



**ARTEMIS**

1  
00:38:24,880 --> 00:38:34,870  
revived american leadership in space

2  
00:38:39,349 --> 00:38:36,550  
it's a particular pleasure to be back

3  
00:38:41,109 --> 00:38:39,359  
here in florida on the space coast

4  
00:38:43,589 --> 00:38:41,119  
and also to be here at the world's

5  
00:38:45,829 --> 00:38:43,599  
premier gateway to space

6  
00:38:47,990 --> 00:38:45,839  
join me in thanking the kennedy space

7  
00:38:50,790 --> 00:38:48,000  
center and director bob cabana for their

8  
00:38:57,829 --> 00:38:50,800  
tremendous hospitality and leadership

9  
00:39:02,150 --> 00:38:59,510  
so it's wonderful to be here at this

10  
00:39:03,750 --> 00:39:02,160  
apollo center bob and it's an incredible

11  
00:39:05,910 --> 00:39:03,760  
place people have come from around the

12  
00:39:07,430 --> 00:39:05,920  
country and around the world to be

13  
00:39:09,910 --> 00:39:07,440

inspired by

14

00:39:12,310 --> 00:39:09,920

the past and now the present and the

15

00:39:13,990 --> 00:39:12,320

future of american leadership in space

16

00:39:15,670 --> 00:39:14,000

and we're truly grateful kennedy space

17

00:39:17,510 --> 00:39:15,680

center for all that you've done

18

00:39:18,630 --> 00:39:17,520

and to continue to advance american

19

00:39:20,950 --> 00:39:18,640

leadership

20

00:39:24,069 --> 00:39:20,960

allow me to also bring greetings from a

21

00:39:27,109 --> 00:39:24,079

champion of american space exploration

22

00:39:29,910 --> 00:39:27,119

someone who has revived americans

23

00:39:31,670 --> 00:39:29,920

leadership in human space exploration in

24

00:39:33,349 --> 00:39:31,680

just four short years

25

00:39:35,109 --> 00:39:33,359

i bring greetings from the 45th

26

00:39:43,750 --> 00:39:35,119

president of the united states of

27

00:39:47,270 --> 00:39:45,349

today at this eighth meeting of the

28

00:39:48,870 --> 00:39:47,280

national space council we will have

29

00:39:50,470 --> 00:39:48,880

updates from

30

00:39:52,470 --> 00:39:50,480

all of our council's members about the

31

00:39:53,910 --> 00:39:52,480

progress that we have made both in

32

00:39:58,390 --> 00:39:53,920

civilian

33

00:40:00,230 --> 00:39:58,400

economic and military advances in space

34

00:40:02,870 --> 00:40:00,240

but before i start

35

00:40:05,109 --> 00:40:02,880

let me at least acknowledge the passing

36

00:40:07,430 --> 00:40:05,119

of an extraordinary american

37

00:40:10,390 --> 00:40:07,440

whose life and contributions to american

38

00:40:12,630 --> 00:40:10,400

aviation have undoubtedly led

39

00:40:15,030 --> 00:40:12,640

to inspire the advances that we've made

40

00:40:17,030 --> 00:40:15,040

in the vast expanse of states

41

00:40:18,950 --> 00:40:17,040

this past monday america lost one of our

42

00:40:20,550 --> 00:40:18,960

greatest heroes one of the greatest

43

00:40:22,069 --> 00:40:20,560

heroes not just in the history of the

44

00:40:23,750 --> 00:40:22,079

united states air force but in the

45

00:40:25,109 --> 00:40:23,760

history of american

46

00:40:27,190 --> 00:40:25,119

aviation

47

00:40:30,550 --> 00:40:27,200

general chuck yeager

48

00:40:33,270 --> 00:40:30,560

he's a man of a humble background

49

00:40:35,270 --> 00:40:33,280

grew up in rural west virginia

50

00:40:37,030 --> 00:40:35,280

enlisted in the military he would go on

51  
00:40:38,950 --> 00:40:37,040  
to become one of the greatest aviators

52  
00:40:40,950 --> 00:40:38,960  
of all time

53  
00:40:43,190 --> 00:40:40,960  
chuck yeager was a war hero

54  
00:40:45,829 --> 00:40:43,200  
shot down 13 nazi aircraft but was

55  
00:40:49,270 --> 00:40:45,839  
himself shot down over france

56  
00:40:51,829 --> 00:40:49,280  
flew more than 150 military planes

57  
00:40:54,710 --> 00:40:51,839  
a total of more than 10 thousand hours

58  
00:40:57,670 --> 00:40:54,720  
thirty years of active duty

59  
00:40:58,870 --> 00:40:57,680  
and as history records was the

60  
00:41:01,750 --> 00:40:58,880  
first

61  
00:41:03,990 --> 00:41:01,760  
man to break the sound barrier

62  
00:41:05,589 --> 00:41:04,000  
general chuck yeager has now left us

63  
00:41:06,950 --> 00:41:05,599

made his

64

00:41:10,470 --> 00:41:06,960

final ascent

65

00:41:13,750 --> 00:41:10,480

but it was my great honor as we renamed

66

00:41:15,589 --> 00:41:13,760

two air force bases as space force bases

67

00:41:17,109 --> 00:41:15,599

just a short while ago

68

00:41:18,790 --> 00:41:17,119

to announce that at the direction of

69

00:41:21,270 --> 00:41:18,800

president donald trump

70

00:41:22,630 --> 00:41:21,280

we are initiating today efforts to

71

00:41:26,069 --> 00:41:22,640

rename

72

00:41:28,790 --> 00:41:26,079

an upcoming united states military base

73

00:41:36,550 --> 00:41:28,800

after the late and great general chuck

74

00:41:40,069 --> 00:41:38,630

i think people here at kennedy space

75

00:41:41,589 --> 00:41:40,079

center know and all of us on the space

76

00:41:43,270 --> 00:41:41,599

council know we

77

00:41:45,349 --> 00:41:43,280

literally would not be here today but

78

00:41:47,510 --> 00:41:45,359

for the achievements of general yeager

79

00:41:50,150 --> 00:41:47,520

and all of those who've been inspired by

80

00:41:51,829 --> 00:41:50,160

his courage and america will never fail

81

00:41:53,190 --> 00:41:51,839

we'll never fail

82

00:41:54,870 --> 00:41:53,200

or never forget

83

00:41:56,309 --> 00:41:54,880

the life and contribution of general

84

00:41:58,710 --> 00:41:56,319

chuck yeager

85

00:42:00,069 --> 00:41:58,720

so as we gather for the this eighth

86

00:42:02,230 --> 00:42:00,079

installment of the national space

87

00:42:03,829 --> 00:42:02,240

council allow me to express my

88

00:42:05,589 --> 00:42:03,839

appreciation to all the members of the

89

00:42:08,150 --> 00:42:05,599

space council and to reflect for just a

90

00:42:09,990 --> 00:42:08,160

few moments before we get started on

91

00:42:11,589 --> 00:42:10,000

how much has changed

92

00:42:13,990 --> 00:42:11,599

over the last four years since the very

93

00:42:16,470 --> 00:42:14,000

first meeting of this council

94

00:42:18,790 --> 00:42:16,480

you know when you look at uh when you

95

00:42:20,710 --> 00:42:18,800

look at national security progress that

96

00:42:22,069 --> 00:42:20,720

we've made in civil and private space

97

00:42:25,430 --> 00:42:22,079

sectors

98

00:42:29,270 --> 00:42:25,440

one thing is clear in four short years

99

00:42:34,630 --> 00:42:29,280

america is leading in space once again

100

00:42:38,710 --> 00:42:36,470

when we took office the national space

101  
00:42:40,630 --> 00:42:38,720  
council had lain dormant for more than

102  
00:42:42,950 --> 00:42:40,640  
25 years

103  
00:42:44,710 --> 00:42:42,960  
president trump articulated an inspiring

104  
00:42:46,550 --> 00:42:44,720  
vision for renewed american leadership

105  
00:42:48,309 --> 00:42:46,560  
in space in his inaugural address the

106  
00:42:49,510 --> 00:42:48,319  
president said and i quote

107  
00:42:50,870 --> 00:42:49,520  
we stand at the birth of a new

108  
00:42:53,910 --> 00:42:50,880  
millennium

109  
00:42:56,150 --> 00:42:53,920  
ready to unlock the mysteries of space

110  
00:42:57,670 --> 00:42:56,160  
and so we have set out to do

111  
00:42:59,349 --> 00:42:57,680  
in our first year in office the

112  
00:43:01,510 --> 00:42:59,359  
president revived this council to

113  
00:43:03,990 --> 00:43:01,520

reinvigorate and coordinate

114

00:43:04,950 --> 00:43:04,000

space activities all across the federal

115

00:43:06,230 --> 00:43:04,960

government

116

00:43:07,990 --> 00:43:06,240

the president brought together some of

117

00:43:10,630 --> 00:43:08,000

the best minds in government and the

118

00:43:13,589 --> 00:43:10,640

private sector to strengthen america's

119

00:43:15,430 --> 00:43:13,599

space enterprise and so many of you are

120

00:43:17,190 --> 00:43:15,440

here with us today and

121

00:43:18,309 --> 00:43:17,200

and we're truly grateful

122

00:43:20,390 --> 00:43:18,319

and whether it's providing for the

123

00:43:22,630 --> 00:43:20,400

common defense or growing our space

124

00:43:23,430 --> 00:43:22,640

economy across america that's exactly

125

00:43:25,109 --> 00:43:23,440

what

126

00:43:27,270 --> 00:43:25,119

we've done throughout the past four

127

00:43:28,710 --> 00:43:27,280

years in the very first days of our

128

00:43:30,309 --> 00:43:28,720

administration the president signed

129

00:43:31,990 --> 00:43:30,319

multiple executive orders and

130

00:43:35,510 --> 00:43:32,000

presidential directives

131

00:43:37,430 --> 00:43:35,520

to reorient our space program to human

132

00:43:39,270 --> 00:43:37,440

space exploration

133

00:43:41,190 --> 00:43:39,280

he took steps to unleash america's

134

00:43:43,270 --> 00:43:41,200

commercial space companies

135

00:43:45,510 --> 00:43:43,280

and to safeguard our national interests

136

00:43:48,230 --> 00:43:45,520

in the increasingly complex and

137

00:43:49,589 --> 00:43:48,240

competitive domain of space

138

00:43:51,670 --> 00:43:49,599

in our first year in office the

139

00:43:54,950 --> 00:43:51,680

president signed space policy directive

140

00:43:57,990 --> 00:43:54,960

one and gave nasa a clear goal

141

00:44:08,470 --> 00:43:58,000

that we are going to go back to the moon

142

00:44:12,390 --> 00:44:10,550

we made clear in our first year that the

143

00:44:14,150 --> 00:44:12,400

moon is not a final destination but it's

144

00:44:17,030 --> 00:44:14,160

a base for developing and training for

145

00:44:19,430 --> 00:44:17,040

future deep space missions

146

00:44:27,510 --> 00:44:19,440

we're going back to the moon

147

00:44:34,230 --> 00:44:29,510

as we gather here in this historic place

148

00:44:39,670 --> 00:44:37,190

december 1972

149

00:44:42,630 --> 00:44:39,680

to apollo 17

150

00:44:45,910 --> 00:44:42,640

the last apollo mission to the moon

151  
00:44:48,150 --> 00:44:45,920  
it would be december 14 1972 that apollo

152  
00:44:51,349 --> 00:44:48,160  
17's commander

153  
00:44:54,069 --> 00:44:51,359  
a navy pilot named gene cernan

154  
00:44:56,630 --> 00:44:54,079  
and a graduate of purdue university in

155  
00:44:58,470 --> 00:44:56,640  
indiana

156  
00:45:01,430 --> 00:44:58,480  
he prepared to depart

157  
00:45:02,870 --> 00:45:01,440  
for earth from the surface of the moon

158  
00:45:05,910 --> 00:45:02,880  
and he spoke words that have really

159  
00:45:07,109 --> 00:45:05,920  
echoed through our time as an ongoing

160  
00:45:09,270 --> 00:45:07,119  
admonition

161  
00:45:11,270 --> 00:45:09,280  
he said and i quote

162  
00:45:14,230 --> 00:45:11,280  
america's challenge of today has forged

163  
00:45:15,589 --> 00:45:14,240

man's destiny of tomorrow

164

00:45:19,190 --> 00:45:15,599

and he said

165

00:45:21,670 --> 00:45:19,200

as we leave the moon we leave as we came

166

00:45:24,790 --> 00:45:21,680

and god willing we shall return

167

00:45:26,550 --> 00:45:24,800

with peace and hope for all mankind

168

00:45:29,030 --> 00:45:26,560

gene cernan was the last man to walk on

169

00:45:33,510 --> 00:45:31,430

but he didn't want to stay the last

170

00:45:35,589 --> 00:45:33,520

he spent the rest of his natural life

171

00:45:36,790 --> 00:45:35,599

advocating for america to go back to the

172

00:45:40,069 --> 00:45:36,800

moon

173

00:45:41,190 --> 00:45:40,079

and we are going to honor gene cernan's

174

00:45:43,990 --> 00:45:41,200

memory

175

00:45:47,270 --> 00:45:44,000

by putting the next man and the first

176  
00:45:49,150 --> 00:45:47,280  
woman on the moon in just a few short

177  
00:45:54,550 --> 00:45:49,160  
years

178  
00:45:59,430 --> 00:45:56,710  
as you'll also hear updates today the

179  
00:46:01,750 --> 00:45:59,440  
president also said nasa and the private

180  
00:46:03,589 --> 00:46:01,760  
sector the entrepreneurial companies

181  
00:46:05,589 --> 00:46:03,599  
that have been involved in

182  
00:46:07,510 --> 00:46:05,599  
space exploration and development in

183  
00:46:09,589 --> 00:46:07,520  
motion to ensure

184  
00:46:11,990 --> 00:46:09,599  
that we would return to the moon and

185  
00:46:13,829 --> 00:46:12,000  
then the next astronauts on the surface

186  
00:46:15,990 --> 00:46:13,839  
of the moon and all the economic

187  
00:46:18,390 --> 00:46:16,000  
development in space will be driven

188  
00:46:19,910 --> 00:46:18,400

by american ingenuity

189

00:46:20,950 --> 00:46:19,920

and we're going to ensure that americans

190

00:46:22,870 --> 00:46:20,960

are going to be

191

00:46:24,550 --> 00:46:22,880

we're going to be the very first

192

00:46:26,390 --> 00:46:24,560

the very first not only to develop on

193

00:46:28,550 --> 00:46:26,400

the moon and mars but also to continue

194

00:46:31,030 --> 00:46:28,560

to develop the economic potential

195

00:46:33,190 --> 00:46:31,040

of space exploration

196

00:46:35,030 --> 00:46:33,200

even in this challenging year

197

00:46:37,750 --> 00:46:35,040

in the life of our nation

198

00:46:39,670 --> 00:46:37,760

when americans have sacrificed so much

199

00:46:41,670 --> 00:46:39,680

we've continued to make steady progress

200

00:46:43,589 --> 00:46:41,680

toward that goal of renewed american

201

00:46:45,270 --> 00:46:43,599

leadership in space

202

00:46:47,990 --> 00:46:45,280

this spring it was my great honor to

203

00:46:50,309 --> 00:46:48,000

attend the first crude launch along with

204

00:46:51,829 --> 00:46:50,319

the president of the united states from

205

00:46:53,349 --> 00:46:51,839

right here at the kennedy space center

206

00:46:55,990 --> 00:46:53,359

it's the first time we sent american

207

00:46:58,550 --> 00:46:56,000

astronauts into space from kennedy space

208

00:46:59,589 --> 00:46:58,560

center in nearly a decade

209

00:47:01,430 --> 00:46:59,599

and then

210

00:47:03,750 --> 00:47:01,440

not to wait a minute further this last

211

00:47:06,550 --> 00:47:03,760

november i returned again to see the

212

00:47:07,750 --> 00:47:06,560

second crude full-scale launch and

213

00:47:09,670 --> 00:47:07,760

mission

214

00:47:10,550 --> 00:47:09,680

of american astronauts from american

215

00:47:13,670 --> 00:47:10,560

soil

216

00:47:16,390 --> 00:47:13,680

back into american space

217

00:47:22,230 --> 00:47:16,400

that's the result of real leadership and

218

00:47:26,309 --> 00:47:24,870

and what's remarkable is those rockets

219

00:47:29,109 --> 00:47:26,319

were built by american private

220

00:47:31,910 --> 00:47:29,119

enterprise in this new partnership that

221

00:47:33,829 --> 00:47:31,920

we have forged and built upon

222

00:47:34,950 --> 00:47:33,839

uh in the united states over the last

223

00:47:36,790 --> 00:47:34,960

four years

224

00:47:39,430 --> 00:47:36,800

you know a businessman turned president

225

00:47:41,510 --> 00:47:39,440

decided to renew our commitment to space

226

00:47:43,589 --> 00:47:41,520

he knew it was important to unleash the

227

00:47:44,950 --> 00:47:43,599

power of america's private sector and so

228

00:47:46,710 --> 00:47:44,960

we have done

229

00:47:49,349 --> 00:47:46,720

as you will note out here today from the

230

00:47:51,430 --> 00:47:49,359

secretary of commerce we we went to work

231

00:47:53,829 --> 00:47:51,440

early on to cut and streamline

232

00:47:55,829 --> 00:47:53,839

out-of-date regulations that made the

233

00:47:57,910 --> 00:47:55,839

united states the number one country in

234

00:48:00,150 --> 00:47:57,920

the world for space business and will

235

00:48:02,790 --> 00:48:00,160

continue to accelerate

236

00:48:04,790 --> 00:48:02,800

investment and development in space

237

00:48:07,109 --> 00:48:04,800

this past april the president signed an

238

00:48:08,710 --> 00:48:07,119

executive order to recognize and promote

239

00:48:11,910 --> 00:48:08,720

the rights of private companies to

240

00:48:13,510 --> 00:48:11,920

recover and use space resources

241

00:48:15,190 --> 00:48:13,520

that order we believe will provide the

242

00:48:17,030 --> 00:48:15,200

kind of clarity and stability that our

243

00:48:18,630 --> 00:48:17,040

businesses need to thrive

244

00:48:21,190 --> 00:48:18,640

we'll give our entrepreneurs the

245

00:48:23,589 --> 00:48:21,200

incentive to take our commercial space

246

00:48:25,589 --> 00:48:23,599

activity to all new heights

247

00:48:27,589 --> 00:48:25,599

and just last week nasa made its first

248

00:48:29,910 --> 00:48:27,599

commitments to buy lunar material from

249

00:48:31,190 --> 00:48:29,920

private companies and we'll continue

250

00:48:33,750 --> 00:48:31,200

to build on creating the kind of

251  
00:48:35,670 --> 00:48:33,760  
incentives that will generate investment

252  
00:48:36,549 --> 00:48:35,680  
and space development for generations to

253  
00:48:38,390 --> 00:48:36,559  
come

254  
00:48:41,270 --> 00:48:38,400  
and even as we make great progress in

255  
00:48:42,630 --> 00:48:41,280  
expanding america's commercial activity

256  
00:48:45,190 --> 00:48:42,640  
in space

257  
00:48:48,150 --> 00:48:45,200  
we also recognize the challenges of

258  
00:48:50,150 --> 00:48:48,160  
digital threats to our space operations

259  
00:48:52,309 --> 00:48:50,160  
and that's why the president established

260  
00:48:53,750 --> 00:48:52,319  
cyber security principles for all of our

261  
00:48:56,230 --> 00:48:53,760  
space systems

262  
00:48:57,829 --> 00:48:56,240  
whether government or private

263  
00:49:00,069 --> 00:48:57,839

the president put in place the world's

264

00:49:02,470 --> 00:49:00,079

first comprehensive space traffic

265

00:49:04,069 --> 00:49:02,480

management policy as well

266

00:49:06,630 --> 00:49:04,079

and made it clear that we're going to

267

00:49:08,390 --> 00:49:06,640

use the resources the capabilities and

268

00:49:11,109 --> 00:49:08,400

the technologies of the private sector

269

00:49:13,910 --> 00:49:11,119

to make all space activities safer and

270

00:49:15,430 --> 00:49:13,920

more secure than ever before

271

00:49:18,390 --> 00:49:15,440

it's amazing as you think about all

272

00:49:20,790 --> 00:49:18,400

these accomplishments in renewed human

273

00:49:22,470 --> 00:49:20,800

uh exploration in space from here in the

274

00:49:23,270 --> 00:49:22,480

united states the difference that all

275

00:49:24,710 --> 00:49:23,280

these

276

00:49:26,630 --> 00:49:24,720

distinguished members of the national

277

00:49:29,030 --> 00:49:26,640

space council have made

278

00:49:31,829 --> 00:49:29,040

in america's future in space

279

00:49:33,510 --> 00:49:31,839

but at the time that we acknowledge uh

280

00:49:34,870 --> 00:49:33,520

the progress that we have made in

281

00:49:37,349 --> 00:49:34,880

expanding

282

00:49:38,470 --> 00:49:37,359

human space exploration and reviving

283

00:49:40,870 --> 00:49:38,480

american

284

00:49:42,069 --> 00:49:40,880

space enterprise we also recognize that

285

00:49:44,790 --> 00:49:42,079

there are

286

00:49:45,990 --> 00:49:44,800

challenges and even threats in space as

287

00:49:47,990 --> 00:49:46,000

well

288

00:49:50,069 --> 00:49:48,000

as i just said as we dedicated two air

289

00:49:51,510 --> 00:49:50,079

force bases now as the first two space

290

00:49:52,790 --> 00:49:51,520

force bases

291

00:49:55,190 --> 00:49:52,800

in america

292

00:49:57,430 --> 00:49:55,200

space is a vacuum

293

00:49:59,670 --> 00:49:57,440

but we aren't operating in a vacuum when

294

00:50:01,349 --> 00:49:59,680

it comes to our national security

295

00:50:04,309 --> 00:50:01,359

the space race that began in the

296

00:50:05,990 --> 00:50:04,319

nineteen fifties continues today

297

00:50:07,910 --> 00:50:06,000

we are in the lead

298

00:50:09,510 --> 00:50:07,920

but we are not alone

299

00:50:10,950 --> 00:50:09,520

as you will hear today in the national

300

00:50:13,510 --> 00:50:10,960

space council from the director of

301  
00:50:15,910 --> 00:50:13,520  
national intelligence and others china

302  
00:50:17,510 --> 00:50:15,920  
and russia are continuing to develop

303  
00:50:19,510 --> 00:50:17,520  
space weaponry

304  
00:50:22,230 --> 00:50:19,520  
russia demonstrated a

305  
00:50:24,150 --> 00:50:22,240  
space-based anti-satellite weapon in

306  
00:50:27,030 --> 00:50:24,160  
earlier this year

307  
00:50:27,990 --> 00:50:27,040  
china is developing a new manned space

308  
00:50:30,470 --> 00:50:28,000  
station

309  
00:50:32,150 --> 00:50:30,480  
and its robotic spacecraft will return

310  
00:50:34,309 --> 00:50:32,160  
samples from the moon

311  
00:50:37,670 --> 00:50:34,319  
in just a matter of weeks

312  
00:50:41,670 --> 00:50:37,680  
in fact china is increasingly emerging

313  
00:50:43,829 --> 00:50:41,680

as a serious competitor in space

314

00:50:46,390 --> 00:50:43,839

just as they are in other areas of the

315

00:50:48,870 --> 00:50:46,400

global economy and to the strategic

316

00:50:50,870 --> 00:50:48,880

interests of the united states

317

00:50:52,950 --> 00:50:50,880

as a world witness china recently landed

318

00:50:54,630 --> 00:50:52,960

an unmanned craft on the moon

319

00:50:57,270 --> 00:50:54,640

and for the first time

320

00:51:00,069 --> 00:50:57,280

robotically raised the red flag of

321

00:51:02,069 --> 00:51:00,079

communist china on that magnificent

322

00:51:04,710 --> 00:51:02,079

desolation

323

00:51:06,710 --> 00:51:04,720

all of that competition the investment

324

00:51:08,710 --> 00:51:06,720

of other nations on earth

325

00:51:12,150 --> 00:51:08,720

and security in space is among the

326

00:51:13,910 --> 00:51:12,160

reasons why our commander-in-chief

327

00:51:15,430 --> 00:51:13,920

took the unprecedented step of

328

00:51:17,990 --> 00:51:15,440

establishing the first

329

00:51:20,230 --> 00:51:18,000

branch new branch of our armed forces in

330

00:51:22,950 --> 00:51:20,240

some 70 years

331

00:51:24,790 --> 00:51:22,960

president of the united states now

332

00:51:26,870 --> 00:51:24,800

almost a year ago

333

00:51:30,010 --> 00:51:26,880

signed into law the creation of the

334

00:51:35,670 --> 00:51:30,020

united states space force

335

00:51:38,390 --> 00:51:37,190

under president trump the highest

336

00:51:40,069 --> 00:51:38,400

priority

337

00:51:42,309 --> 00:51:40,079

of our administration is the safety and

338

00:51:44,150 --> 00:51:42,319

security of the american people and

339

00:51:46,549 --> 00:51:44,160

where too often

340

00:51:48,630 --> 00:51:46,559

too often in the past america's

341

00:51:49,750 --> 00:51:48,640

neglected growing security threats in

342

00:51:51,510 --> 00:51:49,760

space

343

00:51:54,150 --> 00:51:51,520

this president called for extending our

344

00:51:55,750 --> 00:51:54,160

dominance on land and sea and air to the

345

00:51:57,990 --> 00:51:55,760

final frontier

346

00:51:59,750 --> 00:51:58,000

it would be june of 2018 when president

347

00:52:01,910 --> 00:51:59,760

trump laid out his vision

348

00:52:04,549 --> 00:52:01,920

for american military power in space he

349

00:52:06,630 --> 00:52:04,559

called for the creation of that new

350

00:52:08,390 --> 00:52:06,640

military service that we

351  
00:52:09,670 --> 00:52:08,400  
spoke of today at the dedication of

352  
00:52:11,910 --> 00:52:09,680  
those bases

353  
00:52:13,510 --> 00:52:11,920  
i believe it is a a tribute to the

354  
00:52:15,910 --> 00:52:13,520  
president's leadership as well as the

355  
00:52:18,390 --> 00:52:15,920  
leadership of all the military personnel

356  
00:52:20,710 --> 00:52:18,400  
that are gathered here today that

357  
00:52:22,549 --> 00:52:20,720  
literally in just a year and a half

358  
00:52:24,549 --> 00:52:22,559  
after our president first called for the

359  
00:52:26,069 --> 00:52:24,559  
establishment of a space force after it

360  
00:52:30,309 --> 00:52:26,079  
had been talked about for a half a

361  
00:52:31,589 --> 00:52:30,319  
century he was able to sign it into law

362  
00:52:33,430 --> 00:52:31,599  
extraordinary to think of the

363  
00:52:36,790 --> 00:52:33,440

contribution

364

00:52:39,270 --> 00:52:36,800

space force will make

365

00:52:41,910 --> 00:52:39,280

to the security of our nation and the

366

00:52:44,549 --> 00:52:41,920

perpetuation of our freedom as deputy

367

00:52:45,750 --> 00:52:44,559

secretary norcross norquist will reflect

368

00:52:47,750 --> 00:52:45,760

in a few minutes

369

00:52:48,870 --> 00:52:47,760

the space force is growing stronger by

370

00:52:51,190 --> 00:52:48,880

the day

371

00:52:53,750 --> 00:52:51,200

in fact secretary barrett and i were not

372

00:52:57,109 --> 00:52:53,760

long ago in colorado springs

373

00:52:58,870 --> 00:52:57,119

when we saw the first 86 company-grade

374

00:53:01,270 --> 00:52:58,880

officers commissioned

375

00:53:03,109 --> 00:53:01,280

into the united states space force

376  
00:53:05,750 --> 00:53:03,119  
and we're pleased to be joined today by

377  
00:53:07,589 --> 00:53:05,760  
the chief of space operations

378  
00:53:09,589 --> 00:53:07,599  
the man who has been working around the

379  
00:53:11,270 --> 00:53:09,599  
clock to stand up the united states

380  
00:53:19,430 --> 00:53:11,280  
space force join me in thanking general

381  
00:53:22,710 --> 00:53:21,430  
so we've made great progress

382  
00:53:24,309 --> 00:53:22,720  
we evidenced that today in the

383  
00:53:27,430 --> 00:53:24,319  
dedication of

384  
00:53:30,230 --> 00:53:27,440  
of cape canaveral space force station

385  
00:53:33,109 --> 00:53:30,240  
and also patrick's space force base

386  
00:53:34,549 --> 00:53:33,119  
right here on the space coast in florida

387  
00:53:35,990 --> 00:53:34,559  
and i know the lieutenant governor of

388  
00:53:37,430 --> 00:53:36,000

florida is with us here today and is

389

00:53:39,430 --> 00:53:37,440

pleased to see that

390

00:53:41,109 --> 00:53:39,440

but just like 42 years ago when gene

391

00:53:42,390 --> 00:53:41,119

cernan was on his way

392

00:53:43,910 --> 00:53:42,400

to the moon

393

00:53:46,790 --> 00:53:43,920

and just like when chuck yeager was

394

00:53:48,790 --> 00:53:46,800

breaking the sound barrier in the 1940s

395

00:53:50,790 --> 00:53:48,800

the united states continues to face an

396

00:53:52,309 --> 00:53:50,800

era of competition

397

00:53:54,069 --> 00:53:52,319

and as members of the national space

398

00:53:55,990 --> 00:53:54,079

council know

399

00:53:58,470 --> 00:53:56,000

it's a competition that america is

400

00:54:07,270 --> 00:53:58,480

winning today and we're going to keep on

401  
00:54:10,150 --> 00:54:08,870  
and that's one more reason today while

402  
00:54:12,950 --> 00:54:10,160  
i'm pleased to announce that the

403  
00:54:14,950 --> 00:54:12,960  
president as of today has issued a new

404  
00:54:16,230 --> 00:54:14,960  
national space policy that we will

405  
00:54:17,829 --> 00:54:16,240  
articulate

406  
00:54:20,069 --> 00:54:17,839  
at this meeting of the national space

407  
00:54:21,990 --> 00:54:20,079  
council the national space policy

408  
00:54:24,230 --> 00:54:22,000  
provides the president's direction to

409  
00:54:26,630 --> 00:54:24,240  
the executive branch on all space

410  
00:54:29,670 --> 00:54:26,640  
activities it emphasizes that space is

411  
00:54:31,510 --> 00:54:29,680  
critical to our security and our way of

412  
00:54:34,870 --> 00:54:31,520  
life and lays out the fundamental

413  
00:54:37,030 --> 00:54:34,880

principles to put america first in space

414

00:54:38,710 --> 00:54:37,040

dr scott pace will go into more detail

415

00:54:40,789 --> 00:54:38,720

about the president's new national space

416

00:54:43,750 --> 00:54:40,799

policy in just a few moments

417

00:54:45,750 --> 00:54:43,760

but it represents our ongoing commitment

418

00:54:48,150 --> 00:54:45,760

to at the national space council and

419

00:54:50,390 --> 00:54:48,160

throughout this administration to ensure

420

00:54:52,789 --> 00:54:50,400

american leadership in space

421

00:54:54,069 --> 00:54:52,799

but for now let me just say that because

422

00:54:55,670 --> 00:54:54,079

of the hard work of all the men and

423

00:54:58,230 --> 00:54:55,680

women of the national space council

424

00:55:00,230 --> 00:54:58,240

putting our president's vision uh into

425

00:55:02,789 --> 00:55:00,240

effect because of the hard work

426  
00:55:05,750 --> 00:55:02,799  
of all of the dedicated men and women on

427  
00:55:07,910 --> 00:55:05,760  
our uh space council advisory group and

428  
00:55:09,670 --> 00:55:07,920  
the support of the american people and

429  
00:55:11,670 --> 00:55:09,680  
leaders in the congress

430  
00:55:12,950 --> 00:55:11,680  
we've made great progress in the last

431  
00:55:15,109 --> 00:55:12,960  
four years

432  
00:55:17,349 --> 00:55:15,119  
but as you will hear again today

433  
00:55:19,589 --> 00:55:17,359  
there is a renewed determination

434  
00:55:20,789 --> 00:55:19,599  
all across this nation and all across

435  
00:55:23,190 --> 00:55:20,799  
this government

436  
00:55:24,309 --> 00:55:23,200  
and all across every level of government

437  
00:55:26,789 --> 00:55:24,319  
to continue to build on the

438  
00:55:28,309 --> 00:55:26,799

extraordinary progress that we've made

439

00:55:30,630 --> 00:55:28,319

and today we will hear about that

440

00:55:33,349 --> 00:55:30,640

progress the ongoing challenges and

441

00:55:36,150 --> 00:55:33,359

opportunities that america faces so let

442

00:55:39,670 --> 00:55:36,160

me say once again welcome to this eighth

443

00:55:42,040 --> 00:55:39,680

meeting of the national space council

444

00:56:14,710 --> 00:55:42,050

let's get to work

445

00:56:19,270 --> 00:56:17,750

again let me call this meeting of the

446

00:56:20,870 --> 00:56:19,280

national space council here at the

447

00:56:23,589 --> 00:56:20,880

kennedy space center

448

00:56:24,950 --> 00:56:23,599

on florida's historic space coast

449

00:56:26,150 --> 00:56:24,960

into session today's meeting will

450

00:56:28,710 --> 00:56:26,160

include important updates and

451  
00:56:31,910 --> 00:56:28,720  
announcements from council members and

452  
00:56:34,789 --> 00:56:31,920  
the council's executive secretary

453  
00:56:36,069 --> 00:56:34,799  
first and foremost allow me to turn our

454  
00:56:38,470 --> 00:56:36,079  
attention

455  
00:56:39,829 --> 00:56:38,480  
to the economic progress that we've made

456  
00:56:41,510 --> 00:56:39,839  
policies have been advanced at the

457  
00:56:43,750 --> 00:56:41,520  
secretary of commerce

458  
00:56:45,109 --> 00:56:43,760  
uh wilbur ross has been a great champion

459  
00:56:47,270 --> 00:56:45,119  
of space

460  
00:56:49,270 --> 00:56:47,280  
even as we've seen the american economy

461  
00:56:51,510 --> 00:56:49,280  
over the last four years reach

462  
00:56:53,510 --> 00:56:51,520  
all new heights i think we set another

463  
00:56:57,349 --> 00:56:53,520

record on the stock market again

464

00:56:59,589 --> 00:56:57,359

today mr secretary but let me just say

465

00:57:02,390 --> 00:56:59,599

let me just say how grateful we are

466

00:57:04,470 --> 00:57:02,400

for your immediate appreciation

467

00:57:06,309 --> 00:57:04,480

for the impact that that space

468

00:57:07,030 --> 00:57:06,319

exploration and entrepreneurship could

469

00:57:08,830 --> 00:57:07,040

have

470

00:57:10,150 --> 00:57:08,840

on the american economy and

471

00:57:11,589 --> 00:57:10,160

[Music]

472

00:57:13,670 --> 00:57:11,599

why don't you give us an update on the

473

00:57:15,589 --> 00:57:13,680

department of commerce's activities

474

00:57:18,069 --> 00:57:15,599

related to space traffic management

475

00:57:19,750 --> 00:57:18,079

international space development uh and

476  
00:57:21,349 --> 00:57:19,760  
investment and other encouraging space

477  
00:57:23,589 --> 00:57:21,359  
news but join me in thanking secretary

478  
00:57:25,950 --> 00:57:23,599  
wilbur ross for his great leadership on

479  
00:57:29,510 --> 00:57:25,960  
this cabinet

480  
00:57:35,190 --> 00:57:32,230  
thank you vice president pence for the

481  
00:57:36,390 --> 00:57:35,200  
opportunity to update the national space

482  
00:57:39,109 --> 00:57:36,400  
council

483  
00:57:41,589 --> 00:57:39,119  
on the growth of the space economy

484  
00:57:44,470 --> 00:57:41,599  
and the related work that is taking

485  
00:57:47,190 --> 00:57:44,480  
place at the commerce department

486  
00:57:51,349 --> 00:57:47,200  
here at cape canaveral last week

487  
00:57:52,549 --> 00:57:51,359  
spacex executed its 100th successful

488  
00:57:55,510 --> 00:57:52,559

commercial

489

00:57:59,190 --> 00:57:55,520

falcon 9 rocket launch

490

00:58:02,549 --> 00:57:59,200

they sent a crew and thousands of pounds

491

00:58:05,349 --> 00:58:02,559

of supplies and research gear

492

00:58:09,349 --> 00:58:05,359

aboard a dragon spacecraft to the

493

00:58:11,990 --> 00:58:09,359

international space station i'm reminded

494

00:58:15,109 --> 00:58:12,000

that it wasn't long ago when travel

495

00:58:16,069 --> 00:58:15,119

among the stars was merely a distant

496

00:58:20,069 --> 00:58:16,079

goal

497

00:58:22,230 --> 00:58:20,079

before it was even a race among nations

498

00:58:24,150 --> 00:58:22,240

indeed our country has achieved

499

00:58:26,150 --> 00:58:24,160

remarkable progress

500

00:58:27,589 --> 00:58:26,160

in the space sector

501  
00:58:30,230 --> 00:58:27,599  
and now again

502  
00:58:31,349 --> 00:58:30,240  
as american business people continue

503  
00:58:33,670 --> 00:58:31,359  
creating

504  
00:58:37,030 --> 00:58:33,680  
new ways to make space

505  
00:58:39,750 --> 00:58:37,040  
more commercially feasible

506  
00:58:40,670 --> 00:58:39,760  
i toured such an example earlier this

507  
00:58:43,109 --> 00:58:40,680  
year

508  
00:58:44,710 --> 00:58:43,119  
astrobotics new headquarters in

509  
00:58:47,589 --> 00:58:44,720  
pittsburgh

510  
00:58:49,750 --> 00:58:47,599  
one of the many small companies doing

511  
00:58:52,789 --> 00:58:49,760  
very creative things

512  
00:58:55,349 --> 00:58:52,799  
their facility will support unmanned

513  
00:58:57,750 --> 00:58:55,359

missions to the moon and drive

514

00:59:01,309 --> 00:58:57,760

technological development

515

00:59:03,190 --> 00:59:01,319

that brings us closer to nasa's planned

516

00:59:06,549 --> 00:59:03,200

2024

517

00:59:09,270 --> 00:59:06,559

human moon landing

518

00:59:12,950 --> 00:59:09,280

such landmark accomplishments in the

519

00:59:16,230 --> 00:59:12,960

commercial space field come alongside

520

00:59:18,950 --> 00:59:16,240

record-breaking economic investment in

521

00:59:24,150 --> 00:59:18,960

space activities

522

00:59:27,430 --> 00:59:24,160

globally another 4.9 million dollars was

523

00:59:29,510 --> 00:59:27,440

invested in space companies in the third

524

00:59:32,710 --> 00:59:29,520

quarter alone

525

00:59:34,789 --> 00:59:32,720

this not only marks the most productive

526

00:59:38,630 --> 00:59:34,799

quarter on record

527

00:59:41,990 --> 00:59:38,640

but it also raises the total 2020

528

00:59:45,670 --> 00:59:42,000

investment to 17 and a half billion

529

00:59:49,990 --> 00:59:45,680

dollars in the overall industry

530

00:59:51,109 --> 00:59:50,000

and wonderfully the u.s accounts for 62

531

00:59:55,349 --> 00:59:51,119

percent

532

00:59:57,670 --> 00:59:55,359

of the industry's total investment

533

00:59:58,390 --> 00:59:57,680

morgan stanley projects

534

01:00:01,349 --> 00:59:58,400

that

535

01:00:02,549 --> 01:00:01,359

revenue generated by the global space

536

01:00:06,150 --> 01:00:02,559

industry

537

01:00:08,069 --> 01:00:06,160

may top a trillion dollars by the year

538

01:00:11,430 --> 01:00:08,079

2040

539

01:00:13,510 --> 01:00:11,440

and the recent explosion of the industry

540

01:00:16,390 --> 01:00:13,520

here in the u.s

541

01:00:17,910 --> 01:00:16,400

is due in no small part

542

01:00:20,710 --> 01:00:17,920

to the efforts of the trump

543

01:00:26,470 --> 01:00:20,720

administration

544

01:00:29,910 --> 01:00:26,480

and the work of the national space

545

01:00:31,589 --> 01:00:29,920

council has already had significant

546

01:00:35,030 --> 01:00:31,599

impacts

547

01:00:38,069 --> 01:00:35,040

noaa has removed red tape that

548

01:00:39,750 --> 01:00:38,079

previously surrounded remote sensing

549

01:00:43,270 --> 01:00:39,760

technology

550

01:00:48,390 --> 01:00:43,280

by lit re-shortening the licensing

551  
01:00:49,829 --> 01:00:48,400  
timelines from 74 days to 28 days at

552  
01:00:53,270 --> 01:00:49,839  
present

553  
01:00:56,470 --> 01:00:53,280  
this enables companies to sell data from

554  
01:00:57,990 --> 01:00:56,480  
satellites more easily and more

555  
01:01:01,030 --> 01:00:58,000  
efficiently

556  
01:01:04,870 --> 01:01:01,040  
helping commercial satellite operators

557  
01:01:07,510 --> 01:01:04,880  
stay competitive in a rapidly changing

558  
01:01:10,470 --> 01:01:07,520  
global marketplace

559  
01:01:12,230 --> 01:01:10,480  
commerce department has also taken steps

560  
01:01:14,950 --> 01:01:12,240  
over the last year

561  
01:01:18,150 --> 01:01:14,960  
at the behest of the vice president to

562  
01:01:20,630 --> 01:01:18,160  
identify new space missions

563  
01:01:23,349 --> 01:01:20,640

and get them the necessary

564

01:01:26,150 --> 01:01:23,359

authorizations to proceed

565

01:01:29,750 --> 01:01:26,160

in line with our treaties

566

01:01:33,670 --> 01:01:29,760

the goal here is to alleviate the

567

01:01:36,710 --> 01:01:33,680

administrative and regulatory burden on

568

01:01:37,630 --> 01:01:36,720

emerging companies and technologies

569

01:01:39,910 --> 01:01:37,640

and we

570

01:01:42,309 --> 01:01:39,920

enthusiastically continue

571

01:01:45,270 --> 01:01:42,319

in that mission

572

01:01:47,430 --> 01:01:45,280

financial indicators and regulatory

573

01:01:50,789 --> 01:01:47,440

procedures aside

574

01:01:53,270 --> 01:01:50,799

one simple way to observe the growth of

575

01:01:56,470 --> 01:01:53,280

our space industry

576  
01:01:57,990 --> 01:01:56,480  
is to look at the number of satellites

577  
01:01:59,750 --> 01:01:58,000  
in orbit

578  
01:02:03,510 --> 01:01:59,760  
this year alone

579  
01:02:06,789 --> 01:02:03,520  
the number of active satellites in orbit

580  
01:02:09,510 --> 01:02:06,799  
is set to increase by more than 50

581  
01:02:12,549 --> 01:02:09,520  
percent 5.0 percent

582  
01:02:16,789 --> 01:02:12,559  
to 1250

583  
01:02:19,990 --> 01:02:16,799  
of which about 80 percent are small sats

584  
01:02:23,510 --> 01:02:20,000  
and the satellite industry association

585  
01:02:24,630 --> 01:02:23,520  
estimates that up to 110

586  
01:02:27,829 --> 01:02:24,640  
000

587  
01:02:29,829 --> 01:02:27,839  
new satellites could be in orbit by

588  
01:02:32,829 --> 01:02:29,839

2030.

589

01:02:35,109 --> 01:02:32,839

this is good news for projects like

590

01:02:37,990 --> 01:02:35,119

spacex's starlink

591

01:02:40,270 --> 01:02:38,000

as well as for smaller companies that

592

01:02:43,510 --> 01:02:40,280

can benefit from the growing

593

01:02:46,630 --> 01:02:43,520

accessibility of private satellites

594

01:02:50,470 --> 01:02:46,640

but the increase in satellites has also

595

01:02:54,549 --> 01:02:50,480

created a unique set of challenges when

596

01:02:57,430 --> 01:02:54,559

it comes to managing orbital traffic

597

01:02:58,950 --> 01:02:57,440

we are seeing more and more frequent

598

01:03:00,829 --> 01:02:58,960

near misses

599

01:03:04,870 --> 01:03:00,839

that could cause

600

01:03:07,589 --> 01:03:04,880

unprecedented new amounts of debris

601  
01:03:08,630 --> 01:03:07,599  
if two significant objects were to

602  
01:03:11,029 --> 01:03:08,640  
collide

603  
01:03:12,150 --> 01:03:11,039  
they could create such a shower of

604  
01:03:15,190 --> 01:03:12,160  
debris

605  
01:03:18,549 --> 01:03:15,200  
that it could endanger the astronauts

606  
01:03:21,750 --> 01:03:18,559  
aboard the international space station

607  
01:03:25,589 --> 01:03:21,760  
it could endanger billions of dollars of

608  
01:03:27,910 --> 01:03:25,599  
u.s and other investment in space

609  
01:03:31,270 --> 01:03:27,920  
and it could also interfere

610  
01:03:34,630 --> 01:03:31,280  
with the growth of space commerce

611  
01:03:37,109 --> 01:03:34,640  
fortunately there's no shortage of

612  
01:03:40,470 --> 01:03:37,119  
brilliant men and women who have made

613  
01:03:41,990 --> 01:03:40,480

remarkable headway toward managing this

614

01:03:42,829 --> 01:03:42,000

problem

615

01:03:48,549 --> 01:03:42,839

in

616

01:03:51,270 --> 01:03:48,559

policy directive 3

617

01:03:54,309 --> 01:03:51,280

provided a unique approach to the

618

01:03:56,549 --> 01:03:54,319

management of orbital traffic

619

01:04:00,069 --> 01:03:56,559

the commerce department's office of

620

01:04:03,829 --> 01:04:00,079

space commerce and our interagency

621

01:04:05,589 --> 01:04:03,839

partners took on the missions laid out

622

01:04:08,710 --> 01:04:05,599

by this initiative

623

01:04:09,910 --> 01:04:08,720

and today i'm proud to report that we're

624

01:04:13,510 --> 01:04:09,920

in the midst

625

01:04:16,470 --> 01:04:13,520

of finalizing a department of commerce

626  
01:04:19,430 --> 01:04:16,480  
department of defense mou

627  
01:04:22,390 --> 01:04:19,440  
that will provide a detailed plan

628  
01:04:23,589 --> 01:04:22,400  
for the improvement of space situational

629  
01:04:25,190 --> 01:04:23,599  
awareness

630  
01:04:28,630 --> 01:04:25,200  
and ultimately

631  
01:04:31,430 --> 01:04:28,640  
space traffic management

632  
01:04:35,029 --> 01:04:31,440  
we have also drawn on existing nowhere

633  
01:04:37,029 --> 01:04:35,039  
resources to establish a new

634  
01:04:39,829 --> 01:04:37,039  
open architecture

635  
01:04:42,950 --> 01:04:39,839  
data repository

636  
01:04:45,190 --> 01:04:42,960  
system allows both private and

637  
01:04:48,390 --> 01:04:45,200  
government entities

638  
01:04:49,349 --> 01:04:48,400

including those of our allies to share

639

01:04:52,230 --> 01:04:49,359

data

640

01:04:55,990 --> 01:04:52,240

increasing all parties situational

641

01:04:58,549 --> 01:04:56,000

awareness amidst an increasingly crowded

642

01:05:00,950 --> 01:04:58,559

orbital environment

643

01:05:05,190 --> 01:05:00,960

we continue to work with our allies in

644

01:05:06,549 --> 01:05:05,200

industry on the norms standards and best

645

01:05:09,990 --> 01:05:06,559

practices

646

01:05:11,750 --> 01:05:10,000

that will inform new rules of the road

647

01:05:13,510 --> 01:05:11,760

for space

648

01:05:16,390 --> 01:05:13,520

we have also worked with private

649

01:05:20,309 --> 01:05:16,400

business and technology leaders

650

01:05:23,109 --> 01:05:20,319

from around the globe in this issue

651  
01:05:26,150 --> 01:05:23,119  
in fact just before thanksgiving the

652  
01:05:27,750 --> 01:05:26,160  
office of space commerce hosted an

653  
01:05:32,230 --> 01:05:27,760  
industry day

654  
01:05:34,230 --> 01:05:32,240  
with over 250 companies participating

655  
01:05:37,829 --> 01:05:34,240  
virtually of course

656  
01:05:40,710 --> 01:05:37,839  
to discuss our approach to the open

657  
01:05:43,750 --> 01:05:40,720  
architecture data repository

658  
01:05:46,470 --> 01:05:43,760  
we will continue to work collaboratively

659  
01:05:48,390 --> 01:05:46,480  
with the public and private sector to

660  
01:05:51,029 --> 01:05:48,400  
tackle this challenge

661  
01:05:54,230 --> 01:05:51,039  
it's not the only one we face

662  
01:05:57,109 --> 01:05:54,240  
china's lunar landing last week

663  
01:05:58,789 --> 01:05:57,119

underscores that we are not the only

664

01:06:01,270 --> 01:05:58,799

ones invested

665

01:06:03,829 --> 01:06:01,280

in the business of space

666

01:06:04,950 --> 01:06:03,839

and that competition for american

667

01:06:07,589 --> 01:06:04,960

companies

668

01:06:09,270 --> 01:06:07,599

operating in this sector is real

669

01:06:13,190 --> 01:06:09,280

competition

670

01:06:16,950 --> 01:06:13,200

similarly japan became the first country

671

01:06:18,470 --> 01:06:16,960

to bring back to earth a soil sample

672

01:06:21,750 --> 01:06:18,480

from an

673

01:06:26,870 --> 01:06:24,950

looking ahead my department's bureau of

674

01:06:30,069 --> 01:06:26,880

economic analysis

675

01:06:33,510 --> 01:06:30,079

will publish within the next two weeks

676  
01:06:36,230 --> 01:06:33,520  
innovative experimental statistics

677  
01:06:38,789 --> 01:06:36,240  
that will help us further measure and

678  
01:06:40,390 --> 01:06:38,799  
understand the space

679  
01:06:42,549 --> 01:06:40,400  
sector

680  
01:06:46,549 --> 01:06:42,559  
and i look forward to sharing this

681  
01:06:49,029 --> 01:06:46,559  
informative new data with all of you

682  
01:06:52,150 --> 01:06:49,039  
the united states remains an incubator

683  
01:06:55,109 --> 01:06:52,160  
for greatness like no other

684  
01:06:58,829 --> 01:06:55,119  
and i'm confident that we will retain

685  
01:07:02,390 --> 01:06:58,839  
our position as the premier hub for

686  
01:07:06,040 --> 01:07:02,400  
space-based exploration and business

687  
01:07:07,720 --> 01:07:07,270  
[Applause]

688  
01:07:10,870 --> 01:07:07,730

excellent

689

01:07:13,029 --> 01:07:10,880

[Applause]

690

01:07:14,069 --> 01:07:13,039

uh thank you secretary ross and more

691

01:07:15,910 --> 01:07:14,079

importantly thank you for your

692

01:07:17,750 --> 01:07:15,920

leadership thank you

693

01:07:18,549 --> 01:07:17,760

on the national space council on behalf

694

01:07:20,230 --> 01:07:18,559

of

695

01:07:22,390 --> 01:07:20,240

american entrepreneurial leadership in

696

01:07:24,549 --> 01:07:22,400

space truly extraordinary

697

01:07:26,549 --> 01:07:24,559

accomplishments and uh

698

01:07:28,150 --> 01:07:26,559

my favorite one is that you said at the

699

01:07:31,270 --> 01:07:28,160

present point 17 and a half billion

700

01:07:33,910 --> 01:07:31,280

dollars in investment the last year and

701  
01:07:36,549 --> 01:07:33,920  
more than 60 percent of that is invested

702  
01:07:38,549 --> 01:07:36,559  
in the united states of america so

703  
01:07:40,230 --> 01:07:38,559  
thanks for helping to facilitate that

704  
01:07:42,789 --> 01:07:40,240  
the secretary of the energy a member of

705  
01:07:43,829 --> 01:07:42,799  
our cabinet dan bruyette is here with an

706  
01:07:47,510 --> 01:07:43,839  
update

707  
01:07:49,190 --> 01:07:47,520  
on space nuclear power efforts and uh

708  
01:07:52,150 --> 01:07:49,200  
under his leadership

709  
01:07:54,390 --> 01:07:52,160  
uh the collaborations between

710  
01:07:56,870 --> 01:07:54,400  
the department of energy the department

711  
01:07:58,630 --> 01:07:56,880  
of defense and and nasa mr secretary let

712  
01:08:01,670 --> 01:07:58,640  
me also thank you

713  
01:08:03,589 --> 01:08:01,680

for your energetic and tireless efforts

714

01:08:06,470 --> 01:08:03,599

in forging exactly the kind of

715

01:08:08,789 --> 01:08:06,480

partnerships uh across government that

716

01:08:11,109 --> 01:08:08,799

are facilitating advances of american

717

01:08:13,349 --> 01:08:11,119

technology and space exploration

718

01:08:15,109 --> 01:08:13,359

secretary dan bruyette the department of

719

01:08:15,900 --> 01:08:15,119

energy everyone

720

01:08:18,709 --> 01:08:15,910

thank you

721

01:08:20,070 --> 01:08:18,719

[Applause]

722

01:08:21,829 --> 01:08:20,080

well thank you mr vice president for

723

01:08:23,590 --> 01:08:21,839

that kind introduction i'm honored to

724

01:08:25,430 --> 01:08:23,600

join you today to provide the national

725

01:08:27,590 --> 01:08:25,440

space council with a brief update on the

726

01:08:29,030 --> 01:08:27,600

initiatives that our department the us

727

01:08:31,510 --> 01:08:29,040

department of energy has undertaken

728

01:08:33,430 --> 01:08:31,520

since the council's last meeting in may

729

01:08:35,829 --> 01:08:33,440

in july of this year

730

01:08:37,430 --> 01:08:35,839

nasa hosted our first ever nasa doe

731

01:08:39,189 --> 01:08:37,440

executive committee meeting right here

732

01:08:40,950 --> 01:08:39,199

at the kennedy space center the

733

01:08:44,390 --> 01:08:40,960

executive committee that was established

734

01:08:46,470 --> 01:08:44,400

under our new nasa doe mou

735

01:08:49,829 --> 01:08:46,480

that administrator bridenstine and i

736

01:08:51,749 --> 01:08:49,839

signed allows us to strategically pursue

737

01:08:53,669 --> 01:08:51,759

opportunities that will advance our

738

01:08:55,269 --> 01:08:53,679

cooperation between our two departments

739

01:08:57,910 --> 01:08:55,279

and space activities

740

01:09:00,070 --> 01:08:57,920

at the july meeting at that july meeting

741

01:09:01,669 --> 01:09:00,080

nasa and doe agreed to establish three

742

01:09:03,269 --> 01:09:01,679

joint working groups

743

01:09:05,110 --> 01:09:03,279

one group is focused on power

744

01:09:06,950 --> 01:09:05,120

infrastructure for the proposed artemis

745

01:09:09,349 --> 01:09:06,960

lunar space camp

746

01:09:11,430 --> 01:09:09,359

the second group focuses on developing

747

01:09:14,709 --> 01:09:11,440

nuclear power and propulsion systems for

748

01:09:18,070 --> 01:09:14,719

future moon and mars missions as well as

749

01:09:19,910 --> 01:09:18,080

robotic deep space exploration

750

01:09:22,229 --> 01:09:19,920

in the third group mr vice president is

751  
01:09:24,070 --> 01:09:22,239  
focused on pursuing space science and

752  
01:09:26,149 --> 01:09:24,080  
innovation interests particularly high

753  
01:09:28,149 --> 01:09:26,159  
performance computing initiatives that

754  
01:09:30,789 --> 01:09:28,159  
hopefully will address the challenges of

755  
01:09:33,110 --> 01:09:30,799  
traffic management that secretary ross

756  
01:09:35,590 --> 01:09:33,120  
just spoke about weather issues and

757  
01:09:36,709 --> 01:09:35,600  
planetary defense from near-earth

758  
01:09:39,030 --> 01:09:36,719  
objects

759  
01:09:41,189 --> 01:09:39,040  
these working groups will ensure that

760  
01:09:43,749 --> 01:09:41,199  
doe international laboratories are

761  
01:09:45,590 --> 01:09:43,759  
effectively harnessing the capabilities

762  
01:09:48,070 --> 01:09:45,600  
of our world-class scientists our

763  
01:09:50,309 --> 01:09:48,080

engineers our technicians and our

764

01:09:52,550 --> 01:09:50,319

research facilities to partner with nasa

765

01:09:55,750 --> 01:09:52,560

to solve some of the greatest technical

766

01:09:57,590 --> 01:09:55,760

challenges facing the united states

767

01:09:59,270 --> 01:09:57,600

since our last council meeting we've

768

01:10:01,110 --> 01:09:59,280

also continued our space-related

769

01:10:03,750 --> 01:10:01,120

engagement with the u.s department of

770

01:10:05,510 --> 01:10:03,760

defense in october d.o.e senior

771

01:10:07,910 --> 01:10:05,520

leadership teams went to the pentagon

772

01:10:11,510 --> 01:10:07,920

for a space technology mini summit to

773

01:10:14,070 --> 01:10:11,520

discuss how doed and doe could cooperate

774

01:10:16,630 --> 01:10:14,080

more strategically on space related

775

01:10:18,709 --> 01:10:16,640

challenges our senior policy teams and

776

01:10:20,950 --> 01:10:18,719

our technical leaders met with acting

777

01:10:22,550 --> 01:10:20,960

secretary of defense for research and

778

01:10:24,630 --> 01:10:22,560

engineering as well as with

779

01:10:27,030 --> 01:10:24,640

representatives from the strategic

780

01:10:30,149 --> 01:10:27,040

capabilities office the space

781

01:10:32,630 --> 01:10:30,159

development agency and darpa to explore

782

01:10:34,870 --> 01:10:32,640

ways of strengthening does contributions

783

01:10:37,430 --> 01:10:34,880

to the space mission areas of each of

784

01:10:39,910 --> 01:10:37,440

those offices we were extremely

785

01:10:41,669 --> 01:10:39,920

encouraged by the outcome of the mini

786

01:10:44,070 --> 01:10:41,679

summit and we will continue to work with

787

01:10:46,630 --> 01:10:44,080

the under secretary's office as well as

788

01:10:49,510 --> 01:10:46,640

other elements of dod

789

01:10:51,510 --> 01:10:49,520

as doe looks to the future we will

790

01:10:54,070 --> 01:10:51,520

continue to leverage our global

791

01:10:56,709 --> 01:10:54,080

leadership in nuclear power technologies

792

01:10:59,270 --> 01:10:56,719

to provide sustainable power solutions

793

01:11:03,030 --> 01:10:59,280

for space applications such as radio

794

01:11:05,350 --> 01:11:03,040

isotope power surface fission power and

795

01:11:07,110 --> 01:11:05,360

nuclear thermal propulsion

796

01:11:09,270 --> 01:11:07,120

following the successful launch of the

797

01:11:12,470 --> 01:11:09,280

perseverance rover which is powered by a

798

01:11:15,350 --> 01:11:12,480

doe developed radio isotope power system

799

01:11:17,669 --> 01:11:15,360

doe and nasa began formal engagement

800

01:11:21,030 --> 01:11:17,679

with nuclear aerospace and commercial

801  
01:11:23,030 --> 01:11:21,040  
power sectors to design and develop a

802  
01:11:26,870 --> 01:11:23,040  
surface power system for a lunar

803  
01:11:28,470 --> 01:11:26,880  
demonstration in the late 2020s

804  
01:11:30,149 --> 01:11:28,480  
we're also working on engagement

805  
01:11:33,270 --> 01:11:30,159  
opportunities with private industry to

806  
01:11:35,430 --> 01:11:33,280  
advance thermal nuclear propulsion

807  
01:11:37,350 --> 01:11:35,440  
technologies we want to move that ball

808  
01:11:40,390 --> 01:11:37,360  
even further forward

809  
01:11:43,270 --> 01:11:40,400  
doi nasa and dod are also working with

810  
01:11:46,470 --> 01:11:43,280  
industry to establish advanced nuclear

811  
01:11:48,870 --> 01:11:46,480  
fuel production capabilities to support

812  
01:11:51,510 --> 01:11:48,880  
future terrestrial and space demand

813  
01:11:54,870 --> 01:11:51,520

needs and seeking to establish and

814

01:11:57,430 --> 01:11:54,880

maintain a nuclear supply chain

815

01:11:59,430 --> 01:11:57,440

chain capability that enables us to

816

01:12:01,110 --> 01:11:59,440

address a very wide range of

817

01:12:03,669 --> 01:12:01,120

applications

818

01:12:07,030 --> 01:12:03,679

in addition to those things doe and nasa

819

01:12:10,390 --> 01:12:07,040

successes in ramping up plutonium-238

820

01:12:13,110 --> 01:12:10,400

isotope production have now eliminated

821

01:12:14,950 --> 01:12:13,120

projected supply shortfalls increasing

822

01:12:18,390 --> 01:12:14,960

the opportunities for deep space

823

01:12:20,310 --> 01:12:18,400

missions in the 2020s and beyond

824

01:12:22,470 --> 01:12:20,320

through our strategic investments doe

825

01:12:25,189 --> 01:12:22,480

and nasa have also modernized

826

01:12:27,990 --> 01:12:25,199

large portions of the radio isotope

827

01:12:30,229 --> 01:12:28,000

power system supply chain eliminating

828

01:12:33,350 --> 01:12:30,239

single point failures and improving

829

01:12:34,870 --> 01:12:33,360

reliability to support quicker mission

830

01:12:36,550 --> 01:12:34,880

tempos

831

01:12:39,750 --> 01:12:36,560

yet there's so much more

832

01:12:41,830 --> 01:12:39,760

that we at doe can do and we will do it

833

01:12:44,149 --> 01:12:41,840

we're looking for ways to apply our next

834

01:12:46,550 --> 01:12:44,159

generation computing technologies to

835

01:12:48,950 --> 01:12:46,560

address the tracking modeling and data

836

01:12:52,310 --> 01:12:48,960

analysis challenges of space weather

837

01:12:55,189 --> 01:12:52,320

warnings space debris chat tracking and

838

01:12:58,390 --> 01:12:55,199

avoidance and large-scale analysis of

839

01:13:00,070 --> 01:12:58,400

space radiation in cosmic microwave

840

01:13:02,709 --> 01:13:00,080

environments

841

01:13:04,070 --> 01:13:02,719

mr vice president this is all possible

842

01:13:05,590 --> 01:13:04,080

because of your leadership of the

843

01:13:08,709 --> 01:13:05,600

national space council and the

844

01:13:11,430 --> 01:13:08,719

president's focus on significant space

845

01:13:12,950 --> 01:13:11,440

goals and our work at the doe is enabled

846

01:13:15,510 --> 01:13:12,960

by the great work of my colleagues

847

01:13:18,070 --> 01:13:15,520

across the interagency so i'd like to

848

01:13:20,550 --> 01:13:18,080

especially thank all of those who have

849

01:13:23,669 --> 01:13:20,560

partnered closely with us especially jim

850

01:13:26,470 --> 01:13:23,679

bridenstine and jim warhart at nasa and

851

01:13:28,149 --> 01:13:26,480  
of course michael crazios at dod

852

01:13:30,310 --> 01:13:28,159  
finally it's in this spirit of

853

01:13:32,790 --> 01:13:30,320  
collaboration that i'm pleased to

854

01:13:34,790 --> 01:13:32,800  
announce does new space strategy which

855

01:13:37,110 --> 01:13:34,800  
we will soon publish

856

01:13:39,750 --> 01:13:37,120  
this decade outlook will directly

857

01:13:43,830 --> 01:13:39,760  
support the national space policy and

858

01:13:46,390 --> 01:13:43,840  
will focus doe on being a key technology

859

01:13:48,709 --> 01:13:46,400  
developer to support the space missions

860

01:13:50,470 --> 01:13:48,719  
of our interagency partners thank you

861

01:13:52,149 --> 01:13:50,480  
again for inviting me thank you for

862

01:13:54,709 --> 01:13:52,159  
allowing me to join you

863

01:13:56,950 --> 01:13:54,719

doe or as i like to call it the

864

01:13:59,110 --> 01:13:56,960

department of exploration

865

01:14:02,390 --> 01:13:59,120

looks forward to a future of powering

866

01:14:05,350 --> 01:14:02,400

innovation of driving exploration

867

01:14:08,010 --> 01:14:05,360

and for reaching for the stars thank you

868

01:14:13,110 --> 01:14:08,020

mr vice president

869

01:14:16,790 --> 01:14:15,590

thank you secretary buret and uh

870

01:14:27,590 --> 01:14:16,800

i

871

01:14:30,149 --> 01:14:27,600

the department of energy on the

872

01:14:33,189 --> 01:14:30,159

development of nuclear power

873

01:14:34,070 --> 01:14:33,199

is what will precisely enable

874

01:14:36,630 --> 01:14:34,080

us

875

01:14:38,470 --> 01:14:36,640

to do deep space exploration

876  
01:14:39,830 --> 01:14:38,480  
and and to put american astronauts on

877  
01:14:41,669 --> 01:14:39,840  
mars

878  
01:14:43,430 --> 01:14:41,679  
even a layperson like me understands

879  
01:14:44,870 --> 01:14:43,440  
that when you've got nuclear power

880  
01:14:45,990 --> 01:14:44,880  
you can run the engine the whole way

881  
01:14:47,750 --> 01:14:46,000  
there

882  
01:14:49,430 --> 01:14:47,760  
and i've been assured it would take us

883  
01:14:51,270 --> 01:14:49,440  
about half the amount of time to get to

884  
01:14:52,630 --> 01:14:51,280  
mars and get back from mars with nuclear

885  
01:14:53,590 --> 01:14:52,640  
power

886  
01:14:55,510 --> 01:14:53,600  
and

887  
01:14:56,870 --> 01:14:55,520  
i just want to commend you for

888  
01:14:58,149 --> 01:14:56,880

the way you've used the department

889

01:15:01,030 --> 01:14:58,159

you've worked with the department of

890

01:15:03,189 --> 01:15:01,040

defense closely with nasa to promote the

891

01:15:05,350 --> 01:15:03,199

development of that innovation truly

892

01:15:07,030 --> 01:15:05,360

it's going to be a game changer for

893

01:15:08,149 --> 01:15:07,040

american leadership and human space

894

01:15:10,149 --> 01:15:08,159

exploration

895

01:15:17,030 --> 01:15:10,159

thank you mr so thank you another round

896

01:15:21,510 --> 01:15:19,110

uh someone that i've come to admire and

897

01:15:23,110 --> 01:15:21,520

appreciate very much a key member of our

898

01:15:26,070 --> 01:15:23,120

administration is the director of the

899

01:15:27,669 --> 01:15:26,080

office of science and technology policy

900

01:15:31,510 --> 01:15:27,679

he's been involved in

901  
01:15:32,950 --> 01:15:31,520  
in uh advancing uh policies that will

902  
01:15:34,870 --> 01:15:32,960  
that will give us the capacity to

903  
01:15:37,110 --> 01:15:34,880  
continue to monitor

904  
01:15:39,990 --> 01:15:37,120  
a planetary

905  
01:15:42,709 --> 01:15:40,000  
weather issues from space so vital to

906  
01:15:45,189 --> 01:15:42,719  
the life of the nation

907  
01:15:46,870 --> 01:15:45,199  
he himself is a legendary weatherman and

908  
01:15:49,830 --> 01:15:46,880  
he's brought that discipline and that

909  
01:15:51,590 --> 01:15:49,840  
creativity to the national space council

910  
01:15:52,870 --> 01:15:51,600  
join me in welcoming dr kelvin

911  
01:15:53,980 --> 01:15:52,880  
drogemeyer

912  
01:15:56,229 --> 01:15:53,990  
dr drugmart

913  
01:15:58,149 --> 01:15:56,239

[Applause]

914

01:15:59,590 --> 01:15:58,159

thank you so much mr vice president it's

915

01:16:01,590 --> 01:15:59,600

an honor and privilege to be here today

916

01:16:03,270 --> 01:16:01,600

on this historic occasion i really

917

01:16:04,550 --> 01:16:03,280

appreciate so very much your leadership

918

01:16:06,390 --> 01:16:04,560

of the council and your extraordinary

919

01:16:08,550 --> 01:16:06,400

service to america as our vice president

920

01:16:09,830 --> 01:16:08,560

thank you so very much for that

921

01:16:11,590 --> 01:16:09,840

under the president's leadership and

922

01:16:13,590 --> 01:16:11,600

under your leadership mr vice president

923

01:16:15,430 --> 01:16:13,600

this nation has recommitted itself to

924

01:16:17,270 --> 01:16:15,440

space discovery and exploration and the

925

01:16:19,030 --> 01:16:17,280

advancement of humanity's expansion into

926  
01:16:20,470 --> 01:16:19,040  
the heavens today i would like to

927  
01:16:22,229 --> 01:16:20,480  
highlight two areas where we have made

928  
01:16:24,229 --> 01:16:22,239  
really significant progress over the

929  
01:16:26,870 --> 01:16:24,239  
recent months and years where i believe

930  
01:16:29,110 --> 01:16:26,880  
our continued effort is is needed the

931  
01:16:30,709 --> 01:16:29,120  
first of these topics is space weather

932  
01:16:32,149 --> 01:16:30,719  
now we're all familiar as vice president

933  
01:16:34,149 --> 01:16:32,159  
said with terrestrial weather the

934  
01:16:36,310 --> 01:16:34,159  
towering clouds and beautiful

935  
01:16:38,470 --> 01:16:36,320  
thunderstorms we see every afternoon in

936  
01:16:40,149 --> 01:16:38,480  
the summer here in oklahoma the the very

937  
01:16:42,070 --> 01:16:40,159  
powerful storms we see in the midwest

938  
01:16:43,510 --> 01:16:42,080

like places like indiana

939

01:16:45,189 --> 01:16:43,520

they're beautiful but they're also very

940

01:16:47,030 --> 01:16:45,199

destructive and so we have to really

941

01:16:48,709 --> 01:16:47,040

understand and look to predict those

942

01:16:50,550 --> 01:16:48,719

well space weather is basically no

943

01:16:52,310 --> 01:16:50,560

different it encompasses a wide array of

944

01:16:53,590 --> 01:16:52,320

phenomena that are equally in some cases

945

01:16:56,310 --> 01:16:53,600

very beautiful

946

01:16:57,669 --> 01:16:56,320

but also they complicate our exploration

947

01:16:59,430 --> 01:16:57,679

activities and really have the potential

948

01:17:01,430 --> 01:16:59,440

to degrade and even destroy some of the

949

01:17:03,830 --> 01:17:01,440

infrastructure that is most critical to

950

01:17:05,430 --> 01:17:03,840

our nation's security and our economy so

951  
01:17:07,270 --> 01:17:05,440  
the importance of both understanding and

952  
01:17:09,350 --> 01:17:07,280  
forecasting and accounting for space

953  
01:17:11,910 --> 01:17:09,360  
weather is very very important as we

954  
01:17:13,030 --> 01:17:11,920  
reinvigorate our human space exploration

955  
01:17:15,669 --> 01:17:13,040  
program

956  
01:17:18,149 --> 01:17:15,679  
in october 2020 the president signed the

957  
01:17:20,709 --> 01:17:18,159  
pro-swift act it's an acronym which

958  
01:17:22,709 --> 01:17:20,719  
established as u.s policy and i quote to

959  
01:17:24,709 --> 01:17:22,719  
prepare and protect against the social

960  
01:17:25,910 --> 01:17:24,719  
and economic impacts of space weather

961  
01:17:27,669 --> 01:17:25,920  
phenomena

962  
01:17:30,149 --> 01:17:27,679  
the pro-swift act also provides

963  
01:17:31,750 --> 01:17:30,159

statutory authority for existing space

964

01:17:33,990 --> 01:17:31,760

weather coordination activities under

965

01:17:35,750 --> 01:17:34,000

the national science technology council

966

01:17:37,189 --> 01:17:35,760

now in march of last year that same

967

01:17:38,630 --> 01:17:37,199

national science technology council

968

01:17:40,950 --> 01:17:38,640

released a national space weather

969

01:17:42,470 --> 01:17:40,960

strategy and action plan and that very

970

01:17:44,310 --> 01:17:42,480

same day the president signed an

971

01:17:45,910 --> 01:17:44,320

executive order on coordinating national

972

01:17:48,149 --> 01:17:45,920

resilience to something called

973

01:17:49,510 --> 01:17:48,159

electromagnetic pulses now they're

974

01:17:51,510 --> 01:17:49,520

relevant here because the sorts of

975

01:17:53,189 --> 01:17:51,520

geomagnetic disturbances that occur in

976

01:17:54,709 --> 01:17:53,199

the sun that are disruptive they're

977

01:17:56,790 --> 01:17:54,719

called space weather disruptive to our

978

01:17:58,229 --> 01:17:56,800

space activities they're both a space

979

01:17:59,830 --> 01:17:58,239

weather phenomena and they're also

980

01:18:02,390 --> 01:17:59,840

naturally occurring

981

01:18:03,910 --> 01:18:02,400

as emps so since the release of those

982

01:18:05,990 --> 01:18:03,920

documents federal agencies have worked

983

01:18:07,350 --> 01:18:06,000

very very hard on their implementation

984

01:18:09,350 --> 01:18:07,360

and together with the academic and

985

01:18:10,390 --> 01:18:09,360

private sector and also international

986

01:18:12,070 --> 01:18:10,400

partners

987

01:18:14,229 --> 01:18:12,080

we've made great progress and i want to

988

01:18:16,550 --> 01:18:14,239

highlight very quickly three areas uh

989

01:18:18,149 --> 01:18:16,560

first the u.s geological survey is

990

01:18:20,229 --> 01:18:18,159

working toward completing a survey of

991

01:18:21,270 --> 01:18:20,239

ground conductivity across the united

992

01:18:23,189 --> 01:18:21,280

states now we're familiar with

993

01:18:25,430 --> 01:18:23,199

conductivity lightning across the sky

994

01:18:26,950 --> 01:18:25,440

and conductivity on on power lines but

995

01:18:29,189 --> 01:18:26,960

there's actually conductivity in the

996

01:18:31,030 --> 01:18:29,199

ground these data help

997

01:18:33,110 --> 01:18:31,040

usgs and also noaa develop new

998

01:18:35,189 --> 01:18:33,120

operational geoelectric field maps the

999

01:18:36,950 --> 01:18:35,199

actual mapping of the geoelectric field

1000

01:18:38,550 --> 01:18:36,960

it provides much more accurate estimates

1001  
01:18:40,790 --> 01:18:38,560  
of electric currents that are generated

1002  
01:18:43,510 --> 01:18:40,800  
by geomagnetic storms and those things

1003  
01:18:45,189 --> 01:18:43,520  
can then disrupt power operations and

1004  
01:18:46,709 --> 01:18:45,199  
resilience and things like that so that

1005  
01:18:48,950 --> 01:18:46,719  
hazard map is going to be a very very

1006  
01:18:50,790 --> 01:18:48,960  
important tool that we have to sustain

1007  
01:18:53,270 --> 01:18:50,800  
electrical power during geomagnetic

1008  
01:18:55,750 --> 01:18:53,280  
storms a second as a result also a

1009  
01:18:57,590 --> 01:18:55,760  
partnership between noaa and nasa noaa's

1010  
01:18:59,510 --> 01:18:57,600  
space weather follow-on spacecraft is

1011  
01:19:01,030 --> 01:18:59,520  
scheduled for launch in 2024 that

1012  
01:19:03,270 --> 01:19:01,040  
magical year when we're going to return

1013  
01:19:04,870 --> 01:19:03,280

to the moon this will ensure continuity

1014

01:19:07,189 --> 01:19:04,880

of observations critical to space

1015

01:19:09,510 --> 01:19:07,199

weather prediction and forecasting and

1016

01:19:11,590 --> 01:19:09,520

also to noaa's geomagnetic storm watches

1017

01:19:13,430 --> 01:19:11,600

and warnings and issues regularly

1018

01:19:15,030 --> 01:19:13,440

and third noaa nasa and also the

1019

01:19:16,470 --> 01:19:15,040

national science foundation have funded

1020

01:19:18,149 --> 01:19:16,480

several research opportunities that are

1021

01:19:20,149 --> 01:19:18,159

going to advance solar and geospace

1022

01:19:21,590 --> 01:19:20,159

modeling and improve space weather

1023

01:19:23,510 --> 01:19:21,600

predictions just like we have models to

1024

01:19:25,430 --> 01:19:23,520

predict terrestrial weather we have

1025

01:19:26,870 --> 01:19:25,440

models to actually predict space weather

1026

01:19:28,550 --> 01:19:26,880

that research targeted key

1027

01:19:30,149 --> 01:19:28,560

administration priorities established

1028

01:19:32,149 --> 01:19:30,159

through the space policy directives that

1029

01:19:33,990 --> 01:19:32,159

the vice president mentioned including

1030

01:19:35,990 --> 01:19:34,000

human space exploration and space

1031

01:19:37,910 --> 01:19:36,000

traffic management as secretary ross

1032

01:19:39,350 --> 01:19:37,920

mentioned these agencies are also

1033

01:19:40,790 --> 01:19:39,360

working very very closely together to

1034

01:19:43,910 --> 01:19:40,800

implement a framework to accelerate

1035

01:19:45,189 --> 01:19:43,920

transition of space weather research to

1036

01:19:47,189 --> 01:19:45,199

operations very very important

1037

01:19:48,870 --> 01:19:47,199

transition and they will help inform key

1038

01:19:50,229 --> 01:19:48,880

decision making for operations of

1039

01:19:51,910 --> 01:19:50,239

critical infrastructure like our

1040

01:19:53,669 --> 01:19:51,920

electric power grid

1041

01:19:55,510 --> 01:19:53,679

finally the second topic i want to

1042

01:19:57,830 --> 01:19:55,520

address really briefly is planetary

1043

01:19:59,430 --> 01:19:57,840

protection now what is planetary

1044

01:20:02,470 --> 01:19:59,440

protection it's basically the practice

1045

01:20:04,709 --> 01:20:02,480

of mitigating risks to earth of harmful

1046

01:20:06,870 --> 01:20:04,719

biological contamination due to space

1047

01:20:09,110 --> 01:20:06,880

activities there's actually two sides of

1048

01:20:10,790 --> 01:20:09,120

that coin it includes protecting the

1049

01:20:12,070 --> 01:20:10,800

search for extraterrestrial life by

1050

01:20:14,629 --> 01:20:12,080

controlling the introduction of

1051  
01:20:16,629 --> 01:20:14,639  
biological contaminants from earth

1052  
01:20:18,790 --> 01:20:16,639  
to other celestial bodies we call that

1053  
01:20:20,550 --> 01:20:18,800  
forward contamination but it also

1054  
01:20:22,149 --> 01:20:20,560  
includes protecting our own biosphere

1055  
01:20:24,310 --> 01:20:22,159  
here on earth from potentially harmful

1056  
01:20:26,070 --> 01:20:24,320  
biological contamination from things

1057  
01:20:28,229 --> 01:20:26,080  
like returning spacecraft we call that

1058  
01:20:30,149 --> 01:20:28,239  
backward contamination

1059  
01:20:32,310 --> 01:20:30,159  
so as we prepare for human exploration

1060  
01:20:34,390 --> 01:20:32,320  
of mars and other solar system bodies as

1061  
01:20:36,390 --> 01:20:34,400  
the vice president mentioned now is the

1062  
01:20:39,110 --> 01:20:36,400  
time to review and update our planetary

1063  
01:20:40,709 --> 01:20:39,120

protection policy existing u.s policy

1064

01:20:41,990 --> 01:20:40,719

was established back in the apollo

1065

01:20:44,070 --> 01:20:42,000

program and it's not really been

1066

01:20:46,470 --> 01:20:44,080

substantively updated since then so it's

1067

01:20:47,510 --> 01:20:46,480

been many decades meanwhile of course as

1068

01:20:49,270 --> 01:20:47,520

you all know they've been very very

1069

01:20:51,189 --> 01:20:49,280

significant technological and research

1070

01:20:53,110 --> 01:20:51,199

developments in the field of space a lot

1071

01:20:54,709 --> 01:20:53,120

of new actors including a lot of private

1072

01:20:57,110 --> 01:20:54,719

companies and so things are accelerating

1073

01:20:58,870 --> 01:20:57,120

very dramatically so to address this

1074

01:21:00,709 --> 01:20:58,880

challenge ostp and the national space

1075

01:21:01,990 --> 01:21:00,719

council staff all the wonderful folks

1076

01:21:03,910 --> 01:21:02,000

here have partnered over the past six

1077

01:21:05,750 --> 01:21:03,920

months to co-lead an interagency working

1078

01:21:07,910 --> 01:21:05,760

group on planetary protection it's

1079

01:21:09,750 --> 01:21:07,920

really a whole of government effort and

1080

01:21:11,830 --> 01:21:09,760

we deliberated several topics first of

1081

01:21:13,189 --> 01:21:11,840

course as i mentioned how to accelerate

1082

01:21:15,030 --> 01:21:13,199

commercial space exploration and

1083

01:21:17,189 --> 01:21:15,040

development while we also preserve the

1084

01:21:19,750 --> 01:21:17,199

scientific integrity in the search for

1085

01:21:21,910 --> 01:21:19,760

life on other terrestrial bodies we want

1086

01:21:24,149 --> 01:21:21,920

to avoid that that backward

1087

01:21:26,709 --> 01:21:24,159

contamination to earth likewise we want

1088

01:21:28,950 --> 01:21:26,719

to avoid that forward contamination

1089

01:21:30,470 --> 01:21:28,960

as well and then also third making sure

1090

01:21:31,669 --> 01:21:30,480

that private sector activities are

1091

01:21:33,669 --> 01:21:31,679

protected because we all know that

1092

01:21:35,590 --> 01:21:33,679

commercial activities as we've seen here

1093

01:21:37,430 --> 01:21:35,600

are extremely important so looking

1094

01:21:39,110 --> 01:21:37,440

forward to planetary protection has to

1095

01:21:41,030 --> 01:21:39,120

really be a key element of strategy and

1096

01:21:42,709 --> 01:21:41,040

it certainly is across all the federal

1097

01:21:44,709 --> 01:21:42,719

government but also with our academic

1098

01:21:46,629 --> 01:21:44,719

and our industry partners we want to

1099

01:21:48,550 --> 01:21:46,639

absolutely ensure a safe sustainable and

1100

01:21:50,629 --> 01:21:48,560

predictable earth and space environment

1101  
01:21:51,990 --> 01:21:50,639  
as we continue to advance u.s leadership

1102  
01:21:54,550 --> 01:21:52,000  
in space exploration and

1103  
01:21:56,390 --> 01:21:54,560  
commercialization mr vice president i am

1104  
01:21:58,070 --> 01:21:56,400  
completely grateful to the wonderful

1105  
01:21:59,750 --> 01:21:58,080  
opportunity you've provided to me and

1106  
01:22:01,430 --> 01:21:59,760  
others at ostp to work with all these

1107  
01:22:02,790 --> 01:22:01,440  
great folks on the national space

1108  
01:22:04,310 --> 01:22:02,800  
council on these initiatives over the

1109  
01:22:05,830 --> 01:22:04,320  
last several months and years and we

1110  
01:22:07,430 --> 01:22:05,840  
look forward to that the wonderful days

1111  
01:22:10,470 --> 01:22:07,440  
that lay ahead for america in space

1112  
01:22:12,709 --> 01:22:10,480  
thank you very much mr vice president

1113  
01:22:14,550 --> 01:22:12,719

thank you so much

1114

01:22:16,470 --> 01:22:14,560

great job

1115

01:22:18,470 --> 01:22:16,480

[Applause]

1116

01:22:21,030 --> 01:22:18,480

one of the enduring

1117

01:22:22,629 --> 01:22:21,040

lessons that i've learned as

1118

01:22:24,709 --> 01:22:22,639

chairman of the national space council

1119

01:22:25,750 --> 01:22:24,719

as you actually have weather in space

1120

01:22:27,510 --> 01:22:25,760

so

1121

01:22:30,470 --> 01:22:27,520

thanks for your great leadership on that

1122

01:22:33,590 --> 01:22:30,480

and uh so vitally important

1123

01:22:35,830 --> 01:22:33,600

to our nation's uh economy and nation's

1124

01:22:38,629 --> 01:22:35,840

security as you mentioned so

1125

01:22:40,629 --> 01:22:38,639

thank you kelvin great report

1126

01:22:42,390 --> 01:22:40,639

we've talked a lot about

1127

01:22:44,229 --> 01:22:42,400

the impact on the economy on this

1128

01:22:46,950 --> 01:22:44,239

national space council over the course

1129

01:22:47,990 --> 01:22:46,960

of the past four years we've talked just

1130

01:22:49,750 --> 01:22:48,000

as much

1131

01:22:51,510 --> 01:22:49,760

about our national security and as i

1132

01:22:53,910 --> 01:22:51,520

reflected in my opening

1133

01:22:55,510 --> 01:22:53,920

remarks

1134

01:22:58,070 --> 01:22:55,520

with the encouragement of all the

1135

01:22:59,750 --> 01:22:58,080

members of the national space council

1136

01:23:00,950 --> 01:22:59,760

this administration has taken strong

1137

01:23:02,229 --> 01:23:00,960

strides

1138

01:23:03,990 --> 01:23:02,239

to advance

1139

01:23:05,750 --> 01:23:04,000

our national security

1140

01:23:07,669 --> 01:23:05,760

in space

1141

01:23:09,990 --> 01:23:07,679

so today i wanted to turn our attention

1142

01:23:11,350 --> 01:23:10,000

to our security issues for the first

1143

01:23:13,669 --> 01:23:11,360

time

1144

01:23:15,990 --> 01:23:13,679

in his role as director of national

1145

01:23:18,070 --> 01:23:16,000

intelligence john radcliffe joins us

1146

01:23:20,790 --> 01:23:18,080

today he's going to provide an update

1147

01:23:23,110 --> 01:23:20,800

on international space threats

1148

01:23:24,950 --> 01:23:23,120

and the competition that we face john

1149

01:23:26,629 --> 01:23:24,960

you and i have talked you wrote a

1150

01:23:27,510 --> 01:23:26,639

compelling piece over the last several

1151

01:23:29,590 --> 01:23:27,520

days

1152

01:23:32,470 --> 01:23:29,600

particularly about

1153

01:23:33,430 --> 01:23:32,480

about the strategic competition that

1154

01:23:36,390 --> 01:23:33,440

china

1155

01:23:37,590 --> 01:23:36,400

poses us here on earth as well as in the

1156

01:23:39,990 --> 01:23:37,600

heavens

1157

01:23:41,510 --> 01:23:40,000

we appreciate your leadership very much

1158

01:23:44,950 --> 01:23:41,520

but as i said before i think you

1159

01:23:46,390 --> 01:23:44,960

understand the president understands his

1160

01:23:48,149 --> 01:23:46,400

space is a vacuum but we're not

1161

01:23:50,229 --> 01:23:48,159

operating in a vacuum especially when it

1162

01:23:51,669 --> 01:23:50,239

pertains to the security

1163

01:23:53,990 --> 01:23:51,679

of the people of the united states of

1164

01:23:55,669 --> 01:23:54,000

america so join me in in welcoming the

1165

01:23:58,149 --> 01:23:55,679

director of the national

1166

01:24:00,070 --> 01:23:58,159

net director of national intelligence

1167

01:24:02,530 --> 01:24:00,080

our dni john radcliffe in the national

1168

01:24:06,149 --> 01:24:02,540

space council

1169

01:24:08,229 --> 01:24:06,159

[Applause]

1170

01:24:10,709 --> 01:24:08,239

thank you mr vice president and let me

1171

01:24:12,310 --> 01:24:10,719

start i know this is a common refrain as

1172

01:24:13,990 --> 01:24:12,320

you listen to all my fellow council

1173

01:24:15,669 --> 01:24:14,000

members but it's because

1174

01:24:18,790 --> 01:24:15,679

we all marvel

1175

01:24:20,870 --> 01:24:18,800

at your success and leadership uh over

1176  
01:24:22,629 --> 01:24:20,880  
this space council and i think everyone

1177  
01:24:24,550 --> 01:24:22,639  
here wants to express our

1178  
01:24:26,550 --> 01:24:24,560  
gratitude and appreciation from the

1179  
01:24:29,270 --> 01:24:26,560  
council and on behalf of a grateful

1180  
01:24:31,350 --> 01:24:29,280  
nation so thank you very much

1181  
01:24:33,430 --> 01:24:31,360  
to my fellow council members thank you

1182  
01:24:35,510 --> 01:24:33,440  
for allowing me to update you on the

1183  
01:24:37,110 --> 01:24:35,520  
threats that we face in space

1184  
01:24:38,149 --> 01:24:37,120  
and how the intelligence community is

1185  
01:24:40,950 --> 01:24:38,159  
taking

1186  
01:24:42,629 --> 01:24:40,960  
unprecedented action in order to

1187  
01:24:45,669 --> 01:24:42,639  
increase the effectiveness of our

1188  
01:24:48,070 --> 01:24:45,679

national security space enterprise

1189

01:24:50,390 --> 01:24:48,080

and to respond to the president's new

1190

01:24:52,790 --> 01:24:50,400

space policy

1191

01:24:55,110 --> 01:24:52,800

by almost any measure the dramatic

1192

01:24:57,910 --> 01:24:55,120

increases in space related capabilities

1193

01:25:00,310 --> 01:24:57,920

and services over the past decade have

1194

01:25:03,189 --> 01:25:00,320

been game changers with profound

1195

01:25:06,229 --> 01:25:03,199

implications for life on earth currently

1196

01:25:08,310 --> 01:25:06,239

over 80 nations operate in space and 50

1197

01:25:10,390 --> 01:25:08,320

countries have dedicated government

1198

01:25:12,390 --> 01:25:10,400

budgets for space

1199

01:25:14,790 --> 01:25:12,400

and governments are not the only players

1200

01:25:17,110 --> 01:25:14,800

in space dozens of new commercial space

1201  
01:25:19,350 --> 01:25:17,120  
companies have emerged with plans to

1202  
01:25:22,229 --> 01:25:19,360  
launch tens of thousands of satellites

1203  
01:25:23,990 --> 01:25:22,239  
in the coming years more than all of the

1204  
01:25:27,110 --> 01:25:24,000  
satellites that have been launched since

1205  
01:25:30,310 --> 01:25:27,120  
the dawn of the space of the space age

1206  
01:25:32,390 --> 01:25:30,320  
over the past five years u s companies

1207  
01:25:34,390 --> 01:25:32,400  
have launched more commercial remote

1208  
01:25:35,990 --> 01:25:34,400  
sensing satellites into orbit than the

1209  
01:25:38,149 --> 01:25:36,000  
rest of the world

1210  
01:25:40,229 --> 01:25:38,159  
but today that trend is reversing

1211  
01:25:42,390 --> 01:25:40,239  
the national geospatial intelligence

1212  
01:25:44,310 --> 01:25:42,400  
agency which i oversee

1213  
01:25:46,550 --> 01:25:44,320

predicts that in this decade the rest of

1214

01:25:48,629 --> 01:25:46,560

the world will launch at least twice as

1215

01:25:51,350 --> 01:25:48,639

many commercial remote sensing

1216

01:25:54,470 --> 01:25:51,360

satellites as the united states

1217

01:25:56,709 --> 01:25:54,480

economically the global space industry

1218

01:25:58,149 --> 01:25:56,719

has grown rapidly in recent years and is

1219

01:26:01,669 --> 01:25:58,159

now approaching

1220

01:26:04,550 --> 01:26:01,679

500 billion dollars in annual revenue

1221

01:26:06,550 --> 01:26:04,560

but more critical is that broad sectors

1222

01:26:09,669 --> 01:26:06,560

of the u s economy have come to rely

1223

01:26:11,910 --> 01:26:09,679

upon space related capabilities our

1224

01:26:14,870 --> 01:26:11,920

estimates suggest that industries with

1225

01:26:17,830 --> 01:26:14,880

reliance on space based services now

1226  
01:26:19,669 --> 01:26:17,840  
contribute over five trillion dollars to

1227  
01:26:20,950 --> 01:26:19,679  
our gross domestic product

1228  
01:26:23,430 --> 01:26:20,960  
simply put

1229  
01:26:25,990 --> 01:26:23,440  
we depend on space systems as critical

1230  
01:26:27,590 --> 01:26:26,000  
infrastructure directly supporting the

1231  
01:26:29,990 --> 01:26:27,600  
american way of life

1232  
01:26:31,110 --> 01:26:30,000  
if these space based services are

1233  
01:26:33,830 --> 01:26:31,120  
disrupted

1234  
01:26:36,390 --> 01:26:33,840  
we could see adverse effects on nearly

1235  
01:26:37,990 --> 01:26:36,400  
all sectors of the us economy

1236  
01:26:41,430 --> 01:26:38,000  
including consumers

1237  
01:26:43,350 --> 01:26:41,440  
consumer supply chains transportation

1238  
01:26:46,470 --> 01:26:43,360

telecommute telecommunications

1239

01:26:48,950 --> 01:26:46,480

agriculture and finance

1240

01:26:51,030 --> 01:26:48,960

mr vice president and fellow members to

1241

01:26:53,590 --> 01:26:51,040

a degree unparalleled in american

1242

01:26:56,550 --> 01:26:53,600

history the nation's economy and

1243

01:26:58,870 --> 01:26:56,560

security rely upon space systems

1244

01:27:01,510 --> 01:26:58,880

that our competitors are challenging and

1245

01:27:02,830 --> 01:27:01,520

that our adversaries are increasingly

1246

01:27:05,669 --> 01:27:02,840

increasingly

1247

01:27:07,189 --> 01:27:05,679

threatening to that point

1248

01:27:10,390 --> 01:27:07,199

america's vital interests are

1249

01:27:11,430 --> 01:27:10,400

increasingly at risk as china and russia

1250

01:27:13,990 --> 01:27:11,440

develop

1251  
01:27:16,149 --> 01:27:14,000  
and field destructive weapons to

1252  
01:27:17,669 --> 01:27:16,159  
threaten u.s and allied space

1253  
01:27:19,830 --> 01:27:17,679  
capabilities

1254  
01:27:21,750 --> 01:27:19,840  
as i wrote in an op-ed published in the

1255  
01:27:24,149 --> 01:27:21,760  
wall street journal last week the

1256  
01:27:25,830 --> 01:27:24,159  
intelligence is clear china poses the

1257  
01:27:27,910 --> 01:27:25,840  
greatest national security threat to the

1258  
01:27:30,550 --> 01:27:27,920  
united states and that includes china's

1259  
01:27:32,310 --> 01:27:30,560  
actions in space where china

1260  
01:27:34,470 --> 01:27:32,320  
is pursuing weapons capable of

1261  
01:27:36,629 --> 01:27:34,480  
destroying our satellites up to

1262  
01:27:39,030 --> 01:27:36,639  
geosynchronous earth orbit

1263  
01:27:40,390 --> 01:27:39,040

where many of our critical space systems

1264

01:27:42,950 --> 01:27:40,400

reside

1265

01:27:45,350 --> 01:27:42,960

china has also deployed a ground-based

1266

01:27:48,149 --> 01:27:45,360

missile intended to target and destroy

1267

01:27:50,229 --> 01:27:48,159

satellites in low earth orbit

1268

01:27:51,669 --> 01:27:50,239

russia has a similar system to china in

1269

01:27:53,750 --> 01:27:51,679

development that is likely to be

1270

01:27:55,750 --> 01:27:53,760

operational in the next several years

1271

01:27:57,590 --> 01:27:55,760

and russia has also fielded a

1272

01:27:59,510 --> 01:27:57,600

ground-based laser weapon which could

1273

01:28:02,229 --> 01:27:59,520

blind or damage

1274

01:28:03,590 --> 01:28:02,239

are space-based optical sensors

1275

01:28:05,510 --> 01:28:03,600

and i'll note

1276

01:28:07,590 --> 01:28:05,520

that russia in particular has recently

1277

01:28:09,510 --> 01:28:07,600

demonstrated provocative behavior

1278

01:28:11,270 --> 01:28:09,520

creating a potentially dangerous

1279

01:28:12,550 --> 01:28:11,280

situation in space over the past year

1280

01:28:14,310 --> 01:28:12,560

the russian government as the vice

1281

01:28:16,629 --> 01:28:14,320

president noted launched a satellite

1282

01:28:19,270 --> 01:28:16,639

that began to actively maneuver close to

1283

01:28:21,350 --> 01:28:19,280

a u.s government satellite

1284

01:28:23,669 --> 01:28:21,360

i want to make clear to the members of

1285

01:28:25,270 --> 01:28:23,679

this council that we consider this to be

1286

01:28:27,189 --> 01:28:25,280

threatening behavior

1287

01:28:29,110 --> 01:28:27,199

especially considering that the russians

1288

01:28:31,350 --> 01:28:29,120

have previously launched a very similar

1289

01:28:33,430 --> 01:28:31,360

satellite that exhibited characteristics

1290

01:28:35,590 --> 01:28:33,440

of a weapon when it released a

1291

01:28:36,950 --> 01:28:35,600

high-speed projectile

1292

01:28:40,070 --> 01:28:36,960

our space force

1293

01:28:43,189 --> 01:28:40,080

chief general raymond agreed by recently

1294

01:28:46,310 --> 01:28:43,199

saying this is not the behavior of a

1295

01:28:47,830 --> 01:28:46,320

responsible space-faring nation

1296

01:28:49,669 --> 01:28:47,840

in short

1297

01:28:52,390 --> 01:28:49,679

the threat to the united states and

1298

01:28:55,270 --> 01:28:52,400

allied space systems continue to grow

1299

01:28:57,430 --> 01:28:55,280

and we should not allow that threat to

1300

01:28:59,350 --> 01:28:57,440

grow unabated

1301

01:29:01,110 --> 01:28:59,360

and because of that

1302

01:29:04,709 --> 01:29:01,120

the president's new national space

1303

01:29:05,910 --> 01:29:04,719

policy recognizes that space is and

1304

01:29:08,790 --> 01:29:05,920

should be

1305

01:29:10,550 --> 01:29:08,800

a priority intelligence domain

1306

01:29:13,110 --> 01:29:10,560

something the intelligence community has

1307

01:29:14,470 --> 01:29:13,120

already begun to take action on

1308

01:29:16,070 --> 01:29:14,480

and to move out

1309

01:29:18,149 --> 01:29:16,080

earlier this year

1310

01:29:21,669 --> 01:29:18,159

we directed our intelligence agencies to

1311

01:29:23,830 --> 01:29:21,679

increase to support to space defense and

1312

01:29:25,030 --> 01:29:23,840

added new funding to counter space

1313

01:29:27,030 --> 01:29:25,040

threats

1314

01:29:29,350 --> 01:29:27,040

although those numbers are classified

1315

01:29:31,910 --> 01:29:29,360

this represents a significant new

1316

01:29:34,229 --> 01:29:31,920

investment which will directly address

1317

01:29:35,990 --> 01:29:34,239

the emerging intelligence requirements

1318

01:29:37,270 --> 01:29:36,000

of the space force

1319

01:29:39,270 --> 01:29:37,280

additionally

1320

01:29:41,590 --> 01:29:39,280

we are working directly with space force

1321

01:29:44,070 --> 01:29:41,600

leadership to create a new

1322

01:29:45,350 --> 01:29:44,080

national space intelligence center which

1323

01:29:47,430 --> 01:29:45,360

will deliver

1324

01:29:49,669 --> 01:29:47,440

intelligence support necessary to

1325

01:29:51,590 --> 01:29:49,679

achieve our national security objectives

1326

01:29:53,990 --> 01:29:51,600

the establishment of this new center

1327

01:29:56,870 --> 01:29:54,000

will provide the nation unparalleled

1328

01:29:59,189 --> 01:29:56,880

scientific and technical intelligence on

1329

01:30:00,390 --> 01:29:59,199

space related threats and it will serve

1330

01:30:02,550 --> 01:30:00,400

as the

1331

01:30:04,390 --> 01:30:02,560

service intelligence center for the

1332

01:30:06,310 --> 01:30:04,400

space force

1333

01:30:08,950 --> 01:30:06,320

as i described earlier america's

1334

01:30:11,750 --> 01:30:08,960

entrepreneurs and innovators are

1335

01:30:14,149 --> 01:30:11,760

demonstrating amazing new capabilities

1336

01:30:16,950 --> 01:30:14,159

in commercial space marketplace

1337

01:30:19,189 --> 01:30:16,960

the new national space policy recognizes

1338

01:30:20,470 --> 01:30:19,199

that the rapidly expanding commercial

1339

01:30:23,510 --> 01:30:20,480

space industry

1340

01:30:25,750 --> 01:30:23,520

is a vital element of national power

1341

01:30:28,070 --> 01:30:25,760

consistent with this recognition i

1342

01:30:30,470 --> 01:30:28,080

recently approved the creation

1343

01:30:34,149 --> 01:30:30,480

of the intelligence community commercial

1344

01:30:36,470 --> 01:30:34,159

space council this is a high level forum

1345

01:30:38,950 --> 01:30:36,480

which will facilitate collaboration

1346

01:30:40,790 --> 01:30:38,960

across the intelligence community and

1347

01:30:42,390 --> 01:30:40,800

with industry focusing on the

1348

01:30:45,189 --> 01:30:42,400

intersection of commercial space

1349

01:30:46,790 --> 01:30:45,199

services and national security

1350

01:30:48,470 --> 01:30:46,800

the council will deepen our

1351  
01:30:50,790 --> 01:30:48,480  
understanding of the capabilities and

1352  
01:30:53,270 --> 01:30:50,800  
trends of both the united states and

1353  
01:30:55,270 --> 01:30:53,280  
foreign commercial space industries

1354  
01:30:57,750 --> 01:30:55,280  
it will provide recommendations to

1355  
01:30:59,910 --> 01:30:57,760  
bolster our use of commercial space

1356  
01:31:03,189 --> 01:30:59,920  
capabilities and it will support the

1357  
01:31:05,750 --> 01:31:03,199  
growth of a robust u.s commercial space

1358  
01:31:07,750 --> 01:31:05,760  
industry that is responsive to our

1359  
01:31:10,390 --> 01:31:07,760  
national security needs

1360  
01:31:11,990 --> 01:31:10,400  
as an example of our increasing

1361  
01:31:14,070 --> 01:31:12,000  
engagement with the commercial space

1362  
01:31:16,229 --> 01:31:14,080  
sector the national reconnaissance

1363  
01:31:19,430 --> 01:31:16,239

office or nro recently conducted a

1364

01:31:22,629 --> 01:31:19,440

national security mission on a small

1365

01:31:24,470 --> 01:31:22,639

commercial rocket launched from outside

1366

01:31:26,629 --> 01:31:24,480

of the united states an achievement

1367

01:31:28,149 --> 01:31:26,639

which was a first for our intelligence

1368

01:31:30,310 --> 01:31:28,159

community

1369

01:31:32,470 --> 01:31:30,320

the new national space policy also

1370

01:31:35,030 --> 01:31:32,480

recognizes that the intelligence

1371

01:31:38,070 --> 01:31:35,040

community and the department of defense

1372

01:31:41,189 --> 01:31:38,080

are co-equal partners in the national

1373

01:31:43,189 --> 01:31:41,199

security space enterprise with both

1374

01:31:46,870 --> 01:31:43,199

operating a variety of spacecraft that

1375

01:31:48,550 --> 01:31:46,880

perform vital missions to our nation

1376

01:31:50,709 --> 01:31:48,560

however countering the increasing

1377

01:31:52,870 --> 01:31:50,719

threats we face now and in the future

1378

01:31:54,950 --> 01:31:52,880

will require an even

1379

01:31:57,750 --> 01:31:54,960

higher level of collaboration and

1380

01:31:59,750 --> 01:31:57,760

integration than in the past

1381

01:32:01,350 --> 01:31:59,760

previously we reported to this council

1382

01:32:03,510 --> 01:32:01,360

that the intelligence community and

1383

01:32:06,149 --> 01:32:03,520

department of defense have agreed to

1384

01:32:07,510 --> 01:32:06,159

align u.s space command

1385

01:32:10,709 --> 01:32:07,520

and the nro

1386

01:32:12,950 --> 01:32:10,719

under a new protect and defend strategy

1387

01:32:15,430 --> 01:32:12,960

for the purposes of jointly guarding our

1388

01:32:18,390 --> 01:32:15,440

vital space systems

1389

01:32:20,470 --> 01:32:18,400

should a conflict ever extend to space

1390

01:32:22,149 --> 01:32:20,480

for the first time

1391

01:32:24,629 --> 01:32:22,159

there will be a unified structure that

1392

01:32:26,550 --> 01:32:24,639

fully integrates intelligence and

1393

01:32:29,270 --> 01:32:26,560

defense plans authorities and

1394

01:32:32,470 --> 01:32:29,280

capabilities to ensure seamless

1395

01:32:34,470 --> 01:32:32,480

execution of space defense actions

1396

01:32:36,709 --> 01:32:34,480

i'm pleased to report that the nro and

1397

01:32:39,669 --> 01:32:36,719

space command are testing this emerging

1398

01:32:41,510 --> 01:32:39,679

construct in a series of war games and

1399

01:32:42,870 --> 01:32:41,520

experiments that are designed to

1400

01:32:45,430 --> 01:32:42,880

pressure test

1401

01:32:46,950 --> 01:32:45,440

the new arrangement before space command

1402

01:32:49,350 --> 01:32:46,960

reaches its full

1403

01:32:50,950 --> 01:32:49,360

operational capability

1404

01:32:53,750 --> 01:32:50,960

finally

1405

01:32:54,950 --> 01:32:53,760

i am very pleased to report that my team

1406

01:32:57,030 --> 01:32:54,960

at the office of the director of

1407

01:32:58,790 --> 01:32:57,040

national intelligence is working

1408

01:33:00,870 --> 01:32:58,800

with our space force leadership to

1409

01:33:03,910 --> 01:33:00,880

evaluate the potential for the space

1410

01:33:06,550 --> 01:33:03,920

force to become the 18th member of the

1411

01:33:08,709 --> 01:33:06,560

united states intelligence community

1412

01:33:11,110 --> 01:33:08,719

we anticipate a decision on this

1413

01:33:12,550 --> 01:33:11,120

history-making opportunity in the next

1414

01:33:14,950 --> 01:33:12,560

month or two

1415

01:33:16,550 --> 01:33:14,960

which would profoundly strengthen the

1416

01:33:17,669 --> 01:33:16,560

partnership between the department of

1417

01:33:19,430 --> 01:33:17,679

defense

1418

01:33:21,270 --> 01:33:19,440

and our intelligence community in

1419

01:33:23,669 --> 01:33:21,280

conclusion

1420

01:33:26,149 --> 01:33:23,679

as adversaries increasingly threaten our

1421

01:33:29,030 --> 01:33:26,159

vital interests in space the actions

1422

01:33:32,070 --> 01:33:29,040

that i have described here for you today

1423

01:33:34,470 --> 01:33:32,080

plus many more of a classified nature

1424

01:33:36,709 --> 01:33:34,480

that i cannot discuss publicly will

1425

01:33:39,590 --> 01:33:36,719

continue to provide us with a

1426

01:33:43,030 --> 01:33:39,600

competitive advantage will allow us to

1427

01:33:45,669 --> 01:33:43,040

counter emergent threats in space and

1428

01:33:48,149 --> 01:33:45,679

allow us to achieve unified action

1429

01:33:50,149 --> 01:33:48,159

should conflict ever extend to space

1430

01:33:52,310 --> 01:33:50,159

i want to assure each of you my fellow

1431

01:33:55,030 --> 01:33:52,320

council members as well as the american

1432

01:33:58,070 --> 01:33:55,040

public that if our adversaries challenge

1433

01:34:00,790 --> 01:33:58,080

us in space they will face a truly

1434

01:34:02,390 --> 01:34:00,800

united national security space team

1435

01:34:03,510 --> 01:34:02,400

thank you again mr vice president for

1436

01:34:05,430 --> 01:34:03,520

the opportunity and members of the

1437

01:34:07,430 --> 01:34:05,440

council to address you

1438

01:34:12,229 --> 01:34:07,440

on these important efforts thanks very

1439

01:34:17,030 --> 01:34:14,709

mr excellent

1440

01:34:19,830 --> 01:34:17,040

uh well thank you thank you director

1441

01:34:22,790 --> 01:34:19,840

radcliffe thank you for

1442

01:34:24,790 --> 01:34:22,800

that uh that that stirring summary but

1443

01:34:26,790 --> 01:34:24,800

also thank you for the visionary

1444

01:34:27,910 --> 01:34:26,800

recommendation we very much look forward

1445

01:34:29,270 --> 01:34:27,920

to that

1446

01:34:31,750 --> 01:34:29,280

uh and

1447

01:34:34,709 --> 01:34:31,760

the the notion of adding

1448

01:34:37,110 --> 01:34:34,719

the united states space force to

1449

01:34:42,070 --> 01:34:37,120

the infrastructure of our intelligence

1450

01:34:46,550 --> 01:34:44,629

makes great sense and i just i want to

1451  
01:34:48,870 --> 01:34:46,560  
commend you for leaning into this and

1452  
01:34:50,229 --> 01:34:48,880  
making such a meaningful contribution

1453  
01:34:51,830 --> 01:34:50,239  
to this eighth meeting of the national

1454  
01:34:54,149 --> 01:34:51,840  
space council thank you very much thank

1455  
01:34:55,350 --> 01:34:54,159  
you very much john

1456  
01:34:57,109 --> 01:34:55,360  
there has always been a chair on the

1457  
01:34:59,270 --> 01:34:57,119  
national space council for the secretary

1458  
01:35:00,870 --> 01:34:59,280  
of defense and successive secretaries of

1459  
01:35:02,870 --> 01:35:00,880  
defense have

1460  
01:35:04,470 --> 01:35:02,880  
played the role and have been full

1461  
01:35:06,709 --> 01:35:04,480  
partners

1462  
01:35:09,189 --> 01:35:06,719  
in renewing america's commitment to our

1463  
01:35:10,950 --> 01:35:09,199

national security and space

1464

01:35:12,790 --> 01:35:10,960

we're deeply grateful to them

1465

01:35:17,030 --> 01:35:12,800

for their service but

1466

01:35:19,109 --> 01:35:17,040

but a common denominator a consistent uh

1467

01:35:21,510 --> 01:35:19,119

ally and advocate

1468

01:35:23,189 --> 01:35:21,520

uh for advancing america's national

1469

01:35:25,189 --> 01:35:23,199

security interests in space has been the

1470

01:35:27,030 --> 01:35:25,199

deputy secretary of defense

1471

01:35:29,510 --> 01:35:27,040

uh david norquist and i just want to

1472

01:35:32,550 --> 01:35:29,520

take this opportunity

1473

01:35:34,709 --> 01:35:32,560

to thank the deputy secretary of defense

1474

01:35:37,189 --> 01:35:34,719

for taking the guidance

1475

01:35:38,070 --> 01:35:37,199

of this national space council

1476

01:35:40,149 --> 01:35:38,080

taking the vision of the

1477

01:35:40,950 --> 01:35:40,159

commander-in-chief

1478

01:35:45,189 --> 01:35:40,960

and

1479

01:35:46,790 --> 01:35:45,199

uh at the department of defense you

1480

01:35:48,950 --> 01:35:46,800

you've made a great great difference in

1481

01:35:50,950 --> 01:35:48,960

the security of this country uh in the

1482

01:35:52,950 --> 01:35:50,960

vast expanse of space so join me in

1483

01:36:00,470 --> 01:35:52,960

thanking deputy secretary of defense

1484

01:36:03,750 --> 01:36:02,149

good afternoon everyone and thank you

1485

01:36:05,830 --> 01:36:03,760

vice president for chairing this meeting

1486

01:36:07,910 --> 01:36:05,840

today you just heard about some of the

1487

01:36:08,950 --> 01:36:07,920

challenges and threats facing us in

1488

01:36:09,990 --> 01:36:08,960

space

1489

01:36:12,229 --> 01:36:10,000

since the

1490

01:36:14,070 --> 01:36:12,239

last national space council meeting back

1491

01:36:17,030 --> 01:36:14,080

in may the department of defense has

1492

01:36:19,030 --> 01:36:17,040

made tremendous progress in adjusting to

1493

01:36:21,030 --> 01:36:19,040

the challenges of space as a warfighting

1494

01:36:22,390 --> 01:36:21,040

domain today i want to highlight our

1495

01:36:25,189 --> 01:36:22,400

developments across the department the

1496

01:36:26,709 --> 01:36:25,199

u.s space force u.s space command and

1497

01:36:28,629 --> 01:36:26,719

within the office of the secretary of

1498

01:36:30,310 --> 01:36:28,639

defense and in doing so i want to thank

1499

01:36:32,950 --> 01:36:30,320

those around the table

1500

01:36:35,030 --> 01:36:32,960

your efforts and partnerships are vital

1501

01:36:36,070 --> 01:36:35,040

to achieving our nation's objectives in

1502

01:36:37,510 --> 01:36:36,080

space

1503

01:36:38,790 --> 01:36:37,520

so let me begin with an update on the

1504

01:36:40,709 --> 01:36:38,800

space force

1505

01:36:41,830 --> 01:36:40,719

in order to grasp the magnitude of what

1506

01:36:44,310 --> 01:36:41,840

the department of defense has

1507

01:36:46,310 --> 01:36:44,320

accomplished it is worth pausing to

1508

01:36:47,830 --> 01:36:46,320

reflect on the timeline

1509

01:36:49,750 --> 01:36:47,840

the space force was officially

1510

01:36:52,629 --> 01:36:49,760

established when president trump signed

1511

01:36:56,229 --> 01:36:52,639

the fiscal year 2000 national defense

1512

01:36:58,229 --> 01:36:56,239

authorization act on december 20th 2019

1513

01:36:59,830 --> 01:36:58,239

less than one year ago

1514

01:37:01,990 --> 01:36:59,840

it was originally planned that the space

1515

01:37:02,950 --> 01:37:02,000

force would be established one year

1516

01:37:05,430 --> 01:37:02,960

after

1517

01:37:08,070 --> 01:37:05,440

the ndaa was signed so mr vice president

1518

01:37:09,430 --> 01:37:08,080

that would been 11 days from today

1519

01:37:11,350 --> 01:37:09,440

and i would have been spending today

1520

01:37:13,510 --> 01:37:11,360

explaining to the things we hoped to get

1521

01:37:14,790 --> 01:37:13,520

done and might get done

1522

01:37:17,270 --> 01:37:14,800

in the future

1523

01:37:19,030 --> 01:37:17,280

but instead the president and congress

1524

01:37:20,709 --> 01:37:19,040

understood the urgency

1525

01:37:23,350 --> 01:37:20,719

of strengthening our space-based

1526

01:37:25,750 --> 01:37:23,360

military capabilities and they directed

1527

01:37:27,270 --> 01:37:25,760

us to get right to work

1528

01:37:29,830 --> 01:37:27,280

following this spirit of speed we've

1529

01:37:32,229 --> 01:37:29,840

moved rapidly to advance the space force

1530

01:37:33,750 --> 01:37:32,239

and we have reached many milestones

1531

01:37:35,669 --> 01:37:33,760

operationally the space force has

1532

01:37:37,430 --> 01:37:35,679

launched satellites into space

1533

01:37:39,189 --> 01:37:37,440

and provided support to nasa's two

1534

01:37:42,470 --> 01:37:39,199

successful human space flights launched

1535

01:37:44,229 --> 01:37:42,480

from right here in cape canaveral

1536

01:37:45,830 --> 01:37:44,239

the space force is also engaged with our

1537

01:37:48,229 --> 01:37:45,840

allies and partners to enhance

1538

01:37:50,149 --> 01:37:48,239

cooperation in space we have now seen

1539

01:37:52,390 --> 01:37:50,159

them place a higher priority on this

1540

01:37:54,470 --> 01:37:52,400

domain as well

1541

01:37:56,629 --> 01:37:54,480

the uk which announced the creation of a

1542

01:37:58,310 --> 01:37:56,639

space command last month and france

1543

01:38:01,510 --> 01:37:58,320

which is adjusted from the air force now

1544

01:38:03,189 --> 01:38:01,520

having the french air and space force

1545

01:38:05,510 --> 01:38:03,199

through all of this the space force has

1546

01:38:07,270 --> 01:38:05,520

continued delivering new capabilities

1547

01:38:09,430 --> 01:38:07,280

for the united states

1548

01:38:11,990 --> 01:38:09,440

in fact in august the national

1549

01:38:14,950 --> 01:38:12,000

aeronautics association recognized our

1550

01:38:16,470 --> 01:38:14,960

x-37b space plane with one of its most

1551

01:38:18,390 --> 01:38:16,480

prestigious awards

1552

01:38:21,510 --> 01:38:18,400

a distinction also given to orville

1553

01:38:22,709 --> 01:38:21,520

wright and the apollo 11 team

1554

01:38:25,430 --> 01:38:22,719

structurally

1555

01:38:27,430 --> 01:38:25,440

we have created a new and leaner field

1556

01:38:28,470 --> 01:38:27,440

organization comprised of three field

1557

01:38:30,790 --> 01:38:28,480

commands

1558

01:38:32,310 --> 01:38:30,800

and nine space deltas that cover

1559

01:38:34,149 --> 01:38:32,320

missions such as intelligence

1560

01:38:36,149 --> 01:38:34,159

surveillance and reconnaissance

1561

01:38:38,550 --> 01:38:36,159

space electronic warfare

1562

01:38:40,790 --> 01:38:38,560

and space domain awareness

1563

01:38:43,109 --> 01:38:40,800

the space force's success thus far are

1564

01:38:44,709 --> 01:38:43,119

reflected in its people

1565

01:38:47,510 --> 01:38:44,719

since its founding it has grown

1566

01:38:49,030 --> 01:38:47,520

substantially which is a trend we expect

1567

01:38:51,350 --> 01:38:49,040

to continue

1568

01:38:53,270 --> 01:38:51,360

over the last three months more than 2

1569

01:38:54,390 --> 01:38:53,280

100 members have transferred from the

1570

01:38:56,070 --> 01:38:54,400

air force

1571

01:38:59,189 --> 01:38:56,080

into the space force

1572

01:39:01,270 --> 01:38:59,199

we anticipate that an additional 3700

1573

01:39:03,990 --> 01:39:01,280

airmen skilled in fields such as

1574

01:39:06,709 --> 01:39:04,000

intelligence acquisition engineering and

1575

01:39:07,830 --> 01:39:06,719

cyber will transfer in the next three

1576

01:39:09,590 --> 01:39:07,840

months

1577

01:39:12,229 --> 01:39:09,600

these men and women have great

1578

01:39:14,950 --> 01:39:12,239

leadership in general raymond will

1579

01:39:17,669 --> 01:39:14,960

become a statutory member soon of the

1580

01:39:20,070 --> 01:39:17,679

member of the joint chiefs of staff

1581

01:39:20,950 --> 01:39:20,080

with the right people and leadership in

1582

01:39:22,870 --> 01:39:20,960

place

1583

01:39:24,550 --> 01:39:22,880

we are focused on cultivating the

1584

01:39:26,709 --> 01:39:24,560

culture of the service

1585

01:39:27,830 --> 01:39:26,719

in this respect we have also made great

1586

01:39:29,669 --> 01:39:27,840

strides

1587

01:39:32,149 --> 01:39:29,679

for example just seven months after the

1588

01:39:35,750 --> 01:39:32,159

space force was established the service

1589

01:39:38,470 --> 01:39:35,760

released the space capstone publication

1590

01:39:40,629 --> 01:39:38,480

its first doctrine document

1591

01:39:42,709 --> 01:39:40,639

this is a military service's fundamental

1592

01:39:44,229 --> 01:39:42,719

responsibility because it articulates

1593

01:39:46,950 --> 01:39:44,239

their unique purpose

1594

01:39:49,590 --> 01:39:46,960

identity and operational mindset and it

1595

01:39:51,189 --> 01:39:49,600

informs the joint doctrine

1596

01:39:53,270 --> 01:39:51,199

significantly the space capstone

1597

01:39:55,669 --> 01:39:53,280

publication identifies space power as a

1598

01:39:59,030 --> 01:39:55,679

distinct form of military power that is

1599

01:40:01,750 --> 01:39:59,040

vital to u.s prosperity and security

1600

01:40:04,149 --> 01:40:01,760

the space force's motto semper supra

1601  
01:40:06,709 --> 01:40:04,159  
captures their role well safeguarding

1602  
01:40:08,709 --> 01:40:06,719  
u.s advantages in the ultimate high

1603  
01:40:11,510 --> 01:40:08,719  
ground requires them to be

1604  
01:40:13,750 --> 01:40:11,520  
always above

1605  
01:40:14,950 --> 01:40:13,760  
next i'll provide an update on u.s space

1606  
01:40:17,270 --> 01:40:14,960  
command

1607  
01:40:19,990 --> 01:40:17,280  
just as we have at c it is important to

1608  
01:40:23,189 --> 01:40:20,000  
establish responsible standards and

1609  
01:40:24,790 --> 01:40:23,199  
norms in space u.s space command is

1610  
01:40:27,270 --> 01:40:24,800  
promoting these efforts and calling out

1611  
01:40:29,270 --> 01:40:27,280  
those like russia who violate these

1612  
01:40:31,030 --> 01:40:29,280  
standards and norms

1613  
01:40:32,790 --> 01:40:31,040

in august we welcome general dickinson

1614

01:40:35,430 --> 01:40:32,800

to the helm through u.s space command's

1615

01:40:37,510 --> 01:40:35,440

first change of command ceremony

1616

01:40:39,669 --> 01:40:37,520

he made history by becoming the first

1617

01:40:40,950 --> 01:40:39,679

army general to lead the combatant

1618

01:40:42,470 --> 01:40:40,960

command

1619

01:40:44,229 --> 01:40:42,480

i should note that his predecessor

1620

01:40:47,350 --> 01:40:44,239

general raymond had served in a dual

1621

01:40:49,910 --> 01:40:47,360

capacity chief of space operations and

1622

01:40:51,350 --> 01:40:49,920

commander of u.s space command the

1623

01:40:53,270 --> 01:40:51,360

department is grateful to general

1624

01:40:56,629 --> 01:40:53,280

raymond for stepping up to serve in

1625

01:40:58,470 --> 01:40:56,639

these two consequential roles

1626

01:40:59,830 --> 01:40:58,480

finally i would be remiss if i didn't

1627

01:41:01,910 --> 01:40:59,840

share the progress the department has

1628

01:41:04,070 --> 01:41:01,920

made within the pentagon

1629

01:41:05,109 --> 01:41:04,080

in june we released a new defense space

1630

01:41:06,870 --> 01:41:05,119

strategy

1631

01:41:08,950 --> 01:41:06,880

over the next 10 years this document

1632

01:41:10,709 --> 01:41:08,960

will guide the department in achieving

1633

01:41:12,950 --> 01:41:10,719

our desirable conditions for a space

1634

01:41:15,270 --> 01:41:12,960

domain that is secure

1635

01:41:17,270 --> 01:41:15,280

stable and accessible

1636

01:41:18,790 --> 01:41:17,280

similar to our national defense strategy

1637

01:41:20,310 --> 01:41:18,800

we pursue our objectives through four

1638

01:41:22,470 --> 01:41:20,320

lines of effort

1639

01:41:24,310 --> 01:41:22,480

these are build a comprehensive military

1640

01:41:26,470 --> 01:41:24,320

advantage in space

1641

01:41:29,189 --> 01:41:26,480

integrate space into national

1642

01:41:31,270 --> 01:41:29,199

joint and combined operations

1643

01:41:33,270 --> 01:41:31,280

shape the strategic environment

1644

01:41:35,669 --> 01:41:33,280

and cooperate with allies

1645

01:41:37,430 --> 01:41:35,679

partners industry and other government

1646

01:41:38,709 --> 01:41:37,440

departments and agencies

1647

01:41:40,470 --> 01:41:38,719

if you have not done so i had a chance

1648

01:41:41,830 --> 01:41:40,480

to read it yet i would encourage you all

1649

01:41:43,350 --> 01:41:41,840

to do so

1650

01:41:45,350 --> 01:41:43,360

it will give you a clear sense of how

1651  
01:41:48,390 --> 01:41:45,360  
the department's thinking has evolved on

1652  
01:41:50,790 --> 01:41:48,400  
space from a policy perspective

1653  
01:41:52,950 --> 01:41:50,800  
this defense space strategy served as a

1654  
01:41:54,709 --> 01:41:52,960  
part of our department's contribution to

1655  
01:41:57,350 --> 01:41:54,719  
the development of the new

1656  
01:41:58,870 --> 01:41:57,360  
national space policy which we are proud

1657  
01:42:00,709 --> 01:41:58,880  
to support

1658  
01:42:02,709 --> 01:42:00,719  
another indication of our prioritization

1659  
01:42:05,830 --> 01:42:02,719  
of space was creating an assistant

1660  
01:42:07,910 --> 01:42:05,840  
secretary of defense for space policy

1661  
01:42:09,910 --> 01:42:07,920  
i established this office in

1662  
01:42:12,629 --> 01:42:09,920  
response to the bipartisan fiscal year

1663  
01:42:14,390 --> 01:42:12,639

2000 national defense authorization act

1664

01:42:15,910 --> 01:42:14,400  
and to fulfill your due out mr vice

1665

01:42:18,470 --> 01:42:15,920  
president when you announced the space

1666

01:42:20,629 --> 01:42:18,480  
force in august 2018

1667

01:42:23,350 --> 01:42:20,639  
congress rightfully identified civilian

1668

01:42:25,910 --> 01:42:23,360  
oversight of the space enterprise as an

1669

01:42:27,510 --> 01:42:25,920  
area of necessary change

1670

01:42:30,070 --> 01:42:27,520  
the assistant secretary of defense for

1671

01:42:32,070 --> 01:42:30,080  
space policy will now be responsible for

1672

01:42:34,870 --> 01:42:32,080  
interagency coordination and

1673

01:42:36,390 --> 01:42:34,880  
international engagement on space policy

1674

01:42:38,709 --> 01:42:36,400  
and strategy

1675

01:42:40,310 --> 01:42:38,719  
with this elevated level of leadership

1676

01:42:43,189 --> 01:42:40,320

we will bring heightened focus to the

1677

01:42:44,950 --> 01:42:43,199

space domain as we prepare for long-term

1678

01:42:46,870 --> 01:42:44,960

strategic competition

1679

01:42:47,750 --> 01:42:46,880

and ensure alignment with the space

1680

01:42:49,910 --> 01:42:47,760

force

1681

01:42:52,149 --> 01:42:49,920

and u s space command

1682

01:42:54,390 --> 01:42:52,159

in conclusion the department of defense

1683

01:42:56,870 --> 01:42:54,400

has had a significant and successful

1684

01:42:59,350 --> 01:42:56,880

past seven months we remain committed to

1685

01:43:01,669 --> 01:42:59,360

continuing this important transformation

1686

01:43:04,310 --> 01:43:01,679

of our national security space program

1687

01:43:05,669 --> 01:43:04,320

which is prepares us for deterring the

1688

01:43:15,030 --> 01:43:05,679

high-end fight

1689

01:43:20,149 --> 01:43:17,669

i think thank you so much deputy

1690

01:43:22,229 --> 01:43:20,159

secretary norquist and and again i i

1691

01:43:23,430 --> 01:43:22,239

know i speak on behalf of

1692

01:43:26,070 --> 01:43:23,440

the president and everyone on the

1693

01:43:28,070 --> 01:43:26,080

national space council and uh

1694

01:43:29,750 --> 01:43:28,080

and our secretaries of defense over the

1695

01:43:30,870 --> 01:43:29,760

last four years when i say how grateful

1696

01:43:33,350 --> 01:43:30,880

we are

1697

01:43:34,470 --> 01:43:33,360

uh you are the you are the get it done

1698

01:43:36,310 --> 01:43:34,480

guy

1699

01:43:37,750 --> 01:43:36,320

at the pentagon and uh thanks for

1700

01:43:40,149 --> 01:43:37,760

getting it done

1701

01:43:42,629 --> 01:43:40,159

so quickly in standing up our

1702

01:43:44,790 --> 01:43:42,639

united states space force and in all the

1703

01:43:47,270 --> 01:43:44,800

ways that you've described

1704

01:43:50,149 --> 01:43:47,280

someone else who deserves a tremendous

1705

01:43:51,430 --> 01:43:50,159

amount of credit

1706

01:43:53,350 --> 01:43:51,440

is

1707

01:43:55,030 --> 01:43:53,360

i want to call on for maybe just a few

1708

01:43:56,229 --> 01:43:55,040

brief reflections following the deputy

1709

01:43:58,149 --> 01:43:56,239

secretary's

1710

01:44:00,229 --> 01:43:58,159

uh remarks he's a former commander of

1711

01:44:01,990 --> 01:44:00,239

the united states strategic

1712

01:44:03,990 --> 01:44:02,000

command

1713

01:44:06,870 --> 01:44:04,000

led forces in operation enduring freedom

1714

01:44:08,870 --> 01:44:06,880

operation iraqi freedom led

1715

01:44:11,109 --> 01:44:08,880

and commanded air force space command

1716

01:44:12,709 --> 01:44:11,119

and now fortunately

1717

01:44:14,390 --> 01:44:12,719

we arrive at a time in the moment in our

1718

01:44:16,790 --> 01:44:14,400

history when as we're standing up

1719

01:44:19,350 --> 01:44:16,800

american military leadership in space

1720

01:44:22,149 --> 01:44:19,360

the vice chairman of the joint chiefs of

1721

01:44:25,430 --> 01:44:22,159

staff brings a lifetime of dedication

1722

01:44:27,910 --> 01:44:25,440

and experience uh to america's military

1723

01:44:30,149 --> 01:44:27,920

security and space so let me uh

1724

01:44:31,270 --> 01:44:30,159

let me invite all gathered here uh first

1725

01:44:33,750 --> 01:44:31,280

to thank

1726

01:44:35,030 --> 01:44:33,760

uh general john heighton for his

1727

01:44:36,470 --> 01:44:35,040

lifetime

1728

01:44:37,270 --> 01:44:36,480

of service

1729

01:44:38,790 --> 01:44:37,280

and

1730

01:44:39,990 --> 01:44:38,800

general heighten any reflections that

1731

01:44:41,669 --> 01:44:40,000

you have

1732

01:44:50,070 --> 01:44:41,679

on this first year of the united states

1733

01:44:53,189 --> 01:44:51,510

thank you everybody thank you mr vice

1734

01:44:54,870 --> 01:44:53,199

president uh i have a million

1735

01:44:56,070 --> 01:44:54,880

reflections yeah to choose from

1736

01:44:58,229 --> 01:44:56,080

everything that's going through my mind

1737

01:44:59,430 --> 01:44:58,239

right now is is nearly impossible

1738

01:45:01,830 --> 01:44:59,440

because the

1739

01:45:03,189 --> 01:45:01,840

this is an exciting time this is a an

1740

01:45:05,270 --> 01:45:03,199

important time

1741

01:45:07,430 --> 01:45:05,280

but it's a time that as director

1742

01:45:08,470 --> 01:45:07,440

ratcliffe clearly pointed out we have a

1743

01:45:10,390 --> 01:45:08,480

threat

1744

01:45:11,830 --> 01:45:10,400

and and what we're doing and what we

1745

01:45:13,510 --> 01:45:11,840

have been doing is about how do we

1746

01:45:14,790 --> 01:45:13,520

respond to that threat

1747

01:45:16,709 --> 01:45:14,800

and the partnership we have with the

1748

01:45:17,990 --> 01:45:16,719

intelligence community is as strong as

1749

01:45:20,149 --> 01:45:18,000

it's ever been

1750

01:45:22,149 --> 01:45:20,159

uh and i was so excited to hear the

1751

01:45:23,350 --> 01:45:22,159

the concept of the space force being the

1752

01:45:25,910 --> 01:45:23,360

18th member of the intelligence

1753

01:45:28,070 --> 01:45:25,920

community that that that present

1754

01:45:29,189 --> 01:45:28,080

presents so many opportunities for us to

1755

01:45:31,510 --> 01:45:29,199

do things

1756

01:45:33,350 --> 01:45:31,520

in much better ways of how we do

1757

01:45:36,229 --> 01:45:33,360

surveillance how we do intelligence all

1758

01:45:37,830 --> 01:45:36,239

those things open up by just that simple

1759

01:45:39,990 --> 01:45:37,840

idea

1760

01:45:42,310 --> 01:45:40,000

so as i as i sit here

1761

01:45:45,189 --> 01:45:42,320

i'll just say that space command and the

1762

01:45:46,629 --> 01:45:45,199

space force have two basic functions

1763

01:45:48,550 --> 01:45:46,639

when you look at the saturn v that's

1764

01:45:51,270 --> 01:45:48,560

above us

1765

01:45:52,870 --> 01:45:51,280

you like to look up and dream and i was

1766

01:45:55,030 --> 01:45:52,880

involved in the previous edition of the

1767

01:45:56,470 --> 01:45:55,040

united states space command and and i'll

1768

01:45:58,229 --> 01:45:56,480

say that that command really like to

1769

01:46:00,870 --> 01:45:58,239

look up

1770

01:46:02,310 --> 01:46:00,880

surveil and we need to understand the

1771

01:46:03,990 --> 01:46:02,320

threat and and you heard the vice

1772

01:46:05,430 --> 01:46:04,000

president and the director of national

1773

01:46:07,510 --> 01:46:05,440

intelligence talk about the russian

1774

01:46:08,709 --> 01:46:07,520

threat that we watched very closely

1775

01:46:10,070 --> 01:46:08,719

through the partnerships we have with

1776

01:46:11,510 --> 01:46:10,080

our own sensors with the intelligence

1777

01:46:13,750 --> 01:46:11,520

community center so we know exactly

1778

01:46:14,950 --> 01:46:13,760

what's going on and exactly what they're

1779

01:46:16,709 --> 01:46:14,960

doing but

1780

01:46:19,109 --> 01:46:16,719

the reason the united states military is

1781

01:46:21,189 --> 01:46:19,119

in space is really to look down

1782

01:46:23,030 --> 01:46:21,199

to look down and make sure that our

1783

01:46:26,310 --> 01:46:23,040

planet is safe and that we support the

1784

01:46:27,669 --> 01:46:26,320

army the navy the air force the marines

1785

01:46:29,350 --> 01:46:27,679

all of the elements of our national

1786

01:46:31,830 --> 01:46:29,360

security support the joint force and

1787

01:46:33,189 --> 01:46:31,840

make sure that it is secure and and if

1788

01:46:35,030 --> 01:46:33,199

you look at everything that we do every

1789

01:46:36,790 --> 01:46:35,040

day and you heard the deputy talk about

1790

01:46:37,750 --> 01:46:36,800

the amazing organizational changes that

1791

01:46:39,350 --> 01:46:37,760

are under

1792

01:46:40,790 --> 01:46:39,360

but actually it's the mission and the

1793

01:46:42,709 --> 01:46:40,800

people that do that mission every day

1794

01:46:44,790 --> 01:46:42,719

that are the the key piece of it and you

1795

01:46:46,310 --> 01:46:44,800

just look back in january when when

1796

01:46:47,669 --> 01:46:46,320

missiles were launched from iran into

1797

01:46:50,070 --> 01:46:47,679

al-assad

1798

01:46:51,910 --> 01:46:50,080

in iraq and you look at the warning that

1799

01:46:53,350 --> 01:46:51,920

was provided immediately from the

1800

01:46:55,350 --> 01:46:53,360

operators in the united states space

1801  
01:46:56,149 --> 01:46:55,360  
command that allowed people to take

1802  
01:46:58,790 --> 01:46:56,159  
cover

1803  
01:47:00,390 --> 01:46:58,800  
and the in the exquisite indications and

1804  
01:47:01,830 --> 01:47:00,400  
warning that were put together by space

1805  
01:47:03,350 --> 01:47:01,840  
command people space force people

1806  
01:47:06,070 --> 01:47:03,360  
working together with the intelligence

1807  
01:47:08,470 --> 01:47:06,080  
community to make sure that no american

1808  
01:47:11,570 --> 01:47:08,480  
died in that attack that's a remarkable

1809  
01:47:18,550 --> 01:47:16,550  
[Applause]

1810  
01:47:19,990 --> 01:47:18,560  
so mr vice president thank you for your

1811  
01:47:21,990 --> 01:47:20,000  
leadership

1812  
01:47:23,669 --> 01:47:22,000  
it is actually a joy to work with you in

1813  
01:47:25,750 --> 01:47:23,679

any meeting i've ever been in

1814

01:47:28,229 --> 01:47:25,760

and and i want to say that uh

1815

01:47:29,590 --> 01:47:28,239

i look forward to the future uh

1816

01:47:31,990 --> 01:47:29,600

you know the one thing about all four

1817

01:47:33,669 --> 01:47:32,000

stars general raymond is that we're all

1818

01:47:34,550 --> 01:47:33,679

circling the drain

1819

01:47:36,870 --> 01:47:34,560

um

1820

01:47:37,990 --> 01:47:36,880

you know we're all pretty much done

1821

01:47:40,629 --> 01:47:38,000

uh

1822

01:47:42,310 --> 01:47:40,639

but the other thing about all of us

1823

01:47:44,149 --> 01:47:42,320

is man wouldn't you like to go back and

1824

01:47:45,830 --> 01:47:44,159

be a second lieutenant into in the

1825

01:47:47,109 --> 01:47:45,840

united states space force today and do

1826

01:47:48,870 --> 01:47:47,119

it all over again

1827

01:47:51,109 --> 01:47:48,880

that would be exciting so mr vice

1828

01:47:54,150 --> 01:47:51,119

president thank you

1829

01:48:00,070 --> 01:47:54,160

general john everybody

1830

01:48:03,350 --> 01:48:01,669

i think it's worth noting for the record

1831

01:48:05,189 --> 01:48:03,360

that i gave him absolutely no notice

1832

01:48:07,189 --> 01:48:05,199

prior to those remarks

1833

01:48:09,030 --> 01:48:07,199

i think i think i think you can hear the

1834

01:48:10,790 --> 01:48:09,040

heart and the mind of someone who's been

1835

01:48:13,830 --> 01:48:10,800

absolutely

1836

01:48:16,310 --> 01:48:13,840

committed for a lifetime to american

1837

01:48:18,149 --> 01:48:16,320

security and space and

1838

01:48:19,669 --> 01:48:18,159

i as i've said to you before general

1839

01:48:22,709 --> 01:48:19,679

heighten i can't help but feel that for

1840

01:48:24,390 --> 01:48:22,719

such a time as this you're vice chairman

1841

01:48:26,550 --> 01:48:24,400

of the joint chiefs of staff so thank

1842

01:48:28,550 --> 01:48:26,560

you for your stalwart leadership and a

1843

01:48:34,790 --> 01:48:28,560

lifetime of service join me in thanking

1844

01:48:38,229 --> 01:48:36,629

closer to home on security and i

1845

01:48:40,149 --> 01:48:38,239

apologize that i didn't give him any

1846

01:48:42,790 --> 01:48:40,159

notice at all the acting secretary of

1847

01:48:44,310 --> 01:48:42,800

the department of homeland security i've

1848

01:48:46,550 --> 01:48:44,320

come to know him

1849

01:48:47,510 --> 01:48:46,560

over the last four years of service and

1850

01:48:51,669 --> 01:48:47,520

uh

1851

01:48:54,790 --> 01:48:51,679

implementation

1852

01:48:56,550 --> 01:48:54,800

uh of american law security on our

1853

01:48:58,149 --> 01:48:56,560

border but the

1854

01:48:59,750 --> 01:48:58,159

members of the national space council

1855

01:49:02,550 --> 01:48:59,760

deserve to know that

1856

01:49:03,990 --> 01:49:02,560

under acting secretary chad wolf's

1857

01:49:05,669 --> 01:49:04,000

direction the department of homeland

1858

01:49:09,030 --> 01:49:05,679

security has also

1859

01:49:12,070 --> 01:49:09,040

been working to increase outreach to the

1860

01:49:15,589 --> 01:49:12,080

private sector to ensure cyber security

1861

01:49:17,750 --> 01:49:15,599

in space systems uh which is of equal

1862

01:49:19,189 --> 01:49:17,760

importance to our economy to the privacy

1863

01:49:22,070 --> 01:49:19,199

of the american people

1864

01:49:23,910 --> 01:49:22,080

so uh for uh a few minutes of

1865

01:49:25,430 --> 01:49:23,920

reflections on the progress the efforts

1866

01:49:27,430 --> 01:49:25,440

dhs has made

1867

01:49:29,189 --> 01:49:27,440

uh join me in thanking acting secretary

1868

01:49:29,520 --> 01:49:29,199

chad wolfe member of the national space

1869

01:49:33,990 --> 01:49:29,530

center

1870

01:49:35,910 --> 01:49:34,000

[Applause]

1871

01:49:37,430 --> 01:49:35,920

well let me start off by again

1872

01:49:39,109 --> 01:49:37,440

expressing my gratitude mr vice

1873

01:49:41,030 --> 01:49:39,119

president for your leadership of the

1874

01:49:43,750 --> 01:49:41,040

council as all of our council members

1875

01:49:45,510 --> 01:49:43,760

have said today the the work that not

1876

01:49:47,030 --> 01:49:45,520

only you but the

1877

01:49:49,109 --> 01:49:47,040

the staff have done over the last four

1878

01:49:52,229 --> 01:49:49,119

years and advancing american leadership

1879

01:49:53,589 --> 01:49:52,239

in this area i think is a testament

1880

01:49:54,790 --> 01:49:53,599

the department of homeland security as

1881

01:49:56,470 --> 01:49:54,800

you said

1882

01:49:59,189 --> 01:49:56,480

is hard at work in helping to implement

1883

01:50:01,669 --> 01:49:59,199

the national space policy in two primary

1884

01:50:03,030 --> 01:50:01,679

areas and that's in cyber security and

1885

01:50:05,270 --> 01:50:03,040

resilience

1886

01:50:07,109 --> 01:50:05,280

so what we call the left of launch or

1887

01:50:08,229 --> 01:50:07,119

before launch is a critically important

1888

01:50:10,709 --> 01:50:08,239

time

1889

01:50:13,189 --> 01:50:10,719

cyber security and supply chain security

1890

01:50:14,950 --> 01:50:13,199

of space systems is paramount and to

1891

01:50:17,109 --> 01:50:14,960

support this effort the department is

1892

01:50:19,270 --> 01:50:17,119

leveraging our relationships and our

1893

01:50:21,510 --> 01:50:19,280

processes with critical infrastructure

1894

01:50:22,790 --> 01:50:21,520

owners and operators around the country

1895

01:50:25,750 --> 01:50:22,800

through our cyber security and

1896

01:50:27,189 --> 01:50:25,760

infrastructure security agency or cisa

1897

01:50:29,109 --> 01:50:27,199

and cisa is leading the newly

1898

01:50:31,750 --> 01:50:29,119

established space information sharing

1899

01:50:33,510 --> 01:50:31,760

and analysis center or isac and that's a

1900

01:50:35,270 --> 01:50:33,520

form for u.s government and private

1901

01:50:37,189 --> 01:50:35,280

industry can share information and best

1902

01:50:39,350 --> 01:50:37,199

practices and we do that through a

1903

01:50:40,629 --> 01:50:39,360

number of other industries as well

1904

01:50:42,310 --> 01:50:40,639

we are also partnering with our

1905

01:50:44,229 --> 01:50:42,320

colleagues at the department of commerce

1906

01:50:45,109 --> 01:50:44,239

secretary ross and others to engage more

1907

01:50:47,109 --> 01:50:45,119

small

1908

01:50:50,070 --> 01:50:47,119

and innovative companies wanting to

1909

01:50:52,629 --> 01:50:50,080

engage in this area as well

1910

01:50:55,109 --> 01:50:52,639

after launch or to right of launch as we

1911

01:50:57,189 --> 01:50:55,119

say dhs is leading in the testing the

1912

01:50:59,350 --> 01:50:57,199

resilience of federal and critical

1913

01:51:01,990 --> 01:50:59,360

functions through the exercising of

1914

01:51:04,149 --> 01:51:02,000

continuity of operation practices

1915

01:51:05,830 --> 01:51:04,159

these left of launch and right of launch

1916

01:51:07,109 --> 01:51:05,840

approach will increase the security of

1917

01:51:08,470 --> 01:51:07,119

our homeland

1918

01:51:10,470 --> 01:51:08,480

we'll certainly broaden our private

1919

01:51:12,070 --> 01:51:10,480

sector and international partnerships

1920

01:51:15,030 --> 01:51:12,080

and will support the important work of

1921

01:51:17,669 --> 01:51:15,040

the american space activities so let me

1922

01:51:19,350 --> 01:51:17,679

just close by again thank you mr vice

1923

01:51:21,270 --> 01:51:19,360

president for your leadership

1924

01:51:23,510 --> 01:51:21,280

for this council and the department

1925

01:51:26,149 --> 01:51:23,520

stands ready to support uh its ongoing

1926

01:51:27,990 --> 01:51:26,159

work so thank you

1927

01:51:28,790 --> 01:51:28,000

thank you chad thanks for the kind words

1928

01:51:31,189 --> 01:51:28,800

and

1929

01:51:34,629 --> 01:51:31,199

thanks for your leadership

1930

01:51:36,709 --> 01:51:34,639

we couldn't be more grateful

1931

01:51:38,390 --> 01:51:36,719

uh i i'm going to get a couple of people

1932

01:51:40,390 --> 01:51:38,400

put a couple more people on the spot

1933

01:51:42,070 --> 01:51:40,400

who've played just a leading role in our

1934

01:51:43,750 --> 01:51:42,080

ability to move out

1935

01:51:46,229 --> 01:51:43,760

on the policies that have been advancing

1936

01:51:49,270 --> 01:51:46,239

our economy and our security

1937

01:51:51,189 --> 01:51:49,280

uh brook collins is the director of the

1938

01:51:53,350 --> 01:51:51,199

president's domestic

1939

01:51:55,510 --> 01:51:53,360

policy council and russ vogt is the head

1940

01:51:57,669 --> 01:51:55,520

of the office of management and budget

1941

01:51:59,430 --> 01:51:57,679

and i can tell you that uh over the

1942

01:52:00,390 --> 01:51:59,440

course of the last four years both of

1943

01:52:03,750 --> 01:52:00,400

them

1944

01:52:06,629 --> 01:52:03,760

have been consistent partners

1945

01:52:10,550 --> 01:52:06,639

in our effort to identify the resources

1946

01:52:13,270 --> 01:52:10,560

uh on the security front and in reviving

1947

01:52:15,990 --> 01:52:13,280

human space exploration here at nasa but

1948

01:52:18,310 --> 01:52:16,000

also in promoting the vital role

1949

01:52:19,270 --> 01:52:18,320

that american leadership in space has

1950

01:52:21,510 --> 01:52:19,280

played

1951

01:52:23,589 --> 01:52:21,520

in our economy as the secretary

1952

01:52:26,470 --> 01:52:23,599

has reflected momentarily i also want to

1953

01:52:28,149 --> 01:52:26,480

recognize brook collins because while

1954

01:52:30,390 --> 01:52:28,159

while we are here at the kennedy space

1955

01:52:32,629 --> 01:52:30,400

center we are on the space coast

1956

01:52:36,070 --> 01:52:32,639

uh with lieutenant governor nunez and a

1957

01:52:38,310 --> 01:52:36,080

lot of proud floridians

1958

01:52:40,310 --> 01:52:38,320

texas likes to boast of their long

1959

01:52:43,189 --> 01:52:40,320

history in space

1960

01:52:45,910 --> 01:52:43,199

in houston and uh and brook collins is a

1961

01:52:48,149 --> 01:52:45,920

daughter of texas and

1962

01:52:49,750 --> 01:52:48,159

and council lone star state home so

1963

01:52:52,229 --> 01:52:49,760

thanks for bringing all that

1964

01:52:53,990 --> 01:52:52,239

natural texas passion

1965

01:52:55,910 --> 01:52:54,000

to your efforts on behalf of space so

1966

01:52:58,870 --> 01:52:55,920

i'm going to recognize the brook collins

1967

01:53:00,790 --> 01:52:58,880

domestic policy council and then the

1968

01:53:03,350 --> 01:53:00,800

director of omb before we turn our

1969

01:53:05,430 --> 01:53:03,360

attention to national space policy and

1970

01:53:07,830 --> 01:53:05,440

to uh the director of nasa's report

1971

01:53:09,750 --> 01:53:07,840

brooke well this is unexpected mr vice

1972

01:53:11,669 --> 01:53:09,760

president but thank you it will only be

1973

01:53:13,750 --> 01:53:11,679

one minute and thank you for the shout

1974

01:53:15,589 --> 01:53:13,760

out to texas it's great to be here in

1975

01:53:17,990 --> 01:53:15,599

florida as well

1976

01:53:20,870 --> 01:53:18,000

i am struck as i sit here as the mother

1977

01:53:23,030 --> 01:53:20,880

of four children i know everyone sitting

1978

01:53:25,430 --> 01:53:23,040

in the room and watching in the audience

1979

01:53:29,350 --> 01:53:25,440

and and watching on tv

1980

01:53:31,350 --> 01:53:29,360

at how inspiring that this group led by

1981

01:53:32,470 --> 01:53:31,360

our president and also you mr vice

1982

01:53:35,830 --> 01:53:32,480

president

1983

01:53:37,189 --> 01:53:35,840

we have reignited america's imagination

1984

01:53:39,430 --> 01:53:37,199

and for

1985

01:53:42,149 --> 01:53:39,440

the young girl or young boy from the

1986

01:53:44,070 --> 01:53:42,159

plains of texas or from the coast of

1987

01:53:46,470 --> 01:53:44,080

florida or from

1988

01:53:47,510 --> 01:53:46,480

the corn fields of indiana that one day

1989

01:53:49,910 --> 01:53:47,520

they too

1990

01:53:52,310 --> 01:53:49,920

could go to space to the final frontier

1991

01:53:54,470 --> 01:53:52,320

and to reach for the stars and that is

1992

01:53:55,750 --> 01:53:54,480

america and so what an honor it is to be

1993

01:53:57,589 --> 01:53:55,760

a part of this and thank you for your

1994

01:54:05,350 --> 01:53:57,599

leadership and for everyone here today

1995

01:54:08,870 --> 01:54:06,790

director of the office of management and

1996

01:54:10,310 --> 01:54:08,880

budgets man i've known for many years

1997

01:54:12,870 --> 01:54:10,320

and

1998

01:54:15,750 --> 01:54:12,880

he is a tight-fisted steward

1999

01:54:19,270 --> 01:54:15,760

of the public treasury but

2000

01:54:20,709 --> 01:54:19,280

i want to take take this opportunity

2001

01:54:23,830 --> 01:54:20,719

to thank

2002

01:54:25,109 --> 01:54:23,840

director russ vote for finding a way for

2003

01:54:28,310 --> 01:54:25,119

of the largest

2004

01:54:30,709 --> 01:54:28,320

largest increases in nasa's budget uh in

2005

01:54:32,310 --> 01:54:30,719

the modern era and uh

2006

01:54:33,109 --> 01:54:32,320

for also finding a way to make sure that

2007

01:54:34,550 --> 01:54:33,119

our

2008

01:54:36,629 --> 01:54:34,560

standing up the united states space

2009

01:54:38,470 --> 01:54:36,639

force had the resources necessary so mr

2010

01:54:40,149 --> 01:54:38,480

director thank you and we'd welcome any

2011

01:54:42,149 --> 01:54:40,159

remarks you'd have for the national

2012

01:54:47,990 --> 01:54:42,159

space council today director russ vote

2013

01:54:51,669 --> 01:54:49,910

thank you mr vice president it is a

2014

01:54:53,830 --> 01:54:51,679

privilege to be back here

2015

01:54:54,709 --> 01:54:53,840

uh and budgets are about priorities and

2016

01:54:56,149 --> 01:54:54,719

one of the things that this

2017

01:54:58,149 --> 01:54:56,159

administration and the president and

2018

01:54:59,589 --> 01:54:58,159

your leadership has been insistent upon

2019

01:55:01,589 --> 01:54:59,599

from the very beginning is that we're

2020

01:55:03,189 --> 01:55:01,599

going to get back to space

2021

01:55:05,030 --> 01:55:03,199

we're overjoyed that we've been able to

2022

01:55:06,310 --> 01:55:05,040

increase the budget by 15

2023

01:55:09,270 --> 01:55:06,320

right now we're in the midst of

2024

01:55:10,629 --> 01:55:09,280

hard-fought negotiations to get our 12

2025

01:55:12,790 --> 01:55:10,639

increase to make sure that we have the

2026  
01:55:14,870 --> 01:55:12,800  
resources to get back to the moon and

2027  
01:55:18,580 --> 01:55:14,880  
mars and beyond but i want to build off

2028  
01:55:22,149 --> 01:55:18,590  
of what brook said and that is to get to

2029  
01:55:23,510 --> 01:55:22,159  
[Applause]

2030  
01:55:25,109 --> 01:55:23,520  
but i want to build off of what brooks

2031  
01:55:27,270 --> 01:55:25,119  
said in terms of the national momentum

2032  
01:55:29,350 --> 01:55:27,280  
that's been built around getting back to

2033  
01:55:31,270 --> 01:55:29,360  
the moon and staying there

2034  
01:55:33,109 --> 01:55:31,280  
i've got two little girls a six year and

2035  
01:55:34,790 --> 01:55:33,119  
eight year old and when when there's

2036  
01:55:36,070 --> 01:55:34,800  
extra cardboard around the house they're

2037  
01:55:37,669 --> 01:55:36,080  
building rockets

2038  
01:55:39,910 --> 01:55:37,679

they've got pictures of astronauts in

2039

01:55:41,350 --> 01:55:39,920

their room and on saturdays we change

2040

01:55:42,390 --> 01:55:41,360

the channel from the football game to

2041

01:55:44,790 --> 01:55:42,400

watch the

2042

01:55:47,189 --> 01:55:44,800

the launches and so you you are getting

2043

01:55:48,550 --> 01:55:47,199

a sense nationally the the momentum

2044

01:55:50,070 --> 01:55:48,560

that's building as a result of the

2045

01:55:51,830 --> 01:55:50,080

leadership of the president the vice

2046

01:55:55,030 --> 01:55:51,840

president the space council the

2047

01:55:57,910 --> 01:55:55,040

important work of of jim bridenstine

2048

01:55:59,350 --> 01:55:57,920

and we're excited at omb to play a

2049

01:56:01,830 --> 01:55:59,360

behind-the-scenes role to get the

2050

01:56:04,229 --> 01:56:01,840

resources that are necessary

2051  
01:56:05,430 --> 01:56:04,239  
to bring agencies together to build

2052  
01:56:06,790 --> 01:56:05,440  
consensus

2053  
01:56:09,350 --> 01:56:06,800  
to make sure that documents and

2054  
01:56:11,430 --> 01:56:09,360  
regulations go out that reflect all one

2055  
01:56:21,270 --> 01:56:11,440  
view of the administration

2056  
01:56:24,790 --> 01:56:23,589  
thank you so much director russ vogue

2057  
01:56:27,109 --> 01:56:24,800  
thanks

2058  
01:56:29,270 --> 01:56:27,119  
for your efforts and

2059  
01:56:30,550 --> 01:56:29,280  
thank you for that uh

2060  
01:56:31,910 --> 01:56:30,560  
thank you for talking to us about your

2061  
01:56:33,430 --> 01:56:31,920  
little girls i think it's one of the

2062  
01:56:35,830 --> 01:56:33,440  
points you make one of the points brooke

2063  
01:56:36,950 --> 01:56:35,840

made is

2064

01:56:40,310 --> 01:56:36,960

that

2065

01:56:42,390 --> 01:56:40,320

having revived american uh america's

2066

01:56:45,109 --> 01:56:42,400

commitment to human space exploration

2067

01:56:46,550 --> 01:56:45,119

and innovation uh rededicating ourselves

2068

01:56:48,790 --> 01:56:46,560

to

2069

01:56:50,629 --> 01:56:48,800

american leadership in space for our

2070

01:56:52,950 --> 01:56:50,639

national security i can't help but feel

2071

01:56:56,310 --> 01:56:52,960

that it's going to inspire

2072

01:56:57,189 --> 01:56:56,320

fire kids to pursue stem education and

2073

01:57:01,510 --> 01:56:57,199

have

2074

01:57:04,390 --> 01:57:01,520

you both for those

2075

01:57:06,550 --> 01:57:04,400

without any notice uh remarks

2076  
01:57:08,470 --> 01:57:06,560  
very inspiring i'm going to ask dr scott

2077  
01:57:09,830 --> 01:57:08,480  
pace who has been the executive director

2078  
01:57:11,189 --> 01:57:09,840  
of the national space council over the

2079  
01:57:13,750 --> 01:57:11,199  
last four years

2080  
01:57:15,109 --> 01:57:13,760  
has been run my right arm throughout

2081  
01:57:17,669 --> 01:57:15,119  
this effort

2082  
01:57:20,950 --> 01:57:17,679  
to come forward today president donald

2083  
01:57:22,310 --> 01:57:20,960  
trump signed an updated national space

2084  
01:57:25,030 --> 01:57:22,320  
policy

2085  
01:57:26,950 --> 01:57:25,040  
for the united states of america just in

2086  
01:57:28,790 --> 01:57:26,960  
time for this eighth meeting

2087  
01:57:31,589 --> 01:57:28,800  
of the national space council and i've

2088  
01:57:34,070 --> 01:57:31,599

asked i've asked dr pace to give us a

2089

01:57:35,990 --> 01:57:34,080

a a very brief update you all should

2090

01:57:36,790 --> 01:57:36,000

have a copy and for those of you looking

2091

01:57:41,350 --> 01:57:36,800

on

2092

01:57:43,030 --> 01:57:41,360

united states of america will be

2093

01:57:46,470 --> 01:57:43,040

available online

2094

01:57:48,550 --> 01:57:46,480

uh for all of the country uh to review

2095

01:57:50,830 --> 01:57:48,560

uh but dr pace maybe you could just

2096

01:57:52,709 --> 01:57:50,840

update members of the

2097

01:57:55,350 --> 01:57:52,719

council uh on

2098

01:57:58,550 --> 01:57:55,360

on the policy and specifically how it it

2099

01:58:00,950 --> 01:57:58,560

differs from previous space policy uh at

2100

01:58:02,950 --> 01:58:00,960

this uh at this important moment in in

2101

01:58:05,030 --> 01:58:02,960

the life of this program and

2102

01:58:06,390 --> 01:58:05,040

and uh in the life of the united states

2103

01:58:08,070 --> 01:58:06,400

space force but

2104

01:58:09,669 --> 01:58:08,080

before i do that i do want to give all

2105

01:58:12,070 --> 01:58:09,679

of you a chance

2106

01:58:14,709 --> 01:58:12,080

we are only as good as the people

2107

01:58:16,629 --> 01:58:14,719

who are behind us supporting us advising

2108

01:58:18,310 --> 01:58:16,639

us informing us

2109

01:58:20,310 --> 01:58:18,320

and i must tell you it's been one of my

2110

01:58:21,510 --> 01:58:20,320

great privileges over these past four

2111

01:58:23,510 --> 01:58:21,520

years

2112

01:58:25,430 --> 01:58:23,520

to enjoy the friendship but the

2113

01:58:26,470 --> 01:58:25,440

extraordinary professionalism and

2114

01:58:29,109 --> 01:58:26,480

guidance

2115

01:58:30,629 --> 01:58:29,119

of of dr scott pace so would all the

2116

01:58:33,030 --> 01:58:30,639

members of the national space council

2117

01:58:45,189 --> 01:58:33,040

join me in showing our appreciation for

2118

01:58:49,430 --> 01:58:47,510

thank you sir and as several people have

2119

01:58:50,950 --> 01:58:49,440

heard me say in speeches

2120

01:58:52,550 --> 01:58:50,960

there's nothing more terrifying than

2121

01:58:54,149 --> 01:58:52,560

having a boss who cares about what you

2122

01:58:55,669 --> 01:58:54,159

do

2123

01:58:57,430 --> 01:58:55,679

and uh

2124

01:58:58,790 --> 01:58:57,440

you're the your your caring and the

2125

01:59:01,189 --> 01:58:58,800

caring of the president have been uh

2126  
01:59:03,030 --> 01:59:01,199  
absolutely instrumental uh to whatever

2127  
01:59:05,350 --> 01:59:03,040  
progress we've been able to make

2128  
01:59:07,270 --> 01:59:05,360  
um and uh with the strong leadership

2129  
01:59:08,629 --> 01:59:07,280  
from the president uh and your your

2130  
01:59:10,229 --> 01:59:08,639  
national space council staff has been

2131  
01:59:11,750 --> 01:59:10,239  
working closely with all the members of

2132  
01:59:13,990 --> 01:59:11,760  
the space council to develop the new

2133  
01:59:15,669 --> 01:59:14,000  
national space policy uh i promise not

2134  
01:59:18,149 --> 01:59:15,679  
to read it it's rather thick

2135  
01:59:19,669 --> 01:59:18,159  
and it's it's there in front of you uh

2136  
01:59:21,669 --> 01:59:19,679  
and i wanted to take the opportunity to

2137  
01:59:23,589 --> 01:59:21,679  
express uh my personal uh thanks and

2138  
01:59:25,109 --> 01:59:23,599

appreciation uh to the members of the

2139

01:59:26,950 --> 01:59:25,119

interagency working group uh that

2140

01:59:29,990 --> 01:59:26,960

contributed to this policy eleven

2141

01:59:31,990 --> 01:59:30,000

agencies uh five white house counsels uh

2142

01:59:33,510 --> 01:59:32,000

there's a lot of folks uh who are part

2143

01:59:35,030 --> 01:59:33,520

of this effort and as well as the

2144

01:59:37,189 --> 01:59:35,040

thoughtful advice from the members of

2145

01:59:38,629 --> 01:59:37,199

the users advisory group

2146

01:59:40,149 --> 01:59:38,639

the national space policy is the

2147

01:59:41,510 --> 01:59:40,159

president's direction

2148

01:59:43,109 --> 01:59:41,520

to u.s government departments and

2149

01:59:44,629 --> 01:59:43,119

agencies to advance the interest of the

2150

01:59:46,790 --> 01:59:44,639

united states in space

2151  
01:59:48,390 --> 01:59:46,800  
for the benefit of the american people

2152  
01:59:49,510 --> 01:59:48,400  
and this policy outlines fundamental

2153  
01:59:51,189 --> 01:59:49,520  
principles

2154  
01:59:53,510 --> 01:59:51,199  
uh of the united states regarding its

2155  
01:59:55,189 --> 01:59:53,520  
activities in space and details future

2156  
01:59:56,470 --> 01:59:55,199  
goals and executive branch tasks to

2157  
01:59:58,149 --> 01:59:56,480  
achieve them

2158  
01:59:59,189 --> 01:59:58,159  
the policy reaffirms the nation's

2159  
02:00:01,109 --> 01:59:59,199  
interest

2160  
02:00:04,070 --> 02:00:01,119  
to act responsibly in space to ensure

2161  
02:00:06,629 --> 02:00:04,080  
safety stability security long-term

2162  
02:00:08,390 --> 02:00:06,639  
sustainability of space activities

2163  
02:00:09,669 --> 02:00:08,400

and as such it's similar to past

2164

02:00:11,830 --> 02:00:09,679

policies in that it reflects

2165

02:00:13,750 --> 02:00:11,840

long-standing efforts extend back

2166

02:00:15,830 --> 02:00:13,760

decades the beginning of the space age

2167

02:00:18,629 --> 02:00:15,840

while recognizing new challenges and new

2168

02:00:21,109 --> 02:00:18,639

opportunities uh in front of us

2169

02:00:23,669 --> 02:00:21,119

the national space policy at top level

2170

02:00:25,430 --> 02:00:23,679

gives primary emphasis to four topics

2171

02:00:27,830 --> 02:00:25,440

commercial space activities

2172

02:00:29,910 --> 02:00:27,840

international cooperation exploration

2173

02:00:31,669 --> 02:00:29,920

science and national security which

2174

02:00:33,270 --> 02:00:31,679

undergirds everything we do

2175

02:00:36,790 --> 02:00:33,280

and the policy expresses the nation's

2176  
02:00:40,070 --> 02:00:37,910  
the

2177  
02:00:41,910 --> 02:00:40,080  
major point i wanted to make as we have

2178  
02:00:43,189 --> 02:00:41,920  
heard around today

2179  
02:00:45,350 --> 02:00:43,199  
is that the international environment

2180  
02:00:47,669 --> 02:00:45,360  
we're in is very dynamic it's influenced

2181  
02:00:49,510 --> 02:00:47,679  
by competition and threats to the space

2182  
02:00:51,750 --> 02:00:49,520  
capabilities in which we rely

2183  
02:00:53,750 --> 02:00:51,760  
and consequently it's important that the

2184  
02:00:56,149 --> 02:00:53,760  
u.s space activities across all sectors

2185  
02:00:58,470 --> 02:00:56,159  
civil commercial and national security

2186  
02:01:00,070 --> 02:00:58,480  
be coordinated at the highest levels in

2187  
02:01:01,430 --> 02:01:00,080  
an integrated manner to advance our

2188  
02:01:03,109 --> 02:01:01,440

national interests and those of our

2189

02:01:04,950 --> 02:01:03,119

allies and partners

2190

02:01:07,350 --> 02:01:04,960

a policy of sustainable space

2191

02:01:09,270 --> 02:01:07,360

exploration and development depends on

2192

02:01:11,510 --> 02:01:09,280

an alignment with enduring national

2193

02:01:13,750 --> 02:01:11,520

interests such as security economic

2194

02:01:15,750 --> 02:01:13,760

growth scientific advancement and a

2195

02:01:17,270 --> 02:01:15,760

stable international environment space

2196

02:01:19,030 --> 02:01:17,280

does not exist for its own sake it

2197

02:01:20,790 --> 02:01:19,040

exists to serve the interests of the

2198

02:01:23,990 --> 02:01:20,800

nation and our alignment with those

2199

02:01:26,070 --> 02:01:24,000

interests is crucial to our success

2200

02:01:28,470 --> 02:01:26,080

establishing us capabilities to operate

2201  
02:01:30,550 --> 02:01:28,480  
routinely out to the moon and beyond

2202  
02:01:32,790 --> 02:01:30,560  
will deliver strategic assets not only

2203  
02:01:35,109 --> 02:01:32,800  
for ourselves but for all like-minded

2204  
02:01:37,430 --> 02:01:35,119  
nations who share our values liberty

2205  
02:01:39,669 --> 02:01:37,440  
democracy rule of law free market

2206  
02:01:41,830 --> 02:01:39,679  
economic principles it is our values we

2207  
02:01:43,270 --> 02:01:41,840  
carry with us into space not merely our

2208  
02:01:44,950 --> 02:01:43,280  
machines

2209  
02:01:47,189 --> 02:01:44,960  
space exploration and development are

2210  
02:01:49,510 --> 02:01:47,199  
not confined to one-time missions or any

2211  
02:01:51,270 --> 02:01:49,520  
single destination

2212  
02:01:52,629 --> 02:01:51,280  
closer to home the united states is

2213  
02:01:54,790 --> 02:01:52,639

going to encourage commercial activities

2214

02:01:57,189 --> 02:01:54,800

to lower the public burden of

2215

02:01:58,950 --> 02:01:57,199

maintaining enhancing space capabilities

2216

02:02:01,189 --> 02:01:58,960

and as the united states journeys again

2217

02:02:03,109 --> 02:02:01,199

into deep space it will do so with

2218

02:02:04,870 --> 02:02:03,119

commercial and international partners

2219

02:02:07,189 --> 02:02:04,880

and at the frontiers of exploration the

2220

02:02:08,790 --> 02:02:07,199

united states will continue to lead as

2221

02:02:10,709 --> 02:02:08,800

it always has done

2222

02:02:12,310 --> 02:02:10,719

the united states is leading in space

2223

02:02:14,390 --> 02:02:12,320

but we also face in determined

2224

02:02:15,990 --> 02:02:14,400

competitors and adversaries

2225

02:02:17,430 --> 02:02:16,000

the president's national space policy

2226

02:02:19,430 --> 02:02:17,440

continues the quest to explore and

2227

02:02:21,189 --> 02:02:19,440

develop the unknown while securing

2228

02:02:22,390 --> 02:02:21,199

benefits for the american people which

2229

02:02:23,430 --> 02:02:22,400

has driven our country since its

2230

02:02:25,669 --> 02:02:23,440

founding

2231

02:02:27,830 --> 02:02:25,679

this drive rooted deeply in the spirit

2232

02:02:29,910 --> 02:02:27,840

of the united states will ensure that as

2233

02:02:32,550 --> 02:02:29,920

humanity expands into space

2234

02:02:33,910 --> 02:02:32,560

it will be the home of our free people

2235

02:02:36,629 --> 02:02:33,920

with that mr vice president thank you

2236

02:02:38,900 --> 02:02:36,639

for the opportunity and be happy to take

2237

02:02:44,950 --> 02:02:38,910

any questions

2238

02:02:49,750 --> 02:02:47,990

uh thank you dr pace and uh the national

2239

02:02:50,870 --> 02:02:49,760

space policy of the united states i was

2240

02:02:52,709 --> 02:02:50,880

there

2241

02:02:54,070 --> 02:02:52,719

uh literally when the staff secretary

2242

02:02:55,589 --> 02:02:54,080

brought this into the president late

2243

02:02:57,830 --> 02:02:55,599

yesterday i know people worked around

2244

02:02:59,109 --> 02:02:57,840

the clock on an interagency basis to get

2245

02:03:00,470 --> 02:02:59,119

this completed

2246

02:03:02,709 --> 02:03:00,480

before the eighth meeting of the space

2247

02:03:04,470 --> 02:03:02,719

council and uh where might people be

2248

02:03:06,709 --> 02:03:04,480

able to review this today we'll make

2249

02:03:08,470 --> 02:03:06,719

sure it's on whitehouse.gov

2250

02:03:10,310 --> 02:03:08,480

i'm pleased to say that white house

2251

02:03:13,030 --> 02:03:10,320

digital services has been great and it's

2252

02:03:14,950 --> 02:03:13,040

available online okay available online

2253

02:03:17,109 --> 02:03:14,960

national space policy

2254

02:03:19,750 --> 02:03:17,119

uh and i would recommended the attention

2255

02:03:20,629 --> 02:03:19,760

of uh of any american uh interested in

2256

02:03:26,229 --> 02:03:20,639

uh

2257

02:03:28,229 --> 02:03:26,239

outline of of what our priorities are

2258

02:03:30,550 --> 02:03:28,239

and what our objectives are with regard

2259

02:03:32,470 --> 02:03:30,560

to american leadership for our economy

2260

02:03:35,669 --> 02:03:32,480

uh and our security and space but thank

2261

02:03:37,910 --> 02:03:35,679

you thank you so much dr pace uh

2262

02:03:39,589 --> 02:03:37,920

for the report and

2263

02:03:42,470 --> 02:03:39,599

how about another round of applause for

2264

02:03:45,460 --> 02:03:42,480

really a tireless public servant and all

2265

02:03:51,510 --> 02:03:49,589

[Applause]

2266

02:03:54,550 --> 02:03:51,520

finally we will now turn our attention

2267

02:03:57,109 --> 02:03:54,560

to nasa's activities

2268

02:03:59,669 --> 02:03:57,119

with a report and uh and a very exciting

2269

02:04:02,790 --> 02:03:59,679

announcement today from

2270

02:04:04,550 --> 02:04:02,800

the administrator of of nasa jim

2271

02:04:07,350 --> 02:04:04,560

bridenstine

2272

02:04:09,430 --> 02:04:07,360

many of you may not be aware that uh

2273

02:04:10,390 --> 02:04:09,440

that prior to serving as the 13th

2274

02:04:12,390 --> 02:04:10,400

administrator

2275

02:04:15,430 --> 02:04:12,400

of of nasa

2276

02:04:18,229 --> 02:04:15,440

jim breidenstein was a navy pilot flew

2277

02:04:21,430 --> 02:04:18,239

combat missions in iraq and afghanistan

2278

02:04:23,270 --> 02:04:21,440

flew more than 1900 hours i first met

2279

02:04:25,109 --> 02:04:23,280

him when he was a congressman from

2280

02:04:26,229 --> 02:04:25,119

oklahoma serving on the house armed

2281

02:04:27,350 --> 02:04:26,239

services

2282

02:04:28,550 --> 02:04:27,360

committee

2283

02:04:30,709 --> 02:04:28,560

but

2284

02:04:32,790 --> 02:04:30,719

very early on it was apparent to

2285

02:04:35,510 --> 02:04:32,800

president trump that this was a man who

2286

02:04:37,669 --> 02:04:35,520

had a a deep passion

2287

02:04:40,709 --> 02:04:37,679

for american leadership

2288

02:04:42,470 --> 02:04:40,719

in space and i must tell you that when i

2289

02:04:44,149 --> 02:04:42,480

think of when i think of all the

2290

02:04:45,589 --> 02:04:44,159

progress that we've made

2291

02:04:47,589 --> 02:04:45,599

in reviving

2292

02:04:49,030 --> 02:04:47,599

american leadership in human space

2293

02:04:50,790 --> 02:04:49,040

exploration

2294

02:04:52,950 --> 02:04:50,800

when i think of

2295

02:04:54,629 --> 02:04:52,960

of the historic steps

2296

02:04:55,589 --> 02:04:54,639

that we have taken in the last four

2297

02:04:56,870 --> 02:04:55,599

years

2298

02:04:59,589 --> 02:04:56,880

to ensure

2299

02:05:02,470 --> 02:04:59,599

american military dominance

2300

02:05:04,149 --> 02:05:02,480

in space as much as on land and sea and

2301

02:05:06,069 --> 02:05:04,159

air

2302

02:05:08,229 --> 02:05:06,079

i am truly grateful as i know the

2303

02:05:10,790 --> 02:05:08,239

president of the united states is for

2304

02:05:13,270 --> 02:05:10,800

the service and tireless

2305

02:05:15,510 --> 02:05:13,280

efforts and enthusiasm of the 13th

2306

02:05:17,430 --> 02:05:15,520

administrator of nasa join me in

2307

02:05:19,510 --> 02:05:17,440

thanking jim reinstein for all that he's

2308

02:05:22,650 --> 02:05:19,520

done and for the important announcement

2309

02:05:22,660 --> 02:05:41,430

[Applause]

2310

02:05:46,550 --> 02:05:43,990

wow a standing ovation from the vice

2311

02:05:48,950 --> 02:05:46,560

president of the united states um

2312

02:05:51,430 --> 02:05:48,960

i will tell you sir it's uh it's been

2313

02:05:53,669 --> 02:05:51,440

the joy of my life to serve this little

2314

02:05:55,830 --> 02:05:53,679

agency called nasa that

2315

02:05:57,750 --> 02:05:55,840

does just amazing things i will i will

2316

02:05:59,830 --> 02:05:57,760

also say and sir i know you've heard it

2317

02:06:02,390 --> 02:05:59,840

today all day long from all of the

2318

02:06:04,470 --> 02:06:02,400

people sitting around this table but

2319

02:06:06,950 --> 02:06:04,480

this this has this has been a

2320

02:06:08,950 --> 02:06:06,960

game-changing administration as it

2321

02:06:11,510 --> 02:06:08,960

relates to space

2322

02:06:12,629 --> 02:06:11,520

from day one this administration came in

2323

02:06:15,189 --> 02:06:12,639

committed

2324

02:06:17,990 --> 02:06:15,199

uh and and not just giving it lip

2325

02:06:19,669 --> 02:06:18,000

service but moving out on it and you're

2326

02:06:21,830 --> 02:06:19,679

hearing it not just from me but from

2327

02:06:25,270 --> 02:06:21,840

everybody around this table who has

2328

02:06:26,550 --> 02:06:25,280

served with and for you sir and uh and

2329

02:06:28,229 --> 02:06:26,560

your leadership here has been

2330

02:06:30,310 --> 02:06:28,239

astonishing i have said and i'll keep

2331

02:06:32,390 --> 02:06:30,320

saying it one of the best things

2332

02:06:34,709 --> 02:06:32,400

president trump did was reestablish the

2333

02:06:35,910 --> 02:06:34,719

national space council and and right

2334

02:06:37,910 --> 02:06:35,920

after that

2335

02:06:39,750 --> 02:06:37,920

putting his number one guy the vice

2336

02:06:41,750 --> 02:06:39,760

president united states in charge of it

2337

02:06:44,709 --> 02:06:41,760

and it's been just a real pleasure

2338

02:06:46,790 --> 02:06:44,719

serving on this council with you sir

2339

02:06:48,709 --> 02:06:46,800

um so i'll go through kind of where we

2340

02:06:51,350 --> 02:06:48,719

are with the artemis program which of

2341

02:06:52,870 --> 02:06:51,360

course is our return to the moon not

2342

02:06:54,629 --> 02:06:52,880

just with the next man but with the

2343

02:06:56,470 --> 02:06:54,639

first woman which was a

2344

02:06:58,229 --> 02:06:56,480

a very direct order from the vice

2345

02:07:00,229 --> 02:06:58,239

president united states who is carrying

2346

02:07:02,310 --> 02:07:00,239

out uh the direction of the president of

2347

02:07:03,830 --> 02:07:02,320

the united states and uh

2348

02:07:06,709 --> 02:07:03,840

so so here's where we are sir and i'm

2349

02:07:09,669 --> 02:07:06,719

very pleased to report the core stage

2350

02:07:12,310 --> 02:07:09,679

of the sls rocket is complete uh it is

2351  
02:07:14,950 --> 02:07:12,320  
at the stennis space center being tested

2352  
02:07:16,390 --> 02:07:14,960  
all four rs-25 engines have been

2353  
02:07:18,550 --> 02:07:16,400  
integrated

2354  
02:07:20,950 --> 02:07:18,560  
and we have now completed

2355  
02:07:22,229 --> 02:07:20,960  
six of the eight tests for what we call

2356  
02:07:24,069 --> 02:07:22,239  
the green run

2357  
02:07:26,390 --> 02:07:24,079  
right now we are in the midst of the

2358  
02:07:27,910 --> 02:07:26,400  
seventh test which we call the wet dress

2359  
02:07:30,069 --> 02:07:27,920  
rehearsal

2360  
02:07:32,069 --> 02:07:30,079  
and of course the the next test after

2361  
02:07:35,430 --> 02:07:32,079  
the wet dress rehearsal is

2362  
02:07:37,750 --> 02:07:35,440  
no kidding a live fire test of all four

2363  
02:07:40,310 --> 02:07:37,760

rs-25 engines

2364

02:07:41,350 --> 02:07:40,320

so we are very excited to be where we

2365

02:07:43,750 --> 02:07:41,360

are

2366

02:07:45,750 --> 02:07:43,760

the sls rocket of course is is is the

2367

02:07:48,069 --> 02:07:45,760

moon rocket i know we're sitting

2368

02:07:50,069 --> 02:07:48,079

underneath a saturn v and this of course

2369

02:07:51,669 --> 02:07:50,079

reminds us of the history but we are

2370

02:07:53,030 --> 02:07:51,679

here today talking about the future and

2371

02:07:55,030 --> 02:07:53,040

i want to assure

2372

02:07:57,270 --> 02:07:55,040

my my friend the director of national

2373

02:07:59,510 --> 02:07:57,280

intelligence john ratcliffe that that

2374

02:08:00,470 --> 02:07:59,520

saturn 5 is very secure

2375

02:08:02,629 --> 02:08:00,480

so

2376

02:08:06,149 --> 02:08:02,639

we we are not going to need a new dni

2377

02:08:08,950 --> 02:08:06,159

today and i i made sure that um

2378

02:08:12,149 --> 02:08:08,960

so i do think it's important to note

2379

02:08:15,030 --> 02:08:12,159

that uh the sls rocket uh mr vice

2380

02:08:16,310 --> 02:08:15,040

president is is back on track and moving

2381

02:08:18,790 --> 02:08:16,320

forward

2382

02:08:20,310 --> 02:08:18,800

the orion crew capsule is complete it

2383

02:08:23,750 --> 02:08:20,320

has gone through environmental testing

2384

02:08:25,430 --> 02:08:23,760

we have done the launch abort testing

2385

02:08:27,750 --> 02:08:25,440

which is also complete and has been

2386

02:08:29,750 --> 02:08:27,760

successful it is mated to the european

2387

02:08:31,910 --> 02:08:29,760

service module and of course it is here

2388

02:08:34,149 --> 02:08:31,920

at the kennedy space center

2389

02:08:35,350 --> 02:08:34,159

waiting for some more processing so that

2390

02:08:37,350 --> 02:08:35,360

again

2391

02:08:39,189 --> 02:08:37,360

is is good news

2392

02:08:41,350 --> 02:08:39,199

as we move forward

2393

02:08:43,669 --> 02:08:41,360

one of the big things that you gave us

2394

02:08:45,030 --> 02:08:43,679

direction to do and this was at the the

2395

02:08:47,990 --> 02:08:45,040

iac

2396

02:08:49,589 --> 02:08:48,000

the international aeronautical congress

2397

02:08:51,510 --> 02:08:49,599

was to make sure that we partnered with

2398

02:08:54,069 --> 02:08:51,520

freedom loving countries

2399

02:08:56,149 --> 02:08:54,079

and we have done that we put together

2400

02:08:58,470 --> 02:08:56,159

the artemis accords

2401  
02:09:00,790 --> 02:08:58,480  
which establishes what are the norms of

2402  
02:09:03,990 --> 02:09:00,800  
behavior what are the things we expect

2403  
02:09:06,629 --> 02:09:04,000  
our partners in space exploration to do

2404  
02:09:08,790 --> 02:09:06,639  
as we explore space together

2405  
02:09:10,629 --> 02:09:08,800  
and so so we wrote wrote out the artemis

2406  
02:09:12,550 --> 02:09:10,639  
of course we had great support from the

2407  
02:09:14,470 --> 02:09:12,560  
state department i want to really

2408  
02:09:16,709 --> 02:09:14,480  
uh tip my hat to what the state

2409  
02:09:20,470 --> 02:09:16,719  
department did the artemis accords are

2410  
02:09:22,149 --> 02:09:20,480  
complete we're looking for transparency

2411  
02:09:24,390 --> 02:09:22,159  
from all of our international partners

2412  
02:09:26,310 --> 02:09:24,400  
we're looking for interoperability

2413  
02:09:28,390 --> 02:09:26,320

we're looking to make sure that if if

2414

02:09:30,950 --> 02:09:28,400

there are astronauts in distress we all

2415

02:09:32,709 --> 02:09:30,960

support each other we're looking to to

2416

02:09:35,030 --> 02:09:32,719

make sure that the future of space

2417

02:09:36,629 --> 02:09:35,040

exploration is peaceful

2418

02:09:38,629 --> 02:09:36,639

and all of this was enshrined in the

2419

02:09:40,870 --> 02:09:38,639

artemis accords and of course

2420

02:09:42,550 --> 02:09:40,880

one of the reasons to do all of this is

2421

02:09:43,910 --> 02:09:42,560

because when we go to the moon this time

2422

02:09:45,510 --> 02:09:43,920

it's going to be with international

2423

02:09:47,270 --> 02:09:45,520

partners which we didn't have last time

2424

02:09:48,709 --> 02:09:47,280

but also this time we're going to have

2425

02:09:50,950 --> 02:09:48,719

commercial partners

2426  
02:09:53,030 --> 02:09:50,960  
and we need to have the processes by

2427  
02:09:55,189 --> 02:09:53,040  
which we can all agree

2428  
02:09:57,589 --> 02:09:55,199  
to explore the moon safely both with

2429  
02:10:00,310 --> 02:09:57,599  
commercial and international partners as

2430  
02:10:01,669 --> 02:10:00,320  
the united states of america leads this

2431  
02:10:04,629 --> 02:10:01,679  
coalition

2432  
02:10:06,550 --> 02:10:04,639  
to to the moon um and eventually on to

2433  
02:10:08,390 --> 02:10:06,560  
mars i want to be clear we already have

2434  
02:10:10,550 --> 02:10:08,400  
nine countries that have signed up nine

2435  
02:10:12,229 --> 02:10:10,560  
freedom-loving countries that signed up

2436  
02:10:14,629 --> 02:10:12,239  
um and we just announced the artemis

2437  
02:10:16,470 --> 02:10:14,639  
accords earlier this year there are more

2438  
02:10:17,910 --> 02:10:16,480

countries that we're talking to every

2439

02:10:19,030 --> 02:10:17,920

day that are interested but here's the

2440

02:10:20,629 --> 02:10:19,040

thing

2441

02:10:22,069 --> 02:10:20,639

and this is my experience as the nasa

2442

02:10:24,629 --> 02:10:22,079

administrator

2443

02:10:26,470 --> 02:10:24,639

everybody loves artemis

2444

02:10:28,470 --> 02:10:26,480

all of our international partners want

2445

02:10:31,350 --> 02:10:28,480

to be part of the artemis program that

2446

02:10:33,510 --> 02:10:31,360

gives us a great tool of soft power to

2447

02:10:35,750 --> 02:10:33,520

say we want you with us but when you

2448

02:10:38,149 --> 02:10:35,760

come with us there are basic standards

2449

02:10:39,990 --> 02:10:38,159

of behavior that we need you to abide by

2450

02:10:41,510 --> 02:10:40,000

and all of those standards by the way

2451  
02:10:44,310 --> 02:10:41,520  
are enshrined in the outer space treaty

2452  
02:10:45,750 --> 02:10:44,320  
of 1967. so all of that is is very

2453  
02:10:48,790 --> 02:10:45,760  
positive

2454  
02:10:50,390 --> 02:10:48,800  
the gateway our little um

2455  
02:10:52,470 --> 02:10:50,400  
it's not really a space station but it's

2456  
02:10:54,229 --> 02:10:52,480  
an outpost around the moon

2457  
02:10:55,990 --> 02:10:54,239  
but it's going to give us the the extra

2458  
02:10:58,069 --> 02:10:56,000  
energy that we need to get to low lunar

2459  
02:11:00,069 --> 02:10:58,079  
orbit to the surface of the moon

2460  
02:11:02,629 --> 02:11:00,079  
and then back to the gateway

2461  
02:11:03,910 --> 02:11:02,639  
the gateway is under development

2462  
02:11:06,390 --> 02:11:03,920  
we are

2463  
02:11:08,709 --> 02:11:06,400

rapidly moving forward on the gateway

2464

02:11:10,550 --> 02:11:08,719

the power and propulsion element

2465

02:11:13,510 --> 02:11:10,560

and what we call halo which is

2466

02:11:14,790 --> 02:11:13,520

habitation and logistics outpost um is

2467

02:11:15,990 --> 02:11:14,800

under development we're going to put

2468

02:11:18,069 --> 02:11:16,000

those two together we're going to launch

2469

02:11:20,629 --> 02:11:18,079

them on a single rocket and we're going

2470

02:11:23,990 --> 02:11:20,639

to do that by the year 2023 so the so

2471

02:11:26,310 --> 02:11:24,000

the gateway will be underway by 2023

2472

02:11:28,229 --> 02:11:26,320

we're also very excited

2473

02:11:29,910 --> 02:11:28,239

that the gateway in fact and this is for

2474

02:11:31,589 --> 02:11:29,920

dr drogemeier

2475

02:11:33,750 --> 02:11:31,599

is get we've already selected two

2476

02:11:35,430 --> 02:11:33,760

science experiments to be on the gateway

2477

02:11:37,030 --> 02:11:35,440

in orbit around the moon and those two

2478

02:11:39,270 --> 02:11:37,040

science experiments

2479

02:11:41,589 --> 02:11:39,280

have to do with space weather and the

2480

02:11:43,510 --> 02:11:41,599

radiation of deep space so this is going

2481

02:11:45,589 --> 02:11:43,520

to enable us to get more science than we

2482

02:11:48,229 --> 02:11:45,599

could otherwise get and of course we all

2483

02:11:50,229 --> 02:11:48,239

know uh dr drogomeyer he mentioned

2484

02:11:51,910 --> 02:11:50,239

oklahoma earlier dr drogemeier comes

2485

02:11:54,069 --> 02:11:51,920

from oklahoma very

2486

02:11:56,069 --> 02:11:54,079

amazing weather scientist

2487

02:11:58,069 --> 02:11:56,079

and now expanding that field all the way

2488

02:11:59,990 --> 02:11:58,079

to space weather so we're there with you

2489

02:12:01,270 --> 02:12:00,000

sir and we'll we'll keep moving forward

2490

02:12:04,870 --> 02:12:01,280

on that

2491

02:12:11,030 --> 02:12:07,830

our european partners uh recently signed

2492

02:12:13,430 --> 02:12:11,040

a an mou with us uh to on the gateway so

2493

02:12:14,870 --> 02:12:13,440

we can very proudly say that when we go

2494

02:12:17,030 --> 02:12:14,880

to the moon we have already got

2495

02:12:19,990 --> 02:12:17,040

commitments from the european space

2496

02:12:23,030 --> 02:12:20,000

agency uh not only to have astronauts

2497

02:12:25,350 --> 02:12:23,040

with us but also uh to provide hardware

2498

02:12:29,109 --> 02:12:25,360

that is going to be very significant for

2499

02:12:31,669 --> 02:12:29,119

our sustainable return to the moon

2500

02:12:33,510 --> 02:12:31,679

so we have also opened up the aperture a

2501  
02:12:35,990 --> 02:12:33,520  
little bit when we go to the moon one of

2502  
02:12:37,030 --> 02:12:36,000  
my first initiatives mr vice president

2503  
02:12:39,270 --> 02:12:37,040  
as you know

2504  
02:12:40,790 --> 02:12:39,280  
uh was we're going to go commercially as

2505  
02:12:42,629 --> 02:12:40,800  
directed by you and the president of the

2506  
02:12:44,390 --> 02:12:42,639  
united states so we initiated the

2507  
02:12:46,310 --> 02:12:44,400  
commercial lunar payload services

2508  
02:12:48,229 --> 02:12:46,320  
program to take nasa payloads to the

2509  
02:12:49,910 --> 02:12:48,239  
surface of the moon where we buy a

2510  
02:12:52,310 --> 02:12:49,920  
service we don't own and operate the

2511  
02:12:54,390 --> 02:12:52,320  
hardware but we buy a service we now

2512  
02:12:56,069 --> 02:12:54,400  
have a number of companies that have

2513  
02:12:57,830 --> 02:12:56,079

signed up to be part of this program sir

2514

02:12:59,109 --> 02:12:57,840

you mentioned earlier uh that we're

2515

02:13:00,709 --> 02:12:59,119

going to actually buy some of that

2516

02:13:03,430 --> 02:13:00,719

regolith on the moon we're going to buy

2517

02:13:05,109 --> 02:13:03,440

resources and we're going to prove that

2518

02:13:07,830 --> 02:13:05,119

this is

2519

02:13:09,510 --> 02:13:07,840

a model of operations that is workable

2520

02:13:11,510 --> 02:13:09,520

and of course the artemis accords are a

2521

02:13:13,910 --> 02:13:11,520

big part of that as well

2522

02:13:15,589 --> 02:13:13,920

i saw sean mahoney is here for maths and

2523

02:13:16,790 --> 02:13:15,599

space systems

2524

02:13:19,910 --> 02:13:16,800

i i think

2525

02:13:22,950 --> 02:13:19,920

secretary ross you mentioned astrobotic

2526

02:13:24,629 --> 02:13:22,960

so there are a lot of small innovative

2527

02:13:26,470 --> 02:13:24,639

impressive companies

2528

02:13:28,870 --> 02:13:26,480

raising money and moving out because of

2529

02:13:30,870 --> 02:13:28,880

the policies that we put in place to go

2530

02:13:33,189 --> 02:13:30,880

to the moon commercially

2531

02:13:34,950 --> 02:13:33,199

so all of that is very exciting uh

2532

02:13:37,109 --> 02:13:34,960

finally i'm just gonna i'm gonna i'm

2533

02:13:38,870 --> 02:13:37,119

gonna anchor uh real quick

2534

02:13:40,310 --> 02:13:38,880

on the human landing system which of

2535

02:13:42,470 --> 02:13:40,320

course

2536

02:13:43,830 --> 02:13:42,480

we have the sls rocket we have the orion

2537

02:13:46,149 --> 02:13:43,840

crew capsule we have the european

2538

02:13:50,069 --> 02:13:46,159

service mods we have the gateway the one

2539

02:13:52,470 --> 02:13:50,079

thing we have not had since 1972

2540

02:13:54,390 --> 02:13:52,480

is a human landing system

2541

02:13:55,990 --> 02:13:54,400

and now we have

2542

02:13:57,350 --> 02:13:56,000

mr vice president because of your

2543

02:13:59,910 --> 02:13:57,360

leadership and the leadership of the

2544

02:14:01,830 --> 02:13:59,920

president we have a human landing system

2545

02:14:05,060 --> 02:14:01,840

funded for the first time since nineteen

2546

02:14:10,870 --> 02:14:05,070

seventy two we have three companies yes

2547

02:14:12,870 --> 02:14:10,880

[Applause]

2548

02:14:16,390 --> 02:14:12,880

we have three companies

2549

02:14:18,069 --> 02:14:16,400

that are under contract there's a lot of

2550

02:14:20,229 --> 02:14:18,079

a lot of companies involved i want to be

2551

02:14:22,229 --> 02:14:20,239

clear but three prime contractors that

2552

02:14:24,390 --> 02:14:22,239

will be leading the efforts

2553

02:14:26,310 --> 02:14:24,400

for the human landing system

2554

02:14:28,229 --> 02:14:26,320

we're in a base period right now where

2555

02:14:30,790 --> 02:14:28,239

we're looking at um how we're going to

2556

02:14:33,109 --> 02:14:30,800

land on the moon um and ultimately by

2557

02:14:35,589 --> 02:14:33,119

february of 2021 we're looking to do a

2558

02:14:37,510 --> 02:14:35,599

down select from three to two so that we

2559

02:14:40,950 --> 02:14:37,520

can come to a resolution on how we're

2560

02:14:42,310 --> 02:14:40,960

going to land on the moon by 2024. now i

2561

02:14:45,109 --> 02:14:42,320

want to be clear when i talk about the

2562

02:14:48,069 --> 02:14:45,119

human landing system mr vice president

2563

02:14:50,390 --> 02:14:48,079

the budget request thank you to

2564

02:14:52,229 --> 02:14:50,400

the director of omb russ vote the budget

2565

02:14:55,270 --> 02:14:52,239

request gave us what we needed to

2566

02:14:57,270 --> 02:14:55,280

achieve at 2024 moon landing and as of

2567

02:14:59,669 --> 02:14:57,280

right now this agency is meeting all of

2568

02:15:01,710 --> 02:14:59,679

its milestones

2569

02:15:05,750 --> 02:15:01,720

yes

2570

02:15:07,990 --> 02:15:05,760

[Applause]

2571

02:15:10,870 --> 02:15:08,000

we are in the midst of as as the

2572

02:15:13,109 --> 02:15:10,880

director of the budget has said we we're

2573

02:15:15,910 --> 02:15:13,119

in the midst of negotiating uh to get

2574

02:15:18,069 --> 02:15:15,920

that lander funded uh the the the bill

2575

02:15:20,550 --> 02:15:18,079

passed in the house um funded it to the

2576

02:15:22,470 --> 02:15:20,560

tune for 2021 about 600 million dollars

2577

02:15:24,470 --> 02:15:22,480

in the senate it was about a billion

2578

02:15:25,830 --> 02:15:24,480

dollars now billion dollars is a lot of

2579

02:15:28,709 --> 02:15:25,840

money and i want to be really clear we

2580

02:15:30,629 --> 02:15:28,719

are so grateful for the bipartisan

2581

02:15:31,830 --> 02:15:30,639

support for this that's one of the the

2582

02:15:34,149 --> 02:15:31,840

biggest things that we have to have

2583

02:15:36,870 --> 02:15:34,159

moving forward this has to be

2584

02:15:38,870 --> 02:15:36,880

generational in nature which means

2585

02:15:40,390 --> 02:15:38,880

strong bipartisan support is necessary

2586

02:15:42,470 --> 02:15:40,400

we're grateful for that

2587

02:15:44,390 --> 02:15:42,480

but ultimately if if we don't get the

2588

02:15:46,550 --> 02:15:44,400

3.3 billion dollars it gets more and

2589

02:15:48,550 --> 02:15:46,560

more difficult so i'm making sure to

2590

02:15:50,229 --> 02:15:48,560

communicate as i do always to our

2591

02:15:51,910 --> 02:15:50,239

legislators

2592

02:15:54,870 --> 02:15:51,920

if if there's anything you can do to

2593

02:15:57,030 --> 02:15:54,880

help with the 3.3 billion dollars

2594

02:15:58,870 --> 02:15:57,040

we are certainly asking for that

2595

02:16:00,390 --> 02:15:58,880

um sir i've i've

2596

02:16:02,310 --> 02:16:00,400

i've been told we're going to show a

2597

02:16:03,669 --> 02:16:02,320

video here but i can see did you have

2598

02:16:09,589 --> 02:16:03,679

anything to say before we go to the

2599

02:16:14,709 --> 02:16:11,270

well i think we've got a very exciting

2600

02:16:18,069 --> 02:16:16,470

i just couldn't be more grateful for

2601

02:16:19,990 --> 02:16:18,079

those of you looking on that are just

2602

02:16:23,589 --> 02:16:20,000

now taking an interest in the program we

2603

02:16:26,390 --> 02:16:23,599

are beneath an apollo saturn v rocket

2604

02:16:28,069 --> 02:16:26,400

but we're about to see a major and

2605

02:16:30,470 --> 02:16:28,079

historic step

2606

02:16:33,349 --> 02:16:30,480

in setting into motion

2607

02:16:35,190 --> 02:16:33,359

in one more way the artemis program

2608

02:16:37,509 --> 02:16:35,200

and the artemis rockets that will uh

2609

02:16:39,990 --> 02:16:37,519

take to the skies over the next

2610

02:16:43,030 --> 02:16:40,000

several years and on to the moon and

2611

02:16:46,389 --> 02:16:44,709

i want i want any school children

2612

02:16:51,030 --> 02:16:46,399

looking on to know that

2613

02:16:52,230 --> 02:16:51,040

that artemis is the twin of apollo

2614

02:16:55,110 --> 02:16:52,240

except

2615

02:16:57,750 --> 02:16:55,120

artemis is going to go a lot farther and

2616

02:16:59,190 --> 02:16:57,760

inspire the world once again so join me

2617

02:17:01,349 --> 02:16:59,200

in thanking administrator jim

2618

02:17:12,490 --> 02:17:01,359

bridenstine and then we'll

2619

02:17:19,910 --> 02:17:17,429

[Music]

2620

02:17:21,270 --> 02:17:19,920

the apollo missions were a daring

2621

02:17:24,309 --> 02:17:21,280

success

2622

02:17:25,509 --> 02:17:24,319

and highlighted what a generation of

2623

02:17:27,830 --> 02:17:25,519

ambition

2624

02:17:30,469 --> 02:17:27,840

can accomplish we choose to go to the

2625

02:17:33,830 --> 02:17:30,479

moon but in a whole new way

2626  
02:17:35,429 --> 02:17:33,840  
not as a destination but as a beginning

2627  
02:17:37,429 --> 02:17:35,439  
and not alone but with a global

2628  
02:17:39,429 --> 02:17:37,439  
coalition of explorers

2629  
02:17:40,469 --> 02:17:39,439  
this calling is part of what makes us

2630  
02:17:42,950 --> 02:17:40,479  
human

2631  
02:17:44,070 --> 02:17:42,960  
and it is this generation's turn to set

2632  
02:17:46,469 --> 02:17:44,080  
the tone

2633  
02:17:49,270 --> 02:17:46,479  
we are going to lead a journey of

2634  
02:17:52,230 --> 02:17:49,280  
discovery that benefits our planet with

2635  
02:17:54,629 --> 02:17:52,240  
life-changing science to use the moon

2636  
02:17:58,070 --> 02:17:54,639  
and its resources as a technology

2637  
02:17:59,910 --> 02:17:58,080  
testament to go even farther to learn

2638  
02:18:02,950 --> 02:17:59,920

how to establish

2639

02:18:05,110 --> 02:18:02,960

and sustain a human presence beyond

2640

02:18:07,750 --> 02:18:05,120

earth this time we're going as the

2641

02:18:09,589 --> 02:18:07,760

artemis generation we will discover

2642

02:18:11,429 --> 02:18:09,599

prove that is possible and bring all

2643

02:18:14,709 --> 02:18:11,439

that we learned back home

2644

02:18:17,270 --> 02:18:14,719

to benefit all of humanity and then we

2645

02:18:18,629 --> 02:18:17,280

will take the next giant leap

2646

02:18:21,270 --> 02:18:18,639

mars

2647

02:18:22,789 --> 02:18:21,280

welcome welcome welcome to the art in

2648

02:18:27,780 --> 02:18:22,799

this generation

2649

02:18:33,349 --> 02:18:27,790

[Music]

2650

02:18:35,589 --> 02:18:33,359

[Applause]

2651  
02:18:37,349 --> 02:18:35,599  
welcome to the artemis generation a lot

2652  
02:18:39,830 --> 02:18:37,359  
of you in this room you've heard me talk

2653  
02:18:41,830 --> 02:18:39,840  
about the artemis generation

2654  
02:18:43,509 --> 02:18:41,840  
i'm the first nasa administrator in

2655  
02:18:45,110 --> 02:18:43,519  
history that wasn't alive when we had

2656  
02:18:45,910 --> 02:18:45,120  
people living and working on another

2657  
02:18:47,429 --> 02:18:45,920  
world

2658  
02:18:49,750 --> 02:18:47,439  
and of course it is our goal that i'm

2659  
02:18:51,429 --> 02:18:49,760  
the last nasa administrator in history

2660  
02:18:53,270 --> 02:18:51,439  
that wasn't alive when we have people

2661  
02:18:55,669 --> 02:18:53,280  
living and working on another world our

2662  
02:18:57,270 --> 02:18:55,679  
goal is to go to the moon sustainably to

2663  
02:18:59,429 --> 02:18:57,280

learn how to live and work on another

2664

02:19:02,790 --> 02:18:59,439

world so that ultimately we can take all

2665

02:19:04,309 --> 02:19:02,800

of that knowledge onto mars and the vice

2666

02:19:07,429 --> 02:19:04,319

president united states came to the

2667

02:19:09,509 --> 02:19:07,439

marshall space flight center in alabama

2668

02:19:10,549 --> 02:19:09,519

and and what he said to us at that time

2669

02:19:13,110 --> 02:19:10,559

was

2670

02:19:15,030 --> 02:19:13,120

he directed us to make sure

2671

02:19:17,669 --> 02:19:15,040

that we go back to the moon this time

2672

02:19:20,389 --> 02:19:17,679

sustainably and we go back to the moon

2673

02:19:22,070 --> 02:19:20,399

with the next man and the first woman

2674

02:19:22,950 --> 02:19:22,080

and that's what this program is all

2675

02:19:25,030 --> 02:19:22,960

about

2676

02:19:27,589 --> 02:19:25,040

and today we have this very special and

2677

02:19:30,870 --> 02:19:27,599

unique milestone where it is time

2678

02:19:33,190 --> 02:19:30,880

to announce who those people will be

2679

02:19:35,349 --> 02:19:33,200

and mr vice president if you would come

2680

02:19:37,910 --> 02:19:35,359

up to the to the front here and

2681

02:19:39,990 --> 02:19:37,920

and share with the audience

2682

02:19:42,389 --> 02:19:40,000

who our astronauts are going to be this

2683

02:19:45,030 --> 02:19:42,399

is the first cadre

2684

02:19:47,910 --> 02:19:45,040

of our artemis astronauts i want to be

2685

02:19:49,429 --> 02:19:47,920

clear there's going to be more

2686

02:19:51,110 --> 02:19:49,439

and of course there's there's going to

2687

02:19:52,230 --> 02:19:51,120

be astronauts that are in low earth

2688

02:19:53,510 --> 02:19:52,240

orbit

2689

02:19:54,790 --> 02:19:53,520

that are going to go to the moon and

2690

02:19:56,710 --> 02:19:54,800

astronauts to go to the moon that are

2691

02:19:59,510 --> 02:19:56,720

going to be in low earth orbit but mr

2692

02:20:01,190 --> 02:19:59,520

vice president please do us the honor of

2693

02:20:02,790 --> 02:20:01,200

introducing who these folks are and

2694

02:20:04,790 --> 02:20:02,800

you'll see on the video their their

2695

02:20:07,270 --> 02:20:04,800

images when he announces them

2696

02:20:09,030 --> 02:20:07,280

uh thank you uh thank you jim it's now

2697

02:20:10,070 --> 02:20:09,040

my honor to announce the names of the

2698

02:20:12,070 --> 02:20:10,080

artemis

2699

02:20:13,270 --> 02:20:12,080

astronauts who will take us back to the

2700

02:20:15,670 --> 02:20:13,280

moon

2701  
02:20:16,790 --> 02:20:15,680  
and beyond

2702  
02:20:24,630 --> 02:20:16,800  
joe

2703  
02:20:24,640 --> 02:20:31,670  
kayla baron

2704  
02:20:31,680 --> 02:20:38,389  
raja chary

2705  
02:20:38,399 --> 02:20:45,030  
matthew dominic

2706  
02:20:51,830 --> 02:20:46,910  
victor glover

2707  
02:20:58,309 --> 02:20:53,560  
woody holberg

2708  
02:21:04,389 --> 02:20:58,319  
[Applause]

2709  
02:21:11,190 --> 02:21:06,180  
christina cook

2710  
02:21:17,429 --> 02:21:11,200  
[Applause]

2711  
02:21:24,230 --> 02:21:18,870  
nicole

2712  
02:21:24,240 --> 02:21:29,910  
and maclean

2713  
02:21:29,920 --> 02:21:35,830

jessica mear

2714

02:21:42,389 --> 02:21:37,030

jasmine

2715

02:21:42,399 --> 02:21:48,150

kate rubins

2716

02:21:48,160 --> 02:21:53,510

frank rubio

2717

02:21:59,670 --> 02:21:54,389

scott

2718

02:21:59,680 --> 02:22:05,429

jessica watkins

2719

02:22:05,439 --> 02:22:13,830

and stephanie wilson

2720

02:22:17,910 --> 02:22:16,230

and now it's my special honor to welcome

2721

02:22:19,910 --> 02:22:17,920

five members

2722

02:22:21,670 --> 02:22:19,920

of the artemis generation who are here

2723

02:22:22,710 --> 02:22:21,680

with us today at the kennedy space

2724

02:22:33,990 --> 02:22:22,720

center

2725

02:22:34,000 --> 02:22:42,230

matthew dominic

2726

02:22:42,240 --> 02:22:49,510

and mclean

2727

02:22:49,520 --> 02:22:56,469

joe acaba

2728

02:22:56,479 --> 02:23:02,830

and

2729

02:23:09,190 --> 02:23:06,309

jessica my fellow americans i give you

2730

02:23:11,910 --> 02:23:09,200

the heroes of the future who will carry

2731

02:23:38,469 --> 02:23:11,920

us back to the moon and beyond

2732

02:23:42,150 --> 02:23:40,710

well thank you all for stepping forward

2733

02:23:43,190 --> 02:23:42,160

and for the excellence that you've shown

2734

02:23:45,190 --> 02:23:43,200

throughout this program and

2735

02:23:47,030 --> 02:23:45,200

congratulations to you

2736

02:23:49,429 --> 02:23:47,040

and all of those that were just named

2737

02:23:51,510 --> 02:23:49,439

that are part of the artemis generation

2738

02:23:54,070 --> 02:23:51,520

really is amazing to think

2739

02:23:55,190 --> 02:23:54,080

that the next man and the first woman on

2740

02:23:57,190 --> 02:23:55,200

the moon

2741

02:23:58,070 --> 02:23:57,200

are among the names that we just read

2742

02:24:01,190 --> 02:23:58,080

and

2743

02:24:03,830 --> 02:24:01,200

right now

2744

02:24:05,670 --> 02:24:03,840

we started today reflecting on a great

2745

02:24:08,469 --> 02:24:05,680

hero of the past

2746

02:24:11,670 --> 02:24:08,479

the artemis generation are the heroes of

2747

02:24:13,110 --> 02:24:11,680

american space exploration in the future

2748

02:24:15,110 --> 02:24:13,120

would you join me in showing our

2749

02:24:17,190 --> 02:24:15,120

appreciation

2750

02:24:34,070 --> 02:24:17,200

for their great heroism

2751

02:24:37,910 --> 02:24:35,990

well thank you all we're going to wrap

2752

02:24:41,270 --> 02:24:37,920

up very quickly here this eighth meeting

2753

02:24:43,190 --> 02:24:41,280

of the national space council

2754

02:24:44,389 --> 02:24:43,200

with gratitude to these heroes who step

2755

02:24:46,070 --> 02:24:44,399

forward and

2756

02:24:48,469 --> 02:24:46,080

let me just say a personal note of

2757

02:24:50,070 --> 02:24:48,479

gratitude to all of the dedicated men

2758

02:24:51,830 --> 02:24:50,080

and women and the staffs who stepped

2759

02:24:53,990 --> 02:24:51,840

forward to serve

2760

02:24:55,349 --> 02:24:54,000

the national space council over the last

2761

02:24:57,270 --> 02:24:55,359

four years

2762

02:24:58,950 --> 02:24:57,280

i think you could tell today in just

2763

02:25:00,950 --> 02:24:58,960

summary fashion

2764

02:25:03,429 --> 02:25:00,960

the extraordinary difference for our

2765

02:25:05,590 --> 02:25:03,439

economy and for our security

2766

02:25:07,750 --> 02:25:05,600

that the national space council under

2767

02:25:09,670 --> 02:25:07,760

the leadership of president donald trump

2768

02:25:12,469 --> 02:25:09,680

has made in renewing

2769

02:25:13,670 --> 02:25:12,479

american leadership in space and join me

2770

02:25:15,590 --> 02:25:13,680

in thanking all the members of the

2771

02:25:22,870 --> 02:25:15,600

national space council one more time

2772

02:25:28,150 --> 02:25:24,950

i also want to take the opportunity to

2773

02:25:30,230 --> 02:25:28,160

thank members of the user advisory group

2774

02:25:32,710 --> 02:25:30,240

this is an extraordinary group of

2775

02:25:33,990 --> 02:25:32,720

americans that had come from the very

2776  
02:25:36,309 --> 02:25:34,000  
heart of

2777  
02:25:38,070 --> 02:25:36,319  
the american space enterprise

2778  
02:25:40,230 --> 02:25:38,080  
they brought their incredible

2779  
02:25:42,070 --> 02:25:40,240  
professionalism and their incredible

2780  
02:25:44,550 --> 02:25:42,080  
experience to bear

2781  
02:25:45,990 --> 02:25:44,560  
on uh on ensuring that we had the very

2782  
02:25:48,630 --> 02:25:46,000  
best guidance

2783  
02:25:52,790 --> 02:25:48,640  
to take the steps necessary to promote

2784  
02:25:54,630 --> 02:25:52,800  
and expand uh america's space enterprise

2785  
02:25:57,429 --> 02:25:54,640  
there are a few that are with us uh here

2786  
02:26:00,230 --> 02:25:57,439  
today uh and first i want to thank from

2787  
02:26:02,309 --> 02:26:00,240  
afar admiral jim ellis who has led uh

2788  
02:26:04,309 --> 02:26:02,319

the user advisory group of the national

2789

02:26:06,469 --> 02:26:04,319

space council with such great

2790

02:26:13,270 --> 02:26:06,479

distinction join me in thanking

2791

02:26:16,950 --> 02:26:15,270

there are 28 members of the user

2792

02:26:18,550 --> 02:26:16,960

advisory group that have given us great

2793

02:26:20,389 --> 02:26:18,560

counsel all along the way they've

2794

02:26:22,309 --> 02:26:20,399

dedicated countless hours

2795

02:26:24,790 --> 02:26:22,319

to giving us their very best advice a

2796

02:26:26,070 --> 02:26:24,800

few are actually with us here today for

2797

02:26:28,389 --> 02:26:26,080

this eighth meeting in the national

2798

02:26:30,309 --> 02:26:28,399

space council so in addition to admiral

2799

02:26:31,990 --> 02:26:30,319

ellis allow me to thank lieutenant

2800

02:26:34,309 --> 02:26:32,000

governor jeannette nunez of the great

2801  
02:26:36,230 --> 02:26:34,319  
state of florida thank you for your

2802  
02:26:39,429 --> 02:26:36,240  
contributions

2803  
02:26:43,830 --> 02:26:41,670  
uh eric stallmer who's with us here

2804  
02:26:48,870 --> 02:26:43,840  
today who is a great space entrepreneur

2805  
02:26:52,790 --> 02:26:51,110  
another great space uh entrepreneur

2806  
02:26:53,990 --> 02:26:52,800  
who's been leading the way and has

2807  
02:26:55,750 --> 02:26:54,000  
become

2808  
02:26:59,110 --> 02:26:55,760  
a great great champion of american

2809  
02:27:00,790 --> 02:26:59,120  
leadership in space uh fatih osman and

2810  
02:27:05,910 --> 02:27:00,800  
his wonderful wife thank you for your

2811  
02:27:10,469 --> 02:27:07,670  
and to a great entrepreneur who brought

2812  
02:27:11,910 --> 02:27:10,479  
great business acumen uh to this and uh

2813  
02:27:14,230 --> 02:27:11,920

the great council

2814

02:27:16,550 --> 02:27:14,240

uh of his wife judy has assisted all

2815

02:27:18,630 --> 02:27:16,560

along the way join me in thanking

2816

02:27:20,309 --> 02:27:18,640

indiana's own fred klipsch for his

2817

02:27:24,469 --> 02:27:20,319

contributions to the national space

2818

02:27:27,910 --> 02:27:25,830

i come to this eighth meeting of the

2819

02:27:28,830 --> 02:27:27,920

national space council just with a heart

2820

02:27:31,429 --> 02:27:28,840

filled with

2821

02:27:33,830 --> 02:27:31,439

gratitude i'm humbled by the efforts of

2822

02:27:35,750 --> 02:27:33,840

all of those that are gathered here

2823

02:27:38,550 --> 02:27:35,760

the military leadership

2824

02:27:40,389 --> 02:27:38,560

from the department of defense

2825

02:27:42,230 --> 02:27:40,399

secretary barrett

2826  
02:27:43,510 --> 02:27:42,240  
general raymond general heighten and

2827  
02:27:45,429 --> 02:27:43,520  
others who have stepped forward to

2828  
02:27:47,270 --> 02:27:45,439  
really transform

2829  
02:27:48,630 --> 02:27:47,280  
the commitment of our nation

2830  
02:27:50,870 --> 02:27:48,640  
to ensuring

2831  
02:27:53,429 --> 02:27:50,880  
the security of the american people from

2832  
02:27:56,309 --> 02:27:53,439  
space but also the vitality

2833  
02:27:58,790 --> 02:27:56,319  
of america's ideals in space

2834  
02:28:00,389 --> 02:27:58,800  
for generations to come but i know i

2835  
02:28:02,389 --> 02:28:00,399  
speak on behalf of the president as well

2836  
02:28:05,429 --> 02:28:02,399  
when i just express my appreciation for

2837  
02:28:07,750 --> 02:28:05,439  
all the members of this administration

2838  
02:28:09,670 --> 02:28:07,760

who caught the same vision

2839

02:28:10,870 --> 02:28:09,680

i love what dr pace said a few moments

2840

02:28:13,190 --> 02:28:10,880

ago he said there's nothing more

2841

02:28:15,429 --> 02:28:13,200

terrifying than having a boss

2842

02:28:17,750 --> 02:28:15,439

who cares about what you're doing

2843

02:28:21,590 --> 02:28:17,760

has an interest in what you're doing

2844

02:28:23,590 --> 02:28:21,600

and all i can say is i can relate

2845

02:28:25,190 --> 02:28:23,600

i'll never forget the day jeanette it

2846

02:28:27,830 --> 02:28:25,200

was when we were campaigning for this

2847

02:28:30,469 --> 02:28:27,840

job four years ago that i got a phone

2848

02:28:33,270 --> 02:28:30,479

call i was on my way to the space coast

2849

02:28:34,309 --> 02:28:33,280

and then our candidate called me up and

2850

02:28:35,910 --> 02:28:34,319

he said

2851  
02:28:37,910 --> 02:28:35,920  
he wanted to revive something called the

2852  
02:28:39,349 --> 02:28:37,920  
national space council

2853  
02:28:40,870 --> 02:28:39,359  
and he wondered if i'd be willing as

2854  
02:28:44,550 --> 02:28:40,880  
other vice presidents had done in the

2855  
02:28:45,750 --> 02:28:44,560  
past to be willing to cheer it and so

2856  
02:28:47,510 --> 02:28:45,760  
there have been many kind words

2857  
02:28:49,510 --> 02:28:47,520  
expressed for your vice president today

2858  
02:28:51,750 --> 02:28:49,520  
but let me uh let me invite all of you

2859  
02:28:54,230 --> 02:28:51,760  
to thank president donald trump and all

2860  
02:28:56,710 --> 02:28:54,240  
of those that have served alongside him

2861  
02:29:04,389 --> 02:28:56,720  
for renewing american leadership in

2862  
02:29:08,070 --> 02:29:06,710  
and as i close this meeting and

2863  
02:29:10,710 --> 02:29:08,080

and in the company of these

2864

02:29:11,590 --> 02:29:10,720

extraordinary americans let me just also

2865

02:29:13,190 --> 02:29:11,600

say

2866

02:29:15,030 --> 02:29:13,200

that i i think the best days for

2867

02:29:16,150 --> 02:29:15,040

american leadership in space are yet to

2868

02:29:17,429 --> 02:29:16,160

come

2869

02:29:19,110 --> 02:29:17,439

and uh

2870

02:29:20,550 --> 02:29:19,120

i know with the caliber of the men and

2871

02:29:22,870 --> 02:29:20,560

women that have stepped forward in this

2872

02:29:24,070 --> 02:29:22,880

program artemis we're going to make all

2873

02:29:26,309 --> 02:29:24,080

new history

2874

02:29:28,389 --> 02:29:26,319

we're going to fill up places like this

2875

02:29:30,389 --> 02:29:28,399

again and again

2876

02:29:32,230 --> 02:29:30,399

and i just want to assure

2877

02:29:34,550 --> 02:29:32,240

all of you that will be carrying

2878

02:29:35,510 --> 02:29:34,560

america's aspiration and ideals into the

2879

02:29:37,429 --> 02:29:35,520

great

2880

02:29:39,349 --> 02:29:37,439

unknown that you go with the confidence

2881

02:29:40,870 --> 02:29:39,359

of the american people

2882

02:29:42,710 --> 02:29:40,880

you will have the support of people all

2883

02:29:43,670 --> 02:29:42,720

across this country as you inspire the

2884

02:29:45,510 --> 02:29:43,680

world

2885

02:29:48,070 --> 02:29:45,520

and i'm very confident that you will go

2886

02:29:50,070 --> 02:29:48,080

with the prayers of tens of millions of

2887

02:29:51,670 --> 02:29:50,080

americans who are grateful for your

2888

02:29:53,349 --> 02:29:51,680

courage and your service

2889

02:29:55,670 --> 02:29:53,359

and the service of all of those that we

2890

02:29:57,030 --> 02:29:55,680

announce today as part of the artemis

2891

02:29:58,950 --> 02:29:57,040

generation

2892

02:30:00,630 --> 02:29:58,960

and my prayer will be in those

2893

02:30:02,309 --> 02:30:00,640

those ancient words that you would be

2894

02:30:03,429 --> 02:30:02,319

confident that as you rise on the wings

2895

02:30:05,590 --> 02:30:03,439

of the dawn

2896

02:30:07,830 --> 02:30:05,600

settle on the far side of the sea

2897

02:30:09,670 --> 02:30:07,840

but as a good book says even if you go

2898

02:30:11,190 --> 02:30:09,680

up to the heavens

2899

02:30:13,429 --> 02:30:11,200

my prayer is that you know that even

2900

02:30:15,990 --> 02:30:13,439

there his hand will guide you

2901

02:30:17,750 --> 02:30:16,000

and his right hand will hold you fast

2902

02:30:19,590 --> 02:30:17,760

so join me in thanking

2903

02:30:22,070 --> 02:30:19,600

the artemis generation the national

2904

02:30:24,790 --> 02:30:22,080

space council our user advisory group

2905

02:30:26,389 --> 02:30:24,800

and every american who has contributed

2906

02:30:28,070 --> 02:30:26,399

to this cause these past four years

2907

02:30:31,349 --> 02:30:28,080

because of all of you

2908

02:30:33,590 --> 02:30:31,359

america is leading in space once again

2909

02:30:36,150 --> 02:30:33,600

and we will be leading for generations

2910

02:30:38,360 --> 02:30:36,160

to come thank you very much god bless

2911

02:30:56,870 --> 02:30:38,370

you all

2912

02:31:01,910 --> 02:30:59,270

at nasa we have always answered the

2913

02:31:05,270 --> 02:31:01,920

innate call to go

2914

02:31:07,190 --> 02:31:05,280

with artemis we are going to stay

2915

02:31:10,550 --> 02:31:07,200

proving that humanity can live on the

2916

02:31:12,830 --> 02:31:10,560

moon mars and other worlds and share the

2917

02:31:14,710 --> 02:31:12,840

wonders of the solar system with

2918

02:31:17,270 --> 02:31:14,720

all

2919

02:31:20,469 --> 02:31:17,280

our story is one of people

2920

02:31:22,710 --> 02:31:20,479

all those who make this journey possible

2921

02:31:25,110 --> 02:31:22,720

from advocates across communities to

2922

02:31:27,510 --> 02:31:25,120

companies across industries to countries

2923

02:31:29,750 --> 02:31:27,520

around the world we achieve this

2924

02:31:32,389 --> 02:31:29,760

collective endeavor

2925

02:31:34,309 --> 02:31:32,399

our efforts create impact for all

2926

02:31:36,550 --> 02:31:34,319

technologies that revolutionize

2927

02:31:38,309 --> 02:31:36,560

industries and jobs that bring

2928

02:31:40,469 --> 02:31:38,319

prosperity to people

2929

02:31:42,550 --> 02:31:40,479

the discoveries from space benefit the

2930

02:31:44,150 --> 02:31:42,560

way we live on earth today and those

2931

02:31:47,910 --> 02:31:44,160

from the moon will create a better

2932

02:31:51,590 --> 02:31:47,920

future for generations to come

2933

02:31:53,590 --> 02:31:51,600

but to do that we must go

2934

02:31:56,710 --> 02:31:53,600

hi i'm chad lingard my name is raj

2935

02:31:59,670 --> 02:31:56,720

achary kayla baron kate rubens hi i'm

2936

02:32:02,550 --> 02:31:59,680

christina cook nasa astronaut joe acaba

2937

02:32:04,790 --> 02:32:02,560

jessica muir woody hoberg and mclean

2938

02:32:06,790 --> 02:32:04,800

stephanie wilson my name is johnny kim

2939

02:32:09,510 --> 02:32:06,800

nicole mann victor glover jessica

2940

02:32:13,429 --> 02:32:09,520

watkins hi i'm matthew dominic jasmine

2941

02:32:16,950 --> 02:32:15,670

this is what we do

2942

02:32:18,630 --> 02:32:16,960

this is what we will do

2943

02:32:21,780 --> 02:32:18,640

[Music]

2944

02:32:31,270 --> 02:32:21,790

let's go

2945

02:32:33,429 --> 02:32:31,280

[Music]

2946

02:32:45,040 --> 02:32:33,439

we go to the moon to learn how to live

2947

02:32:45,050 --> 02:32:54,469

[Music]

2948

02:32:57,190 --> 02:32:55,910

going to space

2949

02:32:59,830 --> 02:32:57,200

is awesome

2950

02:33:01,830 --> 02:32:59,840

my first flight was on the space shuttle

2951  
02:33:03,110 --> 02:33:01,840  
you get into the vehicle you're all

2952  
02:33:05,110 --> 02:33:03,120  
strapped in

2953  
02:33:06,630 --> 02:33:05,120  
you know we have the countdown timer

2954  
02:33:12,309 --> 02:33:06,640  
that's going on

2955  
02:33:15,670 --> 02:33:13,590  
in your mind you're thinking i can't

2956  
02:33:16,950 --> 02:33:15,680  
believe this is actually happening it's

2957  
02:33:20,389 --> 02:33:16,960  
the coolest

2958  
02:33:24,469 --> 02:33:20,399  
experience ever

2959  
02:33:28,870 --> 02:33:26,550  
hey pops it's uh it's good to hear your

2960  
02:33:31,030 --> 02:33:28,880  
voice thanks for the support the launch

2961  
02:33:33,910 --> 02:33:31,040  
was awesome

2962  
02:33:36,389 --> 02:33:33,920  
when i look back to who inspired me it

2963  
02:33:39,110 --> 02:33:36,399

started with my grandfather he actually

2964

02:33:41,270 --> 02:33:39,120

had the old films of the apollo missions

2965

02:33:43,349 --> 02:33:41,280

that we would watch

2966

02:33:45,750 --> 02:33:43,359

i've been fortunate that i've had those

2967

02:33:49,030 --> 02:33:45,760

mentors that have supported me and

2968

02:33:51,910 --> 02:33:49,040

motivated me to be where i am today

2969

02:33:53,990 --> 02:33:51,920

i was born in southern california

2970

02:33:56,870 --> 02:33:54,000

reading playing sports

2971

02:33:58,389 --> 02:33:56,880

enjoyed being outdoors spent some time

2972

02:34:01,270 --> 02:33:58,399

in the united states marine corps

2973

02:34:03,030 --> 02:34:01,280

reserve was a u.s peace corps volunteer

2974

02:34:05,110 --> 02:34:03,040

did a lot of different jobs until i

2975

02:34:07,190 --> 02:34:05,120

found the one that i felt was the most

2976

02:34:09,429 --> 02:34:07,200

important job on the planet which is

2977

02:34:11,830 --> 02:34:09,439

being a school teacher it was one of the

2978

02:34:13,990 --> 02:34:11,840

jobs i never thought i would leave until

2979

02:34:15,590 --> 02:34:14,000

i was given this opportunity to become a

2980

02:34:20,309 --> 02:34:15,600

nasa astronaut

2981

02:34:22,630 --> 02:34:20,319

third flight into space

2982

02:34:24,230 --> 02:34:22,640

i've had the opportunity to go on three

2983

02:34:28,830 --> 02:34:24,240

space missions

2984

02:34:32,950 --> 02:34:28,840

and i've spent about 306 days in

2985

02:34:33,990 --> 02:34:32,960

space to actually walk on the moon for

2986

02:34:36,950 --> 02:34:34,000

me

2987

02:34:40,230 --> 02:34:36,960

to have that as a possibility is just

2988

02:34:45,120 --> 02:34:40,240

incredible this is our next step to

2989

02:35:06,230 --> 02:34:45,130

explore places we have never been before

2990

02:35:12,389 --> 02:35:07,910

all right nasa family and friends our

2991

02:35:15,110 --> 02:35:14,070

i think the thing that's most important

2992

02:35:16,230 --> 02:35:15,120

to me

2993

02:35:18,950 --> 02:35:16,240

is

2994

02:35:21,830 --> 02:35:18,960

just the inspiration of exploration i

2995

02:35:23,910 --> 02:35:21,840

think we all have this innate sense to

2996

02:35:25,910 --> 02:35:23,920

explore whether you're the one who

2997

02:35:28,389 --> 02:35:25,920

actually gets to step on the moon or not

2998

02:35:30,389 --> 02:35:28,399

i think it changes all of us to know

2999

02:35:32,309 --> 02:35:30,399

that we can actually do things that

3000

02:35:35,510 --> 02:35:32,319

would be unimaginable to the generations

3001

02:35:40,550 --> 02:35:38,389

9 11 happened eight days before my 14th

3002

02:35:41,670 --> 02:35:40,560

birthday so i was in eighth grade and i

3003

02:35:44,389 --> 02:35:41,680

was really

3004

02:35:46,710 --> 02:35:44,399

inspired by how our country responded to

3005

02:35:48,550 --> 02:35:46,720

that really tragic event

3006

02:35:50,630 --> 02:35:48,560

it really made me realize that i wanted

3007

02:35:53,429 --> 02:35:50,640

to serve and commit myself to something

3008

02:35:55,190 --> 02:35:53,439

that was bigger than just me

3009

02:35:57,030 --> 02:35:55,200

and there's a huge diversity of

3010

02:35:58,790 --> 02:35:57,040

opportunities in the navy whether it's

3011

02:36:01,190 --> 02:35:58,800

flying a plane driving a surface ship

3012

02:36:02,710 --> 02:36:01,200

driving a submarine being a doctor and i

3013

02:36:05,030 --> 02:36:02,720

spent a week with the submarine warfare

3014

02:36:07,750 --> 02:36:05,040

community including a day underway and i

3015

02:36:09,750 --> 02:36:07,760

was so impressed by the sailors on that

3016

02:36:12,710 --> 02:36:09,760

submarine they just seemed like the kind

3017

02:36:15,429 --> 02:36:12,720

of people who would teach me how to be a

3018

02:36:18,870 --> 02:36:17,830

for me the dream of becoming an

3019

02:36:21,110 --> 02:36:18,880

astronaut

3020

02:36:22,950 --> 02:36:21,120

cemented itself pretty late my life i

3021

02:36:25,830 --> 02:36:22,960

went back to the naval academy to work

3022

02:36:27,429 --> 02:36:25,840

for admiral ted carter and because i was

3023

02:36:28,950 --> 02:36:27,439

working with him i got to go to all

3024

02:36:31,190 --> 02:36:28,960

these really cool events and meet a lot

3025

02:36:33,750 --> 02:36:31,200

of people who had no business talking to

3026

02:36:36,150 --> 02:36:33,760

really i met one of his classmates

3027

02:36:37,510 --> 02:36:36,160

former astronaut kay heyer and she was

3028

02:36:38,790 --> 02:36:37,520

telling me about one of her shuttle

3029

02:36:40,790 --> 02:36:38,800

missions where they were building the

3030

02:36:42,469 --> 02:36:40,800

early space station and i said you know

3031

02:36:44,309 --> 02:36:42,479

that sounds a lot like a submarine in

3032

02:36:46,630 --> 02:36:44,319

space she looked at me she was like it

3033

02:36:48,870 --> 02:36:46,640

totally is that's exactly what it's like

3034

02:36:51,750 --> 02:36:48,880

and that was sort of the lightning

3035

02:36:53,830 --> 02:36:51,760

strike moment as a kid i knew about

3036

02:36:56,389 --> 02:36:53,840

astronauts i watched shuttle launches on

3037

02:36:58,389 --> 02:36:56,399

tv i knew we were in space but never

3038

02:37:00,150 --> 02:36:58,399

seemed like something that i could do

3039

02:37:02,150 --> 02:37:00,160

but i had really good mentorship at that

3040

02:37:04,950 --> 02:37:02,160

time you know i shared that dream with

3041

02:37:07,190 --> 02:37:04,960

my boss admiral carter he turned to me

3042

02:37:08,870 --> 02:37:07,200

and he said kayla do you know how you

3043

02:37:10,309 --> 02:37:08,880

become an astronaut

3044

02:37:11,750 --> 02:37:10,319

you apply

3045

02:37:13,830 --> 02:37:11,760

and for me

3046

02:37:15,510 --> 02:37:13,840

that was the perfect mentorship i need

3047

02:37:17,349 --> 02:37:15,520

in that moment i'm somebody who thinks

3048

02:37:19,349 --> 02:37:17,359

really hard about everything i do all

3049

02:37:20,630 --> 02:37:19,359

the details and he said you know it's

3050

02:37:22,150 --> 02:37:20,640

actually pretty simple you just got to

3051  
02:37:23,670 --> 02:37:22,160  
put yourself out there and you never

3052  
02:37:24,630 --> 02:37:23,680  
know what's going to happen so i did

3053  
02:37:33,410 --> 02:37:24,640  
apply

3054  
02:37:59,750 --> 02:37:50,170  
[Music]

3055  
02:38:04,150 --> 02:38:02,150  
for me every time i have an nbl run or

3056  
02:38:05,750 --> 02:38:04,160  
every time i do a practice space walk

3057  
02:38:07,910 --> 02:38:05,760  
and you get in that

3058  
02:38:09,750 --> 02:38:07,920  
that suit like we call it the emu and i

3059  
02:38:12,070 --> 02:38:09,760  
feel the gloves go on feel the pressure

3060  
02:38:13,429 --> 02:38:12,080  
build uh feel the fan start to flow and

3061  
02:38:14,710 --> 02:38:13,439  
the the air start to come over the back

3062  
02:38:16,469 --> 02:38:14,720  
of your head and you realize like this

3063  
02:38:17,830 --> 02:38:16,479

is it that's what it really strikes me

3064

02:38:21,030 --> 02:38:17,840

that this is this is actually not a

3065

02:38:23,510 --> 02:38:21,040

dream this is actually happening

3066

02:38:25,670 --> 02:38:23,520

i'm raj achary i go by grinder i grew up

3067

02:38:27,670 --> 02:38:25,680

in iowa i went to the air force academy

3068

02:38:29,429 --> 02:38:27,680

and then mit and then i was an air force

3069

02:38:31,110 --> 02:38:29,439

test pilot

3070

02:38:32,790 --> 02:38:31,120

if i ask my mom she definitely has

3071

02:38:34,469 --> 02:38:32,800

memories of me the child talking about

3072

02:38:35,429 --> 02:38:34,479

being an astronaut i always knew i

3073

02:38:37,190 --> 02:38:35,439

wanted to

3074

02:38:38,630 --> 02:38:37,200

do something related to aviation but at

3075

02:38:40,230 --> 02:38:38,640

the same time i think i also started

3076

02:38:41,830 --> 02:38:40,240

telling myself it wasn't really possible

3077

02:38:43,670 --> 02:38:41,840

because it was just something to get let

3078

02:38:45,670 --> 02:38:43,680

down from

3079

02:38:47,030 --> 02:38:45,680

every phase of my life i had doubt uh

3080

02:38:48,469 --> 02:38:47,040

whether i was at the air force academy

3081

02:38:50,630 --> 02:38:48,479

and wondering whether i could survive

3082

02:38:52,630 --> 02:38:50,640

basic training whether it was uh when i

3083

02:38:54,150 --> 02:38:52,640

was at mit or even pilot training

3084

02:38:55,830 --> 02:38:54,160

failing check rides

3085

02:38:57,830 --> 02:38:55,840

and thinking again maybe maybe i'm on

3086

02:38:59,910 --> 02:38:57,840

the wrong path but i think in all those

3087

02:39:01,910 --> 02:38:59,920

events i've been blessed to have a

3088

02:39:03,429 --> 02:39:01,920

supportive family supportive spouse

3089

02:39:04,790 --> 02:39:03,439

supportive mentors and leaders who

3090

02:39:06,230 --> 02:39:04,800

helped me at the time realized like hey

3091

02:39:09,190 --> 02:39:06,240

these are setbacks and and you get

3092

02:39:10,710 --> 02:39:09,200

better by tackling those head on

3093

02:39:12,150 --> 02:39:10,720

for the artemis mission they're not just

3094

02:39:15,510 --> 02:39:12,160

powerpoint slides they're actually

3095

02:39:17,510 --> 02:39:15,520

metals being bent shaped uh formed to

3096

02:39:19,110 --> 02:39:17,520

build the things that we're going to use

3097

02:39:21,910 --> 02:39:19,120

and as a you know as a test pilot

3098

02:39:25,910 --> 02:39:21,920

background this is uh you know a dream

3099

02:39:29,990 --> 02:39:27,510

now looking back i would have told

3100

02:39:31,670 --> 02:39:30,000

myself hey just just pause and

3101

02:39:33,910 --> 02:39:31,680

appreciate what's actually happening

3102

02:39:35,910 --> 02:39:33,920

around you and the magic of the moment

3103

02:39:37,510 --> 02:39:35,920

that you're in

3104

02:39:38,870 --> 02:39:37,520

newton talks about you know standing on

3105

02:39:40,230 --> 02:39:38,880

the shoulders of giants and i'm

3106

02:39:41,510 --> 02:39:40,240

definitely not a giant but if i can

3107

02:39:45,510 --> 02:39:41,520

throw a little stepping stone out there

3108

02:39:45,520 --> 02:39:51,880

my name is raj achary

3109

02:40:15,910 --> 02:40:00,290

[Music]

3110

02:40:20,030 --> 02:40:17,429

ladies and gentlemen our newest

3111

02:40:23,910 --> 02:40:20,040

astronaut matthew dominic

3112

02:40:26,230 --> 02:40:23,920

[Applause]

3113

02:40:28,870 --> 02:40:26,240

i think if you boil it down to it uh i'm

3114

02:40:30,550 --> 02:40:28,880

a father a husband and an explorer

3115

02:40:32,389 --> 02:40:30,560

for my whole life i've always wanted to

3116

02:40:34,389 --> 02:40:32,399

explore further i didn't exactly know

3117

02:40:36,070 --> 02:40:34,399

where i was going to go at any one time

3118

02:40:38,469 --> 02:40:36,080

but i always knew i wanted to go further

3119

02:40:40,790 --> 02:40:38,479

or faster or higher

3120

02:40:42,710 --> 02:40:40,800

i remember as a kid going to air shows

3121

02:40:44,230 --> 02:40:42,720

with with my dad and just looking at

3122

02:40:45,910 --> 02:40:44,240

airplanes and i wanted to understand it

3123

02:40:47,349 --> 02:40:45,920

and so it was just drawn to it every air

3124

02:40:49,349 --> 02:40:47,359

show i went to i wanted to go get in

3125

02:40:51,110 --> 02:40:49,359

that airplane i grew up in wheat ridge

3126  
02:40:52,790 --> 02:40:51,120  
colorado i went to the university of san

3127  
02:40:54,150 --> 02:40:52,800  
diego for electrical engineering and

3128  
02:40:56,790 --> 02:40:54,160  
went to naval post graduate school as

3129  
02:40:59,510 --> 02:40:56,800  
well naval test pilot

3130  
02:41:01,269 --> 02:40:59,520  
it's certainly a sacrifice for family

3131  
02:41:03,269 --> 02:41:01,279  
and friends

3132  
02:41:04,950 --> 02:41:03,279  
being in the military you know we would

3133  
02:41:05,750 --> 02:41:04,960  
go on deployments and lose contact with

3134  
02:41:07,750 --> 02:41:05,760  
them

3135  
02:41:09,910 --> 02:41:07,760  
and they understood the risk that we

3136  
02:41:12,550 --> 02:41:09,920  
were taking you think about the immense

3137  
02:41:14,710 --> 02:41:12,560  
responsibility put on you at times

3138  
02:41:16,469 --> 02:41:14,720

you don't want to let the world down

3139

02:41:23,750 --> 02:41:16,479

but it's about pushing humanity forward

3140

02:41:27,830 --> 02:41:25,750

watching rockets launch right i mean

3141

02:41:29,670 --> 02:41:27,840

watching the shuttle launches as a kid

3142

02:41:30,950 --> 02:41:29,680

was an enabler for music how do how do i

3143

02:41:32,469 --> 02:41:30,960

become a part of that how do i join that

3144

02:41:33,830 --> 02:41:32,479

team to go do that

3145

02:41:37,670 --> 02:41:33,840

godspeed

3146

02:41:39,750 --> 02:41:37,680

to the class of 2017.

3147

02:41:41,269 --> 02:41:39,760

you find out you're getting this job

3148

02:41:42,790 --> 02:41:41,279

and that's huge

3149

02:41:45,269 --> 02:41:42,800

but really that first time that you go

3150

02:41:47,110 --> 02:41:45,279

put your hands into the gloves

3151  
02:41:49,030 --> 02:41:47,120  
is just a very interesting moment it's a

3152  
02:41:50,309 --> 02:41:49,040  
pinch me moment and you realize that

3153  
02:41:52,150 --> 02:41:50,319  
this is this is real it's going to

3154  
02:41:54,070 --> 02:41:52,160  
happen we're going

3155  
02:41:56,630 --> 02:41:54,080  
my previous job was to keep the world

3156  
02:41:58,710 --> 02:41:56,640  
from going backwards this job is about

3157  
02:42:01,269 --> 02:41:58,720  
getting the world to go forwards

3158  
02:42:04,630 --> 02:42:01,279  
pojo brings a lot of energy to our team

3159  
02:42:07,269 --> 02:42:04,640  
and he is always definitely 100 in in

3160  
02:42:17,550 --> 02:42:07,279  
anything he does

3161  
02:42:17,560 --> 02:42:26,389  
[Music]

3162  
02:42:29,830 --> 02:42:27,990  
my earliest idea of who i wanted to be

3163  
02:42:32,070 --> 02:42:29,840

growing up was my father

3164

02:42:34,710 --> 02:42:32,080

my father was a police officer and so i

3165

02:42:36,469 --> 02:42:34,720

wanted to be a police officer

3166

02:42:38,309 --> 02:42:36,479

and then i saw a shuttle launch on

3167

02:42:41,030 --> 02:42:38,319

television and i thought i really want

3168

02:42:42,870 --> 02:42:41,040

to drive one of those and yes i said

3169

02:42:45,670 --> 02:42:42,880

drive because i didn't know any pilots

3170

02:42:47,349 --> 02:42:45,680

or engineers even for that matter

3171

02:42:50,309 --> 02:42:47,359

i'm a public servant and i have been for

3172

02:42:52,870 --> 02:42:50,319

22 years since january of 1998

3173

02:42:54,790 --> 02:42:52,880

and so i asked myself have i done all

3174

02:42:56,870 --> 02:42:54,800

that i can for my country and for my

3175

02:42:59,110 --> 02:42:56,880

family

3176

02:43:01,429 --> 02:42:59,120

i have fantasized about stepping on the

3177

02:43:03,670 --> 02:43:01,439

moon it's my dream my dream is to work

3178

02:43:05,510 --> 02:43:03,680

on the surface of the moon and being

3179

02:43:10,710 --> 02:43:05,520

able to launch humans from

3180

02:43:14,070 --> 02:43:12,469

i was sitting at my desk in the russell

3181

02:43:15,590 --> 02:43:14,080

senate office building and i got a phone

3182

02:43:17,429 --> 02:43:15,600

call from a houston phone number and by

3183

02:43:19,429 --> 02:43:17,439

the time i answered i missed it

3184

02:43:20,950 --> 02:43:19,439

and so i called back and after a lot of

3185

02:43:23,190 --> 02:43:20,960

waiting and being transferred i was

3186

02:43:24,790 --> 02:43:23,200

transferred to janet cavandi who was the

3187

02:43:26,469 --> 02:43:24,800

chair of our board and she asked me if i

3188

02:43:28,070 --> 02:43:26,479

wanted to come to houston and convince

3189

02:43:29,670 --> 02:43:28,080

training and i actually pinched myself

3190

02:43:31,429 --> 02:43:29,680

several times walking back to my office

3191

02:43:32,790 --> 02:43:31,439

there is no way that this is a real

3192

02:43:34,550 --> 02:43:32,800

thing i'm going to wake up and be so

3193

02:43:36,070 --> 02:43:34,560

disappointed when i woke up the next day

3194

02:43:38,070 --> 02:43:36,080

and i actually had an email from janet

3195

02:43:40,150 --> 02:43:38,080

saying it was not a dream it was that

3196

02:43:41,590 --> 02:43:40,160

was actually unreal

3197

02:43:44,710 --> 02:43:41,600

he's a lieutenant commander in the

3198

02:43:46,950 --> 02:43:44,720

united states navy where he flew f18s he

3199

02:43:48,790 --> 02:43:46,960

came to us from washington dc where he

3200

02:43:51,190 --> 02:43:48,800

was serving as united states navy

3201  
02:43:52,469 --> 02:43:51,200  
legislative fellow in the united states

3202  
02:43:55,349 --> 02:43:52,479  
senate

3203  
02:43:59,269 --> 02:43:57,830  
being selected for this job you you

3204  
02:44:00,550 --> 02:43:59,279  
can't help but to think of i've got so

3205  
02:44:03,030 --> 02:44:00,560  
many friends that i know could do this

3206  
02:44:04,790 --> 02:44:03,040  
job well and and that feeling of wow why

3207  
02:44:06,150 --> 02:44:04,800  
didn't they get it and you know feeling

3208  
02:44:07,750 --> 02:44:06,160  
like you're not really good enough cut

3209  
02:44:09,990 --> 02:44:07,760  
out for the job and i felt all of those

3210  
02:44:12,389 --> 02:44:10,000  
things being a father a husband all of

3211  
02:44:13,750 --> 02:44:12,399  
those things come with doubt and i think

3212  
02:44:16,469 --> 02:44:13,760  
you have to learn to get comfortable

3213  
02:44:21,830 --> 02:44:19,269

they call things moonshots

3214

02:44:24,230 --> 02:44:21,840

when people accomplish something amazing

3215

02:44:26,070 --> 02:44:24,240

no matter how good a story you tell

3216

02:44:28,230 --> 02:44:26,080

people are captivated by real world

3217

02:44:29,910 --> 02:44:28,240

accomplishment

3218

02:44:32,230 --> 02:44:29,920

it's our generation's opportunity to

3219

02:44:34,550 --> 02:44:32,240

have our own literal moonshot and then

3220

02:44:36,309 --> 02:44:34,560

to continue inspiring future generations

3221

02:44:38,309 --> 02:44:36,319

to reach for the moon

3222

02:44:40,389 --> 02:44:38,319

they not only have the right stuff they

3223

02:44:41,670 --> 02:44:40,399

represent the full tapestry of american

3224

02:44:44,150 --> 02:44:41,680

diversity

3225

02:44:46,230 --> 02:44:44,160

their journey begins now and the nation

3226

02:44:58,230 --> 02:44:46,240

will be right beside him reaching for

3227

02:44:58,240 --> 02:45:08,070

[Music]

3228

02:45:11,190 --> 02:45:09,590

i actually thought that i was not

3229

02:45:13,670 --> 02:45:11,200

experienced enough didn't have the

3230

02:45:17,510 --> 02:45:13,680

credentials i needed to actually become

3231

02:45:20,550 --> 02:45:18,790

the reason i'd want to go to space with

3232

02:45:22,150 --> 02:45:20,560

woody isn't just because he's brilliant

3233

02:45:23,590 --> 02:45:22,160

which he is but it's because he carries

3234

02:45:24,790 --> 02:45:23,600

his brilliance in such a way that you

3235

02:45:26,230 --> 02:45:24,800

don't feel like you're an idiot when

3236

02:45:27,670 --> 02:45:26,240

you're around him

3237

02:45:30,230 --> 02:45:27,680

it's funny all the little decisions in

3238

02:45:32,550 --> 02:45:30,240

life that get you to where you're going

3239

02:45:35,510 --> 02:45:32,560

my earliest memories i remember building

3240

02:45:37,750 --> 02:45:35,520

little toys out of wood over time got to

3241

02:45:39,349 --> 02:45:37,760

building like 21 foot tall

3242

02:45:41,990 --> 02:45:39,359

rockets and one of those is still up at

3243

02:45:45,110 --> 02:45:42,000

my parents place stored in their barn i

3244

02:45:46,630 --> 02:45:45,120

remember agonizing over what my major

3245

02:45:47,910 --> 02:45:46,640

should be and finally i sort of threw up

3246

02:45:50,070 --> 02:45:47,920

my hands and said i really like

3247

02:45:54,230 --> 02:45:50,080

airplanes and things that fly so i'll do

3248

02:45:58,389 --> 02:45:56,230

one of the best decisions of my life was

3249

02:46:00,230 --> 02:45:58,399

taking summers away from grad school to

3250

02:46:01,590 --> 02:46:00,240

work search and rescue in yosemite one

3251  
02:46:04,309 --> 02:46:01,600  
of my favorite parts of the job was

3252  
02:46:05,990 --> 02:46:04,319  
getting thrown into situations where i

3253  
02:46:08,150 --> 02:46:06,000  
wasn't quite sure what to do the

3254  
02:46:10,710 --> 02:46:08,160  
confidence i gained from that was that i

3255  
02:46:12,710 --> 02:46:10,720  
can deal with the unexpected and adapt

3256  
02:46:14,309 --> 02:46:12,720  
and overcome the other great thing about

3257  
02:46:15,830 --> 02:46:14,319  
what is he applies at brilliance across

3258  
02:46:17,510 --> 02:46:15,840  
all phases of his life whether it's in

3259  
02:46:19,030 --> 02:46:17,520  
the outdoors where he basically saved

3260  
02:46:21,830 --> 02:46:19,040  
half our class from getting severe

3261  
02:46:24,150 --> 02:46:21,840  
hypothermia like it was no big deal

3262  
02:46:26,150 --> 02:46:24,160  
and then on his very first uh space

3263  
02:46:27,590 --> 02:46:26,160

station sim nonchalantly directed the

3264

02:46:30,150 --> 02:46:27,600

whole team through an emergency response

3265

02:46:32,070 --> 02:46:30,160

like you've done it a hundred times

3266

02:46:33,190 --> 02:46:32,080

i've always had a slight tension in me

3267

02:46:35,670 --> 02:46:33,200

between

3268

02:46:37,830 --> 02:46:35,680

sort of the engineer analytical problem

3269

02:46:39,670 --> 02:46:37,840

solving part of me and this sort of

3270

02:46:42,550 --> 02:46:39,680

operational side of me that wanted to be

3271

02:46:44,550 --> 02:46:42,560

out experiencing the world with my hands

3272

02:46:47,269 --> 02:46:44,560

i feel really lucky to be here now where

3273

02:46:48,710 --> 02:46:47,279

i have an opportunity to do operational

3274

02:46:50,230 --> 02:46:48,720

things but also solve really hard

3275

02:46:52,070 --> 02:46:50,240

technical problems

3276  
02:46:54,230 --> 02:46:52,080  
when we go do hard things and challenge

3277  
02:46:57,269 --> 02:46:54,240  
ourselves in that way we will learn new

3278  
02:46:59,349 --> 02:46:57,279  
things that will benefit us

3279  
02:47:06,469 --> 02:46:59,359  
ladies and gentlemen our next newest

3280  
02:47:21,370 --> 02:47:08,550  
i'm an engineer i'm a pilot i'm a

3281  
02:47:21,380 --> 02:47:29,190  
[Music]

3282  
02:47:34,469 --> 02:47:30,950  
ladies and gentlemen the newest nasa

3283  
02:47:37,030 --> 02:47:34,479  
astronaut jonathan kim

3284  
02:47:41,429 --> 02:47:37,040  
you're a navy seal with a degree from

3285  
02:47:41,439 --> 02:47:44,950  
that's just ridiculous

3286  
02:47:47,750 --> 02:47:46,070  
[Music]

3287  
02:47:48,870 --> 02:47:47,760  
exploration is

3288  
02:47:52,469 --> 02:47:48,880

written

3289

02:47:58,150 --> 02:47:55,750

when i realized that being an astronaut

3290

02:48:01,110 --> 02:47:58,160

is really the opportunity to expand our

3291

02:48:03,429 --> 02:48:01,120

understanding of the cosmos

3292

02:48:05,750 --> 02:48:03,439

to make our world a better place

3293

02:48:09,349 --> 02:48:05,760

all while inspiring the next generation

3294

02:48:13,110 --> 02:48:09,359

of children you julian the same children

3295

02:48:14,950 --> 02:48:13,120

that didn't have the confidence to dream

3296

02:48:17,590 --> 02:48:14,960

like i did

3297

02:48:19,730 --> 02:48:17,600

that was when i realized that i

3298

02:48:21,830 --> 02:48:19,740

absolutely wanted to be an astronaut

3299

02:48:24,389 --> 02:48:21,840

[Music]

3300

02:48:27,349 --> 02:48:24,399

like a lot of immigrant families my

3301

02:48:28,870 --> 02:48:27,359

parents moved to america with the hope

3302

02:48:30,790 --> 02:48:28,880

of the american dream

3303

02:48:31,910 --> 02:48:30,800

that their children can have a better

3304

02:48:34,389 --> 02:48:31,920

opportunity

3305

02:48:37,030 --> 02:48:34,399

in this world

3306

02:48:38,630 --> 02:48:37,040

i had a hard time growing up as a kid

3307

02:48:41,349 --> 02:48:38,640

i lacked a lot of things but the biggest

3308

02:48:42,870 --> 02:48:41,359

thing i lacked is confidence

3309

02:48:44,550 --> 02:48:42,880

i wake up

3310

02:48:46,630 --> 02:48:44,560

every day and i think about the

3311

02:48:49,429 --> 02:48:46,640

opportunities i've had

3312

02:48:52,150 --> 02:48:49,439

it's hard for me to believe that

3313

02:48:55,269 --> 02:48:52,160

i'm that same person no you just beam

3314

02:48:57,269 --> 02:48:55,279

right you spend so much effort and hope

3315

02:48:59,110 --> 02:48:57,279

and you try to give whatever the student

3316

02:49:00,389 --> 02:48:59,120

needs to to grow and get where they want

3317

02:49:02,150 --> 02:49:00,399

to be and then when you see that they

3318

02:49:04,150 --> 02:49:02,160

get there it's

3319

02:49:06,710 --> 02:49:04,160

it's just really

3320

02:49:08,309 --> 02:49:06,720

it makes me immensely proud to be part

3321

02:49:09,590 --> 02:49:08,319

of an organization

3322

02:49:11,750 --> 02:49:09,600

to achieve

3323

02:49:14,230 --> 02:49:11,760

such a monumental challenge like

3324

02:49:16,150 --> 02:49:14,240

returning to them

3325

02:49:17,990 --> 02:49:16,160

and that's what really excites me when i

3326

02:49:20,469 --> 02:49:18,000

think of artemis

3327

02:49:21,590 --> 02:49:20,479

the lives that we're going to positively

3328

02:49:23,750 --> 02:49:21,600

impact

3329

02:49:24,870 --> 02:49:23,760

on this endeavor

3330

02:49:27,590 --> 02:49:24,880

it's

3331

02:49:28,710 --> 02:49:27,600

hard to articulate all those emotions

3332

02:49:30,710 --> 02:49:28,720

but it's

3333

02:49:33,429 --> 02:49:30,720

wow

3334

02:49:36,309 --> 02:49:33,439

i am an astronaut

3335

02:49:40,950 --> 02:49:36,319

and i have this amazing opportunity to

3336

02:49:43,110 --> 02:49:40,960

serve my country in humanity to me he is

3337

02:49:44,790 --> 02:49:43,120

service about self

3338

02:49:49,330 --> 02:49:44,800

i would trust my life to him and i'm

3339

02:49:49,340 --> 02:50:09,830

[Music]

3340

02:50:13,990 --> 02:50:11,510

today's space flight will be the very

3341

02:50:16,710 --> 02:50:14,000

first ford nasa's christina cook we have

3342

02:50:19,110 --> 02:50:16,720

to answer humanity's call to explore we

3343

02:50:21,670 --> 02:50:19,120

have to set ourselves as the leadership

3344

02:50:24,070 --> 02:50:21,680

and proactively seeking out challenges

3345

02:50:26,389 --> 02:50:24,080

and learning that when we focus on one

3346

02:50:28,469 --> 02:50:26,399

thing and we focus on it together we can

3347

02:50:31,830 --> 02:50:28,479

achieve anything

3348

02:50:34,389 --> 02:50:31,840

i am someone who has loved exploration

3349

02:50:36,469 --> 02:50:34,399

on the frontier since i was little i

3350

02:50:38,469 --> 02:50:36,479

used to be inspired by the night sky and

3351  
02:50:40,710 --> 02:50:38,479  
throughout my career it's been this

3352  
02:50:43,110 --> 02:50:40,720  
balance between engineering for space

3353  
02:50:46,230 --> 02:50:43,120  
science missions and doing science in

3354  
02:50:48,469 --> 02:50:46,240  
really remote places all over the world

3355  
02:50:50,230 --> 02:50:48,479  
i loved things that made me feel small

3356  
02:50:52,389 --> 02:50:50,240  
things that made me ponder the size of

3357  
02:50:54,309 --> 02:50:52,399  
the universe my place in it and

3358  
02:50:56,309 --> 02:50:54,319  
everything that was out there to explore

3359  
02:50:58,230 --> 02:50:56,319  
and i put that stuff to work making

3360  
02:51:00,150 --> 02:50:58,240  
science gadgets for nasa space science

3361  
02:51:03,110 --> 02:51:00,160  
missions and working really hard in that

3362  
02:51:05,110 --> 02:51:03,120  
career but also setting goals in hobbies

3363  
02:51:06,710 --> 02:51:05,120

that i had i learned to rock climb i

3364

02:51:08,230 --> 02:51:06,720

learned to sail

3365

02:51:09,990 --> 02:51:08,240

finally learning surfing at this point

3366

02:51:12,469 --> 02:51:10,000

in my life and so i think working hard

3367

02:51:14,550 --> 02:51:12,479

on all fronts to be a better person and

3368

02:51:16,309 --> 02:51:14,560

to contribute the most to the world is

3369

02:51:17,910 --> 02:51:16,319

really what's important to me

3370

02:51:20,150 --> 02:51:17,920

i really don't remember a time when i

3371

02:51:21,910 --> 02:51:20,160

didn't want to be an astronaut for me i

3372

02:51:24,469 --> 02:51:21,920

learned that if i was going to be an

3373

02:51:26,389 --> 02:51:24,479

astronaut it was because my passions

3374

02:51:27,910 --> 02:51:26,399

turned me into someone that could

3375

02:51:29,910 --> 02:51:27,920

contribute the most as someone

3376

02:51:31,349 --> 02:51:29,920

contributing to human space flight so i

3377

02:51:32,950 --> 02:51:31,359

didn't necessarily live my life

3378

02:51:35,030 --> 02:51:32,960

according to check boxes of how you can

3379

02:51:37,030 --> 02:51:35,040

become an astronaut but i followed those

3380

02:51:38,550 --> 02:51:37,040

passions and one year looked at who i

3381

02:51:40,469 --> 02:51:38,560

had become and the skills i had gathered

3382

02:51:42,550 --> 02:51:40,479

and i asked could i sit across from a

3383

02:51:44,309 --> 02:51:42,560

table and present myself with someone

3384

02:51:46,710 --> 02:51:44,319

who could do this well and i thought i'm

3385

02:51:48,710 --> 02:51:46,720

going to give it a shot

3386

02:51:50,150 --> 02:51:48,720

you know there was a moment where it

3387

02:51:52,070 --> 02:51:50,160

came to me that this was the most

3388

02:51:54,630 --> 02:51:52,080

exquisite personal and professional

3389

02:51:56,389 --> 02:51:54,640

moment of my life a moment of career

3390

02:51:58,469 --> 02:51:56,399

culmination where everything i had

3391

02:52:00,550 --> 02:51:58,479

learned personally professionally every

3392

02:52:02,870 --> 02:52:00,560

skill i had been taught every hero i had

3393

02:52:05,750 --> 02:52:02,880

emulated it was all coming together in

3394

02:52:07,990 --> 02:52:05,760

this moment and i realized that i wanted

3395

02:52:09,750 --> 02:52:08,000

my work to tell every single person on

3396

02:52:11,590 --> 02:52:09,760

earth that they could have that moment

3397

02:52:13,349 --> 02:52:11,600

too if they worked hard for it and i

3398

02:52:36,080 --> 02:52:13,359

wanted every single person on earth to

3399

02:52:36,090 --> 02:52:45,750

[Music]

3400

02:52:50,230 --> 02:52:47,110

i've had that dream of becoming an

3401  
02:52:53,950 --> 02:52:50,240  
astronaut for as long as i can remember

3402  
02:52:56,710 --> 02:52:53,960  
next the u.s astronaut joe lindgren the

3403  
02:52:57,830 --> 02:52:56,720  
217th visitor to the international space

3404  
02:52:59,750 --> 02:52:57,840  
station

3405  
02:53:01,110 --> 02:52:59,760  
what a privilege to have had that

3406  
02:53:03,030 --> 02:53:01,120  
experience to live and work on the

3407  
02:53:05,269 --> 02:53:03,040  
international space station

3408  
02:53:06,710 --> 02:53:05,279  
when you go out of the airlock and you

3409  
02:53:08,710 --> 02:53:06,720  
start moving around on the outside of

3410  
02:53:10,550 --> 02:53:08,720  
the space station looking through that

3411  
02:53:12,870 --> 02:53:10,560  
plastic visor at that scene that

3412  
02:53:15,429 --> 02:53:12,880  
occupies your entire field of view

3413  
02:53:18,870 --> 02:53:15,439

to see the earth spinning quickly below

3414

02:53:23,670 --> 02:53:21,110

it was really watching the space shuttle

3415

02:53:26,469 --> 02:53:23,680

columbia launch in 1981 and that's

3416

02:53:28,950 --> 02:53:26,479

really when i had that eureka moment

3417

02:53:31,110 --> 02:53:28,960

that people actually do this people go

3418

02:53:33,830 --> 02:53:31,120

into space and maybe that's something

3419

02:53:35,190 --> 02:53:33,840

that i could pursue

3420

02:53:36,870 --> 02:53:35,200

i was accepted into the air force

3421

02:53:39,030 --> 02:53:36,880

academy and it was there that i actually

3422

02:53:40,630 --> 02:53:39,040

discovered a passion for biology and

3423

02:53:43,670 --> 02:53:40,640

specifically the effects of

3424

02:53:46,070 --> 02:53:43,680

weightlessness on the human body

3425

02:53:47,830 --> 02:53:46,080

but i remember very clearly going into

3426

02:53:49,510 --> 02:53:47,840

denver one night and unfortunately

3427

02:53:50,870 --> 02:53:49,520

seeing a young woman get hit by a car

3428

02:53:53,349 --> 02:53:50,880

right in front of me while i was on the

3429

02:53:55,190 --> 02:53:53,359

sidewalk and i felt like you know what

3430

02:53:57,110 --> 02:53:55,200

i've been studying biology but i want to

3431

02:53:59,190 --> 02:53:57,120

know more i want to know what i would

3432

02:54:01,990 --> 02:53:59,200

need to do to actually help this person

3433

02:54:03,990 --> 02:54:02,000

and so my path shifted a little bit and

3434

02:54:05,510 --> 02:54:04,000

i ended up going to medical school had

3435

02:54:07,110 --> 02:54:05,520

the great fortune to be hired on as a

3436

02:54:09,269 --> 02:54:07,120

flight surgeon a physician that takes

3437

02:54:10,870 --> 02:54:09,279

care of the astronauts the crew and then

3438

02:54:12,630 --> 02:54:10,880

an astronaut selection was announced and

3439

02:54:14,150 --> 02:54:12,640

i threw my hat in the ring and had the

3440

02:54:18,870 --> 02:54:14,160

great privilege of being selected into

3441

02:54:22,790 --> 02:54:21,030

we go to the moon because it means

3442

02:54:24,630 --> 02:54:22,800

further building that bridge of

3443

02:54:25,590 --> 02:54:24,640

knowledge that is required to get to

3444

02:54:28,230 --> 02:54:25,600

mars

3445

02:54:30,389 --> 02:54:28,240

and an expansion of humanity in the

3446

02:54:32,870 --> 02:54:30,399

solar system

3447

02:54:35,110 --> 02:54:32,880

i'm grateful to be a part of this team

3448

02:54:38,309 --> 02:54:35,120

you know getting to do this job

3449

02:54:41,269 --> 02:54:38,319

is not an individual accomplishment it

3450

02:54:44,230 --> 02:54:41,279

represents effort and work of folks that

3451  
02:54:45,429 --> 02:54:44,240  
have been walking alongside me my family

3452  
02:54:47,990 --> 02:54:45,439  
classmates

3453  
02:54:50,469 --> 02:54:48,000  
colleagues teachers mentors coaches i am

3454  
02:54:52,950 --> 02:54:50,479  
grateful for their investment of time

3455  
02:54:54,170 --> 02:54:52,960  
and energy in helping me to achieve this

3456  
02:55:12,389 --> 02:54:54,180  
goal

3457  
02:55:16,790 --> 02:55:14,550  
i definitely appreciate

3458  
02:55:18,630 --> 02:55:16,800  
my first heroes would be my parents

3459  
02:55:19,670 --> 02:55:18,640  
they've taught me perseverance and

3460  
02:55:22,070 --> 02:55:19,680  
discipline

3461  
02:55:25,429 --> 02:55:22,080  
they gave me that foundation i needed as

3462  
02:55:27,990 --> 02:55:25,439  
a young woman to then move forward and

3463  
02:55:29,990 --> 02:55:28,000

achieve my dreams later on in life i was

3464

02:55:31,990 --> 02:55:30,000

fortunate enough to get accepted to the

3465

02:55:33,750 --> 02:55:32,000

united states naval academy

3466

02:55:35,750 --> 02:55:33,760

it was the summer before my senior year

3467

02:55:36,870 --> 02:55:35,760

at the academy that i got a ride in an

3468

02:55:38,630 --> 02:55:36,880

f-18

3469

02:55:40,950 --> 02:55:38,640

that's the first time that i realized i

3470

02:55:42,309 --> 02:55:40,960

can be a marine and be a fighter pilot

3471

02:55:44,550 --> 02:55:42,319

at the same time this is the best of

3472

02:55:46,630 --> 02:55:44,560

both worlds counting yen

3473

02:55:48,870 --> 02:55:46,640

and so i was uh selected to go to test

3474

02:55:50,710 --> 02:55:48,880

pilot school and was during that time

3475

02:55:52,230 --> 02:55:50,720

that i started looking at what are my

3476  
02:55:56,070 --> 02:55:52,240  
future options going to be in the marine

3477  
02:56:00,950 --> 02:55:58,070  
nasa says it's accepting applications

3478  
02:56:03,510 --> 02:56:00,960  
for new astronauts of the roughly 3 500

3479  
02:56:06,710 --> 02:56:03,520  
applicants nasa is expecting only about

3480  
02:56:08,630 --> 02:56:06,720  
15 will be selected for training

3481  
02:56:10,950 --> 02:56:08,640  
and i thought to myself well that's

3482  
02:56:14,389 --> 02:56:10,960  
crazy there's no way that that i would

3483  
02:56:15,750 --> 02:56:14,399  
ever be accepted to become an astronaut

3484  
02:56:17,349 --> 02:56:15,760  
and i went home and i spoke with my

3485  
02:56:19,190 --> 02:56:17,359  
husband about it and he looked at me

3486  
02:56:20,710 --> 02:56:19,200  
like i was crazy he said why would you

3487  
02:56:22,710 --> 02:56:20,720  
ever pass up such an incredible

3488  
02:56:24,870 --> 02:56:22,720

opportunity if you never apply you're

3489

02:56:26,550 --> 02:56:24,880

never gonna know if you could make it or

3490

02:56:28,150 --> 02:56:26,560

if you could have made it

3491

02:56:29,429 --> 02:56:28,160

that really changed my perspective on

3492

02:56:32,070 --> 02:56:29,439

life

3493

02:56:33,670 --> 02:56:32,080

so i applied to become an astronaut

3494

02:56:36,389 --> 02:56:33,680

and i was very fortunate enough to be

3495

02:56:38,389 --> 02:56:36,399

selected in the class of 2013.

3496

02:56:39,670 --> 02:56:38,399

i'm thrilled to be joining the nasa team

3497

02:56:41,429 --> 02:56:39,680

and looking forward to the next two

3498

02:56:43,510 --> 02:56:41,439

years of training thank you and we've

3499

02:56:45,429 --> 02:56:43,520

been training ever since preparing to

3500

02:56:47,510 --> 02:56:45,439

support current missions onboard the

3501  
02:56:49,670 --> 02:56:47,520  
international space station and now

3502  
02:56:51,429 --> 02:56:49,680  
we're preparing for the artemis mission

3503  
02:56:53,269 --> 02:56:51,439  
just as the united states was the first

3504  
02:56:55,990 --> 02:56:53,279  
nation to reach the moon in the 20th

3505  
02:56:58,070 --> 02:56:56,000  
century so too will we be the first

3506  
02:57:00,230 --> 02:56:58,080  
nation to return astronauts to the moon

3507  
02:57:02,230 --> 02:57:00,240  
in the 21st century

3508  
02:57:04,710 --> 02:57:02,240  
artemis at our mission to the moon is no

3509  
02:57:06,630 --> 02:57:04,720  
longer some far-fetched dream or some

3510  
02:57:08,389 --> 02:57:06,640  
science fiction idea

3511  
02:57:10,630 --> 02:57:08,399  
this is reality

3512  
02:57:11,990 --> 02:57:10,640  
we are going what we're going to learn

3513  
02:57:14,630 --> 02:57:12,000

on the moon

3514

02:57:17,190 --> 02:57:14,640

goes beyond space exploration

3515

02:57:19,429 --> 02:57:17,200

it benefits humans on earth

3516

02:57:20,550 --> 02:57:19,439

it gives enthusiasm to our younger

3517

02:57:23,110 --> 02:57:20,560

generation

3518

02:57:25,349 --> 02:57:23,120

to go after their dreams and to help be

3519

02:57:29,830 --> 02:57:25,359

a part of this evolution of our human

3520

02:57:48,870 --> 02:57:38,970

[Music]

3521

02:57:52,710 --> 02:57:50,389

i think if anything i probably am a

3522

02:57:54,309 --> 02:57:52,720

little bit of an impractical dreamer you

3523

02:57:56,150 --> 02:57:54,319

know be really unrealistic about your

3524

02:57:58,389 --> 02:57:56,160

dreams and just be really realistic

3525

02:57:59,590 --> 02:57:58,399

about your path

3526

02:58:01,670 --> 02:57:59,600

when i was a little girl growing up in

3527

02:58:03,590 --> 02:58:01,680

spokane washington becoming an astronaut

3528

02:58:04,950 --> 02:58:03,600

like nobody did that there was no nobody

3529

02:58:06,550 --> 02:58:04,960

that i could look to and say that person

3530

02:58:08,309 --> 02:58:06,560

walked the path and i'm about to go walk

3531

02:58:10,550 --> 02:58:08,319

the first step i took out of spokane was

3532

02:58:12,550 --> 02:58:10,560

to go to west point that was a huge leap

3533

02:58:14,070 --> 02:58:12,560

out of my comfort zone as i was flying

3534

02:58:15,910 --> 02:58:14,080

across the country for the first time

3535

02:58:17,590 --> 02:58:15,920

ever going to new york city i remember

3536

02:58:19,030 --> 02:58:17,600

thinking like if i had the opportunity

3537

02:58:21,030 --> 02:58:19,040

to get off this plane and not do this i

3538

02:58:23,750 --> 02:58:21,040

probably would have taken it but you

3539

02:58:25,110 --> 02:58:23,760

pushed through that

3540

02:58:27,190 --> 02:58:25,120

i remember sitting on the airplane and

3541

02:58:29,030 --> 02:58:27,200

flying down to nasa for an astronaut

3542

02:58:30,950 --> 02:58:29,040

interview and i had that exact same

3543

02:58:33,190 --> 02:58:30,960

feeling as when i was flying to west

3544

02:58:34,230 --> 02:58:33,200

point as an 18 year old kid and it was

3545

02:58:35,750 --> 02:58:34,240

like

3546

02:58:37,110 --> 02:58:35,760

maybe this is where i've reached too far

3547

02:58:38,710 --> 02:58:37,120

maybe this is where i've pushed too far

3548

02:58:40,150 --> 02:58:38,720

this is where it all ends what little

3549

02:58:41,190 --> 02:58:40,160

girls from spokane washington grew up to

3550

02:58:42,150 --> 02:58:41,200

be an astronaut i'm just not even going

3551  
02:58:43,910 --> 02:58:42,160  
to try

3552  
02:58:45,510 --> 02:58:43,920  
and so when i say impractical dreamer i

3553  
02:58:46,630 --> 02:58:45,520  
mean i never listen to that part of me

3554  
02:58:48,070 --> 02:58:46,640  
that says hey you're probably not going

3555  
02:58:49,349 --> 02:58:48,080  
to succeed at this i always listen to

3556  
02:58:52,309 --> 02:58:49,359  
the part that said well somebody's going

3557  
02:58:54,710 --> 02:58:52,319  
to maybe it's going to be you

3558  
02:58:56,870 --> 02:58:54,720  
we have liftoff of anne mclean blasting

3559  
02:58:59,990 --> 02:58:56,880  
through the kazakh sky to the

3560  
02:59:01,429 --> 02:59:00,000  
international space station

3561  
02:59:03,030 --> 02:59:01,439  
know i've always been so focused on my

3562  
02:59:07,110 --> 02:59:03,040  
goals and i've always just sprinted

3563  
02:59:09,269 --> 02:59:07,120

toward those goals and when i look back

3564

02:59:10,790 --> 02:59:09,279

at all the achievements the achievements

3565

02:59:12,830 --> 02:59:10,800

aren't actually what i remember it's the

3566

02:59:14,950 --> 02:59:12,840

people that i did them

3567

02:59:16,710 --> 02:59:14,960

with the person that wins the rugby

3568

02:59:19,030 --> 02:59:16,720

match is the one that despite all of

3569

02:59:21,110 --> 02:59:19,040

those hits despite all of the contact

3570

02:59:23,110 --> 02:59:21,120

actually thinks 10 steps ahead thinks

3571

02:59:24,389 --> 02:59:23,120

five steps ahead as a team and it's a

3572

02:59:27,110 --> 02:59:24,399

strategy game

3573

02:59:28,790 --> 02:59:27,120

now working here as an astronaut one of

3574

02:59:29,830 --> 02:59:28,800

the toughest things that we do are space

3575

02:59:31,750 --> 02:59:29,840

walks

3576

02:59:33,510 --> 02:59:31,760

you have got to stay so mentally tuned

3577

02:59:35,750 --> 02:59:33,520

in you have to know that you can push

3578

02:59:37,990 --> 02:59:35,760

your body further than you think you can

3579

02:59:39,670 --> 02:59:38,000

and i'm holding on to a handrail on the

3580

02:59:41,750 --> 02:59:39,680

international space station and i'm

3581

02:59:44,150 --> 02:59:41,760

looking out at the vastest space

3582

02:59:45,990 --> 02:59:44,160

and i looked back and i felt like this

3583

02:59:47,349 --> 02:59:46,000

was my planet i was attached to it

3584

02:59:50,150 --> 02:59:47,359

through gravity

3585

02:59:52,230 --> 02:59:50,160

and i felt a closeness to the earth and

3586

02:59:56,230 --> 02:59:52,240

i also realized how much more we have to

3587

02:59:58,230 --> 02:59:56,240

explore we haven't even started yet

3588

03:00:03,980 --> 02:59:58,240

our destiny is always to go and see

3589

03:00:21,110 --> 03:00:11,930

[Music]

3590

03:00:24,870 --> 03:00:22,710

i first started saying i wanted to be an

3591

03:00:26,389 --> 03:00:24,880

astronaut when i was five years old we

3592

03:00:27,910 --> 03:00:26,399

were asked to draw a picture of what we

3593

03:00:30,230 --> 03:00:27,920

wanted to be when we grew up and i

3594

03:00:31,990 --> 03:00:30,240

distinctly remember drawing an astronaut

3595

03:00:35,429 --> 03:00:32,000

in a spacesuit standing on the surface

3596

03:00:37,670 --> 03:00:35,439

of the moon next to the american flag

3597

03:00:39,670 --> 03:00:37,680

people always associated space with me

3598

03:00:42,230 --> 03:00:39,680

they called me space girl they knew that

3599

03:00:44,070 --> 03:00:42,240

it was this ultimate passion that i had

3600

03:00:46,550 --> 03:00:44,080

and this goal

3601  
03:00:48,230 --> 03:00:46,560  
and this historic moment first time that

3602  
03:00:49,349 --> 03:00:48,240  
two women have done a space walk

3603  
03:00:51,510 --> 03:00:49,359  
together

3604  
03:00:53,990 --> 03:00:51,520  
i wrote this in my high school yearbook

3605  
03:00:55,750 --> 03:00:54,000  
and under future plans i said to go for

3606  
03:00:57,750 --> 03:00:55,760  
a spacewalk never forget that moment

3607  
03:01:00,070 --> 03:00:57,760  
coming out the hatch and looking down

3608  
03:01:02,230 --> 03:01:00,080  
and seeing just my boots and the earth

3609  
03:01:03,590 --> 03:01:02,240  
below and it was such a spectacular and

3610  
03:01:04,790 --> 03:01:03,600  
beautiful sight

3611  
03:01:06,230 --> 03:01:04,800  
i probably didn't have the most

3612  
03:01:08,150 --> 03:01:06,240  
traditional path of becoming an

3613  
03:01:09,910 --> 03:01:08,160

astronaut it was biology and

3614

03:01:11,510 --> 03:01:09,920

understanding more about animals that

3615

03:01:12,950 --> 03:01:11,520

really drove me and so that's what i

3616

03:01:14,469 --> 03:01:12,960

pursued

3617

03:01:16,150 --> 03:01:14,479

i'm always telling people everybody

3618

03:01:18,070 --> 03:01:16,160

should be scuba divers there's this

3619

03:01:20,550 --> 03:01:18,080

whole world underwater that most people

3620

03:01:22,389 --> 03:01:20,560

don't get to experience and for me being

3621

03:01:24,630 --> 03:01:22,399

in space shares a lot of the

3622

03:01:26,790 --> 03:01:24,640

similarities of that underwater world

3623

03:01:29,110 --> 03:01:26,800

you're traveling around and moving in a

3624

03:01:31,510 --> 03:01:29,120

different realm you have to trust in

3625

03:01:32,950 --> 03:01:31,520

your hardware trust in your equipment

3626

03:01:35,190 --> 03:01:32,960

and trust in all the people that have

3627

03:01:37,510 --> 03:01:35,200

helped you get where you are

3628

03:01:39,830 --> 03:01:37,520

in my experience as a scientist diving

3629

03:01:42,550 --> 03:01:39,840

underwater or working as an astronaut in

3630

03:01:44,950 --> 03:01:42,560

space you're challenged both mentally

3631

03:01:46,870 --> 03:01:44,960

and physically at the same time and i

3632

03:01:49,910 --> 03:01:46,880

think those are the times when i've

3633

03:01:51,910 --> 03:01:49,920

really felt the most content in my life

3634

03:01:53,830 --> 03:01:51,920

the thing is it just keeps getting

3635

03:01:55,590 --> 03:01:53,840

better and better from the moment i

3636

03:01:58,309 --> 03:01:55,600

arrived on the space station i've had a

3637

03:01:59,830 --> 03:01:58,319

huge smile on my face

3638

03:02:01,429 --> 03:01:59,840

following your heart and following the

3639

03:02:03,190 --> 03:02:01,439

things that you're passionate about you

3640

03:02:04,710 --> 03:02:03,200

can still achieve your dreams and your

3641

03:02:07,670 --> 03:02:04,720

goals and that's exactly what happened

3642

03:02:10,790 --> 03:02:09,110

i think i've always looked up at the

3643

03:02:12,630 --> 03:02:10,800

moon and thought about what it would be

3644

03:02:14,710 --> 03:02:12,640

like to be there

3645

03:02:16,550 --> 03:02:14,720

we're going to the moon to explore and

3646

03:02:18,950 --> 03:02:16,560

we're going to the moon for scientific

3647

03:02:21,030 --> 03:02:18,960

discovery i don't look at this as my own

3648

03:02:23,670 --> 03:02:21,040

accomplishment or something just for me

3649

03:02:26,200 --> 03:02:23,680

this is our mission this is everybody's

3650

03:02:27,830 --> 03:02:26,210

mission our entire planet's really

3651  
03:02:31,190 --> 03:02:27,840  
[Music]

3652  
03:02:38,700 --> 03:02:31,200  
i'm nasa astronaut jessica muir

3653  
03:02:38,710 --> 03:02:48,389  
[Music]

3654  
03:02:52,870 --> 03:02:50,550  
i still wake up every morning and it

3655  
03:02:55,110 --> 03:02:52,880  
feels like a pinch me moment

3656  
03:02:58,950 --> 03:02:55,120  
to think that i'm actually an astronaut

3657  
03:03:05,349 --> 03:03:01,860  
i am jasmine mcbelly

3658  
03:03:07,750 --> 03:03:05,359  
[Music]

3659  
03:03:09,910 --> 03:03:07,760  
i think as a kid i believed i could do

3660  
03:03:12,309 --> 03:03:09,920  
anything so to me i was going to be in

3661  
03:03:13,910 --> 03:03:12,319  
the nba i was going to be an astronaut

3662  
03:03:19,510 --> 03:03:13,920  
and i was going to be an olympic skier

3663  
03:03:24,309 --> 03:03:22,070

i've been very lucky to be surrounded by

3664

03:03:27,269 --> 03:03:24,319

people that have always supported me my

3665

03:03:29,030 --> 03:03:27,279

husband my parents they 100 percent have

3666

03:03:32,070 --> 03:03:29,040

supported me

3667

03:03:33,590 --> 03:03:32,080

jasmine kelly as i started to overcome

3668

03:03:35,670 --> 03:03:33,600

more challenges through my life i

3669

03:03:36,550 --> 03:03:35,680

realized yeah i could possibly really do

3670

03:03:39,590 --> 03:03:36,560

this

3671

03:03:41,990 --> 03:03:39,600

i think it's 100 natural to have doubt

3672

03:03:44,710 --> 03:03:42,000

what's important is how you respond to

3673

03:03:46,950 --> 03:03:44,720

that doubt and just let that be your

3674

03:03:50,309 --> 03:03:46,960

driver to work harder and figure out a

3675

03:03:52,950 --> 03:03:51,670

i think there are a lot of reasons for

3676

03:03:54,389 --> 03:03:52,960

going to the moon

3677

03:03:56,630 --> 03:03:54,399

our curiosity

3678

03:03:58,790 --> 03:03:56,640

who in the world doesn't stare up at the

3679

03:04:01,269 --> 03:03:58,800

moon and just wonder

3680

03:04:03,670 --> 03:04:01,279

while we've been there before we've only

3681

03:04:05,830 --> 03:04:03,680

explored a limited region of it and so

3682

03:04:08,230 --> 03:04:05,840

getting to learn more about the moon i

3683

03:04:10,790 --> 03:04:08,240

think not only can teach us more about

3684

03:04:13,349 --> 03:04:10,800

earth and our own planet but also can

3685

03:04:13,860 --> 03:04:13,359

set us up for going further and going to

3686

03:04:18,870 --> 03:04:13,870

mars

3687

03:04:21,110 --> 03:04:18,880

[Music]

3688

03:04:24,150 --> 03:04:21,120

and when you talk about the way we want

3689

03:04:26,870 --> 03:04:24,160

to go to the moon for artemis one going

3690

03:04:28,230 --> 03:04:26,880

to the lunar south pole just landing on

3691

03:04:30,230 --> 03:04:28,240

that south pole with the lighting

3692

03:04:32,469 --> 03:04:30,240

conditions there are permanent shadowed

3693

03:04:34,950 --> 03:04:32,479

regions so you know we can't use solar

3694

03:04:36,469 --> 03:04:34,960

energy necessarily what resources are on

3695

03:04:39,670 --> 03:04:36,479

the moon that we can use how much of

3696

03:04:43,190 --> 03:04:39,680

them are there how can we use a base

3697

03:04:44,710 --> 03:04:43,200

from the moon to go further

3698

03:04:47,110 --> 03:04:44,720

anything that might jeopardize the

3699

03:04:48,790 --> 03:04:47,120

mission whether i'm on it or not

3700

03:04:51,910 --> 03:04:48,800

those are the things that kind of keep

3701  
03:04:56,150 --> 03:04:51,920  
me up when i lay down at night and those

3702  
03:04:59,990 --> 03:04:58,790  
that's a deep question who am i

3703  
03:05:02,150 --> 03:05:00,000  
well i'm

3704  
03:05:04,630 --> 03:05:02,160  
a wife now i'm a

3705  
03:05:05,830 --> 03:05:04,640  
daughter my parents favorite child

3706  
03:05:07,670 --> 03:05:05,840  
probably

3707  
03:05:15,930 --> 03:05:07,680  
i'm a marine

3708  
03:05:15,940 --> 03:05:25,990  
[Music]

3709  
03:05:29,269 --> 03:05:27,269  
people ask you when you're a kid hey

3710  
03:05:31,269 --> 03:05:29,279  
what do you want to be when you grow up

3711  
03:05:33,750 --> 03:05:31,279  
i said i want to be an astronaut a

3712  
03:05:35,429 --> 03:05:33,760  
biologist and a geologist

3713  
03:05:39,110 --> 03:05:35,439

so you know when you're five this seems

3714

03:05:43,030 --> 03:05:41,269

studying microbiology on station is very

3715

03:05:44,309 --> 03:05:43,040

similar to the earth except for your

3716

03:05:46,230 --> 03:05:44,319

floating

3717

03:05:48,150 --> 03:05:46,240

you may be doing the same experiment but

3718

03:05:49,590 --> 03:05:48,160

you're conducting it on the ceiling

3719

03:05:51,670 --> 03:05:49,600

because that's a convenient place to

3720

03:05:53,349 --> 03:05:51,680

work

3721

03:05:55,750 --> 03:05:53,359

we're studying things like sequencing

3722

03:05:57,990 --> 03:05:55,760

dna what happens to the human body in

3723

03:06:00,309 --> 03:05:58,000

space and even viruses are an issue in

3724

03:06:03,510 --> 03:06:00,319

space

3725

03:06:06,389 --> 03:06:03,520

i get really excited about things and

3726

03:06:08,389 --> 03:06:06,399

something about viruses about biology

3727

03:06:10,270 --> 03:06:08,399

i'm totally fascinated by it and i want

3728

03:06:13,030 --> 03:06:10,280

to get up and go work on this every day

3729

03:06:14,630 --> 03:06:13,040

[Music]

3730

03:06:16,309 --> 03:06:14,640

rubens became the first person to

3731

03:06:18,630 --> 03:06:16,319

sequence dna in space the addition of

3732

03:06:20,710 --> 03:06:18,640

nasa astronaut kate rubins these three

3733

03:06:22,469 --> 03:06:20,720

are about to be in the first planned

3734

03:06:24,710 --> 03:06:22,479

two-orbit flight to the international

3735

03:06:27,750 --> 03:06:24,720

space station with humans on board

3736

03:06:30,950 --> 03:06:27,760

space is both a place that is like this

3737

03:06:33,510 --> 03:06:30,960

far off almost fantastical thing that

3738

03:06:35,510 --> 03:06:33,520

you think about people dream about

3739

03:06:36,950 --> 03:06:35,520

but then on the other hand to me it's

3740

03:06:38,550 --> 03:06:36,960

it's a home

3741

03:06:41,190 --> 03:06:38,560

i've been there i've lived there for six

3742

03:06:43,030 --> 03:06:41,200

months i have friends there i'm looking

3743

03:06:45,190 --> 03:06:43,040

forward to going back there like you

3744

03:06:45,880 --> 03:06:45,200

would look forward to visiting an old

3745

03:06:47,190 --> 03:06:45,890

apartment

3746

03:06:49,510 --> 03:06:47,200

[Music]

3747

03:06:51,030 --> 03:06:49,520

the moon is an incredible destination we

3748

03:06:53,830 --> 03:06:51,040

have been there but we were there for

3749

03:06:56,710 --> 03:06:53,840

such a brief period of time

3750

03:06:58,710 --> 03:06:56,720

apollo it united the world

3751  
03:07:00,870 --> 03:06:58,720  
and so to think you know when we're

3752  
03:07:03,269 --> 03:07:00,880  
having dark times to think of the fact

3753  
03:07:04,870 --> 03:07:03,279  
that we might have people on the planet

3754  
03:07:06,550 --> 03:07:04,880  
able to look up

3755  
03:07:07,750 --> 03:07:06,560  
and know that there's humans on the moon

3756  
03:07:08,830 --> 03:07:07,760  
and that we've done this as a joint

3757  
03:07:10,550 --> 03:07:08,840  
international

3758  
03:07:12,309 --> 03:07:10,560  
collaboration

3759  
03:07:14,710 --> 03:07:12,319  
i can't even describe what kinds of the

3760  
03:07:16,710 --> 03:07:14,720  
benefits that might be

3761  
03:07:17,510 --> 03:07:16,720  
both partnerships in the world and just

3762  
03:07:19,429 --> 03:07:17,520  
for

3763  
03:07:20,710 --> 03:07:19,439

joy and inspiration in people's everyday

3764

03:07:22,550 --> 03:07:20,720

lives

3765

03:07:24,950 --> 03:07:22,560

less than 10 minutes away from today's

3766

03:07:26,389 --> 03:07:24,960

launch this is kate rubin celebrating

3767

03:07:28,389 --> 03:07:26,399

her birthday with a launch to the

3768

03:07:30,469 --> 03:07:28,399

international space station

3769

03:07:32,550 --> 03:07:30,479

i think if i was going to talk to my

3770

03:07:34,870 --> 03:07:32,560

younger self i would say don't be so

3771

03:07:37,110 --> 03:07:34,880

stressed out about what you're doing at

3772

03:07:38,550 --> 03:07:37,120

the moment because it's such an honor to

3773

03:07:40,790 --> 03:07:38,560

be a scientist

3774

03:07:55,070 --> 03:07:40,800

and to be an astronaut

3775

03:07:55,080 --> 03:08:04,550

[Music]

3776

03:08:08,710 --> 03:08:06,309

you know i'm a product of a lot of

3777

03:08:11,670 --> 03:08:08,720

sacrifices and great teams

3778

03:08:13,190 --> 03:08:11,680

i'm a son of a teenage single mom

3779

03:08:14,230 --> 03:08:13,200

it was never an option to feel sorry for

3780

03:08:17,269 --> 03:08:14,240

ourselves

3781

03:08:19,910 --> 03:08:17,279

or to use that as a crutch it was just

3782

03:08:22,469 --> 03:08:19,920

hey you can do better you can get ahead

3783

03:08:24,230 --> 03:08:22,479

by working hard studying hard

3784

03:08:25,750 --> 03:08:24,240

and so that kind of set a really good

3785

03:08:27,990 --> 03:08:25,760

foundation of

3786

03:08:29,590 --> 03:08:28,000

hard work equals results

3787

03:08:31,990 --> 03:08:29,600

good morning frank rubio from miami

3788

03:08:34,230 --> 03:08:32,000

florida graduated from west point 98

3789

03:08:36,150 --> 03:08:34,240

gold army blackhawk pilot and then a

3790

03:08:37,910 --> 03:08:36,160

family medicine physician

3791

03:08:39,670 --> 03:08:37,920

the army has essentially shaped me i

3792

03:08:41,590 --> 03:08:39,680

mean it's given me all these amazing

3793

03:08:43,190 --> 03:08:41,600

opportunities the reality is i've just

3794

03:08:43,910 --> 03:08:43,200

always been surrounded by people that

3795

03:08:45,990 --> 03:08:43,920

are

3796

03:08:48,550 --> 03:08:46,000

next level being around those type of

3797

03:08:51,110 --> 03:08:48,560

people my entire career i think has

3798

03:08:52,309 --> 03:08:51,120

pushed me to do better and also kept me

3799

03:08:54,230 --> 03:08:52,319

humbled

3800

03:08:57,030 --> 03:08:54,240

when vice president pence was announcing

3801  
03:08:58,870 --> 03:08:57,040  
our class he made an analogy to turtle

3802  
03:09:01,590 --> 03:08:58,880  
on a fence post basically meaning that

3803  
03:09:02,790 --> 03:09:01,600  
hey you didn't get there on your own

3804  
03:09:04,389 --> 03:09:02,800  
he was talking of course about our

3805  
03:09:06,870 --> 03:09:04,399  
families our loved ones

3806  
03:09:09,110 --> 03:09:06,880  
our co-workers our teams essentially

3807  
03:09:10,790 --> 03:09:09,120  
that allowed us to succeed and get to

3808  
03:09:13,670 --> 03:09:10,800  
that point in our lives

3809  
03:09:15,269 --> 03:09:13,680  
frank is truly a a wonderful person he

3810  
03:09:16,710 --> 03:09:15,279  
is a great american and even better

3811  
03:09:18,389 --> 03:09:16,720  
human being and he's going to make an

3812  
03:09:20,229 --> 03:09:18,399  
awesome astronaut

3813  
03:09:21,510 --> 03:09:20,239

and i really look forward and hope i get

3814

03:09:22,389 --> 03:09:21,520

the chance to go to space with him one

3815

03:09:24,550 --> 03:09:22,399

day

3816

03:09:28,389 --> 03:09:24,560

what the moon will allow us to do is to

3817

03:09:30,229 --> 03:09:28,399

explore further than we ever have before

3818

03:09:31,590 --> 03:09:30,239

anytime we've explored in history of

3819

03:09:32,790 --> 03:09:31,600

mankind

3820

03:09:35,190 --> 03:09:32,800

there's great benefits from a

3821

03:09:36,550 --> 03:09:35,200

technological point of view

3822

03:09:38,389 --> 03:09:36,560

but i think deeper than that there's a

3823

03:09:40,630 --> 03:09:38,399

sense of pride and beauty that comes

3824

03:09:41,590 --> 03:09:40,640

with accomplishing incredibly hard

3825

03:09:43,349 --> 03:09:41,600

things

3826

03:09:45,349 --> 03:09:43,359

and right now probably more than ever as

3827

03:09:48,070 --> 03:09:45,359

a nation and as a world

3828

03:09:49,349 --> 03:09:48,080

we need that watching how america comes

3829

03:09:50,790 --> 03:09:49,359

together

3830

03:09:52,229 --> 03:09:50,800

in those moments

3831

03:09:54,550 --> 03:09:52,239

bigger than

3832

03:09:57,780 --> 03:09:54,560

life moments is something that's really

3833

03:10:07,790 --> 03:09:57,790

incredible to behold

3834

03:10:07,800 --> 03:10:17,110

[Music]

3835

03:10:20,790 --> 03:10:18,870

right now an american astronaut a

3836

03:10:23,429 --> 03:10:20,800

japanese astronaut and a russian

3837

03:10:26,070 --> 03:10:23,439

cosmonaut are strapped inside of a soyuz

3838

03:10:27,590 --> 03:10:26,080

spacecraft there's always the why did

3839

03:10:28,550 --> 03:10:27,600

you climb the mountain because it's

3840

03:10:30,229 --> 03:10:28,560

there

3841

03:10:32,070 --> 03:10:30,239

we all travel down the street we look

3842

03:10:34,469 --> 03:10:32,080

out the window we're in the backyard the

3843

03:10:36,950 --> 03:10:34,479

moon's out there you can't miss it it's

3844

03:10:38,950 --> 03:10:36,960

beautiful it's there every day

3845

03:10:41,670 --> 03:10:38,960

why would we not want to go there we

3846

03:10:44,950 --> 03:10:41,680

need to go there one minute 10 seconds

3847

03:10:46,309 --> 03:10:44,960

away from liftoff was in junior high

3848

03:10:48,070 --> 03:10:46,319

the teacher asked what do you want to be

3849

03:10:49,830 --> 03:10:48,080

when you grow up and everyone was saying

3850

03:10:51,830 --> 03:10:49,840

i want to be a plumber i want to be an

3851  
03:10:52,790 --> 03:10:51,840  
architect i want to be an accountant and

3852  
03:10:54,389 --> 03:10:52,800  
i said

3853  
03:10:57,269 --> 03:10:54,399  
i want to be an astronaut

3854  
03:10:58,790 --> 03:10:57,279  
and literally everyone in the class left

3855  
03:11:00,710 --> 03:10:58,800  
but then the teacher looked at me and

3856  
03:11:02,550 --> 03:11:00,720  
said right on

3857  
03:11:05,910 --> 03:11:02,560  
and liftoff

3858  
03:11:07,990 --> 03:11:05,920  
scott tingle anton shkaplerov and or she

3859  
03:11:10,469 --> 03:11:08,000  
on their way to the international space

3860  
03:11:11,990 --> 03:11:10,479  
station look this is uh evolution we

3861  
03:11:13,750 --> 03:11:12,000  
didn't always have the technology and

3862  
03:11:15,349 --> 03:11:13,760  
the capability that we have today we

3863  
03:11:17,349 --> 03:11:15,359

didn't always have automobiles we

3864

03:11:19,750 --> 03:11:17,359

weren't always able to just jump in a

3865

03:11:21,990 --> 03:11:19,760

vehicle and travel for 16 hours and get

3866

03:11:24,469 --> 03:11:22,000

to the other side of the country so this

3867

03:11:27,590 --> 03:11:24,479

is the next step in evolution to be able

3868

03:11:29,269 --> 03:11:27,600

to take systems and hone our processes

3869

03:11:31,190 --> 03:11:29,279

and get our operations down so that we

3870

03:11:32,870 --> 03:11:31,200

can set up camp on a place that's

3871

03:11:35,830 --> 03:11:32,880

different from earth so that we can

3872

03:11:37,269 --> 03:11:35,840

conduct science that will better

3873

03:11:39,429 --> 03:11:37,279

this was just a dream when i when i

3874

03:11:40,950 --> 03:11:39,439

first met my wife you know was it going

3875

03:11:43,830 --> 03:11:40,960

to happen was it not going to happen who

3876

03:11:45,830 --> 03:11:43,840

knows but we're here and we're doing it

3877

03:11:49,110 --> 03:11:45,840

and every step we take

3878

03:11:51,030 --> 03:11:49,120

is both a challenge and a reward and to

3879

03:11:53,269 --> 03:11:51,040

be able to live that life and and look

3880

03:11:56,229 --> 03:11:53,279

back at the track that we use to get

3881

03:11:57,910 --> 03:11:56,239

here is uh it's just amazing

3882

03:11:59,830 --> 03:11:57,920

life is pretty busy when you have lofty

3883

03:12:01,269 --> 03:11:59,840

goals and you're constantly focused

3884

03:12:03,590 --> 03:12:01,279

you're constantly working to get

3885

03:12:05,830 --> 03:12:03,600

positive results but that moment for me

3886

03:12:07,910 --> 03:12:05,840

was coming out of the soyuz on my first

3887

03:12:09,670 --> 03:12:07,920

space flight and standing on the ground

3888

03:12:10,950 --> 03:12:09,680

for the first time in six months and

3889

03:12:32,080 --> 03:12:10,960

realizing

3890

03:12:48,229 --> 03:12:44,229

[Music]

3891

03:12:49,910 --> 03:12:48,239

a dream feels like a big far away goal

3892

03:12:51,910 --> 03:12:49,920

that's going to be difficult to achieve

3893

03:12:53,830 --> 03:12:51,920

and something that you might achieve

3894

03:12:56,710 --> 03:12:53,840

much later in life

3895

03:12:59,030 --> 03:12:56,720

but in reality what a dream is or a

3896

03:13:00,950 --> 03:12:59,040

dream realized is is just putting one

3897

03:13:01,990 --> 03:13:00,960

foot in front of the other on a daily

3898

03:13:03,429 --> 03:13:02,000

basis

3899

03:13:05,269 --> 03:13:03,439

and if you put enough of those

3900

03:13:08,790 --> 03:13:05,279

footprints together eventually they

3901  
03:13:11,670 --> 03:13:08,800  
become a path towards your dreams

3902  
03:13:14,229 --> 03:13:11,680  
my name is jessica watkins and my fellow

3903  
03:13:16,870 --> 03:13:14,239  
astronauts would describe me as a rock

3904  
03:13:18,150 --> 03:13:16,880  
nerd endearingly as what i tell myself

3905  
03:13:19,510 --> 03:13:18,160  
at least

3906  
03:13:21,990 --> 03:13:19,520  
one of the things that i enjoy the most

3907  
03:13:24,070 --> 03:13:22,000  
about geology intellectually is you can

3908  
03:13:25,830 --> 03:13:24,080  
function as a detective you're looking

3909  
03:13:27,750 --> 03:13:25,840  
at different puzzle pieces you know all

3910  
03:13:29,110 --> 03:13:27,760  
kind of in different places and you're

3911  
03:13:31,190 --> 03:13:29,120  
trying to bring those puzzle pieces

3912  
03:13:32,630 --> 03:13:31,200  
together to get a full story a full

3913  
03:13:34,870 --> 03:13:32,640

history of what has happened in a

3914

03:13:36,469 --> 03:13:34,880

particular place

3915

03:13:38,710 --> 03:13:36,479

for me as somebody who was really

3916

03:13:41,349 --> 03:13:38,720

interested in the planets geology

3917

03:13:43,590 --> 03:13:41,359

provided a means for me to study the

3918

03:13:46,150 --> 03:13:43,600

surface of another planet particularly

3919

03:13:48,630 --> 03:13:46,160

look at mars which was my passion was

3920

03:13:51,110 --> 03:13:48,640

just super exciting to me

3921

03:13:55,269 --> 03:13:51,120

in college i was lucky enough to get the

3922

03:13:58,870 --> 03:13:57,110

it was one of the best opportunities in

3923

03:14:01,429 --> 03:13:58,880

my life getting to play with the rugby

3924

03:14:04,550 --> 03:14:01,439

team at stanford and play in national

3925

03:14:06,070 --> 03:14:04,560

championships and even win one

3926

03:14:08,469 --> 03:14:06,080

i think one of the biggest lessons that

3927

03:14:10,309 --> 03:14:08,479

i take away from my rugby career is the

3928

03:14:13,429 --> 03:14:10,319

importance of teamwork rugby in

3929

03:14:15,990 --> 03:14:13,439

particular has positions that are all

3930

03:14:17,990 --> 03:14:16,000

suited to different types of body types

3931

03:14:20,389 --> 03:14:18,000

different strengths that people bring to

3932

03:14:22,309 --> 03:14:20,399

the table and i think that is not unlike

3933

03:14:23,830 --> 03:14:22,319

our team here at nasa where everybody

3934

03:14:25,670 --> 03:14:23,840

comes and brings their different

3935

03:14:29,830 --> 03:14:25,680

strengths their different expertise to

3936

03:14:32,550 --> 03:14:29,840

form a powerful and winning team

3937

03:14:34,469 --> 03:14:32,560

dynamic pressure on the vehicle

3938

03:14:36,790 --> 03:14:34,479

this endeavor to go to the moon is going

3939

03:14:38,469 --> 03:14:36,800

to be hard is not something that we can

3940

03:14:40,550 --> 03:14:38,479

do individually it's not something that

3941

03:14:42,710 --> 03:14:40,560

we can do on our own and i think

3942

03:14:44,870 --> 03:14:42,720

especially in these times it's really

3943

03:14:46,630 --> 03:14:44,880

important for us to recognize how much

3944

03:14:49,110 --> 03:14:46,640

we need each other and the importance of

3945

03:14:50,389 --> 03:14:49,120

coming together for one goal and i think

3946

03:14:53,030 --> 03:14:50,399

that going back to the moon really

3947

03:14:55,510 --> 03:14:53,040

embodies that this is mission control

3948

03:15:03,860 --> 03:14:55,520

houston we are now processing a

3949

03:15:03,870 --> 03:15:11,990

[Music]

3950

03:15:15,830 --> 03:15:13,510

mission specialist number three

3951  
03:15:17,830 --> 03:15:15,840  
stephanie wilson making her first flight

3952  
03:15:20,150 --> 03:15:17,840  
into space she'll sit in that seat right

3953  
03:15:23,429 --> 03:15:20,160  
between and behind the pilot commander

3954  
03:15:29,910 --> 03:15:25,910  
ms-3 this is ntd i've got someone clear

3955  
03:15:34,389 --> 03:15:32,630  
every space flight is special the first

3956  
03:15:37,110 --> 03:15:34,399  
space flight is very memorable for

3957  
03:15:40,150 --> 03:15:37,120  
everyone on the day of launch everyone's

3958  
03:15:42,229 --> 03:15:40,160  
very excited and it's very surreal when

3959  
03:15:44,309 --> 03:15:42,239  
the solid rocket boosters and the main

3960  
03:15:46,309 --> 03:15:44,319  
engines at night it's very apparent that

3961  
03:15:48,630 --> 03:15:46,319  
we're going somewhere and it's the best

3962  
03:15:51,110 --> 03:15:48,640  
eight and a half minute ride ever

3963  
03:15:53,910 --> 03:15:51,120

the view from space is spectacular it

3964

03:15:56,309 --> 03:15:53,920

can be very peaceful very serene the

3965

03:15:58,710 --> 03:15:56,319

colors are so vivid the vibrant orange

3966

03:16:00,630 --> 03:15:58,720

of the sahara desert the blue green

3967

03:16:02,870 --> 03:16:00,640

color of the oceans

3968

03:16:06,229 --> 03:16:02,880

it's a wonderful sight to behold

3969

03:16:08,229 --> 03:16:06,239

and what is readily transparent is that

3970

03:16:10,950 --> 03:16:08,239

while there may or may not be strife on

3971

03:16:13,670 --> 03:16:10,960

earth it appears to us to be one unified

3972

03:16:16,550 --> 03:16:13,680

planet and having that perspective of

3973

03:16:18,630 --> 03:16:16,560

one earth and one humanity is one that

3974

03:16:20,710 --> 03:16:18,640

we definitely appreciate having from

3975

03:16:23,830 --> 03:16:20,720

space

3976

03:16:26,070 --> 03:16:23,840

i had a great curiosity for

3977

03:16:28,790 --> 03:16:26,080

what's unknown and i like to solve

3978

03:16:31,190 --> 03:16:28,800

problems so trying to understand and

3979

03:16:33,910 --> 03:16:31,200

have a better sense of the universe and

3980

03:16:35,670 --> 03:16:33,920

what that means to humanity who we are

3981

03:16:38,229 --> 03:16:35,680

what our history is

3982

03:16:41,030 --> 03:16:38,239

and how we leverage that knowledge to

3983

03:16:43,429 --> 03:16:41,040

bring benefits to humanity was something

3984

03:16:45,590 --> 03:16:43,439

that struck me and i hope to work with

3985

03:16:47,590 --> 03:16:45,600

in the future i have certainly benefited

3986

03:16:49,510 --> 03:16:47,600

by having some great mentors in the

3987

03:16:51,590 --> 03:16:49,520

office across nasa

3988

03:16:54,150 --> 03:16:51,600

one thing that veterans of space flights

3989

03:16:55,990 --> 03:16:54,160

do as they share their expertise and

3990

03:16:58,870 --> 03:16:56,000

their experience during the mission

3991

03:17:00,550 --> 03:16:58,880

christina and the uia check oxygen em 1

3992

03:17:03,269 --> 03:17:00,560

and 2.

3993

03:17:05,429 --> 03:17:03,279

1 and 2 are open and i do my best to

3994

03:17:07,269 --> 03:17:05,439

pass along the experience and the

3995

03:17:09,030 --> 03:17:07,279

knowledge that i have gained to others

3996

03:17:11,030 --> 03:17:09,040

in the office and with the next

3997

03:17:15,630 --> 03:17:11,040

generation so that we can have a better

3998

03:17:15,640 --> 03:23:19,190

[Music]

3999

03:23:24,309 --> 03:23:21,590

at nasa we have always answered the

4000

03:23:27,590 --> 03:23:24,319

innate call to go

4001  
03:23:29,510 --> 03:23:27,600  
with artemis we are going to stay

4002  
03:23:32,870 --> 03:23:29,520  
proving that humanity can live on the

4003  
03:23:37,030 --> 03:23:32,880  
moon mars and other worlds and share the

4004  
03:23:42,870 --> 03:23:39,590  
our story is one of people

4005  
03:23:45,030 --> 03:23:42,880  
all those who make this journey possible

4006  
03:23:47,429 --> 03:23:45,040  
from advocates across communities to

4007  
03:23:49,830 --> 03:23:47,439  
companies across industries to countries

4008  
03:23:52,150 --> 03:23:49,840  
around the world we achieve this

4009  
03:23:54,710 --> 03:23:52,160  
collective endeavor

4010  
03:23:56,630 --> 03:23:54,720  
our efforts create impact for all

4011  
03:23:58,870 --> 03:23:56,640  
technologies that revolutionize

4012  
03:24:00,630 --> 03:23:58,880  
industries and jobs that bring

4013  
03:24:02,790 --> 03:24:00,640

prosperity to people

4014

03:24:04,550 --> 03:24:02,800

the discoveries from space benefit the

4015

03:24:06,229 --> 03:24:04,560

way we live on earth today

4016

03:24:10,229 --> 03:24:06,239

and those from the moon will create a

4017

03:24:13,910 --> 03:24:10,239

better future for generations to come

4018

03:24:19,030 --> 03:24:15,910

hi i'm chad lindgren my name is raj

4019

03:24:22,070 --> 03:24:19,040

achary kayla baron kate rubens hi i'm

4020

03:24:24,870 --> 03:24:22,080

christina cook nasa astronaut joe acaba

4021

03:24:27,110 --> 03:24:24,880

jessica amir woody hoberg and mclean

4022

03:24:29,110 --> 03:24:27,120

stephanie wilson my name is johnny kim

4023

03:24:31,830 --> 03:24:29,120

nicole mann victor glover jessica

4024

03:24:35,750 --> 03:24:31,840

watkins hi i'm matthew dominic jasmine

4025

03:24:38,070 --> 03:24:35,760

mcbelly frank rubio scott tingle

4026  
03:24:40,950 --> 03:24:38,080  
this is what we do

4027  
03:24:41,790 --> 03:24:40,960  
this is what we will do

4028  
03:24:53,670 --> 03:24:41,800  
let's

4029  
03:25:04,950 --> 03:24:55,750  
we go to the moon to learn how to live

4030  
03:25:10,870 --> 03:25:08,550  
and welcome to the apollo 5 center here

4031  
03:25:13,670 --> 03:25:10,880  
at nasa's kennedy space center in

4032  
03:25:16,389 --> 03:25:13,680  
florida thank you so much for joining us

4033  
03:25:18,950 --> 03:25:16,399  
as you just saw in that video the 18

4034  
03:25:22,790 --> 03:25:18,960  
astronauts from nasa that were named to

4035  
03:25:25,269 --> 03:25:22,800  
the artemis team is set and we have five

4036  
03:25:27,750 --> 03:25:25,279  
of them here with us today we're serving

4037  
03:25:29,990 --> 03:25:27,760  
as ambassadors for that team we

4038  
03:25:32,309 --> 03:25:30,000

appreciate you all being here with us

4039

03:25:35,030 --> 03:25:32,319

for a conversation about what artemis

4040

03:25:37,349 --> 03:25:35,040

means to get some reaction on you being

4041

03:25:40,950 --> 03:25:37,359

named to that team as well as take some

4042

03:25:42,790 --> 03:25:40,960

questions from our media here of course

4043

03:25:45,269 --> 03:25:42,800

vice president mike pence just announced

4044

03:25:47,429 --> 03:25:45,279

the 18 astronauts on the artemis team

4045

03:25:50,469 --> 03:25:47,439

the mission is to land the first woman

4046

03:25:52,630 --> 03:25:50,479

and the next man on the moon and then to

4047

03:25:55,110 --> 03:25:52,640

learn to live and work

4048

03:25:58,950 --> 03:25:55,120

on another world for the benefit of our

4049

03:26:00,630 --> 03:25:58,960

world as well as going on to mars

4050

03:26:03,030 --> 03:26:00,640

i want to introduce the astronauts we

4051  
03:26:04,630 --> 03:26:03,040  
have the pleasure of talking to today

4052  
03:26:05,349 --> 03:26:04,640  
and begin

4053  
03:26:06,790 --> 03:26:05,359  
with

4054  
03:26:08,950 --> 03:26:06,800  
jessica meer

4055  
03:26:13,750 --> 03:26:08,960  
nasa astronaut

4056  
03:26:13,760 --> 03:26:19,110  
we have jessica watkins

4057  
03:26:19,120 --> 03:26:23,349  
matthew dominic

4058  
03:26:23,359 --> 03:26:27,030  
and ann mclean

4059  
03:26:31,670 --> 03:26:28,150  
very good we're going to start with you

4060  
03:26:33,269 --> 03:26:31,680  
jessica in a pretty big day today

4061  
03:26:36,070 --> 03:26:33,279  
let's talk a little bit about your

4062  
03:26:37,910 --> 03:26:36,080  
background you are a doctorate and you

4063  
03:26:39,990 --> 03:26:37,920

have a doctorate in marine biology

4064

03:26:41,190 --> 03:26:40,000

you're a veteran astronaut you made

4065

03:26:43,590 --> 03:26:41,200

history

4066

03:26:46,870 --> 03:26:43,600

when you uh did the first three all

4067

03:26:48,630 --> 03:26:46,880

women space walks with christina cook

4068

03:26:51,030 --> 03:26:48,640

your mom says you knew you were going to

4069

03:26:53,110 --> 03:26:51,040

be an astronaut when you were five years

4070

03:26:55,349 --> 03:26:53,120

old but you were sharing with me that

4071

03:26:56,950 --> 03:26:55,359

that you had a memory uh of when you

4072

03:26:59,429 --> 03:26:56,960

first realized you wanted to be an

4073

03:27:01,269 --> 03:26:59,439

astronaut when was that

4074

03:27:03,110 --> 03:27:01,279

yeah that's right my mom tells me the

4075

03:27:04,950 --> 03:27:03,120

story that i started saying it when i

4076

03:27:06,309 --> 03:27:04,960

was five years old but i don't know if

4077

03:27:08,870 --> 03:27:06,319

you remember everything you said when

4078

03:27:10,950 --> 03:27:08,880

you were five i certainly don't my first

4079

03:27:13,030 --> 03:27:10,960

distinct memory of it was when i was in

4080

03:27:14,710 --> 03:27:13,040

the first grade our teacher asked us to

4081

03:27:17,110 --> 03:27:14,720

draw a picture of what we wanted to be

4082

03:27:19,510 --> 03:27:17,120

when we grew up and i drew that kind of

4083

03:27:21,349 --> 03:27:19,520

iconic image of the apollo era of an

4084

03:27:23,349 --> 03:27:21,359

astronaut in a spacesuit standing on the

4085

03:27:25,990 --> 03:27:23,359

surface of the moon next to the american

4086

03:27:28,389 --> 03:27:26,000

flag so that was what i said really from

4087

03:27:30,630 --> 03:27:28,399

that moment i never changed that line of

4088

03:27:32,870 --> 03:27:30,640

what i wanted to do that's incredible to

4089

03:27:36,950 --> 03:27:32,880

think about you making that drawing and

4090

03:27:39,349 --> 03:27:36,960

now here you are on the artemis team

4091

03:27:41,349 --> 03:27:39,359

yes thank you so much it is really

4092

03:27:43,349 --> 03:27:41,359

incredibly exciting of course to be part

4093

03:27:44,630 --> 03:27:43,359

of this exceptional team you saw all

4094

03:27:46,150 --> 03:27:44,640

these faces

4095

03:27:47,670 --> 03:27:46,160

and i know that everybody in the

4096

03:27:49,670 --> 03:27:47,680

astronaut office and all of our

4097

03:27:51,670 --> 03:27:49,680

international partners are so ready to

4098

03:27:52,550 --> 03:27:51,680

support this next chapter of human space

4099

03:27:55,030 --> 03:27:52,560

flight

4100

03:27:56,630 --> 03:27:55,040

and what are you looking most forward to

4101  
03:27:58,550 --> 03:27:56,640  
in this mission

4102  
03:28:00,870 --> 03:27:58,560  
for me the artemis mission is important

4103  
03:28:03,590 --> 03:28:00,880  
for three main reasons first of all for

4104  
03:28:05,590 --> 03:28:03,600  
exploration i truly believe is it it is

4105  
03:28:07,670 --> 03:28:05,600  
an innate characteristic of the human

4106  
03:28:09,429 --> 03:28:07,680  
species to explore

4107  
03:28:11,510 --> 03:28:09,439  
secondly an easy one for me as a

4108  
03:28:12,950 --> 03:28:11,520  
scientist for science

4109  
03:28:14,309 --> 03:28:12,960  
if you look at the scientific

4110  
03:28:16,630 --> 03:28:14,319  
experiments that were conducted on the

4111  
03:28:19,429 --> 03:28:16,640  
apollo missions they changed the way

4112  
03:28:21,590 --> 03:28:19,439  
that we see our solar system and we are

4113  
03:28:23,750 --> 03:28:21,600

still to this day learning from those

4114

03:28:26,229 --> 03:28:23,760

very samples using newer technologies

4115

03:28:28,229 --> 03:28:26,239

all the time but there is so much yet to

4116

03:28:29,830 --> 03:28:28,239

discover i'm sure our colleague jessica

4117

03:28:31,750 --> 03:28:29,840

watkins can tell you a lot more about

4118

03:28:33,670 --> 03:28:31,760

the exciting geological opportunities

4119

03:28:36,389 --> 03:28:33,680

that remain for us to uncover on the

4120

03:28:38,229 --> 03:28:36,399

moon that we will uncover as scientist

4121

03:28:39,750 --> 03:28:38,239

science is a very critical component of

4122

03:28:41,590 --> 03:28:39,760

the artemis missions

4123

03:28:43,110 --> 03:28:41,600

and lastly if you think again to those

4124

03:28:46,150 --> 03:28:43,120

apollo missions

4125

03:28:48,630 --> 03:28:46,160

they had a profound impact on many other

4126  
03:28:51,110 --> 03:28:48,640  
aspects of our culture and society

4127  
03:28:53,429 --> 03:28:51,120  
stimulating participation and interest

4128  
03:28:55,830 --> 03:28:53,439  
and growth of all the stem fields

4129  
03:28:58,150 --> 03:28:55,840  
science technology engineering math and

4130  
03:29:00,070 --> 03:28:58,160  
of course those had ramifications far

4131  
03:29:02,870 --> 03:29:00,080  
beyond that of exploration that our

4132  
03:29:04,710 --> 03:29:02,880  
society still benefits from today i know

4133  
03:29:06,870 --> 03:29:04,720  
i am certain that artemis will continue

4134  
03:29:09,110 --> 03:29:06,880  
to have all of those same effects

4135  
03:29:11,110 --> 03:29:09,120  
we appreciate your confidence too as uh

4136  
03:29:13,910 --> 03:29:11,120  
you get started with this team i want to

4137  
03:29:16,389 --> 03:29:13,920  
move on to joe acaba a former math and

4138  
03:29:20,229 --> 03:29:16,399

science teacher a veteran astronaut with

4139

03:29:22,710 --> 03:29:20,239

10 months in space of experience but you

4140

03:29:24,950 --> 03:29:22,720

also taught at melbourne high school

4141

03:29:26,550 --> 03:29:24,960

just an hour down the road from right

4142

03:29:29,030 --> 03:29:26,560

here at the kennedy space center and

4143

03:29:31,590 --> 03:29:29,040

dunnellon as well so i want to start by

4144

03:29:33,510 --> 03:29:31,600

asking you yes you were here of course

4145

03:29:35,429 --> 03:29:33,520

when you launched on the space shuttle

4146

03:29:38,229 --> 03:29:35,439

but what's it like to be back here as a

4147

03:29:40,630 --> 03:29:38,239

teacher in an area where you taught kids

4148

03:29:42,710 --> 03:29:40,640

as well as launched into space yeah it's

4149

03:29:45,429 --> 03:29:42,720

uh great to be back here at the kennedy

4150

03:29:46,870 --> 03:29:45,439

space center out here in florida

4151  
03:29:49,910 --> 03:29:46,880  
you know being part of the shuttle

4152  
03:29:52,790 --> 03:29:49,920  
program was amazing and quite the honor

4153  
03:29:54,950 --> 03:29:52,800  
to have i was here last month as part of

4154  
03:29:57,429 --> 03:29:54,960  
the commercial crew program supporting

4155  
03:29:59,269 --> 03:29:57,439  
uh crew one that just launched so lots

4156  
03:30:00,309 --> 03:29:59,279  
of history but a lot coming up in the

4157  
03:30:02,870 --> 03:30:00,319  
future

4158  
03:30:04,790 --> 03:30:02,880  
but to be an educator

4159  
03:30:07,190 --> 03:30:04,800  
and be back here today where i taught

4160  
03:30:10,229 --> 03:30:07,200  
you know down the road i hope some of my

4161  
03:30:11,910 --> 03:30:10,239  
students are uh watching today uh my

4162  
03:30:13,910 --> 03:30:11,920  
hair is a little bit shorter than it

4163  
03:30:15,670 --> 03:30:13,920

used to be when i had some long hair i

4164

03:30:17,910 --> 03:30:15,680

had some long hairs hard times being a

4165

03:30:19,910 --> 03:30:17,920

school teacher

4166

03:30:22,550 --> 03:30:19,920

i hope they're watching i know they were

4167

03:30:23,990 --> 03:30:22,560

very excited when i applied to become an

4168

03:30:26,710 --> 03:30:24,000

astronaut and when i finally got

4169

03:30:28,389 --> 03:30:26,720

selected but i hope that there's a new

4170

03:30:29,670 --> 03:30:28,399

generation of students that are watching

4171

03:30:32,150 --> 03:30:29,680

this today

4172

03:30:34,469 --> 03:30:32,160

and they're excited you know jessica you

4173

03:30:36,630 --> 03:30:34,479

could hear her excitement and how she

4174

03:30:38,150 --> 03:30:36,640

felt when she was five years old

4175

03:30:40,389 --> 03:30:38,160

i didn't think that when i was five

4176

03:30:42,630 --> 03:30:40,399

years old and i thought i found my

4177

03:30:45,030 --> 03:30:42,640

profession being a school teacher but

4178

03:30:46,150 --> 03:30:45,040

here i am today so it's uh it's cool to

4179

03:30:48,309 --> 03:30:46,160

be here

4180

03:30:50,389 --> 03:30:48,319

the history is awesome but we're all

4181

03:30:52,790 --> 03:30:50,399

here to look towards the future and and

4182

03:30:55,590 --> 03:30:52,800

you speak very highly of teachers who

4183

03:30:57,429 --> 03:30:55,600

who choose that profession um i wonder

4184

03:30:59,429 --> 03:30:57,439

you mentioned the students they they're

4185

03:31:01,910 --> 03:30:59,439

still in contact with you yeah so i do

4186

03:31:03,750 --> 03:31:01,920

have some students now that uh you know

4187

03:31:05,830 --> 03:31:03,760

they email me i'm sure after this

4188

03:31:07,269 --> 03:31:05,840

announcement uh my name will be out

4189

03:31:08,950 --> 03:31:07,279

there and they'll probably shoot me a

4190

03:31:11,190 --> 03:31:08,960

line so it's cool to

4191

03:31:13,590 --> 03:31:11,200

to hear from them to share what i'm

4192

03:31:15,830 --> 03:31:13,600

doing but really to hear about what

4193

03:31:17,510 --> 03:31:15,840

they're doing and you know there's no

4194

03:31:18,469 --> 03:31:17,520

greater profession than being a school

4195

03:31:20,790 --> 03:31:18,479

teacher

4196

03:31:23,670 --> 03:31:20,800

and it's that impact that we have as

4197

03:31:25,910 --> 03:31:23,680

educators that just go on and on so it's

4198

03:31:28,229 --> 03:31:25,920

cool and that's fantastic and as a

4199

03:31:30,550 --> 03:31:28,239

teacher have you thought about how you

4200

03:31:31,830 --> 03:31:30,560

will share artemis with

4201  
03:31:34,389 --> 03:31:31,840  
everyone

4202  
03:31:37,510 --> 03:31:34,399  
boy there's a lot of ways to do that um

4203  
03:31:39,429 --> 03:31:37,520  
the program itself is exciting

4204  
03:31:42,150 --> 03:31:39,439  
you know there is no

4205  
03:31:44,150 --> 03:31:42,160  
kid out there all of us here that have

4206  
03:31:46,710 --> 03:31:44,160  
not looked up in the sky

4207  
03:31:49,349 --> 03:31:46,720  
and wondered what would it be like to go

4208  
03:31:51,590 --> 03:31:49,359  
up there and walk on that thing and so

4209  
03:31:54,630 --> 03:31:51,600  
what i want to do as an educator

4210  
03:31:56,469 --> 03:31:54,640  
is to you know inspire those students

4211  
03:31:59,110 --> 03:31:56,479  
that this is a possibility but we're

4212  
03:32:00,550 --> 03:31:59,120  
going to the moon to get to mars and

4213  
03:32:02,630 --> 03:32:00,560

it's those students that we're going to

4214

03:32:05,030 --> 03:32:02,640

talk to that are going to get us there

4215

03:32:06,550 --> 03:32:05,040

as engineers and astronauts and it's

4216

03:32:07,830 --> 03:32:06,560

incredible you talk about everyone

4217

03:32:10,150 --> 03:32:07,840

looking up at the moon and wondering

4218

03:32:12,229 --> 03:32:10,160

what it's like i did as a kid as well so

4219

03:32:14,790 --> 03:32:12,239

we we will be looking up at you and

4220

03:32:17,269 --> 03:32:14,800

certainly rooting you all on i want to

4221

03:32:18,229 --> 03:32:17,279

move now to uh jessica watkins

4222

03:32:21,590 --> 03:32:18,239

welcome

4223

03:32:23,910 --> 03:32:21,600

i understand you have some family here

4224

03:32:25,750 --> 03:32:23,920

locally in the area i do that's correct

4225

03:32:27,429 --> 03:32:25,760

yes i have some family that lives in the

4226  
03:32:29,510 --> 03:32:27,439  
orlando area

4227  
03:32:31,349 --> 03:32:29,520  
and a few weeks a few weeks ago a few

4228  
03:32:33,030 --> 03:32:31,359  
weeks back a couple months actually

4229  
03:32:36,229 --> 03:32:33,040  
i was able to

4230  
03:32:37,990 --> 03:32:36,239  
tie in with them they came out to my

4231  
03:32:41,190 --> 03:32:38,000  
aunt is a

4232  
03:32:43,510 --> 03:32:41,200  
is an educator just like joe and she was

4233  
03:32:44,950 --> 03:32:43,520  
able to bring her class a lot of her

4234  
03:32:47,990 --> 03:32:44,960  
school actually

4235  
03:32:49,750 --> 03:32:48,000  
come to a field trip out here at ksc

4236  
03:32:51,110 --> 03:32:49,760  
and i was able to tie in and say hello

4237  
03:32:52,469 --> 03:32:51,120  
to them so it was really excellent

4238  
03:32:55,110 --> 03:32:52,479

that's pretty neat let's talk a little

4239

03:32:58,630 --> 03:32:55,120

bit about your resume your geologist as

4240

03:33:01,429 --> 03:32:58,640

was mentioned um you're also you study

4241

03:33:03,030 --> 03:33:01,439

landslides on earth and mars uh you're

4242

03:33:03,990 --> 03:33:03,040

an aquanaut

4243

03:33:05,910 --> 03:33:04,000

and

4244

03:33:09,190 --> 03:33:05,920

a member of the science team for the

4245

03:33:10,870 --> 03:33:09,200

mars curiosity rover you also i thought

4246

03:33:13,349 --> 03:33:10,880

this was interesting won a national

4247

03:33:15,429 --> 03:33:13,359

championship with the stanford women's

4248

03:33:16,830 --> 03:33:15,439

division one rugby team which is pretty

4249

03:33:20,070 --> 03:33:16,840

impressive

4250

03:33:22,389 --> 03:33:20,080

no no that's correct i was was

4251

03:33:25,269 --> 03:33:22,399

definitely um privileged to be a part of

4252

03:33:27,510 --> 03:33:25,279

that team um and uh get to experience

4253

03:33:29,590 --> 03:33:27,520

that that win with them as well um you

4254

03:33:32,070 --> 03:33:29,600

know being part of a rugby team um as

4255

03:33:34,229 --> 03:33:32,080

ann mclean can attest to as well as a

4256

03:33:36,469 --> 03:33:34,239

rugby player as well um you know there

4257

03:33:39,110 --> 03:33:36,479

are a lot of similarities to a rugby

4258

03:33:42,150 --> 03:33:39,120

team as to this artemis team and the

4259

03:33:43,910 --> 03:33:42,160

whole um nasa team uh overall you know

4260

03:33:47,349 --> 03:33:43,920

on a rugby team you have

4261

03:33:48,790 --> 03:33:47,359

people with very varied skill sets you

4262

03:33:50,870 --> 03:33:48,800

have people who are smaller people who

4263

03:33:53,349 --> 03:33:50,880

are larger people are stronger people

4264

03:33:55,190 --> 03:33:53,359

bring different strengths to the table

4265

03:33:57,429 --> 03:33:55,200

and i think that's true both of this

4266

03:33:59,510 --> 03:33:57,439

artemis team and nasa as well and all of

4267

03:34:01,830 --> 03:33:59,520

those strengths come together to really

4268

03:34:03,269 --> 03:34:01,840

build a you know productive and winning

4269

03:34:05,510 --> 03:34:03,279

team and i think

4270

03:34:06,550 --> 03:34:05,520

one of your strengths is speed i was

4271

03:34:08,950 --> 03:34:06,560

looking at one of the wonderfully

4272

03:34:11,030 --> 03:34:08,960

produced videos that are done on you and

4273

03:34:13,190 --> 03:34:11,040

it's there's this great clip of you

4274

03:34:14,950 --> 03:34:13,200

scoring a try

4275

03:34:16,630 --> 03:34:14,960

two defenders are coming to get you

4276

03:34:18,469 --> 03:34:16,640

they're running in the same direction

4277

03:34:20,229 --> 03:34:18,479

and you split them on the way to score

4278

03:34:22,550 --> 03:34:20,239

but it's not so much that you you know

4279

03:34:24,469 --> 03:34:22,560

split them but you blew by them and they

4280

03:34:25,670 --> 03:34:24,479

were running in the same direction you

4281

03:34:28,229 --> 03:34:25,680

did

4282

03:34:30,389 --> 03:34:28,239

yes well so all of all those skill sets

4283

03:34:33,190 --> 03:34:30,399

the only one that i have is is speed so

4284

03:34:35,429 --> 03:34:33,200

i have to use it wisely

4285

03:34:36,710 --> 03:34:35,439

it was wonderful watching that score um

4286

03:34:38,550 --> 03:34:36,720

let's talk a little bit about the

4287

03:34:40,630 --> 03:34:38,560

mysteries of the moon because you you

4288

03:34:42,790 --> 03:34:40,640

talk often about how

4289

03:34:45,190 --> 03:34:42,800

you know geology helps us understand the

4290

03:34:48,150 --> 03:34:45,200

history of what happened what are you

4291

03:34:49,990 --> 03:34:48,160

looking forward to in terms of solving

4292

03:34:51,990 --> 03:34:50,000

the mysteries of the moon

4293

03:34:54,550 --> 03:34:52,000

absolutely i'm i'm happy that you asked

4294

03:34:56,550 --> 03:34:54,560

that question um certainly the moon we

4295

03:34:59,910 --> 03:34:56,560

have a lot that we can learn from the

4296

03:35:01,830 --> 03:34:59,920

moon as well as learn about the moon

4297

03:35:03,349 --> 03:35:01,840

in terms of understanding the history of

4298

03:35:05,429 --> 03:35:03,359

the moon itself

4299

03:35:09,190 --> 03:35:05,439

one of the big questions in the polar

4300

03:35:11,349 --> 03:35:09,200

regions is looking at lunar volatiles so

4301

03:35:13,510 --> 03:35:11,359

understanding how those

4302

03:35:15,990 --> 03:35:13,520

volatiles formed where they are their

4303

03:35:17,750 --> 03:35:16,000

distribution and extent which will also

4304

03:35:18,950 --> 03:35:17,760

help us in the future as we start to

4305

03:35:21,349 --> 03:35:18,960

look for

4306

03:35:23,190 --> 03:35:21,359

a site to build our moon base and

4307

03:35:24,389 --> 03:35:23,200

continue into the future

4308

03:35:27,190 --> 03:35:24,399

the moon also

4309

03:35:29,750 --> 03:35:27,200

allows us to look at planetary processes

4310

03:35:32,150 --> 03:35:29,760

particularly looking at impact cratering

4311

03:35:34,229 --> 03:35:32,160

which is a process that we see on

4312

03:35:36,309 --> 03:35:34,239

multiple bodies rocky bodies in the

4313

03:35:37,269 --> 03:35:36,319

solar system and helps us understand

4314

03:35:39,429 --> 03:35:37,279

ages

4315

03:35:41,269 --> 03:35:39,439

within the solar system

4316

03:35:42,870 --> 03:35:41,279

the moon will also help us understand

4317

03:35:45,510 --> 03:35:42,880

more about the earth

4318

03:35:48,870 --> 03:35:45,520

for one the moon earth

4319

03:35:51,269 --> 03:35:48,880

system and the origin of the moon

4320

03:35:53,910 --> 03:35:51,279

helps us understand more about earth and

4321

03:35:55,830 --> 03:35:53,920

how we can apply some of that knowledge

4322

03:35:58,309 --> 03:35:55,840

to what we know about the earth and

4323

03:36:01,030 --> 03:35:58,319

lastly the moon can also function as a

4324

03:36:04,229 --> 03:36:01,040

platform where we can start to explore

4325

03:36:06,389 --> 03:36:04,239

the sun and astrophysics

4326

03:36:08,710 --> 03:36:06,399

start to observe the universe from a

4327

03:36:11,269 --> 03:36:08,720

different vantage point and and learn so

4328

03:36:12,790 --> 03:36:11,279

much more and we need resources on the

4329

03:36:15,510 --> 03:36:12,800

moon as well right if we're going to

4330

03:36:18,469 --> 03:36:15,520

sustain a presence there which is very

4331

03:36:19,510 --> 03:36:18,479

key absolutely jessica thank you so much

4332

03:36:21,590 --> 03:36:19,520

and now

4333

03:36:25,030 --> 03:36:21,600

mr matthew dominic

4334

03:36:27,590 --> 03:36:25,040

u.s navy test pilot and fighter pilot

4335

03:36:30,790 --> 03:36:27,600

you flew 61 combat missions

4336

03:36:32,389 --> 03:36:30,800

uh you're doubly electrical engineer

4337

03:36:34,229 --> 03:36:32,399

and interestingly

4338

03:36:37,750 --> 03:36:34,239

you were kidnapped aboard an aircraft

4339

03:36:40,550 --> 03:36:37,760

carrier where your fellow uh

4340

03:36:43,030 --> 03:36:40,560

your your fellow airman and or seaman

4341

03:36:45,830 --> 03:36:43,040

rather shaved a stripe right through the

4342

03:36:47,670 --> 03:36:45,840

top of your head right held you down

4343

03:36:49,030 --> 03:36:47,680

that's correct

4344

03:36:51,030 --> 03:36:49,040

i'd be lying if i say i didn't deserve

4345

03:36:52,950 --> 03:36:51,040

it i had played a practical joke on them

4346

03:36:53,830 --> 03:36:52,960

and and they got me back

4347

03:36:56,150 --> 03:36:53,840

well

4348

03:36:57,750 --> 03:36:56,160

i can only imagine what that looked like

4349

03:36:59,429 --> 03:36:57,760

i i had to finish the job and get rid of

4350

03:37:01,750 --> 03:36:59,439

the rest of the hair yeah she went full

4351

03:37:03,590 --> 03:37:01,760

full cue ball shaved it all off uh that

4352

03:37:04,389 --> 03:37:03,600

sounds like that was the right choice

4353

03:37:06,550 --> 03:37:04,399

um

4354

03:37:07,590 --> 03:37:06,560

in talking about uh you know as we stand

4355

03:37:09,349 --> 03:37:07,600

here

4356

03:37:11,349 --> 03:37:09,359

and this mission the artist miss artemis

4357

03:37:14,469 --> 03:37:11,359

mission we look at this

4358

03:37:17,030 --> 03:37:14,479

great vehicle the saturn v rocket

4359

03:37:18,630 --> 03:37:17,040

i know you're a tinkerer and you love to

4360

03:37:20,630 --> 03:37:18,640

take things apart understand how they

4361

03:37:22,309 --> 03:37:20,640

work when you look at this machine

4362

03:37:23,590 --> 03:37:22,319

what are your thoughts what what do you

4363

03:37:25,429 --> 03:37:23,600

think about when you see something this

4364

03:37:26,630 --> 03:37:25,439

impressive that made history here in

4365

03:37:28,469 --> 03:37:26,640

america

4366

03:37:31,269 --> 03:37:28,479

i mean i've been struggling to listen

4367

03:37:33,510 --> 03:37:31,279

and to see here is that we stand

4368

03:37:35,910 --> 03:37:33,520

in this room the saturn 5 building and

4369

03:37:37,670 --> 03:37:35,920

look at all the incredible hardware and

4370

03:37:39,590 --> 03:37:37,680

it's a thing of dreams right it's a

4371

03:37:41,190 --> 03:37:39,600

thing it instantly takes you to a

4372

03:37:44,550 --> 03:37:41,200

childhood dream

4373

03:37:46,790 --> 03:37:44,560

you look and you imagine every bolt and

4374

03:37:48,950 --> 03:37:46,800

every valve and every

4375

03:37:51,190 --> 03:37:48,960

fuel line that runs to this hardware or

4376

03:37:52,950 --> 03:37:51,200

the quarter scale orion or the sls on

4377

03:37:54,870 --> 03:37:52,960

the mobile launcher over there

4378

03:37:56,309 --> 03:37:54,880

and think about the people in the team

4379

03:37:58,389 --> 03:37:56,319

in america coming together and our

4380

03:38:00,229 --> 03:37:58,399

national partners coming together to

4381

03:38:01,670 --> 03:38:00,239

make that work right you could imagine

4382

03:38:03,510 --> 03:38:01,680

being the engineer waking up in the

4383

03:38:05,590 --> 03:38:03,520

middle of the night

4384

03:38:06,790 --> 03:38:05,600

and thinking well maybe i should change

4385

03:38:07,590 --> 03:38:06,800

this to make the design a little bit

4386

03:38:09,030 --> 03:38:07,600

better

4387

03:38:11,670 --> 03:38:09,040

because there's a few

4388

03:38:13,910 --> 03:38:11,680

really lucky pink bodies

4389

03:38:15,830 --> 03:38:13,920

you know 150 feet that way who are going

4390

03:38:17,349 --> 03:38:15,840

to ride this thing and you don't want to

4391

03:38:18,309 --> 03:38:17,359

let the world down

4392

03:38:19,670 --> 03:38:18,319

right you don't want to ever let the

4393

03:38:22,150 --> 03:38:19,680

world down there's an immense weight on

4394

03:38:24,070 --> 03:38:22,160

your shoulders so as i look around i see

4395

03:38:26,150 --> 03:38:24,080

the hardware i imagine

4396

03:38:29,030 --> 03:38:26,160

walking out to the launch pad in a dream

4397

03:38:30,710 --> 03:38:29,040

and you you go up that elevator and the

4398

03:38:32,150 --> 03:38:30,720

the building is creaking in the wind and

4399

03:38:33,269 --> 03:38:32,160

the wind is rustling through as you come

4400

03:38:35,269 --> 03:38:33,279

out the door

4401

03:38:36,790 --> 03:38:35,279

like the the gas the rocket has just

4402

03:38:38,389 --> 03:38:36,800

been fueled and the

4403

03:38:39,670 --> 03:38:38,399

it's creaking with the new stress and

4404

03:38:41,349 --> 03:38:39,680

the new loads those are the things i

4405

03:38:43,429 --> 03:38:41,359

think about when i look at this hardware

4406

03:38:45,349 --> 03:38:43,439

i instantly enter a dream world this is

4407

03:38:47,269 --> 03:38:45,359

the thing of dreams i'm incredibly lucky

4408

03:38:49,110 --> 03:38:47,279

to be here i feel like you just took me

4409

03:38:51,189 --> 03:38:49,120

there in the way that you described it

4410

03:38:52,630 --> 03:38:51,199

that's outstanding um

4411

03:38:54,309 --> 03:38:52,640

i know that you've been involved we were

4412

03:38:56,229 --> 03:38:54,319

talking about

4413

03:38:59,110 --> 03:38:56,239

your background and how you're applying

4414

03:39:02,469 --> 03:38:59,120

it now as an astronaut the interface

4415

03:39:04,389 --> 03:39:02,479

between human and electronics and and so

4416

03:39:06,630 --> 03:39:04,399

you've already been working with the

4417

03:39:08,950 --> 03:39:06,640

team that's building orion tell me a

4418

03:39:10,790 --> 03:39:08,960

little bit about that

4419

03:39:12,710 --> 03:39:10,800

in the navy i worked in you know my

4420

03:39:13,510 --> 03:39:12,720

specialty was human machine interface

4421

03:39:15,590 --> 03:39:13,520

right

4422

03:39:17,269 --> 03:39:15,600

and it's been really incredible to have

4423

03:39:19,269 --> 03:39:17,279

worked in the navy spec you know

4424

03:39:20,870 --> 03:39:19,279

training and working and redesigning

4425

03:39:23,830 --> 03:39:20,880

flight control laws to land on an

4426  
03:39:25,750 --> 03:39:23,840  
aircraft carrier and revolutionizing how

4427  
03:39:28,309 --> 03:39:25,760  
we did that and now those same

4428  
03:39:30,469 --> 03:39:28,319  
techniques the same principles as we sit

4429  
03:39:32,309 --> 03:39:30,479  
down with all of the vendors as we look

4430  
03:39:33,750 --> 03:39:32,319  
at the human landing system to get ready

4431  
03:39:35,349 --> 03:39:33,760  
to go back to the moon having the same

4432  
03:39:38,070 --> 03:39:35,359  
theoretical conversations with them

4433  
03:39:40,070 --> 03:39:38,080  
about the the human machine interface

4434  
03:39:41,990 --> 03:39:40,080  
necessary to go and do the task of

4435  
03:39:44,790 --> 03:39:42,000  
landing on the moon like you wake up

4436  
03:39:47,030 --> 03:39:44,800  
every morning and you feel this immense

4437  
03:39:49,750 --> 03:39:47,040  
burden for society and humanity that i

4438  
03:39:51,510 --> 03:39:49,760

need to do this well today i am the one

4439

03:39:53,590 --> 03:39:51,520

a bunch of us all of us all of the

4440

03:39:55,349 --> 03:39:53,600

astronauts in the core all the people at

4441

03:39:57,429 --> 03:39:55,359

all the centers are in the arena trying

4442

03:39:59,590 --> 03:39:57,439

to make this happen for humanity and so

4443

03:40:01,030 --> 03:39:59,600

it's it's incredible to see those

4444

03:40:03,349 --> 03:40:01,040

just be working with the hardware and

4445

03:40:05,189 --> 03:40:03,359

making the decisions in the room and you

4446

03:40:07,189 --> 03:40:05,199

maybe it's coveted maybe you're walking

4447

03:40:08,150 --> 03:40:07,199

out of a themes meeting right a video

4448

03:40:09,830 --> 03:40:08,160

chat

4449

03:40:11,110 --> 03:40:09,840

and you realize whoa we just we just

4450

03:40:12,150 --> 03:40:11,120

talked about landing on the moon today

4451  
03:40:14,309 --> 03:40:12,160  
and how we're going to have it make it

4452  
03:40:15,750 --> 03:40:14,319  
happen so it's it's very easy to be

4453  
03:40:17,590 --> 03:40:15,760  
motivated to come to work

4454  
03:40:19,349 --> 03:40:17,600  
and it's interesting you talk about the

4455  
03:40:21,030 --> 03:40:19,359  
responsibility i mean there's there's

4456  
03:40:22,710 --> 03:40:21,040  
inherent risk obviously would be an

4457  
03:40:25,670 --> 03:40:22,720  
astronaut that's always bought down by

4458  
03:40:27,349 --> 03:40:25,680  
nasa uh in the best way that we can but

4459  
03:40:29,349 --> 03:40:27,359  
you were telling me that you don't think

4460  
03:40:31,510 --> 03:40:29,359  
about that you you think about the

4461  
03:40:33,750 --> 03:40:31,520  
responsibility that you have

4462  
03:40:35,750 --> 03:40:33,760  
i think if you had to choose between two

4463  
03:40:38,630 --> 03:40:35,760

fears what i'm more afraid of dying on a

4464

03:40:40,070 --> 03:40:38,640

rocket or letting down all of the people

4465

03:40:41,429 --> 03:40:40,080

that worked so hard to make this happen

4466

03:40:43,349 --> 03:40:41,439

all of the international partners that

4467

03:40:45,429 --> 03:40:43,359

came together that toiled for their

4468

03:40:47,910 --> 03:40:45,439

careers decades to make something happen

4469

03:40:50,229 --> 03:40:47,920

and you maybe didn't study a little bit

4470

03:40:52,229 --> 03:40:50,239

more so that you know the right time to

4471

03:40:53,349 --> 03:40:52,239

throw the switch to make it happen i

4472

03:40:54,710 --> 03:40:53,359

think there's an immense amount of

4473

03:40:56,950 --> 03:40:54,720

responsibility there i think i'm more

4474

03:40:58,630 --> 03:40:56,960

afraid of that than of dying right like

4475

03:41:00,070 --> 03:40:58,640

that's that's the fear that's the thing

4476  
03:41:02,070 --> 03:41:00,080  
that drives you when you wake up that

4477  
03:41:04,630 --> 03:41:02,080  
sounds like the right stuff to me thank

4478  
03:41:05,830 --> 03:41:04,640  
you matthew for sharing that with us

4479  
03:41:08,389 --> 03:41:05,840  
and mclean

4480  
03:41:11,110 --> 03:41:08,399  
welcome and thank you for being here um

4481  
03:41:13,990 --> 03:41:11,120  
a little bit about you west point grad

4482  
03:41:16,070 --> 03:41:14,000  
marshall scholarship winner in 2002 a

4483  
03:41:18,150 --> 03:41:16,080  
military instructor pilot veteran

4484  
03:41:19,349 --> 03:41:18,160  
astronaut with a call sign

4485  
03:41:21,910 --> 03:41:19,359  
animal

4486  
03:41:23,349 --> 03:41:21,920  
so tell me a little bit how you got that

4487  
03:41:26,150 --> 03:41:23,359  
call sign

4488  
03:41:28,790 --> 03:41:26,160

sure uh well as jessica said there's a

4489

03:41:31,750 --> 03:41:28,800

lot of different uh skill sets on a

4490

03:41:34,630 --> 03:41:31,760

rugby field some people run fast and

4491

03:41:36,710 --> 03:41:34,640

some people uh hit hard and

4492

03:41:37,830 --> 03:41:36,720

which one was i was in the ladder if

4493

03:41:39,590 --> 03:41:37,840

jessica and i were ever on the same

4494

03:41:41,110 --> 03:41:39,600

pitch i couldn't catch her i think one

4495

03:41:43,269 --> 03:41:41,120

of the important reasons i'd like to go

4496

03:41:45,830 --> 03:41:43,279

to the moon is a fighting chance to

4497

03:41:47,910 --> 03:41:45,840

catch a disco there but

4498

03:41:48,950 --> 03:41:47,920

no gravity evens the field right that's

4499

03:41:50,710 --> 03:41:48,960

right

4500

03:41:52,870 --> 03:41:50,720

well that's outstanding i want to ask

4501  
03:41:55,189 --> 03:41:52,880  
you you you talk often

4502  
03:41:57,590 --> 03:41:55,199  
about overcoming your doubts

4503  
03:41:59,590 --> 03:41:57,600  
as you achieved some pretty incredible

4504  
03:42:01,750 --> 03:41:59,600  
things in your career so far

4505  
03:42:04,229 --> 03:42:01,760  
um as you look at the artemis program

4506  
03:42:06,710 --> 03:42:04,239  
kind of what what are you sensing about

4507  
03:42:08,950 --> 03:42:06,720  
the challenge that liza had

4508  
03:42:10,630 --> 03:42:08,960  
yeah you know i i talk to people often

4509  
03:42:12,229 --> 03:42:10,640  
about the doubts it's in the back of our

4510  
03:42:14,070 --> 03:42:12,239  
mind right because we're all human and

4511  
03:42:15,269 --> 03:42:14,080  
this is human space flight and the human

4512  
03:42:16,710 --> 03:42:15,279  
in human space flight is the most

4513  
03:42:18,309 --> 03:42:16,720

complicated part

4514

03:42:19,590 --> 03:42:18,319

and we all wake up in the in the morning

4515

03:42:20,870 --> 03:42:19,600

none of us wake up and go you know what

4516

03:42:23,349 --> 03:42:20,880

i'm going to do 100

4517

03:42:24,389 --> 03:42:23,359

correct today right we all wake up

4518

03:42:26,389 --> 03:42:24,399

there's like something in the back of

4519

03:42:28,150 --> 03:42:26,399

our mind that makes us doubt

4520

03:42:29,750 --> 03:42:28,160

you know and the people that that

4521

03:42:32,309 --> 03:42:29,760

achieve and that make things happen are

4522

03:42:34,309 --> 03:42:32,319

the ones that address the doubt

4523

03:42:37,189 --> 03:42:34,319

respect it and move on

4524

03:42:39,429 --> 03:42:37,199

right bravery is not the absence of fear

4525

03:42:40,630 --> 03:42:39,439

it's being afraid and doing it anyway

4526

03:42:42,710 --> 03:42:40,640

okay and there's plenty of times that

4527

03:42:44,710 --> 03:42:42,720

everybody on this stage and everybody

4528

03:42:46,710 --> 03:42:44,720

out here was worried about something

4529

03:42:48,309 --> 03:42:46,720

doubted something wondered if that was

4530

03:42:49,349 --> 03:42:48,319

the right path for them

4531

03:42:50,870 --> 03:42:49,359

thought something was going to be too

4532

03:42:52,710 --> 03:42:50,880

hard for them to achieve and guess what

4533

03:42:54,950 --> 03:42:52,720

they did they did it anyway

4534

03:42:57,510 --> 03:42:54,960

this crew and our crew at nasa are is a

4535

03:42:59,830 --> 03:42:57,520

group of doers we are dreamers but even

4536

03:43:01,189 --> 03:42:59,840

more so we're doers and in order to do

4537

03:43:03,510 --> 03:43:01,199

you got to face those fears face those

4538

03:43:05,030 --> 03:43:03,520

doubts and move forward

4539

03:43:07,349 --> 03:43:05,040

and that's why you know people look up

4540

03:43:09,269 --> 03:43:07,359

to you and the rest of the astronauts so

4541

03:43:11,750 --> 03:43:09,279

much when they hear things like this and

4542

03:43:13,910 --> 03:43:11,760

knowing what you do you were telling me

4543

03:43:15,189 --> 03:43:13,920

uh earlier that uh one of the biggest

4544

03:43:18,469 --> 03:43:15,199

questions you get

4545

03:43:20,710 --> 03:43:18,479

uh from the public is uh jessica

4546

03:43:22,550 --> 03:43:20,720

uh you know or ansari are you going to

4547

03:43:23,750 --> 03:43:22,560

be the first woman on the moon and i

4548

03:43:25,189 --> 03:43:23,760

thought your your response was

4549

03:43:26,710 --> 03:43:25,199

interesting what do you say yeah you

4550

03:43:27,990 --> 03:43:26,720

know we do get asked that and especially

4551  
03:43:30,309 --> 03:43:28,000  
i think even more so now we're going to

4552  
03:43:31,990 --> 03:43:30,319  
get asked that is it going to be you and

4553  
03:43:33,269 --> 03:43:32,000  
one of the things that i uh that i

4554  
03:43:34,550 --> 03:43:33,279  
learned from the from the first day i

4555  
03:43:36,550 --> 03:43:34,560  
stepped in the halls at nasa is the

4556  
03:43:38,950 --> 03:43:36,560  
caliber of people that we work with

4557  
03:43:40,469 --> 03:43:38,960  
and so right now what i know

4558  
03:43:42,229 --> 03:43:40,479  
is that i'm either going to walk on the

4559  
03:43:43,429 --> 03:43:42,239  
moon or one of my friends is going to

4560  
03:43:45,590 --> 03:43:43,439  
walk on the moon

4561  
03:43:48,550 --> 03:43:45,600  
and both of those scenarios are beyond

4562  
03:43:51,750 --> 03:43:48,560  
the my wildest dreams when i was a kid

4563  
03:43:53,590 --> 03:43:51,760

wow that's special to hear that um and

4564

03:43:55,510 --> 03:43:53,600

you're also one of the few astronauts

4565

03:43:57,269 --> 03:43:55,520

that has a saturday night live skit

4566

03:43:59,110 --> 03:43:57,279

about you but did you think that was

4567

03:44:01,269 --> 03:43:59,120

funny i was just happy she got her

4568

03:44:02,870 --> 03:44:01,279

uniform right as an army officer it's

4569

03:44:04,790 --> 03:44:02,880

very important to me to make sure that

4570

03:44:06,389 --> 03:44:04,800

patcher's in the right place so i i hand

4571

03:44:08,229 --> 03:44:06,399

it to him for getting it right they got

4572

03:44:09,910 --> 03:44:08,239

the details right at it right

4573

03:44:11,590 --> 03:44:09,920

well you folks uh really are an

4574

03:44:13,510 --> 03:44:11,600

inspiring bunch and and thank you so

4575

03:44:15,030 --> 03:44:13,520

much for taking the time uh to have a

4576

03:44:16,389 --> 03:44:15,040

conversation with us we do want to get

4577

03:44:18,469 --> 03:44:16,399

some questions from the media who have

4578

03:44:21,030 --> 03:44:18,479

gathered here and we'd like to ask you

4579

03:44:22,309 --> 03:44:21,040

to say your name and affiliation and to

4580

03:44:24,630 --> 03:44:22,319

whom you would like to direct the

4581

03:44:27,510 --> 03:44:24,640

question sure hi thanks for taking my

4582

03:44:30,550 --> 03:44:27,520

question um i'm amy from space.com

4583

03:44:33,030 --> 03:44:30,560

and i was just whoever wants to answer

4584

03:44:34,710 --> 03:44:33,040

um how excited are you guys to be in the

4585

03:44:36,710 --> 03:44:34,720

first class for this program and to

4586

03:44:40,950 --> 03:44:36,720

maybe be the first to ride

4587

03:44:44,630 --> 03:44:42,389

how about jessica

4588

03:44:48,630 --> 03:44:44,640

there's two of them on stage

4589

03:44:51,750 --> 03:44:49,730

jessica it's all you

4590

03:44:53,750 --> 03:44:51,760

[Laughter]

4591

03:44:56,229 --> 03:44:53,760

um yes i can definitely tell you that

4592

03:44:58,309 --> 03:44:56,239

all of us here on stage as well as the

4593

03:44:59,910 --> 03:44:58,319

13 others

4594

03:45:01,670 --> 03:44:59,920

back in houston as well as the rest of

4595

03:45:03,590 --> 03:45:01,680

the astronaut corps we are all so

4596

03:45:05,349 --> 03:45:03,600

excited to be a part of this effort

4597

03:45:07,110 --> 03:45:05,359

we're so excited about moving forward

4598

03:45:09,349 --> 03:45:07,120

taking the next step

4599

03:45:12,870 --> 03:45:09,359

and making this dream going back to the

4600

03:45:17,670 --> 03:45:14,870

and then um i had a

4601  
03:45:19,670 --> 03:45:17,680  
question for jessica mir um i'm sure

4602  
03:45:21,189 --> 03:45:19,680  
that you guys are all comrades and

4603  
03:45:23,750 --> 03:45:21,199  
friends and get along really well but

4604  
03:45:26,550 --> 03:45:23,760  
how special is it to share this with

4605  
03:45:28,790 --> 03:45:26,560  
christina who you got to share your

4606  
03:45:31,030 --> 03:45:28,800  
spacewalks with and

4607  
03:45:32,630 --> 03:45:31,040  
your time and space

4608  
03:45:34,150 --> 03:45:32,640  
it's really amazing you know i think it

4609  
03:45:36,710 --> 03:45:34,160  
kind of goes back to what anne said

4610  
03:45:38,150 --> 03:45:36,720  
earlier about the fact that we are all

4611  
03:45:40,710 --> 03:45:38,160  
colleagues and we all work closely

4612  
03:45:42,790 --> 03:45:40,720  
together but we are all friends as well

4613  
03:45:44,630 --> 03:45:42,800

when i go to work every day i know that

4614

03:45:46,469 --> 03:45:44,640

i'm going to see people that not only do

4615

03:45:48,469 --> 03:45:46,479

i love to work with but i just love to

4616

03:45:50,790 --> 03:45:48,479

hang out with in my free time

4617

03:45:52,790 --> 03:45:50,800

and to spend all of these things of life

4618

03:45:54,790 --> 03:45:52,800

as you can imagine becoming an astronaut

4619

03:45:55,990 --> 03:45:54,800

is full of a lot of changes in our lives

4620

03:45:58,469 --> 03:45:56,000

for all of us

4621

03:46:00,070 --> 03:45:58,479

and you really have an exceptionally

4622

03:46:01,910 --> 03:46:00,080

close bond especially with your

4623

03:46:03,670 --> 03:46:01,920

classmates christina's one of those

4624

03:46:06,150 --> 03:46:03,680

classmates anne's one of these one of my

4625

03:46:07,590 --> 03:46:06,160

classmates all eight of us in that class

4626

03:46:09,590 --> 03:46:07,600

particularly like brothers and sisters

4627

03:46:11,670 --> 03:46:09,600

so it is an absolute privilege and honor

4628

03:46:13,189 --> 03:46:11,680

and it just makes it even more special

4629

03:46:16,710 --> 03:46:13,199

to be sharing it with those people that

4630

03:46:23,429 --> 03:46:19,910

hi there rachel joy with florida today

4631

03:46:26,469 --> 03:46:23,439

um jessica watkins you very well could

4632

03:46:29,429 --> 03:46:26,479

be the first woman on the moon

4633

03:46:33,110 --> 03:46:29,439

i'm curious why you think it's important

4634

03:46:35,750 --> 03:46:33,120

that a woman should go to the moon

4635

03:46:38,070 --> 03:46:35,760

yeah absolutely um and i think you know

4636

03:46:39,990 --> 03:46:38,080

it's it's a really big honor for all of

4637

03:46:41,670 --> 03:46:40,000

us to to be here to be part of this team

4638

03:46:44,710 --> 03:46:41,680

to be part of this effort and and to

4639

03:46:46,389 --> 03:46:44,720

know um that that we can contribute to

4640

03:46:51,189 --> 03:46:46,399

that first woman and effort that next

4641

03:46:53,750 --> 03:46:51,199

man on the moon um i think for um

4642

03:46:55,590 --> 03:46:53,760

for me what that that means is just

4643

03:46:57,349 --> 03:46:55,600

being a part of this artemis generation

4644

03:46:59,189 --> 03:46:57,359

you know it's something that as we kind

4645

03:47:00,469 --> 03:46:59,199

of described is something that we've

4646

03:47:02,309 --> 03:47:00,479

we've all looked

4647

03:47:04,550 --> 03:47:02,319

you know uh looked forward to or you

4648

03:47:06,950 --> 03:47:04,560

know hoped for dreamed of since we were

4649

03:47:09,269 --> 03:47:06,960

little and for that dream to becoming a

4650

03:47:11,670 --> 03:47:09,279

reality um really just for the nation

4651  
03:47:14,070 --> 03:47:11,680  
that we you know are going back to the

4652  
03:47:15,670 --> 03:47:14,080  
moon and um i think is really exciting

4653  
03:47:18,469 --> 03:47:15,680  
for all of us and let's broaden that out

4654  
03:47:19,990 --> 03:47:18,479  
to our ladies on the stage with you um

4655  
03:47:22,870 --> 03:47:20,000  
jessica meer you have any thoughts on

4656  
03:47:26,870 --> 03:47:25,269  
i think jessica captured it quite well i

4657  
03:47:29,269 --> 03:47:26,880  
mean we are all ready to be part of this

4658  
03:47:31,349 --> 03:47:29,279  
team and it makes sense you know when

4659  
03:47:34,309 --> 03:47:31,359  
when we came into this when our class

4660  
03:47:35,830 --> 03:47:34,319  
started we were 50 female 50 male and it

4661  
03:47:37,910 --> 03:47:35,840  
was the first time that had happened but

4662  
03:47:39,510 --> 03:47:37,920  
it felt normal to us and this is

4663  
03:47:41,030 --> 03:47:39,520

something that of course you know i get

4664

03:47:43,030 --> 03:47:41,040

this question a lot and talking about

4665

03:47:44,229 --> 03:47:43,040

that that space walk that christina and

4666

03:47:46,469 --> 03:47:44,239

i did together

4667

03:47:48,469 --> 03:47:46,479

and to us it really isn't a personal

4668

03:47:50,790 --> 03:47:48,479

achievement for us it is paying homage

4669

03:47:52,950 --> 03:47:50,800

and tribute to the generations of women

4670

03:47:54,950 --> 03:47:52,960

and other minorities that really were

4671

03:47:56,950 --> 03:47:54,960

the boundary pushers that truly broke

4672

03:47:59,510 --> 03:47:56,960

those glass ceilings to let us be here

4673

03:48:01,670 --> 03:47:59,520

today the great is for us now it just

4674

03:48:03,510 --> 03:48:01,680

seems normal we are all going to go

4675

03:48:05,990 --> 03:48:03,520

together to the moon and we're going to

4676

03:48:07,590 --> 03:48:06,000

go as a team and the fact that that is

4677

03:48:09,590 --> 03:48:07,600

just a thing that's that's part of

4678

03:48:10,870 --> 03:48:09,600

everything we do now shows how far we've

4679

03:48:13,030 --> 03:48:10,880

come and that's really thanks to those

4680

03:48:15,269 --> 03:48:13,040

generations before us and does it seem

4681

03:48:16,710 --> 03:48:15,279

normal to you as well it does seem

4682

03:48:18,150 --> 03:48:16,720

normal and and part of that is you know

4683

03:48:20,469 --> 03:48:18,160

when i was up on space station and you

4684

03:48:22,469 --> 03:48:20,479

know we never even thought about

4685

03:48:24,630 --> 03:48:22,479

genders or races or religions or

4686

03:48:26,309 --> 03:48:24,640

nationalities even until somebody asked

4687

03:48:28,550 --> 03:48:26,319

us about them and so it has actually

4688

03:48:30,070 --> 03:48:28,560

made us reflect on the reasons

4689

03:48:32,389 --> 03:48:30,080

and my takeaway is that the strongest

4690

03:48:33,990 --> 03:48:32,399

teams are the most diverse teams

4691

03:48:37,030 --> 03:48:34,000

i can be a little hard-headed sometimes

4692

03:48:38,870 --> 03:48:37,040

i know that and i flew my mission with a

4693

03:48:40,550 --> 03:48:38,880

canadian doctor he and i have very

4694

03:48:42,389 --> 03:48:40,560

different personalities

4695

03:48:45,030 --> 03:48:42,399

and the thing with a group is that if

4696

03:48:46,950 --> 03:48:45,040

everybody's agreeing nobody's thinking

4697

03:48:49,030 --> 03:48:46,960

okay and so there were decisions that i

4698

03:48:50,630 --> 03:48:49,040

made uh during my mission that my

4699

03:48:52,550 --> 03:48:50,640

crewmate said hey why don't you think

4700

03:48:55,349 --> 03:48:52,560

about this and that saved that that

4701

03:48:57,030 --> 03:48:55,359

saved that day and vice versa

4702

03:48:58,389 --> 03:48:57,040

the second part of it is representation

4703

03:49:00,070 --> 03:48:58,399

we represent

4704

03:49:02,070 --> 03:49:00,080

all walks of life in america and every

4705

03:49:03,110 --> 03:49:02,080

kid in america and across the world even

4706

03:49:07,349 --> 03:49:03,120

now

4707

03:49:08,950 --> 03:49:07,359

look like me i can do this and it's

4708

03:49:10,469 --> 03:49:08,960

important for us to be able to look at

4709

03:49:12,389 --> 03:49:10,479

them and say you have an opportunity

4710

03:49:14,150 --> 03:49:12,399

that we've the doors are open

4711

03:49:15,670 --> 03:49:14,160

come come on after us

4712

03:49:17,670 --> 03:49:15,680

and you all three are very much an

4713

03:49:19,349 --> 03:49:17,680

inspiration to young girls around the

4714

03:49:21,590 --> 03:49:19,359

world another question i'm gonna ask

4715

03:49:23,750 --> 03:49:21,600

another question so jessica and matthew

4716

03:49:25,990 --> 03:49:23,760

you're both newbies right haven't been

4717

03:49:28,630 --> 03:49:26,000

to space yeah okay

4718

03:49:31,510 --> 03:49:28,640

so matthew your first time going to

4719

03:49:33,670 --> 03:49:31,520

space is going to be direct to the moon

4720

03:49:35,349 --> 03:49:33,680

is that a little intimidating i mean

4721

03:49:38,790 --> 03:49:35,359

that's like

4722

03:49:40,550 --> 03:49:38,800

no space station trip first

4723

03:49:42,550 --> 03:49:40,560

what do you what do you think let's go

4724

03:49:44,309 --> 03:49:42,560

we're going

4725

03:49:45,429 --> 03:49:44,319

we go i i of course it's intimidating

4726

03:49:46,630 --> 03:49:45,439

right and it's like i talked about

4727

03:49:48,469 --> 03:49:46,640

before

4728

03:49:50,070 --> 03:49:48,479

you just don't want to let so many

4729

03:49:50,950 --> 03:49:50,080

people who've worked so hard on this

4730

03:49:52,070 --> 03:49:50,960

team right it's going to be an

4731

03:49:53,990 --> 03:49:52,080

international coalition that's going to

4732

03:49:55,510 --> 03:49:54,000

go do it you don't want to let them down

4733

03:49:57,670 --> 03:49:55,520

and it just makes you study harder it

4734

03:50:00,870 --> 03:49:57,680

makes you tougher makes you stronger

4735

03:50:03,110 --> 03:50:00,880

okay congratulations to all of you

4736

03:50:05,750 --> 03:50:03,120

all right we have another question

4737

03:50:08,550 --> 03:50:05,760

hey everybody mike from fox 35 news in

4738

03:50:09,990 --> 03:50:08,560

orlando may i ask this jessica a

4739

03:50:11,030 --> 03:50:10,000

question first

4740

03:50:12,870 --> 03:50:11,040

um

4741

03:50:14,550 --> 03:50:12,880

we hear that when we go to the moon this

4742

03:50:15,510 --> 03:50:14,560

time it's going to be to go there to

4743

03:50:17,750 --> 03:50:15,520

stay

4744

03:50:19,750 --> 03:50:17,760

and i wonder if you've thought about

4745

03:50:20,870 --> 03:50:19,760

sort of how long you would be willing to

4746

03:50:22,710 --> 03:50:20,880

be there

4747

03:50:23,750 --> 03:50:22,720

have you thought about what if you could

4748

03:50:26,389 --> 03:50:23,760

go

4749

03:50:27,990 --> 03:50:26,399

but you couldn't come back

4750

03:50:30,790 --> 03:50:28,000

yeah that's a good question and i can

4751  
03:50:32,950 --> 03:50:30,800  
tell you that at the end of my 205 days

4752  
03:50:35,030 --> 03:50:32,960  
on the space station i was not ready to

4753  
03:50:36,950 --> 03:50:35,040  
leave if it were up to me i would have

4754  
03:50:38,870 --> 03:50:36,960  
stayed up there even if there weren't

4755  
03:50:40,550 --> 03:50:38,880  
you know covered a coveted filled earth

4756  
03:50:43,590 --> 03:50:40,560  
that i was coming back to even despite

4757  
03:50:45,429 --> 03:50:43,600  
that 205 days wasn't long enough so i

4758  
03:50:47,990 --> 03:50:45,439  
think when we are up there doing these

4759  
03:50:50,469 --> 03:50:48,000  
missions time passes very quickly

4760  
03:50:52,630 --> 03:50:50,479  
because we are in this whole novel

4761  
03:50:54,309 --> 03:50:52,640  
atmosphere with so many exciting

4762  
03:50:56,469 --> 03:50:54,319  
opportunities around us so much to

4763  
03:50:58,790 --> 03:50:56,479

discover and so much to do that for me

4764

03:51:01,030 --> 03:50:58,800

it just flew by i think it's going to be

4765

03:51:02,950 --> 03:51:01,040

exactly true probably even more so when

4766

03:51:04,950 --> 03:51:02,960

we get all the way to the moon that we

4767

03:51:06,550 --> 03:51:04,960

are going to have so much to do we're

4768

03:51:08,309 --> 03:51:06,560

going to have so many people to not let

4769

03:51:09,910 --> 03:51:08,319

down as matt mentioned and we're going

4770

03:51:12,070 --> 03:51:09,920

to be there and ready to stay for as

4771

03:51:13,349 --> 03:51:12,080

long as the mission dictates and so i

4772

03:51:15,349 --> 03:51:13,359

think personally

4773

03:51:16,870 --> 03:51:15,359

i always trust in the training that we

4774

03:51:18,469 --> 03:51:16,880

receive and on the hundreds and

4775

03:51:20,150 --> 03:51:18,479

thousands of people that are supporting

4776  
03:51:21,990 --> 03:51:20,160  
us on the ground they're the ones that

4777  
03:51:23,910 --> 03:51:22,000  
are designing the correct mission

4778  
03:51:25,910 --> 03:51:23,920  
architecture so they will design the

4779  
03:51:28,070 --> 03:51:25,920  
appropriate length mission to get the

4780  
03:51:29,830 --> 03:51:28,080  
most out of it for all of us back on

4781  
03:51:31,750 --> 03:51:29,840  
earth so absolutely i'll be ready to

4782  
03:51:35,910 --> 03:51:31,760  
stay for for whatever duration that

4783  
03:51:39,429 --> 03:51:37,910  
sure yeah i mean i think

4784  
03:51:41,030 --> 03:51:39,439  
absolutely you know if we start talking

4785  
03:51:42,950 --> 03:51:41,040  
about this first mission to mars that

4786  
03:51:44,630 --> 03:51:42,960  
would probably be a three-year mission

4787  
03:51:46,150 --> 03:51:44,640  
the way it's looking right now and i

4788  
03:51:48,389 --> 03:51:46,160

would be ready to do that when the team

4789

03:51:52,309 --> 03:51:48,399

has it all designed and ready to go

4790

03:51:53,830 --> 03:51:52,319

good for you and question for you um

4791

03:51:55,189 --> 03:51:53,840

is it possible

4792

03:51:57,510 --> 03:51:55,199

that you could be involved in the

4793

03:51:59,910 --> 03:51:57,520

artemis program and also the mars

4794

03:52:01,830 --> 03:51:59,920

program you've been to station right so

4795

03:52:04,150 --> 03:52:01,840

they're they're choosing astronauts who

4796

03:52:06,229 --> 03:52:04,160

have been involved in shuttle and low

4797

03:52:08,630 --> 03:52:06,239

earth orbit at the station do you think

4798

03:52:11,110 --> 03:52:08,640

about what if i could check both boxes

4799

03:52:12,389 --> 03:52:11,120

the moon and mars yeah i'm glad you

4800

03:52:13,590 --> 03:52:12,399

mentioned that because

4801  
03:52:14,870 --> 03:52:13,600  
right now at nasa we're at a really

4802  
03:52:16,870 --> 03:52:14,880  
unique time where we have a lot of

4803  
03:52:18,630 --> 03:52:16,880  
overlapping missions right and just in

4804  
03:52:20,389 --> 03:52:18,640  
our astronaut office you know we have 50

4805  
03:52:21,990 --> 03:52:20,399  
astronauts almost 50 astronauts right

4806  
03:52:23,910 --> 03:52:22,000  
now and we're training on four different

4807  
03:52:25,590 --> 03:52:23,920  
vehicles some people are training to

4808  
03:52:27,750 --> 03:52:25,600  
test the brand new vehicle some people

4809  
03:52:29,510 --> 03:52:27,760  
are training to fly from a vehicle

4810  
03:52:30,710 --> 03:52:29,520  
overseas for a six-month mission to the

4811  
03:52:32,389 --> 03:52:30,720  
space station

4812  
03:52:35,269 --> 03:52:32,399  
some people are designing and looking at

4813  
03:52:37,510 --> 03:52:35,279

the lunar landers and and so all of us

4814

03:52:39,429 --> 03:52:37,520

are involved in something uh different

4815

03:52:41,429 --> 03:52:39,439

and none of us are successful if all of

4816

03:52:43,269 --> 03:52:41,439

those aren't successful and so we are a

4817

03:52:46,070 --> 03:52:43,279

very busy office right now

4818

03:52:47,670 --> 03:52:46,080

and so right now uh the mars missions at

4819

03:52:50,070 --> 03:52:47,680

our office on our operational level

4820

03:52:51,510 --> 03:52:50,080

they're not quite there yet as a direct

4821

03:52:52,950 --> 03:52:51,520

mars mission

4822

03:52:54,229 --> 03:52:52,960

obviously the space station is one of

4823

03:52:56,229 --> 03:52:54,239

our proving grounds the moon's going to

4824

03:52:58,229 --> 03:52:56,239

be our next proving ground and if i can

4825

03:53:00,950 --> 03:52:58,239

stay stay healthy long enough then then

4826

03:53:02,070 --> 03:53:00,960

i'd love to check that next block

4827

03:53:04,229 --> 03:53:02,080

we're certainly working on the

4828

03:53:05,830 --> 03:53:04,239

technology to

4829

03:53:07,590 --> 03:53:05,840

this moon will be the proving ground in

4830

03:53:09,590 --> 03:53:07,600

order to build that technology to get

4831

03:53:13,030 --> 03:53:09,600

out to mars another question all right

4832

03:53:14,870 --> 03:53:13,040

uh team congratulations uh well done uh

4833

03:53:17,590 --> 03:53:14,880

greg paloma spectrum news 13 right here

4834

03:53:19,830 --> 03:53:17,600

on florida space coast um my question is

4835

03:53:21,910 --> 03:53:19,840

back in 1969 in july there was a

4836

03:53:24,229 --> 03:53:21,920

gentleman who said some very famous

4837

03:53:25,990 --> 03:53:24,239

words when he went to a certain place

4838

03:53:27,269 --> 03:53:26,000

for the first time

4839

03:53:30,229 --> 03:53:27,279

and this is for anybody who would like

4840

03:53:32,389 --> 03:53:30,239

to jump in again it's not not a a rigged

4841

03:53:34,070 --> 03:53:32,399

question but

4842

03:53:35,830 --> 03:53:34,080

have you thought about what you may say

4843

03:53:39,030 --> 03:53:35,840

whether you're the next man or the first

4844

03:53:44,150 --> 03:53:40,870

no

4845

03:53:45,269 --> 03:53:44,160

dream come true for a lot of us just to

4846

03:53:47,590 --> 03:53:45,279

be here

4847

03:53:49,590 --> 03:53:47,600

for me it'd be a little premature but

4848

03:53:51,110 --> 03:53:49,600

you know if i happen to be that person

4849

03:53:52,389 --> 03:53:51,120

trust me there'll be some thought put

4850

03:53:53,830 --> 03:53:52,399

into that uh

4851  
03:53:55,349 --> 03:53:53,840  
like matt said

4852  
03:53:57,910 --> 03:53:55,359  
that's one thing you don't want to mess

4853  
03:53:59,189 --> 03:53:57,920  
up when you have that opportunity and

4854  
03:54:02,229 --> 03:53:59,199  
matt it looks like you were pondering

4855  
03:54:03,750 --> 03:54:02,239  
that in your head in this very moment

4856  
03:54:05,110 --> 03:54:03,760  
of course that i was racking and

4857  
03:54:07,110 --> 03:54:05,120  
stacking all of the things in the

4858  
03:54:08,550 --> 03:54:07,120  
priority order and that was way at the

4859  
03:54:10,070 --> 03:54:08,560  
end of the list

4860  
03:54:11,670 --> 03:54:10,080  
not ready yet

4861  
03:54:13,429 --> 03:54:11,680  
there's a lot of work to do i think if

4862  
03:54:14,870 --> 03:54:13,439  
that's something that's keeping us up a

4863  
03:54:17,189 --> 03:54:14,880

lot of things have gone right and that's

4864

03:54:18,630 --> 03:54:17,199

really exciting and if uh if we know

4865

03:54:20,309 --> 03:54:18,640

who's who it's gonna be i think we're

4866

03:54:22,630 --> 03:54:20,319

gonna you know be ribbing them a lot and

4867

03:54:23,930 --> 03:54:22,640

say you better think of something good

4868

03:54:26,630 --> 03:54:23,940

and maybe i'm not gonna help you

4869

03:54:28,229 --> 03:54:26,640

[Laughter]

4870

03:54:30,070 --> 03:54:28,239

i can imagine it even like the

4871

03:54:31,910 --> 03:54:30,080

inspiration coming on the journey there

4872

03:54:33,750 --> 03:54:31,920

right you might have something in your

4873

03:54:36,469 --> 03:54:33,760

mind and you might change it along the

4874

03:54:37,830 --> 03:54:36,479

way just as many writers do

4875

03:54:39,269 --> 03:54:37,840

a follow-up question

4876

03:54:41,269 --> 03:54:39,279

if there's time i'd love to throw this

4877

03:54:43,269 --> 03:54:41,279

at you if you could put some words in a

4878

03:54:45,510 --> 03:54:43,279

time capsule for people 100 years from

4879

03:54:47,590 --> 03:54:45,520

now about what this mission

4880

03:54:48,950 --> 03:54:47,600

is with the artemis mission uh what

4881

03:54:51,030 --> 03:54:48,960

would what would you like to say what

4882

03:54:52,790 --> 03:54:51,040

would you like to say to uh to people

4883

03:54:54,469 --> 03:54:52,800

and not just americans but people across

4884

03:54:55,910 --> 03:54:54,479

the world and maybe people will meet

4885

03:54:57,510 --> 03:54:55,920

eventually on other worlds what would it

4886

03:55:03,110 --> 03:54:57,520

be a hundred years from now what would

4887

03:55:07,189 --> 03:55:05,110

i think i see space flight is it's a

4888

03:55:09,030 --> 03:55:07,199

very long relay race and we're all

4889

03:55:11,990 --> 03:55:09,040

really fortunate to be able to hold the

4890

03:55:13,510 --> 03:55:12,000

baton for a short period of time

4891

03:55:14,870 --> 03:55:13,520

so if in a hundred years i would almost

4892

03:55:16,710 --> 03:55:14,880

want to ask them a question but i think

4893

03:55:18,870 --> 03:55:16,720

what i would just say is i hope that for

4894

03:55:20,550 --> 03:55:18,880

the time i held the baton i made this a

4895

03:55:22,070 --> 03:55:20,560

better program i changed lives for the

4896

03:55:26,150 --> 03:55:22,080

better the program for the better and

4897

03:55:30,550 --> 03:55:28,469

hard to follow that up yeah thank you

4898

03:55:32,229 --> 03:55:30,560

good luck guys yeah

4899

03:55:34,070 --> 03:55:32,239

well thank you very much to our media

4900

03:55:36,229 --> 03:55:34,080

members we appreciate you joining in and

4901

03:55:38,550 --> 03:55:36,239

asking the questions uh one last

4902

03:55:39,990 --> 03:55:38,560

question though for you that i have with

4903

03:55:41,510 --> 03:55:40,000

a show of hands

4904

03:55:44,550 --> 03:55:41,520

who would like to be

4905

03:55:47,030 --> 03:55:44,560

the first woman or the next man to go to

4906

03:55:51,750 --> 03:55:49,670

there it is all five in in honor of uh

4907

03:55:54,389 --> 03:55:51,760

the mercury seven press conference i

4908

03:55:56,790 --> 03:55:54,399

appreciate uh seeing that thank you all

4909

03:55:58,870 --> 03:55:56,800

for being here coming to florida taking

4910

03:56:00,790 --> 03:55:58,880

time out of your busy schedule to meet

4911

03:56:02,870 --> 03:56:00,800

with us and talk with us and share your

4912

03:56:05,189 --> 03:56:02,880

thoughts and feelings about the artemis

4913

03:56:07,670 --> 03:56:05,199

program we greatly appreciate it

4914

03:56:10,870 --> 03:56:07,680

and if you want to learn more about

4915

03:56:13,269 --> 03:56:10,880

these astronauts you can do so by going

4916

03:56:16,469 --> 03:56:13,279

online to [nasa.gov](http://nasa.gov)

4917

03:56:18,150 --> 03:56:16,479

forward slash artemis team again that's

4918

03:56:20,469 --> 03:56:18,160

[nasa.gov](http://nasa.gov)

4919

03:56:23,030 --> 03:56:20,479

forward slash artemis team their

4920

03:56:25,429 --> 03:56:23,040

biographies are there as well as some

4921

03:56:27,429 --> 03:56:25,439

very finely produced videos about them

4922

03:56:29,429 --> 03:56:27,439

where you can hear them in their own

4923

03:56:30,550 --> 03:56:29,439

words i want to thank you all for

4924

03:56:32,469 --> 03:56:30,560

watching

4925

03:56:34,389 --> 03:56:32,479

and remind you to

4926

03:56:59,040 --> 03:56:34,399

keep looking up