525

00:17:35,830 --> 00:17:33,039

space-faring countries

526
00:17:38,230 --> 00:17:35,840
because really who's going to enforce

527
00:17:40,390 --> 00:17:38,240
these debatable space laws anyway

528
00:17:42,830 --> 00:17:40,400
and of course these laws would be

529
00:17:45,029 --> 00:17:42,840
trivial if it becomes clear that

530
00:17:45,990 --> 00:17:45,039
extraterrestrials own an asteroid or

531
00:17:49,350 --> 00:17:46,000
some other celestial

532
00:17:50,070 --> 00:17:49,360
body take mars for example if the united

533
00:17:52,470 --> 00:17:50,080
states

534
00:17:53,990 --> 00:17:52,480
or even a u.s company establishes a

535
00:17:55,990 --> 00:17:54,000
colony on mars

536
00:17:57,270 --> 00:17:56,000
then is later approached by a

537
00:17:58,470 --> 00:17:57,280
representative from a martian

538
00:18:00,470 --> 00:17:58,480

civilization

539

00:18:01,590 --> 00:18:00,480

who announced that they are laying claim

540

00:18:04,230 --> 00:18:01,600

to the colony

541

00:18:06,470 --> 00:18:04,240

because it's on their land what rights

542

00:18:09,270 --> 00:18:06,480

should these u.s colonists have

543

00:18:09,909 --> 00:18:09,280

well first of all under current space

544

00:18:12,470 --> 00:18:09,919

law

545

00:18:13,190 --> 00:18:12,480

the colonists are obligated to inform

546

00:18:15,430 --> 00:18:13,200

the un

547

00:18:16,870 --> 00:18:15,440

about the extraterrestrials and about

548

00:18:18,789 --> 00:18:16,880

the incident

549

00:18:20,950 --> 00:18:18,799

attorney susan simpson explains on the

550

00:18:23,510 --> 00:18:20,960

website the view from ll-2

551
00:18:23,990 --> 00:18:23,520
that under article 11 of the outer space

552
00:18:25,270 --> 00:18:24,000
treaty

553
00:18:27,590 --> 00:18:25,280
a colony like this would have an

554
00:18:27,990 --> 00:18:27,600
obligation to inform the secretary

555
00:18:29,909 --> 00:18:28,000
general

556
00:18:31,830 --> 00:18:29,919
of the united nations as well as the

557
00:18:32,789 --> 00:18:31,840
public and the international scientific

558
00:18:34,630 --> 00:18:32,799
community

559
00:18:36,630 --> 00:18:34,640
to the greatest extent feasible and

560
00:18:39,190 --> 00:18:36,640
practicable of the nature

561
00:18:41,350 --> 00:18:39,200
conduct location and results of the

562
00:18:44,310 --> 00:18:41,360
encounter with extraterrestrials

563
00:18:46,070 --> 00:18:44,320

she continues quote therefore not only

564

00:18:47,029 --> 00:18:46,080

must all of the nations be made aware of

565

00:18:49,029 --> 00:18:47,039

the aliens

566

00:18:51,029 --> 00:18:49,039

no secret men in black type arrangements

567

00:18:52,630 --> 00:18:51,039

can legally take place either

568

00:18:54,549 --> 00:18:52,640

the discovery of an extraterrestrial

569

00:18:55,510 --> 00:18:54,559

intelligence must be announced to the

570

00:18:57,669 --> 00:18:55,520

world

571

00:18:58,950 --> 00:18:57,679

even if all the states wanted to make it

572

00:19:01,270 --> 00:18:58,960

a government secret

573

00:19:02,630 --> 00:19:01,280

the scientific community also has a

574

00:19:05,270 --> 00:19:02,640

right to be informed

575

00:19:06,390 --> 00:19:05,280

end quote but what about the native

576

00:19:08,390 --> 00:19:06,400

martians

577

00:19:10,390 --> 00:19:08,400

the outer space treaty wouldn't and

578

00:19:12,150 --> 00:19:10,400

couldn't regulate their actions

579

00:19:14,710 --> 00:19:12,160

mars certainly isn't explanatory to that

580

00:19:17,270 --> 00:19:14,720

treaty a new situation like this

581

00:19:19,110 --> 00:19:17,280

would raise many legal questions did the

582

00:19:21,510 --> 00:19:19,120

martians act in accordance with their

583

00:19:23,669 --> 00:19:21,520

own laws in claiming the colony

584

00:19:25,350 --> 00:19:23,679

what redress could the martians seek

585

00:19:27,510 --> 00:19:25,360

could they sue in their courts

586

00:19:29,750 --> 00:19:27,520

what remedy could the u.s companies seek

587

00:19:32,070 --> 00:19:29,760

could it sue in the united states

588

00:19:34,310 --> 00:19:32,080

how do you sue an extraterrestrial and

589

00:19:36,390 --> 00:19:34,320

sure the us military could intervene and

590

00:19:38,070 --> 00:19:36,400

retake the colony by force

591

00:19:39,590 --> 00:19:38,080

if they had the technological means to

592

00:19:41,190 --> 00:19:39,600

do so but

593

00:19:44,390 --> 00:19:41,200

this course of action would likely

594

00:19:46,230 --> 00:19:44,400

instigate an interplanetary conflict

595

00:19:48,390 --> 00:19:46,240

ideally the colonists would begin a

596

00:19:50,710 --> 00:19:48,400

dialogue with the martian civilization

597

00:19:52,390 --> 00:19:50,720

which could progress into a formation of

598

00:19:54,789 --> 00:19:52,400

an interplanetary treaty

599

00:19:55,750 --> 00:19:54,799

and the birth of interplanetary space

600

00:19:58,230 --> 00:19:55,760

law

601
00:20:00,549 --> 00:19:58,240
after all the outer space treaty states

602
00:20:07,720 --> 00:20:00,559
that astronauts are regarded as

603
00:20:10,950 --> 00:20:07,730
envoys of mankind in outer space

604
00:20:12,549 --> 00:20:10,960
[Music]

605
00:20:14,470 --> 00:20:12,559
well citizens that's gonna do it for

606
00:20:16,149 --> 00:20:14,480
this episode you can find more episodes

607
00:20:16,870 --> 00:20:16,159
of unknown on all the major podcast

608
00:20:18,310 --> 00:20:16,880
platforms

609
00:20:20,710 --> 00:20:18,320
and you can always find this show and

610
00:20:22,070 --> 00:20:20,720
our other shows at rogueplanet.tv

611
00:20:24,630 --> 00:20:22,080
because unknown is a rogue planet

612
00:20:26,870 --> 00:20:24,640
production replenished tv is your home

613
00:20:28,149 --> 00:20:26,880

for all the strange feel free to reach

614

00:20:28,870 --> 00:20:28,159

out to us if you've got a story you want

615

00:20:30,310 --> 00:20:28,880

to share

616

00:20:32,149 --> 00:20:30,320

if there's a story or topic you'd like

617

00:20:33,029 --> 00:20:32,159

us to cover on this show or anything

618

00:20:34,710 --> 00:20:33,039

else

619

00:20:36,669 --> 00:20:34,720

you can find us on social media or

620

00:20:39,110 --> 00:20:36,679

simply email us at contact

621

00:20:39,750 --> 00:20:39,120

rogueplanet.tv thanks again for hanging

622

00:20:41,750 --> 00:20:39,760

out today

623

00:20:43,510 --> 00:20:41,760

i'm jason mcclellan do us a favor

624

00:20:44,950 --> 00:20:43,520

friends always treat the ufo subject

625

00:20:46,630 --> 00:20:44,960

with the cautious and responsible

626

00:20:49,029 --> 00:20:46,640

skepticism it deserves

627

00:20:49,909 --> 00:20:49,039

question everything have the courage to

628

00:20:52,630 --> 00:20:49,919

form your own

629

00:20:53,110 --> 00:20:52,640

opinions keep truth as the focus of your

630

00:20:54,950 --> 00:20:53,120

quest

631

00:20:56,310 --> 00:20:54,960

even if the truth conflicts with your