
E PLURIBUS UNUM
VICE PRESIDENT OF THE UNITED STATES

1
00:00:17,430 --> 00:00:14,070
[Music]

2
00:00:19,990 --> 00:00:17,440
good afternoon everybody uh thank you

3
00:00:21,510 --> 00:00:20,000
to all of you for being here today uh

4
00:00:23,429 --> 00:00:21,520
what a great day

5
00:00:25,509 --> 00:00:23,439
uh as a former

6
00:00:26,630 --> 00:00:25,519
astronaut myself it's quite an honor to

7
00:00:29,269 --> 00:00:26,640
kick off

8
00:00:31,509 --> 00:00:29,279
this administration's first meeting

9
00:00:34,709 --> 00:00:31,519
of the national space council

10
00:00:36,630 --> 00:00:34,719
and to introduce vice president harris

11
00:00:39,430 --> 00:00:36,640
i'll never forget

12
00:00:40,470 --> 00:00:39,440
getting out of my seat on my first space

13
00:00:42,229 --> 00:00:40,480

flight

14
00:00:44,069 --> 00:00:42,239
in 2001

15
00:00:45,830 --> 00:00:44,079
and looking out the window for the very

16
00:00:46,869 --> 00:00:45,840
first time

17
00:00:48,709 --> 00:00:46,879
you see

18
00:00:50,869 --> 00:00:48,719
the earth as this

19
00:00:53,270 --> 00:00:50,879
big round ball just floating there in

20
00:00:55,750 --> 00:00:53,280
the blackness of space and you

21
00:00:57,270 --> 00:00:55,760
immediately get this sense

22
00:00:59,349 --> 00:00:57,280
how we are all

23
00:01:01,029 --> 00:00:59,359
in this together

24
00:01:03,750 --> 00:01:01,039
and i know that everybody in this room

25
00:01:05,509 --> 00:01:03,760
understands how important space will be

26
00:01:06,710 --> 00:01:05,519
for the united states in the 21st

27
00:01:08,630 --> 00:01:06,720
century

28
00:01:10,830 --> 00:01:08,640
commercial activities

29
00:01:13,590 --> 00:01:10,840
in low earth orbit already

30
00:01:15,990 --> 00:01:13,600
form the bedrock of a

31
00:01:17,510 --> 00:01:16,000
number of critical industries

32
00:01:20,710 --> 00:01:17,520
space

33
00:01:23,590 --> 00:01:20,720
also represents the high ground

34
00:01:25,429 --> 00:01:23,600
for future combat operations

35
00:01:28,149 --> 00:01:25,439
and as we've seen in recent weeks and

36
00:01:29,350 --> 00:01:28,159
months the threats of us to us national

37
00:01:33,910 --> 00:01:29,360
security

38
00:01:35,510 --> 00:01:33,920

and commercial assets in space are real

39
00:01:36,630 --> 00:01:35,520
and these threats

40
00:01:39,190 --> 00:01:36,640
will

41
00:01:41,670 --> 00:01:39,200
undoubtedly grow in the years to come

42
00:01:45,030 --> 00:01:41,680
which is why it is critical

43
00:01:47,990 --> 00:01:45,040
that we maintain our competitive edge

44
00:01:50,389 --> 00:01:48,000
over our adversaries

45
00:01:51,990 --> 00:01:50,399
and as our nation looks to confront some

46
00:01:54,870 --> 00:01:52,000
of the most serious scientific

47
00:01:56,870 --> 00:01:54,880
challenges of our time from advanced

48
00:01:59,270 --> 00:01:56,880
medical research to

49
00:02:02,310 --> 00:01:59,280
understanding the causes

50
00:02:03,670 --> 00:02:02,320
and effects of global climate change

51
00:02:06,830 --> 00:02:03,680
space-based

52
00:02:10,150 --> 00:02:06,840
scientific research is crucial

53
00:02:12,630 --> 00:02:10,160
lastly and this is something that's very

54
00:02:16,070 --> 00:02:12,640
important to me personally

55
00:02:20,150 --> 00:02:16,080
space exploration has an incredible

56
00:02:21,670 --> 00:02:20,160
capacity to inspire future generations

57
00:02:23,830 --> 00:02:21,680
i remember

58
00:02:25,030 --> 00:02:23,840
being a young kid during the apollo

59
00:02:26,550 --> 00:02:25,040
program

60
00:02:29,350 --> 00:02:26,560
and trying

61
00:02:30,790 --> 00:02:29,360
and failing to stay awake

62
00:02:32,790 --> 00:02:30,800
in our living room

63
00:02:34,830 --> 00:02:32,800

to watch neil and buzz

64
00:02:37,670 --> 00:02:34,840
walk on the moon on apollo

65
00:02:39,830 --> 00:02:37,680
11. but after i woke up

66
00:02:41,430 --> 00:02:39,840
and realized what happened

67
00:02:44,470 --> 00:02:41,440
their example

68
00:02:47,430 --> 00:02:44,480
served as an inspiration for my brother

69
00:02:49,509 --> 00:02:47,440
and for me and played a big role in our

70
00:02:51,270 --> 00:02:49,519
goal to become astronauts

71
00:02:52,790 --> 00:02:51,280
and i know that seeing the first

72
00:02:55,350 --> 00:02:52,800
american woman

73
00:02:58,070 --> 00:02:55,360
and the first american of color set foot

74
00:02:58,949 --> 00:02:58,080
on the moon as part of the first artemis

75
00:03:01,589 --> 00:02:58,959
mission

76
00:03:02,550 --> 00:03:01,599
will do more than any of us could ever

77
00:03:05,030 --> 00:03:02,560
hope

78
00:03:07,670 --> 00:03:05,040
in terms of inspiring a generation of

79
00:03:10,790 --> 00:03:07,680
americans from all backgrounds

80
00:03:13,110 --> 00:03:10,800
to pursue careers in science math

81
00:03:15,509 --> 00:03:13,120
engineering and technology

82
00:03:17,509 --> 00:03:15,519
the national space council

83
00:03:20,229 --> 00:03:17,519
has the unique ability to bring the

84
00:03:23,190 --> 00:03:20,239
entire federal government together

85
00:03:25,030 --> 00:03:23,200
to address these pressing challenges

86
00:03:26,949 --> 00:03:25,040
and many more

87
00:03:28,710 --> 00:03:26,959
so i want to thank this administration

88
00:03:31,430 --> 00:03:28,720

for their commitment to retaining the

89
00:03:33,509 --> 00:03:31,440
national space council to ensure that

90
00:03:36,149 --> 00:03:33,519
this important

91
00:03:37,350 --> 00:03:36,159
interagency forum exists to confront our

92
00:03:40,229 --> 00:03:37,360
country's

93
00:03:41,270 --> 00:03:40,239
most pressing space challenges

94
00:03:43,910 --> 00:03:41,280
now

95
00:03:46,390 --> 00:03:43,920
it's an honor to introduce my friend

96
00:04:04,149 --> 00:03:46,400
chair of the national space council

97
00:04:04,159 --> 00:04:15,750
so

98
00:04:19,990 --> 00:04:17,670
let me just finish by saying vice

99
00:04:21,909 --> 00:04:20,000
president harris's role

100
00:04:24,070 --> 00:04:21,919
leading the space council demonstrates

101
00:04:26,870 --> 00:04:24,080
her in this administration's commitment

102
00:04:30,310 --> 00:04:26,880
to space her leadership on space on the

103
00:04:33,110 --> 00:04:30,320
world stage and here in the u s has been

104
00:04:35,830 --> 00:04:33,120
and will continue to be incredibly

105
00:04:45,430 --> 00:04:35,840
impactful for future and current

106
00:04:51,670 --> 00:04:48,710
thank you senator kelly thank you

107
00:04:55,350 --> 00:04:53,830
senator i just have to say about you the

108
00:04:56,950 --> 00:04:55,360
president feels this way our nation

109
00:04:57,990 --> 00:04:56,960
feels this way you have dedicated

110
00:05:00,310 --> 00:04:58,000
yourself

111
00:05:02,950 --> 00:05:00,320
to our nation with such courage such

112
00:05:04,950 --> 00:05:02,960
commitment and such patriotism and i

113
00:05:07,270 --> 00:05:04,960

thank you for the introduction and your

114
00:05:09,189 --> 00:05:07,280
life of service thank you

115
00:05:12,150 --> 00:05:09,199
and to everyone good afternoon good

116
00:05:14,390 --> 00:05:12,160
afternoon i want to first thank the

117
00:05:16,070 --> 00:05:14,400
united states institute of peace for

118
00:05:17,909 --> 00:05:16,080
hosting us today

119
00:05:20,469 --> 00:05:17,919
and thank you to everyone

120
00:05:23,110 --> 00:05:20,479
for joining this inaugural meeting of

121
00:05:25,430 --> 00:05:23,120
our national space council

122
00:05:27,189 --> 00:05:25,440
this council has the important

123
00:05:30,469 --> 00:05:27,199
responsibility

124
00:05:31,510 --> 00:05:30,479
to synchronize our nation's civil

125
00:05:35,029 --> 00:05:31,520
commercial

126
00:05:38,390 --> 00:05:35,039
and national security space activities

127
00:05:41,590 --> 00:05:38,400
and gathered here is the largest and

128
00:05:43,510 --> 00:05:41,600
most expansive space council

129
00:05:45,909 --> 00:05:43,520
in our nation's history

130
00:05:48,870 --> 00:05:45,919
today president joe biden issued an

131
00:05:49,830 --> 00:05:48,880
executive order to renew this council

132
00:05:55,189 --> 00:05:49,840
and

133
00:05:57,510 --> 00:05:55,199
here today the secretary of the interior

134
00:06:00,309 --> 00:05:57,520
the secretary of agriculture the

135
00:06:02,870 --> 00:06:00,319
secretary of labor the secretary of

136
00:06:04,550 --> 00:06:02,880
education and our national climate

137
00:06:07,110 --> 00:06:04,560
advisor

138
00:06:09,749 --> 00:06:07,120

the broad membership of this council

139
00:06:11,670 --> 00:06:09,759
reflects our broad priorities

140
00:06:13,590 --> 00:06:11,680
as an administration

141
00:06:15,029 --> 00:06:13,600
and also here today

142
00:06:16,469 --> 00:06:15,039
are members of congress from both

143
00:06:18,790 --> 00:06:16,479
chambers

144
00:06:21,749 --> 00:06:18,800
as well as admiral jim ellis who serves

145
00:06:23,029 --> 00:06:21,759
as chair of the users advisory group and

146
00:06:25,510 --> 00:06:23,039
i thank all of you for your

147
00:06:27,990 --> 00:06:25,520
participation and your leadership and

148
00:06:31,029 --> 00:06:28,000
welcome to all

149
00:06:32,629 --> 00:06:31,039
astronauts have said that seeing earth

150
00:06:35,590 --> 00:06:32,639
from space

151
00:06:39,189 --> 00:06:35,600
for the first time like senator kelly

152
00:06:41,430 --> 00:06:39,199
described is awe-inspiring

153
00:06:43,270 --> 00:06:41,440
and clarifying

154
00:06:46,150 --> 00:06:43,280
in that moment

155
00:06:48,950 --> 00:06:46,160
it becomes abundantly clear

156
00:06:55,110 --> 00:06:48,960
how precious our earth

157
00:06:58,950 --> 00:06:55,120
and how connected

158
00:07:01,350 --> 00:06:58,960
we all who occupy space on this earth

159
00:07:03,430 --> 00:07:01,360
how connected we are

160
00:07:05,270 --> 00:07:03,440
the vision they say

161
00:07:07,909 --> 00:07:05,280
is so powerful

162
00:07:09,990 --> 00:07:07,919
that it produces an effect which has

163
00:07:13,270 --> 00:07:10,000

actually been given a name

164
00:07:15,670 --> 00:07:13,280
the overview effect

165
00:07:16,950 --> 00:07:15,680
one astronaut from the apollo 8 mission

166
00:07:19,029 --> 00:07:16,960
explained

167
00:07:20,469 --> 00:07:19,039
while the crew's initial focus was on

168
00:07:21,749 --> 00:07:20,479
the moon

169
00:07:24,710 --> 00:07:21,759
in the end

170
00:07:26,469 --> 00:07:24,720
it was equally important to look back at

171
00:07:29,270 --> 00:07:26,479
earth

172
00:07:32,230 --> 00:07:29,280
today our nation and our world

173
00:07:34,469 --> 00:07:32,240
is more active in space than ever before

174
00:07:36,950 --> 00:07:34,479
with satellites in orbit that provides

175
00:07:38,070 --> 00:07:36,960
services and security to people here on

176
00:07:41,350 --> 00:07:38,080
earth

177
00:07:43,589 --> 00:07:41,360
with a thriving commercial enterprise

178
00:07:46,790 --> 00:07:43,599
with the international space station

179
00:07:48,950 --> 00:07:46,800
among the brightest objects in our sky

180
00:07:52,869 --> 00:07:48,960
and with the artemis program which is

181
00:07:55,749 --> 00:07:52,879
helping our nation achieve new heights

182
00:07:58,469 --> 00:07:55,759
and while our exploration of space

183
00:08:00,710 --> 00:07:58,479
takes us up to the moon to mars to the

184
00:08:03,189 --> 00:08:00,720
edge of our solar system

185
00:08:04,390 --> 00:08:03,199
like the apollo 8 crew

186
00:08:06,629 --> 00:08:04,400
i believe

187
00:08:08,550 --> 00:08:06,639
we have a responsibility

188
00:08:10,950 --> 00:08:08,560

to also look

189
00:08:13,029 --> 00:08:10,960
to our home planet

190
00:08:16,309 --> 00:08:13,039
in this new era

191
00:08:18,550 --> 00:08:16,319
we must see all the ways in which space

192
00:08:19,990 --> 00:08:18,560
can benefit earth

193
00:08:21,990 --> 00:08:20,000
we must see

194
00:08:25,589 --> 00:08:22,000
all the ways in which space

195
00:08:28,469 --> 00:08:25,599
can benefit the people of our nation

196
00:08:31,749 --> 00:08:28,479
and of all humanity

197
00:08:33,750 --> 00:08:31,759
this perspective is central to our work

198
00:08:36,870 --> 00:08:33,760
as a council

199
00:08:39,750 --> 00:08:36,880
because while exploration of space

200
00:08:42,870 --> 00:08:39,760
defined the 20th century

201
00:08:46,389 --> 00:08:42,880
the opportunity of space

202
00:08:47,750 --> 00:08:46,399
must guide our work in the 21st

203
00:08:50,070 --> 00:08:47,760
and that is why

204
00:08:52,389 --> 00:08:50,080
the first order of business today

205
00:08:53,509 --> 00:08:52,399
is to release our space priorities

206
00:08:56,550 --> 00:08:53,519
framework

207
00:08:58,550 --> 00:08:56,560
our priorities as i mentioned are broad

208
00:09:00,870 --> 00:08:58,560
as is our framework

209
00:09:02,630 --> 00:09:00,880
our framework covers many areas in which

210
00:09:05,430 --> 00:09:02,640
space activity

211
00:09:06,710 --> 00:09:05,440
is a source for american leadership and

212
00:09:09,269 --> 00:09:06,720
strength

213
00:09:11,350 --> 00:09:09,279

and american innovation

214
00:09:13,910 --> 00:09:11,360
and opportunity

215
00:09:16,870 --> 00:09:13,920
at this meeting this afternoon

216
00:09:18,710 --> 00:09:16,880
we will focus on three particular areas

217
00:09:20,389 --> 00:09:18,720
within our framework

218
00:09:23,750 --> 00:09:20,399
and the three areas i believe

219
00:09:25,670 --> 00:09:23,760
demonstrate our administration's vision

220
00:09:28,310 --> 00:09:25,680
and our mission

221
00:09:32,310 --> 00:09:28,320
three areas in which i believe

222
00:09:33,430 --> 00:09:32,320
we will make significant progress

223
00:09:36,790 --> 00:09:33,440
one

224
00:09:40,470 --> 00:09:36,800
building our stem workforce

225
00:09:41,910 --> 00:09:40,480
two addressing the climate crisis

226
00:09:45,110 --> 00:09:41,920
three

227
00:09:46,870 --> 00:09:45,120
promoting rules and norms that govern

228
00:09:48,949 --> 00:09:46,880
space

229
00:09:51,190 --> 00:09:48,959
so first on stem

230
00:09:53,269 --> 00:09:51,200
i have visited several college campuses

231
00:09:55,269 --> 00:09:53,279
over the years including this year i

232
00:09:57,829 --> 00:09:55,279
visited hampton university

233
00:10:00,550 --> 00:09:57,839
and hbcu in virginia

234
00:10:02,150 --> 00:10:00,560
hampton university hosts

235
00:10:04,389 --> 00:10:02,160
a nasa mission

236
00:10:06,710 --> 00:10:04,399
the aim satellite mission

237
00:10:09,350 --> 00:10:06,720
the students there are scientists and

238
00:10:12,310 --> 00:10:09,360

they are working with scientists to

239
00:10:13,750 --> 00:10:12,320
track atmospheric changes

240
00:10:15,030 --> 00:10:13,760
and i'll tell you something about these

241
00:10:15,829 --> 00:10:15,040
students

242
00:10:16,829 --> 00:10:15,839
they

243
00:10:20,310 --> 00:10:16,839
are both

244
00:10:22,310 --> 00:10:20,320
inspired and inspiring

245
00:10:25,269 --> 00:10:22,320
and so we must ensure

246
00:10:28,150 --> 00:10:25,279
that more of our nation's students have

247
00:10:31,509 --> 00:10:28,160
access to these important opportunities

248
00:10:34,790 --> 00:10:31,519
we must encourage more of our students

249
00:10:36,630 --> 00:10:34,800
to pursue stem careers

250
00:10:39,509 --> 00:10:36,640
the truth is

251
00:10:41,430 --> 00:10:39,519
the united states used to lead

252
00:10:43,269 --> 00:10:41,440
i said past tense

253
00:10:45,509 --> 00:10:43,279
used to lead

254
00:10:47,269 --> 00:10:45,519
the world on innovation

255
00:10:49,750 --> 00:10:47,279
but right now

256
00:10:54,150 --> 00:10:49,760
our nation is falling behind

257
00:10:58,389 --> 00:10:54,160
as others develop their stem workforce

258
00:11:00,949 --> 00:10:58,399
to compete in the 21st century

259
00:11:03,750 --> 00:11:00,959
to keep our nation secure

260
00:11:06,389 --> 00:11:03,760
in the 21st century

261
00:11:08,150 --> 00:11:06,399
our nation must invest

262
00:11:09,750 --> 00:11:08,160
in more scientists

263
00:11:11,430 --> 00:11:09,760

more engineers

264
00:11:13,190 --> 00:11:11,440
more programmers

265
00:11:15,110 --> 00:11:13,200
we must

266
00:11:18,949 --> 00:11:15,120
it is an imperative

267
00:11:21,350 --> 00:11:18,959
build a strong stem workforce

268
00:11:24,630 --> 00:11:21,360
and i've seen with my own eyes

269
00:11:26,790 --> 00:11:24,640
how space can help us reach that goal

270
00:11:28,470 --> 00:11:26,800
from the elementary school student with

271
00:11:30,310 --> 00:11:28,480
a telescope

272
00:11:32,790 --> 00:11:30,320
to the college student

273
00:11:35,590 --> 00:11:32,800
analyzing satellite data

274
00:11:36,630 --> 00:11:35,600
to the trades apprentice who is learning

275
00:11:39,430 --> 00:11:36,640
skills

276
00:11:42,389 --> 00:11:39,440
to help build rockets

277
00:11:43,990 --> 00:11:42,399
so today as a council we will discuss

278
00:11:46,069 --> 00:11:44,000
how we can strengthen

279
00:11:47,190 --> 00:11:46,079
space policy

280
00:11:48,790 --> 00:11:47,200
and

281
00:11:51,269 --> 00:11:48,800
how we can partner

282
00:11:52,790 --> 00:11:51,279
with union leaders and business leaders

283
00:11:55,750 --> 00:11:52,800
and educators

284
00:11:58,230 --> 00:11:55,760
to build the workforce that will solve

285
00:11:59,829 --> 00:11:58,240
the challenges of our time

286
00:12:01,509 --> 00:11:59,839
and that brings me to our second area of

287
00:12:04,150 --> 00:12:01,519
focus today

288
00:12:05,910 --> 00:12:04,160

the challenge of our climate crisis

289
00:12:08,150 --> 00:12:05,920
the aim satellite mission at hampton

290
00:12:09,750 --> 00:12:08,160
university is one of the many

291
00:12:12,230 --> 00:12:09,760
that is measuring the impact of the

292
00:12:14,870 --> 00:12:12,240
climate crisis i was recently at the

293
00:12:17,190 --> 00:12:14,880
goddard space flight center in maryland

294
00:12:19,670 --> 00:12:17,200
and i was honored to be the first to

295
00:12:22,710 --> 00:12:19,680
view images from the satellite that has

296
00:12:25,590 --> 00:12:22,720
been named landsat 9.

297
00:12:27,990 --> 00:12:25,600
these are but two examples of the fleet

298
00:12:30,150 --> 00:12:28,000
of satellites and sensors

299
00:12:33,269 --> 00:12:30,160
we have as a nation

300
00:12:36,310 --> 00:12:33,279
that provides citizens and scientists

301
00:12:37,590 --> 00:12:36,320
with the data they need to mitigate and

302
00:12:40,310 --> 00:12:37,600
adapt

303
00:12:41,910 --> 00:12:40,320
to the impact of the climate crisis

304
00:12:43,430 --> 00:12:41,920
just think

305
00:12:45,750 --> 00:12:43,440
these satellites

306
00:12:48,389 --> 00:12:45,760
provide real-time images of the

307
00:12:50,550 --> 00:12:48,399
landscape of our nation

308
00:12:52,870 --> 00:12:50,560
as natural disasters

309
00:12:55,590 --> 00:12:52,880
increase in frequency and ferocity

310
00:12:59,030 --> 00:12:55,600
around our country these images are

311
00:13:02,230 --> 00:12:59,040
being used by first responders

312
00:13:04,389 --> 00:13:02,240
these images are being used by farmers

313
00:13:06,710 --> 00:13:04,399

to assess their crops

314
00:13:09,590 --> 00:13:06,720
as drought and heat

315
00:13:11,750 --> 00:13:09,600
threatens their livelihood

316
00:13:13,910 --> 00:13:11,760
threatens our ability to produce food as

317
00:13:16,550 --> 00:13:13,920
a nation

318
00:13:20,710 --> 00:13:16,560
and by scientists who are working to

319
00:13:23,110 --> 00:13:20,720
combat the climate crisis head on

320
00:13:25,910 --> 00:13:23,120
today this council will commit

321
00:13:27,509 --> 00:13:25,920
to make this data more accessible

322
00:13:29,509 --> 00:13:27,519
to more people

323
00:13:32,310 --> 00:13:29,519
and we will expand our global

324
00:13:34,629 --> 00:13:32,320
partnerships to increase the data we are

325
00:13:36,870 --> 00:13:34,639
able to collect

326
00:13:39,269 --> 00:13:36,880
last month i announced that the united

327
00:13:41,670 --> 00:13:39,279
states will join the space climate

328
00:13:43,269 --> 00:13:41,680
observatory

329
00:13:45,670 --> 00:13:43,279
that's an international initiative

330
00:13:47,030 --> 00:13:45,680
that's being led by france to support

331
00:13:49,110 --> 00:13:47,040
climate action

332
00:13:51,750 --> 00:13:49,120
to local communities

333
00:13:55,430 --> 00:13:51,760
the work of our council will build on

334
00:13:58,949 --> 00:13:55,440
these types of partnerships which lead

335
00:14:01,590 --> 00:13:58,959
then to the third focus of today

336
00:14:04,310 --> 00:14:01,600
probably one of the most important

337
00:14:06,230 --> 00:14:04,320
in terms of our nation's leadership

338
00:14:09,430 --> 00:14:06,240

around the world

339
00:14:11,269 --> 00:14:09,440
and that is how our nation can lead

340
00:14:15,670 --> 00:14:11,279
in our world

341
00:14:18,230 --> 00:14:15,680
to establish to expand and to accelerate

342
00:14:20,069 --> 00:14:18,240
the rules and the norms that govern

343
00:14:22,310 --> 00:14:20,079
space

344
00:14:24,629 --> 00:14:22,320
over the past weeks and months

345
00:14:26,550 --> 00:14:24,639
i've spoken with heads of state and

346
00:14:27,670 --> 00:14:26,560
governments about our priorities in

347
00:14:30,710 --> 00:14:27,680
space

348
00:14:31,829 --> 00:14:30,720
leaders of france india japan mexico

349
00:14:33,829 --> 00:14:31,839
singapore

350
00:14:35,910 --> 00:14:33,839
among others

351
00:14:37,430 --> 00:14:35,920
in these conversations

352
00:14:40,550 --> 00:14:37,440
the opportunity

353
00:14:43,030 --> 00:14:40,560
of space has been clear

354
00:14:45,110 --> 00:14:43,040
as has the risk

355
00:14:48,310 --> 00:14:45,120
without clear norms

356
00:14:50,870 --> 00:14:48,320
for the responsible use of space

357
00:14:53,750 --> 00:14:50,880
we stand the real risk

358
00:14:56,470 --> 00:14:53,760
of threats to our national

359
00:15:00,710 --> 00:14:56,480
and global security

360
00:15:02,470 --> 00:15:00,720
just last month we saw what can happen

361
00:15:04,870 --> 00:15:02,480
russia launched

362
00:15:08,150 --> 00:15:04,880
an anti-satellite missile

363
00:15:12,069 --> 00:15:08,160

to destroy one of its satellites

364
00:15:14,470 --> 00:15:12,079
by blasting debris across space this

365
00:15:16,949 --> 00:15:14,480
irresponsible act

366
00:15:18,389 --> 00:15:16,959
endangered the satellites of other

367
00:15:20,710 --> 00:15:18,399
nations

368
00:15:23,990 --> 00:15:20,720
as well as astronauts

369
00:15:27,189 --> 00:15:24,000
in the international space station

370
00:15:29,509 --> 00:15:27,199
as activity in space grows

371
00:15:31,910 --> 00:15:29,519
we must reaffirm

372
00:15:33,509 --> 00:15:31,920
yes the rights

373
00:15:37,030 --> 00:15:33,519
of all nations

374
00:15:38,310 --> 00:15:37,040
and we must demand responsibility

375
00:15:42,470 --> 00:15:38,320
from all

376
00:15:49,509 --> 00:15:45,670
we must establish and expand rules and

377
00:15:51,509 --> 00:15:49,519
norms on safety and security

378
00:15:52,829 --> 00:15:51,519
on transparency

379
00:15:55,509 --> 00:15:52,839
and

380
00:15:58,710 --> 00:15:55,519
cooperation to include

381
00:16:00,629 --> 00:15:58,720
military commercial and civil space

382
00:16:02,629 --> 00:16:00,639
activity

383
00:16:03,910 --> 00:16:02,639
as but what example

384
00:16:06,710 --> 00:16:03,920
the united states has led the

385
00:16:09,590 --> 00:16:06,720
development of the artemis accords to

386
00:16:11,269 --> 00:16:09,600
establish clear norms for civil space

387
00:16:14,550 --> 00:16:11,279
exploration

388
00:16:17,590 --> 00:16:14,560

13 nations have signed on so far

389
00:16:20,310 --> 00:16:17,600
from here we must work to expand the

390
00:16:22,870 --> 00:16:20,320
number of signatories

391
00:16:24,389 --> 00:16:22,880
on the artemis accord

392
00:16:26,629 --> 00:16:24,399
in my recent meetings with the

393
00:16:28,310 --> 00:16:26,639
presidents of france and mexico

394
00:16:30,870 --> 00:16:28,320
both nations have indicated their

395
00:16:32,150 --> 00:16:30,880
intention to join

396
00:16:34,310 --> 00:16:32,160
so

397
00:16:36,629 --> 00:16:34,320
promoting rules and norms

398
00:16:40,069 --> 00:16:36,639
addressing the climate crisis

399
00:16:42,230 --> 00:16:40,079
building on our stem workforce

400
00:16:43,910 --> 00:16:42,240
these are the three areas of priority

401
00:16:46,470 --> 00:16:43,920
for this council

402
00:16:48,230 --> 00:16:46,480
that will guide our work today

403
00:16:50,870 --> 00:16:48,240
and there are many more that this

404
00:16:53,670 --> 00:16:50,880
council will address in the days and the

405
00:16:55,829 --> 00:16:53,680
weeks and the months ahead

406
00:16:57,749 --> 00:16:55,839
so keeping that in mind i will conclude

407
00:17:00,310 --> 00:16:57,759
with this

408
00:17:01,670 --> 00:17:00,320
the astronauts who have returned home

409
00:17:03,350 --> 00:17:01,680
from space

410
00:17:05,110 --> 00:17:03,360
they describe

411
00:17:08,150 --> 00:17:05,120
with wonder

412
00:17:09,669 --> 00:17:08,160
a new awareness of not only what is out

413
00:17:12,230 --> 00:17:09,679

there

414
00:17:14,630 --> 00:17:12,240
but what's right here

415
00:17:17,189 --> 00:17:14,640
looking at earth from hundreds of

416
00:17:18,870 --> 00:17:17,199
thousands of miles away

417
00:17:22,390 --> 00:17:18,880
they see

418
00:17:24,309 --> 00:17:22,400
what i know we all know

419
00:17:26,710 --> 00:17:24,319
our planet

420
00:17:28,069 --> 00:17:26,720
is fragile

421
00:17:30,070 --> 00:17:28,079
our planet

422
00:17:34,789 --> 00:17:30,080
is beautiful

423
00:17:36,789 --> 00:17:34,799
and it is filled with billions of people

424
00:17:38,390 --> 00:17:36,799
who are at once

425
00:17:41,669 --> 00:17:38,400
different

426
00:17:46,070 --> 00:17:43,430
from space

427
00:17:48,230 --> 00:17:46,080
all of humanity is one

428
00:17:51,990 --> 00:17:48,240
and through our work and space

429
00:17:54,390 --> 00:17:52,000
we have an opportunity to benefit

430
00:17:57,029 --> 00:17:54,400
not only the american people

431
00:18:00,470 --> 00:17:57,039
but all of humanity

432
00:18:01,830 --> 00:18:00,480
our framework is therefore comprehensive

433
00:18:02,870 --> 00:18:01,840
our agenda

434
00:18:05,510 --> 00:18:02,880
yes

435
00:18:08,070 --> 00:18:05,520
our agenda is ambitious

436
00:18:10,710 --> 00:18:08,080
but as an astronaut once told me about

437
00:18:13,590 --> 00:18:10,720
the advice he received ahead of his

438
00:18:15,350 --> 00:18:13,600

first spacewalk

439
00:18:17,110 --> 00:18:15,360
he was told

440
00:18:18,549 --> 00:18:17,120
simple

441
00:18:20,950 --> 00:18:18,559
just focus

442
00:18:22,549 --> 00:18:20,960
on what's right in front of you

443
00:18:25,750 --> 00:18:22,559
and from there

444
00:18:29,750 --> 00:18:28,470
that my friends is how we will move

445
00:18:32,230 --> 00:18:29,760
forward

446
00:18:35,110 --> 00:18:32,240
focused on what is in front of us

447
00:18:36,070 --> 00:18:35,120
and widening our view and expanding our

448
00:18:37,909 --> 00:18:36,080
work

449
00:18:40,390 --> 00:18:37,919
as we go forward

450
00:18:42,230 --> 00:18:40,400
so again i thank you all for being here

451
00:18:54,220 --> 00:18:42,240
and let's now get into our agenda thank

452
00:18:54,230 --> 00:19:03,909
[Applause]

453
00:19:09,350 --> 00:19:06,950
okay so to begin

454
00:19:11,510 --> 00:19:09,360
we will start with our first panel

455
00:19:12,710 --> 00:19:11,520
which will be to discuss the norms and

456
00:19:15,029 --> 00:19:12,720
rules

457
00:19:17,029 --> 00:19:15,039
and we have many

458
00:19:18,710 --> 00:19:17,039
extraordinary american leaders who are

459
00:19:21,190 --> 00:19:18,720
the members of the president's cabinet

460
00:19:23,270 --> 00:19:21,200
who are here taking a role of leadership

461
00:19:25,590 --> 00:19:23,280
not only in this discussion but as heads

462
00:19:27,110 --> 00:19:25,600
of their agencies on the work ahead and

463
00:19:29,430 --> 00:19:27,120

the commitments that we are prepared to

464
00:19:31,909 --> 00:19:29,440
make today and going forward

465
00:19:34,950 --> 00:19:31,919
so the first topic on norms and rules is

466
00:19:37,669 --> 00:19:34,960
essentially how do we modernize

467
00:19:39,909 --> 00:19:37,679
the norms and rules that govern space

468
00:19:43,750 --> 00:19:39,919
so we know from apollo 8 from previous

469
00:19:46,950 --> 00:19:43,760
missions um space exploration is not new

470
00:19:49,110 --> 00:19:46,960
but we are in a new era where we are i

471
00:19:52,630 --> 00:19:49,120
think more than ever before appreciating

472
00:19:54,470 --> 00:19:52,640
the capacity and yes the opportunity

473
00:19:57,190 --> 00:19:54,480
so on this topic

474
00:19:59,350 --> 00:19:57,200
let's consider the challenges that are

475
00:20:01,510 --> 00:19:59,360
also presented in addition to the

476
00:20:03,510 --> 00:20:01,520
opportunities the challenges for example

477
00:20:05,029 --> 00:20:03,520
being congestion

478
00:20:07,830 --> 00:20:05,039
debris

479
00:20:09,750 --> 00:20:07,840
and threats including the need to

480
00:20:11,590 --> 00:20:09,760
de-escalate threats

481
00:20:13,510 --> 00:20:11,600
through deconfliction

482
00:20:15,750 --> 00:20:13,520
and ensuring that we are all working

483
00:20:16,870 --> 00:20:15,760
with the same norms

484
00:20:19,350 --> 00:20:16,880
and rules

485
00:20:21,270 --> 00:20:19,360
so that we don't compromise

486
00:20:23,110 --> 00:20:21,280
the safety or integrity

487
00:20:24,310 --> 00:20:23,120
of any of our missions because of

488
00:20:26,630 --> 00:20:24,320

confusion

489
00:20:30,310 --> 00:20:26,640
coming out of a lack of rules and norms

490
00:20:31,909 --> 00:20:30,320
that govern the road so with that

491
00:20:34,470 --> 00:20:31,919
i'm going to introduce

492
00:20:36,710 --> 00:20:34,480
commerce secretary gina raimondo

493
00:20:39,750 --> 00:20:36,720
the department of commerce has made a

494
00:20:41,110 --> 00:20:39,760
new mandate to provide space situational

495
00:20:42,950 --> 00:20:41,120
awareness data

496
00:20:45,350 --> 00:20:42,960
and space traffic management to the

497
00:20:47,510 --> 00:20:45,360
nation and the world and so

498
00:20:49,110 --> 00:20:47,520
secretary raimondo i'd like to start by

499
00:20:51,270 --> 00:20:49,120
asking you

500
00:20:54,070 --> 00:20:51,280
given this mandate

501
00:20:56,390 --> 00:20:54,080
and and an open data system

502
00:20:58,950 --> 00:20:56,400
that can merge commercial

503
00:21:01,350 --> 00:20:58,960
along with military data in a way that

504
00:21:03,510 --> 00:21:01,360
is then an open data system so that it's

505
00:21:05,750 --> 00:21:03,520
not only integrated and synchronized but

506
00:21:09,110 --> 00:21:05,760
available to the public how are you

507
00:21:11,270 --> 00:21:09,120
thinking about the plan of rollout

508
00:21:13,110 --> 00:21:11,280
yes thank you thank you

509
00:21:14,830 --> 00:21:13,120
madam vice president and thank you most

510
00:21:17,830 --> 00:21:14,840
important for your leadership in this

511
00:21:20,870 --> 00:21:17,840
area which is as you said so vital to

512
00:21:23,190 --> 00:21:20,880
our national security and also our

513
00:21:26,070 --> 00:21:23,200

economic security i also want to extend

514
00:21:27,350 --> 00:21:26,080
my appreciation to all of you and and to

515
00:21:29,190 --> 00:21:27,360
the members of the national space

516
00:21:31,190 --> 00:21:29,200
council president today and to members

517
00:21:32,630 --> 00:21:31,200
of congress and other distinguished

518
00:21:34,470 --> 00:21:32,640
guests who are here

519
00:21:36,390 --> 00:21:34,480
so as you say

520
00:21:39,590 --> 00:21:36,400
commerce is not always necessarily

521
00:21:42,630 --> 00:21:39,600
thought of as the space agency

522
00:21:43,990 --> 00:21:42,640
however we do play an important role in

523
00:21:52,230 --> 00:21:44,000
space

524
00:21:54,390 --> 00:21:52,240
our work at the commerce department and

525
00:21:57,270 --> 00:21:54,400
i'm joined here by dr spinrad who runs

526
00:21:58,549 --> 00:21:57,280
noaa covers climate and weather data

527
00:22:01,190 --> 00:21:58,559
services

528
00:22:02,789 --> 00:22:01,200
space safety and sustainability

529
00:22:05,029 --> 00:22:02,799
workforce development that the vice

530
00:22:06,950 --> 00:22:05,039
president just spoke of manufacturing

531
00:22:08,950 --> 00:22:06,960
and management of the nation's radio

532
00:22:12,230 --> 00:22:08,960
frequency spectrum

533
00:22:14,630 --> 00:22:12,240
we're also involved in standard setting

534
00:22:17,190 --> 00:22:14,640
cyber security export controls and

535
00:22:19,350 --> 00:22:17,200
promoting space exports around the world

536
00:22:20,789 --> 00:22:19,360
which is of course an increasing area of

537
00:22:23,990 --> 00:22:20,799
our economy

538
00:22:25,590 --> 00:22:24,000

and we lead in these areas because space

539
00:22:28,470 --> 00:22:25,600
is directly tied to our economic

540
00:22:30,310 --> 00:22:28,480
security and our global competitiveness

541
00:22:33,350 --> 00:22:30,320
within the department of commerce we

542
00:22:35,750 --> 00:22:33,360
have the office of space commerce

543
00:22:37,510 --> 00:22:35,760
and the work there is

544
00:22:39,190 --> 00:22:37,520
central and we plan in this

545
00:22:41,669 --> 00:22:39,200
administration under the president's

546
00:22:44,070 --> 00:22:41,679
leadership vice president's leadership

547
00:22:46,789 --> 00:22:44,080
to have the office of space commerce

548
00:22:48,950 --> 00:22:46,799
play an even greater and more robust

549
00:22:53,110 --> 00:22:48,960
role in the interagency

550
00:22:54,950 --> 00:22:53,120
uh process as we shape space policy and

551
00:22:55,830 --> 00:22:54,960
space strategy

552
00:22:57,590 --> 00:22:55,840
as

553
00:22:58,950 --> 00:22:57,600
vice president just said

554
00:23:01,029 --> 00:22:58,960
the recent

555
00:23:03,750 --> 00:23:01,039
russian anti-satellite test was

556
00:23:05,669 --> 00:23:03,760
absolutely a wake-up call for all of us

557
00:23:08,149 --> 00:23:05,679
and its potential impacts to space

558
00:23:09,990 --> 00:23:08,159
safety and sustainability highlight the

559
00:23:12,630 --> 00:23:10,000
importance of the work we're doing in

560
00:23:15,029 --> 00:23:12,640
the office of space commerce

561
00:23:16,630 --> 00:23:15,039
all of the work to support all of the

562
00:23:18,630 --> 00:23:16,640
work we're doing in the office of space

563
00:23:20,950 --> 00:23:18,640

commerce will support

564
00:23:24,070 --> 00:23:20,960
space traffic coordination as you just

565
00:23:25,990 --> 00:23:24,080
asked about presently building on strong

566
00:23:28,549 --> 00:23:26,000
foundation established by the department

567
00:23:31,430 --> 00:23:28,559
of defense the office of space commerce

568
00:23:34,230 --> 00:23:31,440
developed at the request of congress

569
00:23:36,390 --> 00:23:34,240
a prototype space situational awareness

570
00:23:39,190 --> 00:23:36,400
system to support civil and commercial

571
00:23:41,269 --> 00:23:39,200
space operations and we are now deeply

572
00:23:44,470 --> 00:23:41,279
in the process of preparing for an

573
00:23:46,390 --> 00:23:44,480
operational system from the prototype

574
00:23:49,110 --> 00:23:46,400
in collaboration with our interagency

575
00:23:51,110 --> 00:23:49,120
partners and importantly in

576
00:23:54,870 --> 00:23:51,120
collaboration with the commercial

577
00:23:56,950 --> 00:23:54,880
industrial space sector and that over

578
00:23:58,470 --> 00:23:56,960
the next several years we believe we

579
00:24:01,430 --> 00:23:58,480
will be able to make that leap between

580
00:24:03,269 --> 00:24:01,440
the prototype and the commercial

581
00:24:05,190 --> 00:24:03,279
system which will be incredibly

582
00:24:07,110 --> 00:24:05,200
important for space traffic and

583
00:24:09,110 --> 00:24:07,120
coordination

584
00:24:10,789 --> 00:24:09,120
thank you madam secretary and and to

585
00:24:12,630 --> 00:24:10,799
emphasize the importance of the role of

586
00:24:14,310 --> 00:24:12,640
the department of commerce

587
00:24:16,470 --> 00:24:14,320
and and i'm going to next introduce the

588
00:24:19,269 --> 00:24:16,480

secretary of transportation pete budjic

589
00:24:21,909 --> 00:24:19,279
between the two agencies we

590
00:24:24,549 --> 00:24:21,919
cover launch and then activity in space

591
00:24:26,310 --> 00:24:24,559
and the coordination um you may think of

592
00:24:27,830 --> 00:24:26,320
it like historically how you think of

593
00:24:31,190 --> 00:24:27,840
the faa

594
00:24:33,990 --> 00:24:31,200
and and the regulation of traffic well

595
00:24:36,149 --> 00:24:34,000
similar adoption of policy and and

596
00:24:38,230 --> 00:24:36,159
coordination must take place in a very

597
00:24:39,830 --> 00:24:38,240
coordinated way within our government as

598
00:24:42,390 --> 00:24:39,840
it relates to activity in space so thank

599
00:24:44,310 --> 00:24:42,400
you madam secretary secretary budapest

600
00:24:46,310 --> 00:24:44,320
thank you for the work that the

601
00:24:48,070 --> 00:24:46,320
department is doing and in particular

602
00:24:51,190 --> 00:24:48,080
again the department of transportation

603
00:24:54,470 --> 00:24:51,200
has a role to regulate space launch

604
00:24:57,110 --> 00:24:54,480
activity and so my question to you is

605
00:24:57,830 --> 00:24:57,120
at given that role and given also the

606
00:25:05,750 --> 00:24:57,840
the

607
00:25:08,070 --> 00:25:05,760
about updating and upgrading um its

608
00:25:10,390 --> 00:25:08,080
rules of the road around regulation of

609
00:25:11,750 --> 00:25:10,400
space launch well uh thank you madam

610
00:25:13,909 --> 00:25:11,760
vice president first of all for for your

611
00:25:15,510 --> 00:25:13,919
leadership of this body and in this area

612
00:25:17,269 --> 00:25:15,520
we're thrilled to be with our

613
00:25:19,269 --> 00:25:17,279

colleagues and such a distinguished

614
00:25:22,310 --> 00:25:19,279
audience as you say this is about

615
00:25:24,950 --> 00:25:22,320
coordinating uh the launch and reentry

616
00:25:26,470 --> 00:25:24,960
processes one way we think of it as if

617
00:25:28,789 --> 00:25:26,480
if orbit is to be thought of as the

618
00:25:30,310 --> 00:25:28,799
beltway we're particularly concerned

619
00:25:32,870 --> 00:25:30,320
with the on-ramps and the off-ramps

620
00:25:35,029 --> 00:25:32,880
launch and re-entry so the department

621
00:25:36,789 --> 00:25:35,039
right now is addressing this through new

622
00:25:38,390 --> 00:25:36,799
regulations that became effective in

623
00:25:40,870 --> 00:25:38,400
march of this year

624
00:25:43,269 --> 00:25:40,880
which enhanced the requirements to avoid

625
00:25:45,190 --> 00:25:43,279
collisions with other objects during

626
00:25:47,430 --> 00:25:45,200
commercial launches and re-entries and

627
00:25:50,230 --> 00:25:47,440
to prevent the creation of new debris

628
00:25:51,830 --> 00:25:50,240
during those those phases of the flight

629
00:25:52,789 --> 00:25:51,840
building on that for the immediate

630
00:25:54,630 --> 00:25:52,799
future

631
00:25:57,029 --> 00:25:54,640
the department's going to be addressing

632
00:25:59,110 --> 00:25:57,039
safety and sustainability through a new

633
00:26:00,390 --> 00:25:59,120
regulation on orbital degree debris

634
00:26:02,789 --> 00:26:00,400
mitigation

635
00:26:05,750 --> 00:26:02,799
so the idea which we hope to be ready to

636
00:26:07,750 --> 00:26:05,760
propose in spring of 2022 is to make

637
00:26:09,830 --> 00:26:07,760
sure we're not creating unnecessary

638
00:26:11,909 --> 00:26:09,840

debris that would inhibit future space

639
00:26:14,390 --> 00:26:11,919
operations and that we have means to

640
00:26:17,269 --> 00:26:14,400
take care of what is placed into orbit

641
00:26:19,269 --> 00:26:17,279
so this faa orbital rule would apply

642
00:26:21,190 --> 00:26:19,279
strictly to commercial launches but it

643
00:26:23,750 --> 00:26:21,200
would be informed by nasa documentation

644
00:26:25,029 --> 00:26:23,760
to inform that regulation and throughout

645
00:26:26,950 --> 00:26:25,039
the process we're

646
00:26:28,950 --> 00:26:26,960
harmonizing with international entities

647
00:26:30,070 --> 00:26:28,960
through the interagency space degree

648
00:26:31,510 --> 00:26:30,080
coordinating committee which is one

649
00:26:33,750 --> 00:26:31,520
reason why we're so pleased to see so

650
00:26:34,549 --> 00:26:33,760
many international partners represented

651
00:26:36,070 --> 00:26:34,559
here

652
00:26:38,310 --> 00:26:36,080
and we want to explore policy that will

653
00:26:40,870 --> 00:26:38,320
limit the non-functional items that are

654
00:26:43,909 --> 00:26:40,880
allowed into space in the first place

655
00:26:46,070 --> 00:26:43,919
trying to take a broader view on all of

656
00:26:47,430 --> 00:26:46,080
the different implications of

657
00:26:49,590 --> 00:26:47,440
not just the launch process but our

658
00:26:52,149 --> 00:26:49,600
space ports as well

659
00:26:54,230 --> 00:26:52,159
you noted the rapid increase in activity

660
00:26:56,390 --> 00:26:54,240
and just to put that in perspective

661
00:26:57,830 --> 00:26:56,400
we've seen the number of launches double

662
00:26:59,510 --> 00:26:57,840
even after the previously

663
00:27:01,269 --> 00:26:59,520

record-breaking numbers last year when

664
00:27:02,470 --> 00:27:01,279
it came to commercial space travel and

665
00:27:03,990 --> 00:27:02,480
we're actually getting close to the

666
00:27:05,909 --> 00:27:04,000
point where we will see

667
00:27:07,669 --> 00:27:05,919
more commercial launches on an annual

668
00:27:09,990 --> 00:27:07,679
basis than what we were accustomed to

669
00:27:12,310 --> 00:27:10,000
seeing over the course of about a decade

670
00:27:13,750 --> 00:27:12,320
uh so we are gearing up

671
00:27:15,750 --> 00:27:13,760
and it's very much the right time i

672
00:27:17,190 --> 00:27:15,760
think for this body to be playing that

673
00:27:18,950 --> 00:27:17,200
coordinating role that you mentioned

674
00:27:20,389 --> 00:27:18,960
that's so important and we're looking

675
00:27:22,870 --> 00:27:20,399
forward to carrying on that work

676
00:27:25,590 --> 00:27:22,880
thank you and um

677
00:27:26,470 --> 00:27:25,600
can i emphasize enough the importance of

678
00:27:29,190 --> 00:27:26,480
the

679
00:27:31,750 --> 00:27:29,200
united states

680
00:27:33,990 --> 00:27:31,760
um being a leader not only in what we do

681
00:27:35,909 --> 00:27:34,000
in terms of our activity as a nation but

682
00:27:38,950 --> 00:27:35,919
really coordinating and helping to set

683
00:27:41,269 --> 00:27:38,960
the global standards uh for for space

684
00:27:43,669 --> 00:27:41,279
launch but also for the activity that

685
00:27:46,470 --> 00:27:43,679
relates to debris and congestion and all

686
00:27:49,590 --> 00:27:46,480
of that so thank you mr secretary

687
00:27:51,430 --> 00:27:49,600
next i want to ask um deputy secretary

688
00:27:54,630 --> 00:27:51,440

of state wendy sherman

689
00:27:57,029 --> 00:27:54,640
to discuss a bit about how

690
00:27:59,590 --> 00:27:57,039
we are coordinating where is wendy there

691
00:28:03,029 --> 00:28:01,510
um i knew you were here

692
00:28:05,510 --> 00:28:03,039
about um

693
00:28:07,269 --> 00:28:05,520
how we are thinking about

694
00:28:08,870 --> 00:28:07,279
again as a transition from secretary

695
00:28:09,669 --> 00:28:08,880
budej to you

696
00:28:17,990 --> 00:28:09,679
the

697
00:28:19,990 --> 00:28:18,000
partners with our allies and even

698
00:28:22,070 --> 00:28:20,000
sometimes with our adversaries

699
00:28:23,669 --> 00:28:22,080
and how we are bringing folks together

700
00:28:25,669 --> 00:28:23,679
and i mentioned the conversations that

701
00:28:28,549 --> 00:28:25,679
i've had with various heads of state and

702
00:28:30,630 --> 00:28:28,559
government um heads but how

703
00:28:32,310 --> 00:28:30,640
in particular is the state department

704
00:28:34,630 --> 00:28:32,320
leading the effort to strengthen and

705
00:28:36,149 --> 00:28:34,640
expand these alliances and partnerships

706
00:28:38,070 --> 00:28:36,159
and in particular if you can emphasize

707
00:28:39,750 --> 00:28:38,080
the artemis accord and the leadership

708
00:28:41,990 --> 00:28:39,760
role you've taken there

709
00:28:43,669 --> 00:28:42,000
thank you very much madam vice president

710
00:28:45,110 --> 00:28:43,679
it's really a pleasure to be here and

711
00:28:46,789 --> 00:28:45,120
thank you to all who have joined

712
00:28:48,149 --> 00:28:46,799
including those who are joining from all

713
00:28:49,750 --> 00:28:48,159

around the world

714
00:28:51,750 --> 00:28:49,760
in this discussion

715
00:28:53,269 --> 00:28:51,760
the department of state leads u.s

716
00:28:55,830 --> 00:28:53,279
government engagements with other

717
00:28:58,149 --> 00:28:55,840
nations many of whom are here today to

718
00:28:59,909 --> 00:28:58,159
promote shared norms of responsible

719
00:29:02,950 --> 00:28:59,919
behavior and the long-term

720
00:29:06,710 --> 00:29:02,960
sustainability of outer space activities

721
00:29:08,710 --> 00:29:06,720
grounded in the 1967 outer space treaty

722
00:29:10,630 --> 00:29:08,720
and related core treaties conventions

723
00:29:12,549 --> 00:29:10,640
and agreements

724
00:29:15,510 --> 00:29:12,559
a major effort of the department along

725
00:29:18,070 --> 00:29:15,520
with nasa is the expansion as you said

726
00:29:20,630 --> 00:29:18,080
madam sec vice president the artemis

727
00:29:22,789 --> 00:29:20,640
supports which provide basic principles

728
00:29:25,350 --> 00:29:22,799
to guide the next generation of civil

729
00:29:28,389 --> 00:29:25,360
exploration of outer space as we go to

730
00:29:30,470 --> 00:29:28,399
the moon and onwards to mars

731
00:29:32,310 --> 00:29:30,480
the accords are this generation's

732
00:29:35,269 --> 00:29:32,320
re-commitment to the principles of the

733
00:29:38,070 --> 00:29:35,279
outer space treaty envisioning a safe

734
00:29:41,029 --> 00:29:38,080
transparent peaceful and prosperous

735
00:29:43,350 --> 00:29:41,039
approach to exploration science and

736
00:29:45,029 --> 00:29:43,360
commercial activities in space

737
00:29:47,909 --> 00:29:45,039
throughout all our work on

738
00:29:50,389 --> 00:29:47,919

sustainability we promote the effective

739
00:29:52,549 --> 00:29:50,399
implementation of breast practices

740
00:29:55,269 --> 00:29:52,559
standards and norms of responsible

741
00:29:57,750 --> 00:29:55,279
behavior for the full range of

742
00:29:59,190 --> 00:29:57,760
governmental and private sector space

743
00:30:01,269 --> 00:29:59,200
activities

744
00:30:03,909 --> 00:30:01,279
within the united nations committee on

745
00:30:06,310 --> 00:30:03,919
the peaceful uses of outer space the

746
00:30:07,190 --> 00:30:06,320
department worked collaboratively for 10

747
00:30:09,430 --> 00:30:07,200
years

748
00:30:11,430 --> 00:30:09,440
to develop the 21 guidelines on

749
00:30:15,350 --> 00:30:11,440
long-term sustainability

750
00:30:16,549 --> 00:30:15,360
via consensus among nearly 100 member

751
00:30:18,789 --> 00:30:16,559
states

752
00:30:22,710 --> 00:30:18,799
these voluntary and non-legally binding

753
00:30:25,190 --> 00:30:22,720
guidelines address key us objectives

754
00:30:27,029 --> 00:30:25,200
such as national level policy regulatory

755
00:30:28,230 --> 00:30:27,039
frameworks for commercial space

756
00:30:30,230 --> 00:30:28,240
activities

757
00:30:32,389 --> 00:30:30,240
safety of space operations scientific

758
00:30:34,389 --> 00:30:32,399
research and development and effective

759
00:30:36,310 --> 00:30:34,399
international cooperation

760
00:30:38,710 --> 00:30:36,320
we're now focused on the widespread

761
00:30:41,350 --> 00:30:38,720
implementation of these 21 guidelines

762
00:30:42,630 --> 00:30:41,360
and continue to lead u.s participation

763
00:30:45,110 --> 00:30:42,640

in follow-on

764
00:30:47,190 --> 00:30:45,120
lts working group which addresses the

765
00:30:49,590 --> 00:30:47,200
implementation of guidelines capacity

766
00:30:52,230 --> 00:30:49,600
building and studying other challenges

767
00:30:54,310 --> 00:30:52,240
to space sustainability as has been

768
00:30:56,549 --> 00:30:54,320
mentioned with respect to the growing

769
00:30:58,389 --> 00:30:56,559
threats to outer space activities such

770
00:31:00,950 --> 00:30:58,399
as russia's recent irresponsible

771
00:31:03,430 --> 00:31:00,960
anti-satellite weapons test the united

772
00:31:05,190 --> 00:31:03,440
nation united states co-sponsored a

773
00:31:08,070 --> 00:31:05,200
united nations general assembly

774
00:31:10,310 --> 00:31:08,080
resolution that for the first time ever

775
00:31:12,950 --> 00:31:10,320
will create a un-led process to develop

776
00:31:15,110 --> 00:31:12,960
ideas for those national security space

777
00:31:18,070 --> 00:31:15,120
norms of behavior that we've been

778
00:31:21,509 --> 00:31:18,080
discussing today this is also something

779
00:31:24,310 --> 00:31:21,519
that we bring up uh in my own strategic

780
00:31:26,630 --> 00:31:24,320
stability dialogue with the russians and

781
00:31:29,669 --> 00:31:26,640
our ongoing dialogues with countries all

782
00:31:31,909 --> 00:31:29,679
over the world thank you

783
00:31:34,470 --> 00:31:31,919
thank you and that actually is a great

784
00:31:37,190 --> 00:31:34,480
segue into the discussion with the

785
00:31:39,750 --> 00:31:37,200
deputy secretary of defense kath hicks

786
00:31:42,070 --> 00:31:39,760
so on that point about the most recent

787
00:31:44,470 --> 00:31:42,080
anti-satellite test and this destructive

788
00:31:46,789 --> 00:31:44,480

nature of it i think in many ways it has

789
00:31:49,590 --> 00:31:46,799
been uh

790
00:31:50,870 --> 00:31:49,600
a moment for us to really see very

791
00:31:52,389 --> 00:31:50,880
clearly

792
00:31:55,190 --> 00:31:52,399
what can happen

793
00:31:58,549 --> 00:31:55,200
and what potentially can be avoided with

794
00:32:01,269 --> 00:31:58,559
norms and rules and so um if you could

795
00:32:03,269 --> 00:32:01,279
um deputy secretary of defense cath

796
00:32:04,470 --> 00:32:03,279
hicks talk about how the department of

797
00:32:07,029 --> 00:32:04,480
defense

798
00:32:09,350 --> 00:32:07,039
views what we can do to reduce the risk

799
00:32:11,830 --> 00:32:09,360
of inadvertent conflict because of

800
00:32:14,549 --> 00:32:11,840
potential miscalculation based on

801
00:32:17,269 --> 00:32:14,559
misinterpretation of intentions in space

802
00:32:18,950 --> 00:32:17,279
which we know can always lead to very

803
00:32:21,029 --> 00:32:18,960
undesirable consequences and are

804
00:32:22,549 --> 00:32:21,039
avoidable at the same time

805
00:32:24,149 --> 00:32:22,559
certainly madam vice president and first

806
00:32:26,789 --> 00:32:24,159
let me thank you for your continued

807
00:32:28,870 --> 00:32:26,799
focus on space norms it's so important

808
00:32:31,029 --> 00:32:28,880
just as you said to reduce the risk of

809
00:32:33,590 --> 00:32:31,039
inadvertent escalation

810
00:32:35,590 --> 00:32:33,600
and misunderstanding which can expand uh

811
00:32:37,430 --> 00:32:35,600
beyond the space domain

812
00:32:40,230 --> 00:32:37,440
so that really requires a shared

813
00:32:41,830 --> 00:32:40,240

understanding of what we're trying to do

814
00:32:42,789 --> 00:32:41,840
in terms of responsible behavior in

815
00:32:44,950 --> 00:32:42,799
space

816
00:32:46,710 --> 00:32:44,960
and as a military organization and one

817
00:32:47,909 --> 00:32:46,720
of the world's most experienced and

818
00:32:50,950 --> 00:32:47,919
largest

819
00:32:53,269 --> 00:32:50,960
space operators dod knows it has a

820
00:32:55,830 --> 00:32:53,279
special responsibility to articulate

821
00:32:58,149 --> 00:32:55,840
what we mean by responsible behavior and

822
00:32:59,990 --> 00:32:58,159
then to reflect those values and how we

823
00:33:02,549 --> 00:33:00,000
actually operate

824
00:33:05,750 --> 00:33:02,559
so secretary of defense austin beginning

825
00:33:08,149 --> 00:33:05,760
last july set forth very publicly

826
00:33:11,669 --> 00:33:08,159
long-standing operational practices that

827
00:33:14,630 --> 00:33:11,679
we have in space to really demonstrate

828
00:33:17,430 --> 00:33:14,640
direction to our space operators

829
00:33:19,830 --> 00:33:17,440
and those five tenants are to operate in

830
00:33:21,750 --> 00:33:19,840
from to and through space

831
00:33:23,350 --> 00:33:21,760
with due regard to others and in a

832
00:33:25,430 --> 00:33:23,360
professional manner

833
00:33:26,549 --> 00:33:25,440
to limit the generation of long-lived

834
00:33:28,789 --> 00:33:26,559
debris

835
00:33:30,149 --> 00:33:28,799
to avoid the creation of harmful

836
00:33:32,630 --> 00:33:30,159
interference

837
00:33:35,269 --> 00:33:32,640
to maintain safe separation and safe

838
00:33:37,430 --> 00:33:35,279

trajectory and to communicate and make

839
00:33:39,669 --> 00:33:37,440
notifications to enhance the safety and

840
00:33:41,830 --> 00:33:39,679
stability of the domain

841
00:33:44,149 --> 00:33:41,840
we use those uh tenants for

842
00:33:45,990 --> 00:33:44,159
conversations on space norms much as the

843
00:33:48,870 --> 00:33:46,000
state department does in multilateral

844
00:33:50,710 --> 00:33:48,880
fora with defense counterparts worldwide

845
00:33:52,310 --> 00:33:50,720
and of course as i said to guide our own

846
00:33:53,509 --> 00:33:52,320
activities

847
00:33:56,310 --> 00:33:53,519
the russia

848
00:33:57,509 --> 00:33:56,320
destructive anti-satellite test just

849
00:33:59,990 --> 00:33:57,519
conducted

850
00:34:02,470 --> 00:34:00,000
really demonstrates the the potential

851
00:34:04,389 --> 00:34:02,480
deadly effects if tenants like this are

852
00:34:06,470 --> 00:34:04,399
not widely shared

853
00:34:09,270 --> 00:34:06,480
in that case we've seen significant

854
00:34:11,669 --> 00:34:09,280
amounts of hazardous debris created

855
00:34:13,669 --> 00:34:11,679
that can threaten and and could still

856
00:34:15,990 --> 00:34:13,679
threaten the lives of those space

857
00:34:18,550 --> 00:34:16,000
travelers who are in low earth orbit and

858
00:34:20,710 --> 00:34:18,560
that risk will continue for years uh

859
00:34:22,790 --> 00:34:20,720
with space assets that are vital to all

860
00:34:25,349 --> 00:34:22,800
nations interests

861
00:34:27,190 --> 00:34:25,359
such a display of deliberate disregard

862
00:34:29,349 --> 00:34:27,200
for safety stability security and

863
00:34:30,869 --> 00:34:29,359

sustainability in space

864
00:34:32,149 --> 00:34:30,879
um is

865
00:34:34,790 --> 00:34:32,159
one that

866
00:34:37,109 --> 00:34:34,800
is one to be condemned um and

867
00:34:38,310 --> 00:34:37,119
underscores the urgency of acting in

868
00:34:40,230 --> 00:34:38,320
defense of

869
00:34:43,510 --> 00:34:40,240
developing shared norms and having

870
00:34:44,869 --> 00:34:43,520
long-term sustainability of outer space

871
00:34:46,950 --> 00:34:44,879
so from the defense department's

872
00:34:48,790 --> 00:34:46,960
perspective we would like to see all

873
00:34:50,629 --> 00:34:48,800
nations agree to refrain from

874
00:34:53,030 --> 00:34:50,639
anti-satellite weapons testing that

875
00:34:54,950 --> 00:34:53,040
creates debris which as you've mentioned

876
00:34:57,030 --> 00:34:54,960
pollutes the space environment risks

877
00:34:58,950 --> 00:34:57,040
damaging space objects and threatens the

878
00:35:00,550 --> 00:34:58,960
lives of current and future space

879
00:35:03,990 --> 00:35:00,560
explorers

880
00:35:05,910 --> 00:35:04,000
thank you and thank you and and and and

881
00:35:06,870 --> 00:35:05,920
to the secretary for the work that you

882
00:35:09,109 --> 00:35:06,880
all have been doing in your role of

883
00:35:09,910 --> 00:35:09,119
leadership it's been extraordinary um

884
00:35:12,390 --> 00:35:09,920
and

885
00:35:14,630 --> 00:35:12,400
the these last few in particular lead up

886
00:35:16,710 --> 00:35:14,640
to a conversation with our national

887
00:35:18,150 --> 00:35:16,720
security advisor jake sullivan

888
00:35:20,870 --> 00:35:18,160

um

889
00:35:23,109 --> 00:35:20,880
you have enormous responsibilities and i

890
00:35:25,750 --> 00:35:23,119
thank you for your extraordinary service

891
00:35:28,950 --> 00:35:25,760
and um on the issue of space

892
00:35:31,190 --> 00:35:28,960
the role of of the national security

893
00:35:33,430 --> 00:35:31,200
advisor and in your office

894
00:35:35,349 --> 00:35:33,440
really is as it is with many other

895
00:35:38,150 --> 00:35:35,359
issues to coordinate

896
00:35:40,470 --> 00:35:38,160
among these various agencies so can you

897
00:35:43,589 --> 00:35:40,480
talk a bit about the um

898
00:35:45,190 --> 00:35:43,599
the key security agencies that you

899
00:35:47,030 --> 00:35:45,200
always bring together and will bring

900
00:35:49,109 --> 00:35:47,040
together around this issue and what is

901
00:35:52,630 --> 00:35:49,119
the value in particular

902
00:35:53,510 --> 00:35:52,640
of convening these agencies on the issue

903
00:35:55,910 --> 00:35:53,520
of

904
00:35:57,910 --> 00:35:55,920
international norms and rules and all

905
00:36:01,270 --> 00:35:57,920
with the mind toward the priority of

906
00:36:05,190 --> 00:36:02,870
thank you madam vice president and

907
00:36:07,190 --> 00:36:05,200
thanks to uh colleagues and teammates

908
00:36:09,510 --> 00:36:07,200
and to partners from many countries that

909
00:36:11,349 --> 00:36:09,520
i see represented here today and madame

910
00:36:13,030 --> 00:36:11,359
vice president in particular

911
00:36:15,190 --> 00:36:13,040
thank you for your leadership and

912
00:36:15,990 --> 00:36:15,200
driving the space priorities framework

913
00:36:18,069 --> 00:36:16,000

which

914
00:36:18,950 --> 00:36:18,079
i think took your advice in widening the

915
00:36:20,630 --> 00:36:18,960
view

916
00:36:24,150 --> 00:36:20,640
or i guess it was the advice really of

917
00:36:26,310 --> 00:36:24,160
the person talking to the space walker

918
00:36:28,230 --> 00:36:26,320
um

919
00:36:31,190 --> 00:36:28,240
i i think the way in which you've

920
00:36:33,589 --> 00:36:31,200
expanded this very council answers the

921
00:36:35,190 --> 00:36:33,599
question about why coordination is so

922
00:36:37,589 --> 00:36:35,200
important because the sheer number of

923
00:36:38,950 --> 00:36:37,599
stakeholders who come into play

924
00:36:40,710 --> 00:36:38,960
on the question

925
00:36:43,910 --> 00:36:40,720
of dealing with space governance and

926
00:36:46,630 --> 00:36:43,920
space norms is so broad it cuts across

927
00:36:48,950 --> 00:36:46,640
the national security and civilian space

928
00:36:51,030 --> 00:36:48,960
it cuts across public and private it

929
00:36:52,550 --> 00:36:51,040
cuts across countries

930
00:36:58,550 --> 00:36:52,560
it cuts across

931
00:36:59,910 --> 00:36:58,560
and norms and uh and interests and

932
00:37:02,069 --> 00:36:59,920
values

933
00:37:04,069 --> 00:37:02,079
and from the national security council's

934
00:37:07,030 --> 00:37:04,079
perspective we will work closely with

935
00:37:08,950 --> 00:37:07,040
the national space council to coordinate

936
00:37:10,710 --> 00:37:08,960
u.s activities to strengthen global

937
00:37:11,670 --> 00:37:10,720
governance for space over the past few

938
00:37:13,430 --> 00:37:11,680

years

939
00:37:15,510 --> 00:37:13,440
the international community through work

940
00:37:17,510 --> 00:37:15,520
at the united nations and elsewhere

941
00:37:19,430 --> 00:37:17,520
has made progress in developing norms to

942
00:37:22,310 --> 00:37:19,440
strengthen uh the safety and

943
00:37:24,310 --> 00:37:22,320
sustainability of space activities but

944
00:37:25,910 --> 00:37:24,320
frankly we've fallen short in addressing

945
00:37:27,750 --> 00:37:25,920
the risks of inadvertent conflict

946
00:37:29,349 --> 00:37:27,760
arising from growing national security

947
00:37:30,630 --> 00:37:29,359
activities in space

948
00:37:33,030 --> 00:37:30,640
you've heard from

949
00:37:35,109 --> 00:37:33,040
many people on the stage about

950
00:37:37,829 --> 00:37:35,119
the irresponsible and dangerous to be

951
00:37:38,790 --> 00:37:37,839
debris generating weapons testing

952
00:37:41,030 --> 00:37:38,800
if we

953
00:37:43,190 --> 00:37:41,040
were to allow that to continue we risk

954
00:37:45,829 --> 00:37:43,200
allowing military military activities in

955
00:37:47,349 --> 00:37:45,839
space to undermine the peaceful use of

956
00:37:49,109 --> 00:37:47,359
space by all

957
00:37:50,630 --> 00:37:49,119
so building on the work that you just

958
00:37:52,470 --> 00:37:50,640
heard from both the department of state

959
00:37:54,069 --> 00:37:52,480
and the department of defense the

960
00:37:56,630 --> 00:37:54,079
national security council will focus

961
00:37:58,950 --> 00:37:56,640
initially on developing new proposals

962
00:38:01,270 --> 00:37:58,960
for international norms that contribute

963
00:38:04,069 --> 00:38:01,280

to stability and security in space while

964
00:38:06,550 --> 00:38:04,079
also protecting the space environment

965
00:38:08,950 --> 00:38:06,560
and in part that's about making sure

966
00:38:11,190 --> 00:38:08,960
that we ensure legitimate national

967
00:38:13,190 --> 00:38:11,200
security space activities do not

968
00:38:14,390 --> 00:38:13,200
undermine strategic stability between

969
00:38:16,950 --> 00:38:14,400
nations

970
00:38:18,950 --> 00:38:16,960
it also means working very closely with

971
00:38:21,190 --> 00:38:18,960
the civilian side of the space equation

972
00:38:23,589 --> 00:38:21,200
so that we responsibly govern private

973
00:38:25,990 --> 00:38:23,599
sector space activities which are now

974
00:38:27,670 --> 00:38:26,000
increasingly at the forefront of global

975
00:38:29,430 --> 00:38:27,680
innovation in space

976
00:38:30,870 --> 00:38:29,440
so we look forward to developing our

977
00:38:32,870 --> 00:38:30,880
ideas and coordination with our

978
00:38:34,790 --> 00:38:32,880
international partners

979
00:38:36,710 --> 00:38:34,800
we look forward to continuing to

980
00:38:38,790 --> 00:38:36,720
exercise the muscle of establishing the

981
00:38:39,750 --> 00:38:38,800
alliance's institutions agreements and

982
00:38:41,349 --> 00:38:39,760
norms

983
00:38:43,589 --> 00:38:41,359
that have underwritten the international

984
00:38:45,910 --> 00:38:43,599
order here on earth and that can help

985
00:38:48,710 --> 00:38:45,920
sustain a stable and open international

986
00:38:50,230 --> 00:38:48,720
system that extends to space as well and

987
00:38:51,910 --> 00:38:50,240
so i look forward to working under your

988
00:38:53,430 --> 00:38:51,920

leadership madam vice president working

989
00:38:55,510 --> 00:38:53,440
with my colleagues here on stage working

990
00:38:57,109 --> 00:38:55,520
with our partners around the world

991
00:38:58,310 --> 00:38:57,119
in this endeavor as we move forward

992
00:39:03,030 --> 00:38:58,320
thank you

993
00:39:05,750 --> 00:39:03,040
so in conclusion for this first panel

994
00:39:09,270 --> 00:39:05,760
i'll just point out that that obvious

995
00:39:12,390 --> 00:39:09,280
priorities are that we increase safety

996
00:39:14,550 --> 00:39:12,400
um as it relates to space traffic and

997
00:39:16,230 --> 00:39:14,560
that we do that in a number of ways that

998
00:39:17,750 --> 00:39:16,240
includes what we've heard about

999
00:39:21,349 --> 00:39:17,760
everything from coordination around

1000
00:39:22,550 --> 00:39:21,359
launch to the air traffic control

1001
00:39:25,910 --> 00:39:22,560
piece

1002
00:39:28,150 --> 00:39:25,920
there is also the priority that we have

1003
00:39:31,190 --> 00:39:28,160
as a council and as an administration to

1004
00:39:34,550 --> 00:39:31,200
promote safe commercial activity

1005
00:39:36,710 --> 00:39:34,560
and that is about encouraging and um and

1006
00:39:38,950 --> 00:39:36,720
recognizing the importance of an

1007
00:39:40,230 --> 00:39:38,960
investment in innovation

1008
00:39:42,390 --> 00:39:40,240
which also

1009
00:39:44,069 --> 00:39:42,400
relates to growing

1010
00:39:46,470 --> 00:39:44,079
the creation of jobs

1011
00:39:48,870 --> 00:39:46,480
in our country very important jobs

1012
00:39:50,710 --> 00:39:48,880
and then of course there is the point

1013
00:39:52,550 --> 00:39:50,720

that has been raised by everyone on the

1014
00:39:53,670 --> 00:39:52,560
panel around the issue of leading

1015
00:39:55,030 --> 00:39:53,680
globally

1016
00:39:56,950 --> 00:39:55,040
of working

1017
00:39:59,670 --> 00:39:56,960
diplomatically with our allies with our

1018
00:40:01,910 --> 00:39:59,680
partners and where there is potential

1019
00:40:04,150 --> 00:40:01,920
for coordination and collaboration with

1020
00:40:08,630 --> 00:40:04,160
some who have been our adversaries

1021
00:40:11,190 --> 00:40:08,640
to again reach a common language and

1022
00:40:13,349 --> 00:40:11,200
certain standards or rules of the road

1023
00:40:15,030 --> 00:40:13,359
so that we can ensure

1024
00:40:18,630 --> 00:40:15,040
that at the very least

1025
00:40:21,109 --> 00:40:18,640
we avoid conflict that is unintended but

1026
00:40:22,390 --> 00:40:21,119
the result of a misinterpretation of

1027
00:40:24,550 --> 00:40:22,400
intentions

1028
00:40:27,030 --> 00:40:24,560
so as we move forward there's a lot of

1029
00:40:28,390 --> 00:40:27,040
opportunity here uh as it relates to

1030
00:40:30,390 --> 00:40:28,400
commercial space

1031
00:40:33,430 --> 00:40:30,400
in particular the department of commerce

1032
00:40:35,910 --> 00:40:33,440
as secretary raimondo has outlined is

1033
00:40:38,230 --> 00:40:35,920
going to provide a plan of action

1034
00:40:40,470 --> 00:40:38,240
to accelerate the development of space

1035
00:40:41,829 --> 00:40:40,480
traffic management services

1036
00:40:43,990 --> 00:40:41,839
the department of transportation

1037
00:40:46,950 --> 00:40:44,000
secretary boudijedge has been doing the

1038
00:40:49,349 --> 00:40:46,960

work of continuing to streamline launch

1039
00:40:51,430 --> 00:40:49,359
regulations to ensure safety and also to

1040
00:40:52,550 --> 00:40:51,440
work with the state department

1041
00:40:53,910 --> 00:40:52,560
to promote

1042
00:40:55,030 --> 00:40:53,920
common standards that are global

1043
00:40:56,790 --> 00:40:55,040
standards

1044
00:40:58,230 --> 00:40:56,800
on the issue of civil

1045
00:41:03,270 --> 00:40:58,240
space

1046
00:41:05,109 --> 00:41:03,280
that is about the department of state

1047
00:41:07,589 --> 00:41:05,119
working with nasa to expand

1048
00:41:09,109 --> 00:41:07,599
participation in the artemis accords and

1049
00:41:11,589 --> 00:41:09,119
then on the issue of national security

1050
00:41:13,190 --> 00:41:11,599
as you've heard and jake sullivan talked

1051
00:41:15,510 --> 00:41:13,200
about this but it's dod it's the

1052
00:41:17,109 --> 00:41:15,520
department of state it's dni

1053
00:41:20,230 --> 00:41:17,119
and the national security council to

1054
00:41:22,069 --> 00:41:20,240
develop a national security perspective

1055
00:41:24,069 --> 00:41:22,079
on what should be the international

1056
00:41:26,069 --> 00:41:24,079
rules and norms

1057
00:41:28,870 --> 00:41:26,079
and then finally the national space

1058
00:41:30,390 --> 00:41:28,880
council staff which i have to thank for

1059
00:41:31,589 --> 00:41:30,400
the extraordinary work that you all have

1060
00:41:34,470 --> 00:41:31,599
been doing

1061
00:41:36,630 --> 00:41:34,480
will build basically an overarching plan

1062
00:41:38,230 --> 00:41:36,640
to synchronize and coordinate these

1063
00:41:40,470 --> 00:41:38,240

rules and norms

1064
00:41:43,270 --> 00:41:40,480
as we go forward so with that why don't

1065
00:41:44,550 --> 00:41:43,280
we start the second panel

1066
00:41:50,230 --> 00:41:44,560
climate

1067
00:41:55,990 --> 00:41:53,349
what we have as an imperative

1068
00:41:59,589 --> 00:41:56,000
to do to acknowledge our role our

1069
00:42:03,030 --> 00:41:59,599
responsibility but also the opportunity

1070
00:42:05,190 --> 00:42:03,040
that we have through space exploration

1071
00:42:07,829 --> 00:42:05,200
to do something about this

1072
00:42:10,550 --> 00:42:07,839
in a way that has a direct impact in a

1073
00:42:11,910 --> 00:42:10,560
way that is a benefit to the people of

1074
00:42:13,430 --> 00:42:11,920
our country and the people around the

1075
00:42:16,390 --> 00:42:13,440
globe

1076
00:42:18,470 --> 00:42:16,400
president biden has made very clear that

1077
00:42:20,790 --> 00:42:18,480
we will have an all of government

1078
00:42:23,030 --> 00:42:20,800
approach to this issue

1079
00:42:26,470 --> 00:42:23,040
and that we will better leverage our

1080
00:42:28,710 --> 00:42:26,480
space capacities to in particular

1081
00:42:30,390 --> 00:42:28,720
highlight the significance of the data

1082
00:42:33,829 --> 00:42:30,400
that we collect

1083
00:42:36,230 --> 00:42:33,839
and do that in a way that makes certain

1084
00:42:38,870 --> 00:42:36,240
that it is available to the public that

1085
00:42:40,710 --> 00:42:38,880
is synchronized and coordinated in a way

1086
00:42:43,829 --> 00:42:40,720
that all can benefit both within the

1087
00:42:45,510 --> 00:42:43,839
government but outside of the government

1088
00:42:47,510 --> 00:42:45,520

an example of the data that we are

1089
00:42:50,230 --> 00:42:47,520
collecting that really is extraordinary

1090
00:42:52,470 --> 00:42:50,240
is the work that i saw at nasa at the

1091
00:42:55,589 --> 00:42:52,480
goddard space flight center

1092
00:42:58,230 --> 00:42:55,599
it's extraordinary what our scientists

1093
00:43:00,309 --> 00:42:58,240
our engineers are doing in terms of

1094
00:43:03,910 --> 00:43:00,319
creating technology

1095
00:43:07,430 --> 00:43:03,920
to do a heat map to to predict

1096
00:43:08,870 --> 00:43:07,440
what weather and climate can do

1097
00:43:11,349 --> 00:43:08,880
or might do

1098
00:43:13,750 --> 00:43:11,359
that can either benefit or harm

1099
00:43:16,069 --> 00:43:13,760
substantial interest that we have

1100
00:43:17,670 --> 00:43:16,079
they are collecting an enormous amount

1101
00:43:20,470 --> 00:43:17,680
of data

1102
00:43:22,230 --> 00:43:20,480
but the importance of that data

1103
00:43:23,750 --> 00:43:22,240
is only

1104
00:43:25,910 --> 00:43:23,760
that we use it

1105
00:43:28,069 --> 00:43:25,920
and that everyone who can benefit from

1106
00:43:31,430 --> 00:43:28,079
it has access to it

1107
00:43:35,109 --> 00:43:31,440
that everyone has the tools to access it

1108
00:43:37,270 --> 00:43:35,119
and that everyone has the skill set

1109
00:43:38,470 --> 00:43:37,280
to actually analyze it in a way that can

1110
00:43:40,630 --> 00:43:38,480
help them

1111
00:43:43,910 --> 00:43:40,640
so our focus on data

1112
00:43:47,510 --> 00:43:43,920
really is not only on our potential to

1113
00:43:50,790 --> 00:43:47,520

increase our capacity to collect

1114
00:43:52,790 --> 00:43:50,800
but also what we must do more

1115
00:43:55,109 --> 00:43:52,800
to make it accessible

1116
00:43:57,589 --> 00:43:55,119
to a larger group of people

1117
00:44:00,150 --> 00:43:57,599
and give the tools not only for the

1118
00:44:02,470 --> 00:44:00,160
availability access to the data but the

1119
00:44:04,950 --> 00:44:02,480
tools to analyze that data

1120
00:44:06,630 --> 00:44:04,960
in a way that the various sectors of our

1121
00:44:09,030 --> 00:44:06,640
country and our world can actually

1122
00:44:12,550 --> 00:44:09,040
benefit from the information

1123
00:44:15,109 --> 00:44:12,560
uh so with that secretary holland

1124
00:44:15,829 --> 00:44:15,119
i want to welcome you as a new member to

1125
00:44:21,030 --> 00:44:15,839
the

1126
00:44:22,630 --> 00:44:21,040
interior and your role obviously and

1127
00:44:25,109 --> 00:44:22,640
includes many

1128
00:44:27,349 --> 00:44:25,119
important areas of priority for us but

1129
00:44:30,069 --> 00:44:27,359
in particular the department has the

1130
00:44:32,710 --> 00:44:30,079
capacity to use

1131
00:44:34,069 --> 00:44:32,720
space to provide cities and local

1132
00:44:36,470 --> 00:44:34,079
jurisdictions

1133
00:44:37,910 --> 00:44:36,480
with the best available science

1134
00:44:39,349 --> 00:44:37,920
particularly as it relates to the

1135
00:44:41,910 --> 00:44:39,359
climate crisis can you talk a little bit

1136
00:44:44,790 --> 00:44:41,920
about that thank you very much

1137
00:44:47,430 --> 00:44:44,800
madam vice president madam chair i'm so

1138
00:44:49,589 --> 00:44:47,440

honored to be here uh yes the department

1139
00:44:51,670 --> 00:44:49,599
of the interior greatly appreciates the

1140
00:44:53,829 --> 00:44:51,680
opportunities to support the biden

1141
00:44:55,910 --> 00:44:53,839
administration space priorities through

1142
00:44:58,150 --> 00:44:55,920
our membership on the council

1143
00:45:01,190 --> 00:44:58,160
we strive to use the best available

1144
00:45:03,270 --> 00:45:01,200
signs in all of our programs and we look

1145
00:45:06,309 --> 00:45:03,280
forward to continuing our close work

1146
00:45:07,349 --> 00:45:06,319
with partner agencies on these important

1147
00:45:08,950 --> 00:45:07,359
issues

1148
00:45:10,950 --> 00:45:08,960
the department through the u.s

1149
00:45:13,190 --> 00:45:10,960
geological survey

1150
00:45:15,030 --> 00:45:13,200
which we have terrific scientists every

1151
00:45:17,510 --> 00:45:15,040
single day

1152
00:45:20,470 --> 00:45:17,520
working very hard they operate the

1153
00:45:23,030 --> 00:45:20,480
landsat satellites and in september i

1154
00:45:25,589 --> 00:45:23,040
was very grateful to attend nasa's

1155
00:45:27,829 --> 00:45:25,599
launch of landsat 9 and we have already

1156
00:45:30,069 --> 00:45:27,839
seen the first set of images like the

1157
00:45:32,069 --> 00:45:30,079
one behind me

1158
00:45:34,470 --> 00:45:32,079
that have come back to earth we're

1159
00:45:37,510 --> 00:45:34,480
working closely with nasa on the final

1160
00:45:40,550 --> 00:45:37,520
testing and if all of that goes uh as we

1161
00:45:43,190 --> 00:45:40,560
plan uh interior looks forward to taking

1162
00:45:45,270 --> 00:45:43,200
over the controls of landsat

1163
00:45:48,470 --> 00:45:45,280

this coming january

1164
00:45:50,630 --> 00:45:48,480
each day interior employees and people

1165
00:45:52,630 --> 00:45:50,640
the world over make good use of the

1166
00:45:55,190 --> 00:45:52,640
images of earth from the landsat

1167
00:45:57,910 --> 00:45:55,200
satellites these images provide a

1168
00:46:00,309 --> 00:45:57,920
foundation for high quality scientific

1169
00:46:02,470 --> 00:46:00,319
information which enable interior to

1170
00:46:05,430 --> 00:46:02,480
honor our trust responsibilities to

1171
00:46:07,990 --> 00:46:05,440
indian tribes manage our nation's lands

1172
00:46:10,630 --> 00:46:08,000
and resources protect our fish and

1173
00:46:13,030 --> 00:46:10,640
wildlife preserve our cultural heritage

1174
00:46:14,870 --> 00:46:13,040
respond to natural hazards and fulfill

1175
00:46:17,589 --> 00:46:14,880
our broader missions

1176
00:46:20,950 --> 00:46:17,599
our partnership with nasa on the landsat

1177
00:46:23,829 --> 00:46:20,960
program has produced a 50-year record of

1178
00:46:26,630 --> 00:46:23,839
images of the earth's land surfaces

1179
00:46:29,430 --> 00:46:26,640
waters and coastlines these images

1180
00:46:32,069 --> 00:46:29,440
inform tribal state local and federal

1181
00:46:35,190 --> 00:46:32,079
decision making for sustainable resource

1182
00:46:38,309 --> 00:46:35,200
management and economic development

1183
00:46:41,670 --> 00:46:38,319
the landsat images tell the story of how

1184
00:46:44,950 --> 00:46:41,680
our planet's landscapes change over time

1185
00:46:48,150 --> 00:46:44,960
and how those changes affect people

1186
00:46:50,390 --> 00:46:48,160
animals and our cultural resources

1187
00:46:53,190 --> 00:46:50,400
the images help us document the effects

1188
00:46:55,829 --> 00:46:53,200

of climate change by demonstrating the

1189
00:46:58,230 --> 00:46:55,839
effects of wildfires droughts coastal

1190
00:47:01,750 --> 00:46:58,240
erosion landslides and other hazardous

1191
00:47:04,069 --> 00:47:01,760
conditions that happen every year

1192
00:47:06,870 --> 00:47:04,079
tribes and indigenous peoples across our

1193
00:47:10,069 --> 00:47:06,880
nation and other countries are often on

1194
00:47:11,270 --> 00:47:10,079
the front lines of climate change we all

1195
00:47:13,829 --> 00:47:11,280
know that

1196
00:47:16,230 --> 00:47:13,839
space based earth observations and

1197
00:47:18,230 --> 00:47:16,240
measurements from the landsat satellites

1198
00:47:19,990 --> 00:47:18,240
are important tools for sustainable

1199
00:47:21,910 --> 00:47:20,000
resource management environmental

1200
00:47:23,430 --> 00:47:21,920
restoration and climate change

1201
00:47:26,630 --> 00:47:23,440
mitigation

1202
00:47:29,030 --> 00:47:26,640
earth observation data that are freely

1203
00:47:32,710 --> 00:47:29,040
available to the public

1204
00:47:35,030 --> 00:47:32,720
from the usgs nasa and noaa satellites

1205
00:47:36,870 --> 00:47:35,040
can bring the power of space technology

1206
00:47:39,589 --> 00:47:36,880
down to the local level

1207
00:47:42,309 --> 00:47:39,599
advancing the educational and career

1208
00:47:44,870 --> 00:47:42,319
prospects of traditional communities

1209
00:47:47,349 --> 00:47:44,880
especially when accompanied by adequate

1210
00:47:50,630 --> 00:47:47,359
training and infrastructure

1211
00:47:53,349 --> 00:47:50,640
i was very pleased to meet nikki tully a

1212
00:47:55,990 --> 00:47:53,359
young scientist from the navajo nation

1213
00:47:58,950 --> 00:47:56,000

who i met during the landsat 9 launch in

1214
00:48:01,589 --> 00:47:58,960
california that i mentioned earlier

1215
00:48:04,790 --> 00:48:01,599
nikki is from the community of blue gap

1216
00:48:06,950 --> 00:48:04,800
arizona an area afflicted by extreme

1217
00:48:09,270 --> 00:48:06,960
drought in recent years

1218
00:48:11,190 --> 00:48:09,280
nikki is working on her bhd in

1219
00:48:13,990 --> 00:48:11,200
environmental science using remote

1220
00:48:16,390 --> 00:48:14,000
sensing satellite data to contribute to

1221
00:48:18,870 --> 00:48:16,400
the navajo nation's decisions on

1222
00:48:20,549 --> 00:48:18,880
effective water resource allocation and

1223
00:48:22,230 --> 00:48:20,559
drought mitigation

1224
00:48:24,870 --> 00:48:22,240
nikki is someone who has used the

1225
00:48:27,430 --> 00:48:24,880
publicly available images from landsat

1226
00:48:28,470 --> 00:48:27,440
satellites to further her scientific

1227
00:48:31,349 --> 00:48:28,480
career

1228
00:48:32,790 --> 00:48:31,359
and help her home communities

1229
00:48:35,190 --> 00:48:32,800
additionally

1230
00:48:36,790 --> 00:48:35,200
nikki working far from her community on

1231
00:48:40,150 --> 00:48:36,800
the navajo nation

1232
00:48:42,950 --> 00:48:40,160
uses landsat images of her home to feel

1233
00:48:45,109 --> 00:48:42,960
close to her family and the teachings

1234
00:48:47,270 --> 00:48:45,119
that have been handed down to her

1235
00:48:49,589 --> 00:48:47,280
through the generations

1236
00:48:52,630 --> 00:48:49,599
in general the images available to the

1237
00:48:55,510 --> 00:48:52,640
public from the landsat program are used

1238
00:48:58,470 --> 00:48:55,520

widely in classrooms across the world to

1239
00:49:01,030 --> 00:48:58,480
promote stem education and make kids

1240
00:49:03,990 --> 00:49:01,040
excited to learn about

1241
00:49:05,990 --> 00:49:04,000
and help protect our beautiful planet

1242
00:49:08,150 --> 00:49:06,000
and that's really the key we need to

1243
00:49:09,990 --> 00:49:08,160
make we need to get kids excited about

1244
00:49:11,030 --> 00:49:10,000
this because we're not going to be here

1245
00:49:13,030 --> 00:49:11,040
forever

1246
00:49:15,510 --> 00:49:13,040
we're eager to hear more stories from

1247
00:49:17,750 --> 00:49:15,520
people like nikki who use earth

1248
00:49:19,750 --> 00:49:17,760
observations to empower communities

1249
00:49:21,910 --> 00:49:19,760
across our nation to achieve

1250
00:49:24,390 --> 00:49:21,920
environmental and climate justice and

1251
00:49:26,950 --> 00:49:24,400
tackle our common economic educational

1252
00:49:28,390 --> 00:49:26,960
environmental and climate challenges

1253
00:49:30,390 --> 00:49:28,400
madam chair thank you for that

1254
00:49:31,589 --> 00:49:30,400
opportunity to share some of what we're

1255
00:49:34,069 --> 00:49:31,599
doing

1256
00:49:34,870 --> 00:49:34,079
thank you and and madam secretary the

1257
00:49:41,750 --> 00:49:34,880
the

1258
00:49:43,990 --> 00:49:41,760
doing is i think becoming obvious as

1259
00:49:45,190 --> 00:49:44,000
this discussion continues including the

1260
00:49:47,510 --> 00:49:45,200
work that you are doing that will have a

1261
00:49:50,230 --> 00:49:47,520
direct impact on our next subject which

1262
00:49:52,710 --> 00:49:50,240
is stem so thank you for that um next we

1263
00:49:54,390 --> 00:49:52,720

have the secretary of agriculture tom

1264
00:49:56,390 --> 00:49:54,400
vilsack and

1265
00:49:59,430 --> 00:49:56,400
mr secretary if you could talk a bit

1266
00:50:01,910 --> 00:49:59,440
about how our activity in space

1267
00:50:04,790 --> 00:50:01,920
is to the benefit of our farming and

1268
00:50:06,790 --> 00:50:04,800
rural communities and what you see as

1269
00:50:08,150 --> 00:50:06,800
being the potential to assist them with

1270
00:50:09,910 --> 00:50:08,160
the challenges that they face

1271
00:50:11,349 --> 00:50:09,920
increasingly every year

1272
00:50:12,870 --> 00:50:11,359
uh madam vice president let me thank you

1273
00:50:15,030 --> 00:50:12,880
for your leadership and for the

1274
00:50:17,670 --> 00:50:15,040
president's leadership in giving usda a

1275
00:50:19,750 --> 00:50:17,680
seat at this important council i think

1276
00:50:21,349 --> 00:50:19,760
it recognizes the critical interface

1277
00:50:23,589 --> 00:50:21,359
between global food security and

1278
00:50:25,910 --> 00:50:23,599
nutrition security worldwide climate

1279
00:50:27,750 --> 00:50:25,920
smart agricultural practices climate

1280
00:50:30,309 --> 00:50:27,760
change in this and space is fully

1281
00:50:31,990 --> 00:50:30,319
interlinked uh area of policy let me

1282
00:50:34,230 --> 00:50:32,000
give you several examples we've heard a

1283
00:50:36,230 --> 00:50:34,240
lot about the landsat satellite well

1284
00:50:38,549 --> 00:50:36,240
that imagery and location services is

1285
00:50:41,109 --> 00:50:38,559
allowing american farmers to utilize

1286
00:50:43,670 --> 00:50:41,119
climate agricultural practices precision

1287
00:50:46,390 --> 00:50:43,680
agriculture will allow them to grow more

1288
00:50:47,910 --> 00:50:46,400

with less land less water less inputs

1289
00:50:49,270 --> 00:50:47,920
and obviously less greenhouse gas

1290
00:50:51,349 --> 00:50:49,280
emissions

1291
00:50:54,150 --> 00:50:51,359
i was surprised to know that usda and

1292
00:50:56,309 --> 00:50:54,160
nasa have over 120 projects working

1293
00:50:59,349 --> 00:50:56,319
together across four separate mission

1294
00:51:01,829 --> 00:50:59,359
areas on water management real-time crop

1295
00:51:04,230 --> 00:51:01,839
assessment quantifying carbon storage

1296
00:51:06,309 --> 00:51:04,240
and sequestration remote assessment of

1297
00:51:09,030 --> 00:51:06,319
plant health all of this is going to

1298
00:51:11,109 --> 00:51:09,040
allow u.s agriculture to reach your goal

1299
00:51:12,630 --> 00:51:11,119
in the president's goal of a net zero

1300
00:51:15,030 --> 00:51:12,640
future and to lead

1301
00:51:16,710 --> 00:51:15,040
the agricultural community in doing so

1302
00:51:18,710 --> 00:51:16,720
let me also say that we're excited about

1303
00:51:20,230 --> 00:51:18,720
the research that we're involved in

1304
00:51:21,510 --> 00:51:20,240
i'm particularly excited about the fact

1305
00:51:23,430 --> 00:51:21,520
that we're going to be able to extend

1306
00:51:25,670 --> 00:51:23,440
space travel with the research that

1307
00:51:27,589 --> 00:51:25,680
we're doing genetic engineering uh

1308
00:51:29,750 --> 00:51:27,599
growth promotion is allowing us through

1309
00:51:33,349 --> 00:51:29,760
innovation to develop food products that

1310
00:51:34,950 --> 00:51:33,359
can be grown in in space uh and to allow

1311
00:51:37,349 --> 00:51:34,960
our astronauts to be able to extend

1312
00:51:38,470 --> 00:51:37,359
their trip my favorite is the flowering

1313
00:51:40,230 --> 00:51:38,480

palm tree

1314
00:51:42,470 --> 00:51:40,240
that is going to continue to provide

1315
00:51:45,430 --> 00:51:42,480
fruit production over the course of a

1316
00:51:47,349 --> 00:51:45,440
number of years look we look forward to

1317
00:51:49,589 --> 00:51:47,359
the formation of this important council

1318
00:51:51,109 --> 00:51:49,599
and the extension of it to include usda

1319
00:51:52,950 --> 00:51:51,119
we appreciate your leadership and we

1320
00:51:54,069 --> 00:51:52,960
look forward to usda playing in the

1321
00:51:56,710 --> 00:51:54,079
central world

1322
00:51:57,670 --> 00:51:56,720
great thank you mr secretary and um i

1323
00:51:59,750 --> 00:51:57,680
agree with the

1324
00:52:01,670 --> 00:51:59,760
the potential that we have

1325
00:52:03,670 --> 00:52:01,680
to to meet some of the long-standing

1326
00:52:05,750 --> 00:52:03,680
generational challenges for our farmers

1327
00:52:07,829 --> 00:52:05,760
and our rural communities with space

1328
00:52:10,470 --> 00:52:07,839
exploration is really profound as it is

1329
00:52:13,589 --> 00:52:10,480
everything from as you said water policy

1330
00:52:15,910 --> 00:52:13,599
to what we can do to assist our farmers

1331
00:52:18,870 --> 00:52:15,920
with information about not only

1332
00:52:20,790 --> 00:52:18,880
mitigation but adaptation on the issue

1333
00:52:22,790 --> 00:52:20,800
of the climate crisis and the rapidly

1334
00:52:26,069 --> 00:52:22,800
changing climate so thank you for that

1335
00:52:28,069 --> 00:52:26,079
and next i i'm going to move over to the

1336
00:52:32,150 --> 00:52:28,079
secretary of the department of homeland

1337
00:52:34,069 --> 00:52:32,160
security ali mayorkas who is a very

1338
00:52:36,790 --> 00:52:34,079

hard-working member of the president's

1339
00:52:38,549 --> 00:52:36,800
cabinet on many issues but on this issue

1340
00:52:42,549 --> 00:52:38,559
in particular you

1341
00:52:44,950 --> 00:52:42,559
run among many other priorities fema

1342
00:52:47,190 --> 00:52:44,960
and if you could talk a bit about your

1343
00:52:49,750 --> 00:52:47,200
approach in the department's approach to

1344
00:52:52,069 --> 00:52:49,760
protecting communities from climate

1345
00:52:53,670 --> 00:52:52,079
disasters and how the work that we are

1346
00:52:55,109 --> 00:52:53,680
doing in space might assist you with

1347
00:52:56,790 --> 00:52:55,119
that important mission

1348
00:52:57,750 --> 00:52:56,800
well thank you very much madam vice

1349
00:52:59,430 --> 00:52:57,760
president

1350
00:53:00,390 --> 00:52:59,440
for the question for competing this

1351
00:53:02,309 --> 00:53:00,400
council

1352
00:53:04,309 --> 00:53:02,319
and for your leadership on so many

1353
00:53:06,630 --> 00:53:04,319
critical issues and thanks to everyone

1354
00:53:08,710 --> 00:53:06,640
for participating today

1355
00:53:11,910 --> 00:53:08,720
here's the the short answer is that

1356
00:53:13,510 --> 00:53:11,920
space activists are quite vital to the

1357
00:53:15,349 --> 00:53:13,520
department of homeland security's

1358
00:53:17,190 --> 00:53:15,359
ability to respond

1359
00:53:19,190 --> 00:53:17,200
to disasters bless you

1360
00:53:21,510 --> 00:53:19,200
and address the threat that climate

1361
00:53:23,829 --> 00:53:21,520
change poses to the nation

1362
00:53:25,430 --> 00:53:23,839
for example fema the federal emergency

1363
00:53:28,710 --> 00:53:25,440

management agency

1364
00:53:30,230 --> 00:53:28,720
uses geospatial data to monitor extreme

1365
00:53:33,829 --> 00:53:30,240
weather events and do predictive

1366
00:53:36,870 --> 00:53:33,839
analysis of severe storms this allows us

1367
00:53:39,750 --> 00:53:36,880
to better prepare the public and enables

1368
00:53:42,710 --> 00:53:39,760
us to deploy our resources and personnel

1369
00:53:45,109 --> 00:53:42,720
swiftly and effectively before and after

1370
00:53:48,630 --> 00:53:45,119
a major storm makes landfall

1371
00:53:51,510 --> 00:53:48,640
fema also employs space-based technology

1372
00:53:54,710 --> 00:53:51,520
and data to map the risk of flooding

1373
00:53:56,950 --> 00:53:54,720
nationwide this past april we announced

1374
00:53:59,430 --> 00:53:56,960
a new pricing methodology for the

1375
00:54:01,510 --> 00:53:59,440
national flood insurance program called

1376
00:54:04,230 --> 00:54:01,520
risk rating 2.0

1377
00:54:06,470 --> 00:54:04,240
it incorporates cutting edge space-based

1378
00:54:08,829 --> 00:54:06,480
technology and modeling to more

1379
00:54:12,549 --> 00:54:08,839
accurately reflect an individual

1380
00:54:15,270 --> 00:54:12,559
properties flood risk in the process our

1381
00:54:17,349 --> 00:54:15,280
department and fema created a system

1382
00:54:20,150 --> 00:54:17,359
that is better equipped for the stark

1383
00:54:21,670 --> 00:54:20,160
reality of frequent flooding caused by

1384
00:54:23,910 --> 00:54:21,680
climate change

1385
00:54:26,790 --> 00:54:23,920
this also addresses another top

1386
00:54:29,349 --> 00:54:26,800
administration priority

1387
00:54:31,349 --> 00:54:29,359
it tackles long-standing inequities in

1388
00:54:32,309 --> 00:54:31,359

flood insurance pricing by fixing a

1389
00:54:35,349 --> 00:54:32,319
system

1390
00:54:36,470 --> 00:54:35,359
in which policy holders with lower value

1391
00:54:38,549 --> 00:54:36,480
homes

1392
00:54:41,910 --> 00:54:38,559
pay more than they should in policy

1393
00:54:43,349 --> 00:54:41,920
holders with high value homes pay less

1394
00:54:45,270 --> 00:54:43,359
all of this

1395
00:54:48,069 --> 00:54:45,280
is part of our department's recently

1396
00:54:50,390 --> 00:54:48,079
issued strategic framework to address

1397
00:54:53,270 --> 00:54:50,400
climate change which recognizes the

1398
00:54:55,030 --> 00:54:53,280
importance of utilizing climate-based

1399
00:54:57,190 --> 00:54:55,040
science

1400
00:54:59,910 --> 00:54:57,200
as we take these steps we must recognize

1401
00:55:02,230 --> 00:54:59,920
another fact we cannot tap

1402
00:55:05,510 --> 00:55:02,240
into the vast potential of space-based

1403
00:55:06,870 --> 00:55:05,520
data unless that data is trusted and

1404
00:55:08,950 --> 00:55:06,880
secure

1405
00:55:12,230 --> 00:55:08,960
our cyber security experts are working

1406
00:55:14,549 --> 00:55:12,240
to protect our space systems by testing

1407
00:55:17,750 --> 00:55:14,559
the resilience of our space assets

1408
00:55:19,030 --> 00:55:17,760
planning for disruptions to space data

1409
00:55:21,750 --> 00:55:19,040
and services

1410
00:55:24,789 --> 00:55:21,760
due to a degraded space environment and

1411
00:55:26,150 --> 00:55:24,799
preparing for any unexpected issues

1412
00:55:28,390 --> 00:55:26,160
simply put

1413
00:55:30,230 --> 00:55:28,400

space is a key priority and that is why

1414
00:55:32,870 --> 00:55:30,240
we're currently updating our

1415
00:55:35,030 --> 00:55:32,880
department's space policy which will

1416
00:55:37,510 --> 00:55:35,040
recognize all the ways in which

1417
00:55:40,470 --> 00:55:37,520
space-based systems play a critical role

1418
00:55:42,789 --> 00:55:40,480
in securing our homeland we look forward

1419
00:55:44,230 --> 00:55:42,799
to working with this council madam vice

1420
00:55:46,870 --> 00:55:44,240
president and thank you again for your

1421
00:55:49,430 --> 00:55:46,880
leadership thank you mr secretary

1422
00:55:51,270 --> 00:55:49,440
now next we will hear from secretary

1423
00:55:53,349 --> 00:55:51,280
jennifer granholm who runs the

1424
00:55:56,230 --> 00:55:53,359
department of energy

1425
00:55:58,549 --> 00:55:56,240
and um is really as a leader on the

1426
00:56:00,710 --> 00:55:58,559
forefront of so many of the biggest

1427
00:56:03,670 --> 00:56:00,720
challenges but also the opportunities

1428
00:56:05,430 --> 00:56:03,680
that we face in terms of the work we can

1429
00:56:07,750 --> 00:56:05,440
do together

1430
00:56:10,230 --> 00:56:07,760
on on the issue of our national labs in

1431
00:56:13,030 --> 00:56:10,240
particular madam secretary do you have

1432
00:56:15,510 --> 00:56:13,040
thoughts about how we can make data more

1433
00:56:18,069 --> 00:56:15,520
accessible and usable

1434
00:56:20,470 --> 00:56:18,079
to a greater number of people and i know

1435
00:56:22,710 --> 00:56:20,480
this is part of your lifelong work is to

1436
00:56:25,030 --> 00:56:22,720
to ensure that all people have access to

1437
00:56:26,710 --> 00:56:25,040
information that helps them

1438
00:56:28,470 --> 00:56:26,720

uh yes thank you so much for the

1439
00:56:30,309 --> 00:56:28,480
question thank you for your leadership

1440
00:56:31,829 --> 00:56:30,319
madam vice president thank you all for

1441
00:56:33,510 --> 00:56:31,839
being here today it is really an honor

1442
00:56:35,990 --> 00:56:33,520
to represent the department of energy on

1443
00:56:37,670 --> 00:56:36,000
the national space council first of all

1444
00:56:40,950 --> 00:56:37,680
department of energy has been working in

1445
00:56:43,270 --> 00:56:40,960
the space science application space for

1446
00:56:44,630 --> 00:56:43,280
about 50 years but one of our biggest

1447
00:56:46,710 --> 00:56:44,640
contributions

1448
00:56:48,630 --> 00:56:46,720
it comes from the data processing

1449
00:56:50,230 --> 00:56:48,640
capabilities of the 17 national

1450
00:56:52,870 --> 00:56:50,240
laboratories just a few weeks ago i

1451
00:56:55,990 --> 00:56:52,880
visited oak ridge national lab and got

1452
00:56:58,470 --> 00:56:56,000
to see our nation's very first exascale

1453
00:57:01,109 --> 00:56:58,480
computer which is named frontier it

1454
00:57:03,589 --> 00:57:01,119
solves calculations at five times uh the

1455
00:57:05,910 --> 00:57:03,599
speed of yesterday's top computers the

1456
00:57:07,589 --> 00:57:05,920
reason why that is important that super

1457
00:57:09,670 --> 00:57:07,599
computing is a tool

1458
00:57:11,349 --> 00:57:09,680
to analyze all the data that's being

1459
00:57:14,309 --> 00:57:11,359
collected from these satellites and

1460
00:57:17,430 --> 00:57:14,319
other means that you've just heard here

1461
00:57:18,789 --> 00:57:17,440
to be able to reflect back on earth what

1462
00:57:21,109 --> 00:57:18,799
are the biggest problems we are

1463
00:57:23,109 --> 00:57:21,119

experiencing and how can our computing

1464
00:57:25,109 --> 00:57:23,119
capabilities resolve those to your point

1465
00:57:26,390 --> 00:57:25,119
let me give you a couple of examples so

1466
00:57:29,109 --> 00:57:26,400
at los alamos

1467
00:57:30,710 --> 00:57:29,119
national lab research researchers have

1468
00:57:33,109 --> 00:57:30,720
developed these algorithms to make a

1469
00:57:35,030 --> 00:57:33,119
better better sense of the flood

1470
00:57:37,109 --> 00:57:35,040
information that we get from satellites

1471
00:57:40,150 --> 00:57:37,119
so the algorithms merge

1472
00:57:42,470 --> 00:57:40,160
a range of space-based data to produce

1473
00:57:43,990 --> 00:57:42,480
this holistic picture of the changes

1474
00:57:45,670 --> 00:57:44,000
that are occurring on earth on the

1475
00:57:48,150 --> 00:57:45,680
ground and that allows us to measure for

1476
00:57:50,789 --> 00:57:48,160
example deforestation gives us a better

1477
00:57:53,030 --> 00:57:50,799
idea of where global carbon emissions

1478
00:57:54,789 --> 00:57:53,040
stands it allows us to track the extreme

1479
00:57:57,670 --> 00:57:54,799
weather events created by those

1480
00:58:00,230 --> 00:57:57,680
emissions similarly at lawrence berkeley

1481
00:58:02,789 --> 00:58:00,240
national lab which i know you know well

1482
00:58:05,750 --> 00:58:02,799
we are now pairing these high-resolution

1483
00:58:07,990 --> 00:58:05,760
satellite images with advanced computer

1484
00:58:10,309 --> 00:58:08,000
modeling to track groundwater in

1485
00:58:12,390 --> 00:58:10,319
california which officials can then use

1486
00:58:14,309 --> 00:58:12,400
to better manage the state's water

1487
00:58:16,789 --> 00:58:14,319
resources and we can also use

1488
00:58:19,750 --> 00:58:16,799

space-based uh data to anticipate and

1489
00:58:22,309 --> 00:58:19,760
immediate anticipate and react to

1490
00:58:24,789 --> 00:58:22,319
immediate crises so pacific northwest

1491
00:58:27,349 --> 00:58:24,799
national laboratory is leading an effort

1492
00:58:28,789 --> 00:58:27,359
called rapid analytics for disaster

1493
00:58:31,829 --> 00:58:28,799
response they've got artificial

1494
00:58:34,789 --> 00:58:31,839
intelligence uh crunching satellite and

1495
00:58:36,950 --> 00:58:34,799
aerial data along with social media

1496
00:58:39,190 --> 00:58:36,960
activity that they are putting together

1497
00:58:40,710 --> 00:58:39,200
to forecast impacts on energy

1498
00:58:43,190 --> 00:58:40,720
infrastructure like the transmission

1499
00:58:45,270 --> 00:58:43,200
grid which allows us to monitor threats

1500
00:58:47,109 --> 00:58:45,280
from climate disasters and organize this

1501
00:58:49,270 --> 00:58:47,119
whole of government approach to

1502
00:58:51,910 --> 00:58:49,280
emergency responses so we're already

1503
00:58:55,030 --> 00:58:51,920
making good use of our national labs

1504
00:58:56,789 --> 00:58:55,040
when it comes to space-based data but as

1505
00:58:59,190 --> 00:58:56,799
when i say america's solutions

1506
00:59:01,270 --> 00:58:59,200
department we are eager to explore new

1507
00:59:02,950 --> 00:59:01,280
avenues of research and innovation and

1508
00:59:05,430 --> 00:59:02,960
and relish the opportunity to working

1509
00:59:07,750 --> 00:59:05,440
with this council thank you and and for

1510
00:59:09,510 --> 00:59:07,760
highlighting some of the jewels of

1511
00:59:11,270 --> 00:59:09,520
of our federal government and the

1512
00:59:13,030 --> 00:59:11,280
investments that have been made over

1513
00:59:15,430 --> 00:59:13,040

over a very long period of time our

1514
00:59:18,230 --> 00:59:15,440
national labs really are part of the

1515
00:59:20,069 --> 00:59:18,240
real incredible work and innovation that

1516
00:59:23,030 --> 00:59:20,079
we have produced as a nation so thank

1517
00:59:25,430 --> 00:59:23,040
you for that uh our national climate

1518
00:59:28,069 --> 00:59:25,440
advisor is gina mccarthy

1519
00:59:31,270 --> 00:59:28,079
and um i want to thank you gina for all

1520
00:59:32,390 --> 00:59:31,280
the work you do i you are a leader in

1521
00:59:34,630 --> 00:59:32,400
the country

1522
00:59:36,789 --> 00:59:34,640
if not a global leader on the issue of

1523
00:59:39,430 --> 00:59:36,799
climate you've been banging the drum for

1524
00:59:42,069 --> 00:59:39,440
quite some time and finally more people

1525
00:59:43,990 --> 00:59:42,079
are saying oh she was right you know

1526
00:59:46,230 --> 00:59:44,000
decades ago i better start paying

1527
00:59:47,829 --> 00:59:46,240
attention

1528
00:59:50,069 --> 00:59:47,839
so with that i want to ask you there's

1529
00:59:52,950 --> 00:59:50,079
so much that you have to say i know

1530
00:59:54,150 --> 00:59:52,960
but in particular can you address

1531
00:59:56,069 --> 00:59:54,160
the

1532
00:59:58,069 --> 00:59:56,079
priority that i know you've had in your

1533
00:59:59,030 --> 00:59:58,079
career to make sure that

1534
01:00:01,750 --> 00:59:59,040
we

1535
01:00:03,910 --> 01:00:01,760
include all communities in particular

1536
01:00:05,670 --> 01:00:03,920
those who are underrepresented in the

1537
01:00:07,910 --> 01:00:05,680
work that we are doing as a council and

1538
01:00:09,990 --> 01:00:07,920

the work that we are doing as a nation

1539
01:00:11,109 --> 01:00:10,000
um so that the

1540
01:00:15,109 --> 01:00:11,119
data

1541
01:00:17,030 --> 01:00:15,119
and the work is accessible to all people

1542
01:00:19,109 --> 01:00:17,040
well first of all uh thank you madam

1543
01:00:21,670 --> 01:00:19,119
vice president if you're saying i'm i'm

1544
01:00:24,470 --> 01:00:21,680
incredibly persistent and obnoxious i

1545
01:00:27,109 --> 01:00:24,480
totally agree with you as will all of my

1546
01:00:28,710 --> 01:00:27,119
colleagues at this

1547
01:00:31,109 --> 01:00:28,720
you for table of your tremendous

1548
01:00:33,109 --> 01:00:31,119
leadership you know as you have heard i

1549
01:00:34,870 --> 01:00:33,119
think from all of us at this point that

1550
01:00:37,430 --> 01:00:34,880
access to space

1551
01:00:38,710 --> 01:00:37,440
and uh cutting earth observation

1552
01:00:40,789 --> 01:00:38,720
platforms

1553
01:00:43,589 --> 01:00:40,799
are providing critically important

1554
01:00:45,510 --> 01:00:43,599
climate data in fact the climate models

1555
01:00:48,950 --> 01:00:45,520
that have confirmed the severity of our

1556
01:00:51,910 --> 01:00:48,960
climate crisis are all based on multiple

1557
01:00:54,630 --> 01:00:51,920
sources of information ranging from ice

1558
01:00:57,910 --> 01:00:54,640
core ice core data to sea level

1559
01:01:01,030 --> 01:00:57,920
measurements but satellite supply data

1560
01:01:03,349 --> 01:01:01,040
has been critical to confirm the true

1561
01:01:05,910 --> 01:01:03,359
extent of the climate crisis we're

1562
01:01:08,870 --> 01:01:05,920
facing and even more importantly to

1563
01:01:11,990 --> 01:01:08,880

inform the solutions we can bring to the

1564
01:01:14,950 --> 01:01:12,000
table space-based resources allow us to

1565
01:01:17,990 --> 01:01:14,960
respond in real time to the impacts of

1566
01:01:20,549 --> 01:01:18,000
climate that we cannot stop and must be

1567
01:01:23,990 --> 01:01:20,559
prepared to face whether that means no

1568
01:01:26,950 --> 01:01:24,000
attracting hurricanes as they form usda

1569
01:01:30,069 --> 01:01:26,960
spotting wildfires usgs mapping the

1570
01:01:33,190 --> 01:01:30,079
severity of droughts or epa

1571
01:01:35,589 --> 01:01:33,200
tracking down methane leaks or

1572
01:01:38,630 --> 01:01:35,599
understanding the flow of harmful algal

1573
01:01:42,789 --> 01:01:38,640
blooms and whose water resources are at

1574
01:01:45,109 --> 01:01:42,799
risk next a dor a doe helping to make

1575
01:01:47,510 --> 01:01:45,119
solar project planning easier and solar

1576
01:01:49,510 --> 01:01:47,520
energy generation more efficient and

1577
01:01:51,750 --> 01:01:49,520
affordable to consumers

1578
01:01:53,670 --> 01:01:51,760
so thanks in part to satellites both in

1579
01:01:56,470 --> 01:01:53,680
the federal government and commercial

1580
01:01:59,109 --> 01:01:56,480
industries we have more data than ever

1581
01:02:01,510 --> 01:01:59,119
before about the climate crisis and that

1582
01:02:03,589 --> 01:02:01,520
data will not only allow us to more

1583
01:02:05,910 --> 01:02:03,599
fully understand the depth and breadth

1584
01:02:07,510 --> 01:02:05,920
of the challenge that we're facing but

1585
01:02:09,829 --> 01:02:07,520
it'll also help us judge the

1586
01:02:13,750 --> 01:02:09,839
effectiveness of the actions we are

1587
01:02:15,829 --> 01:02:13,760
taking and the consequences of inaction

1588
01:02:18,069 --> 01:02:15,839

only with this wealth of data can we

1589
01:02:20,390 --> 01:02:18,079
truly find the path forward that will

1590
01:02:23,510 --> 01:02:20,400
protect the future for our children and

1591
01:02:25,190 --> 01:02:23,520
grandchildren and generations to come

1592
01:02:27,910 --> 01:02:25,200
i think the challenge before these

1593
01:02:29,829 --> 01:02:27,920
agencies along with other agencies on

1594
01:02:31,829 --> 01:02:29,839
the president's national climate task

1595
01:02:35,750 --> 01:02:31,839
force is really to make sure that the

1596
01:02:38,549 --> 01:02:35,760
data we gather is put to use to inform

1597
01:02:40,789 --> 01:02:38,559
our strategies and to design our tools

1598
01:02:44,309 --> 01:02:40,799
that empower our states tribes and local

1599
01:02:47,109 --> 01:02:44,319
communities and to your point madam vice

1600
01:02:48,549 --> 01:02:47,119
president especially the most

1601
01:02:51,029 --> 01:02:48,559
disadvantaged

1602
01:02:53,270 --> 01:02:51,039
and vulnerable communities who have

1603
01:02:55,750 --> 01:02:53,280
constantly been hit the hottest by

1604
01:02:59,029 --> 01:02:55,760
climate change because they've already

1605
01:03:01,750 --> 01:02:59,039
be been weakened by having to face too

1606
01:03:03,510 --> 01:03:01,760
much environmental degradation and

1607
01:03:05,430 --> 01:03:03,520
disinvestment

1608
01:03:07,910 --> 01:03:05,440
and it's these communities that need

1609
01:03:10,789 --> 01:03:07,920
these answers they need data-driven

1610
01:03:12,789 --> 01:03:10,799
science-based solutions which is exactly

1611
01:03:15,589 --> 01:03:12,799
what we're all talking about today and

1612
01:03:18,789 --> 01:03:15,599
this information is going to give them

1613
01:03:22,309 --> 01:03:18,799

the opportunity to fully engage to be

1614
01:03:24,950 --> 01:03:22,319
fully supported and fully invested

1615
01:03:27,589 --> 01:03:24,960
as other communities are

1616
01:03:29,109 --> 01:03:27,599
so they can build back better and yes i

1617
01:03:31,589 --> 01:03:29,119
had to get that in

1618
01:03:34,549 --> 01:03:31,599
build that better in ways that are

1619
01:03:37,109 --> 01:03:34,559
healthier safer more secure and more

1620
01:03:38,710 --> 01:03:37,119
resilient to the challenges ahead

1621
01:03:39,990 --> 01:03:38,720
thank you again for your leadership man

1622
01:03:42,470 --> 01:03:40,000
and vice president

1623
01:03:44,870 --> 01:03:42,480
thank you and yes our buildback better

1624
01:03:47,270 --> 01:03:44,880
agenda extends from earth to space

1625
01:03:49,990 --> 01:03:47,280
there's no question but i do want to

1626
01:03:51,589 --> 01:03:50,000
emphasize or repeat what

1627
01:03:54,069 --> 01:03:51,599
gina just said

1628
01:03:56,150 --> 01:03:54,079
about the importance of satellite data

1629
01:03:57,670 --> 01:03:56,160
one could argue that

1630
01:03:58,950 --> 01:03:57,680
without the satellites what would be

1631
01:04:01,109 --> 01:03:58,960
happening to our climate would be

1632
01:04:04,309 --> 01:04:01,119
happening to our climate

1633
01:04:06,069 --> 01:04:04,319
the significance of it is that it allows

1634
01:04:07,829 --> 01:04:06,079
us to now confirm what we've been

1635
01:04:10,069 --> 01:04:07,839
experiencing what we've been knowing

1636
01:04:12,710 --> 01:04:10,079
what certain people have been talking

1637
01:04:14,630 --> 01:04:12,720
about for a very long time that has not

1638
01:04:16,069 --> 01:04:14,640

been given the priority that it now is

1639
01:04:18,549 --> 01:04:16,079
receiving

1640
01:04:20,150 --> 01:04:18,559
but the data so it allows us to confirm

1641
01:04:22,789 --> 01:04:20,160
it allows us to then judge our

1642
01:04:25,109 --> 01:04:22,799
effectiveness but it does also allow us

1643
01:04:29,109 --> 01:04:25,119
then with this satellite technology with

1644
01:04:31,270 --> 01:04:29,119
our work in space to actually mitigate

1645
01:04:34,150 --> 01:04:31,280
to actually perhaps

1646
01:04:35,109 --> 01:04:34,160
have a real substantial impact on the

1647
01:04:37,190 --> 01:04:35,119
course

1648
01:04:39,670 --> 01:04:37,200
of what is happening to our climate in a

1649
01:04:42,630 --> 01:04:39,680
way that will benefit all people

1650
01:04:43,589 --> 01:04:42,640
i'm asking the climate policy office and

1651
01:04:45,349 --> 01:04:43,599
and

1652
01:04:47,510 --> 01:04:45,359
the climate policy office under gina's

1653
01:04:49,109 --> 01:04:47,520
leadership has agreed um in coordination

1654
01:04:51,750 --> 01:04:49,119
with the office of of science and

1655
01:04:52,950 --> 01:04:51,760
technology policy and the space council

1656
01:04:55,990 --> 01:04:52,960
staff

1657
01:04:58,710 --> 01:04:56,000
to establish essentially a baseline

1658
01:05:00,230 --> 01:04:58,720
of available space data and decision

1659
01:05:02,390 --> 01:05:00,240
making tools

1660
01:05:05,349 --> 01:05:02,400
that are needed to tackle the climate

1661
01:05:07,510 --> 01:05:05,359
crisis and to provide that information

1662
01:05:09,670 --> 01:05:07,520
to all communities with a particular

1663
01:05:11,910 --> 01:05:09,680

awareness of those who have not

1664
01:05:13,910 --> 01:05:11,920
historically received this or have

1665
01:05:15,190 --> 01:05:13,920
access to it or the tools to analyze

1666
01:05:16,470 --> 01:05:15,200
this data

1667
01:05:17,190 --> 01:05:16,480
and

1668
01:05:25,430 --> 01:05:17,200
the

1669
01:05:26,950 --> 01:05:25,440
development and implementation of an

1670
01:05:28,710 --> 01:05:26,960
action plan

1671
01:05:31,589 --> 01:05:28,720
to increase access

1672
01:05:33,510 --> 01:05:31,599
to the data and to decision making tools

1673
01:05:36,950 --> 01:05:33,520
i'm also asking the state department to

1674
01:05:38,710 --> 01:05:36,960
work with interagency partners to

1675
01:05:40,630 --> 01:05:38,720
essentially develop a diplomatic

1676
01:05:42,230 --> 01:05:40,640
approach that will expand

1677
01:05:44,630 --> 01:05:42,240
the global leadership of the united

1678
01:05:47,750 --> 01:05:44,640
states to strengthen our partnerships

1679
01:05:50,150 --> 01:05:47,760
around the world using satellite data

1680
01:05:51,349 --> 01:05:50,160
and the tools available to us so i thank

1681
01:05:54,230 --> 01:05:51,359
you all for the work and your

1682
01:05:57,589 --> 01:05:54,240
commitments going forward

1683
01:05:59,990 --> 01:05:57,599
our third and final subject for today is

1684
01:06:01,430 --> 01:06:00,000
the issue of stem

1685
01:06:05,910 --> 01:06:01,440
and

1686
01:06:09,190 --> 01:06:05,920
importance of that to our capacity to

1687
01:06:11,670 --> 01:06:09,200
explore space but to do all that then

1688
01:06:13,670 --> 01:06:11,680

space allows us to do in terms of all

1689
01:06:15,990 --> 01:06:13,680
the the areas that we have discussed

1690
01:06:17,910 --> 01:06:16,000
from national security to commercial

1691
01:06:19,829 --> 01:06:17,920
activity to addressing the climate

1692
01:06:23,270 --> 01:06:19,839
crisis

1693
01:06:26,710 --> 01:06:23,280
so our nation's strength on this issue i

1694
01:06:29,910 --> 01:06:26,720
do believe is firmly grounded

1695
01:06:32,950 --> 01:06:29,920
in our commitment or lack of commitment

1696
01:06:35,510 --> 01:06:32,960
but i believe our commitment to invest

1697
01:06:36,710 --> 01:06:35,520
in stem education

1698
01:06:39,109 --> 01:06:36,720
and

1699
01:06:41,750 --> 01:06:39,119
i believe frankly that we will risk

1700
01:06:44,309 --> 01:06:41,760
losing our competitive edge

1701
01:06:45,270 --> 01:06:44,319
without a priority in that regard

1702
01:06:48,470 --> 01:06:45,280
so

1703
01:06:51,270 --> 01:06:48,480
we are as a council prioritizing that as

1704
01:06:53,190 --> 01:06:51,280
an issue um and and thinking of it in a

1705
01:06:56,870 --> 01:06:53,200
way that also really understands the

1706
01:06:59,430 --> 01:06:56,880
beauty of space to inspire

1707
01:07:02,230 --> 01:06:59,440
so many people to engage

1708
01:07:05,430 --> 01:07:02,240
in the process of education through stem

1709
01:07:08,390 --> 01:07:05,440
to do this important work that again is

1710
01:07:10,710 --> 01:07:08,400
as much as anything the most noble work

1711
01:07:12,630 --> 01:07:10,720
of improving the condition

1712
01:07:14,950 --> 01:07:12,640
of humankind

1713
01:07:17,270 --> 01:07:14,960

so with that i'm going to ask our

1714
01:07:20,470 --> 01:07:17,280
director of the national intelligence uh

1715
01:07:21,670 --> 01:07:20,480
avril haynes to talk a bit about

1716
01:07:24,549 --> 01:07:21,680
uh

1717
01:07:29,109 --> 01:07:24,559
what kind of jobs

1718
01:07:32,470 --> 01:07:29,119
director haines

1719
01:07:35,750 --> 01:07:32,480
are are require a stem education

1720
01:07:38,789 --> 01:07:35,760
in a way that is designed to improve and

1721
01:07:40,390 --> 01:07:38,799
enhance our nation's security and and do

1722
01:07:42,950 --> 01:07:40,400
the work that we must do in the work

1723
01:07:44,390 --> 01:07:42,960
that you do leading intelligence

1724
01:07:46,390 --> 01:07:44,400
communities

1725
01:07:48,549 --> 01:07:46,400
thank you so much madam vice president

1726
01:07:50,230 --> 01:07:48,559
it's really an honor to be here to

1727
01:07:51,990 --> 01:07:50,240
represent the intelligence community and

1728
01:07:53,750 --> 01:07:52,000
particularly with some of my really

1729
01:07:57,029 --> 01:07:53,760
wonderful colleagues the director of the

1730
01:08:00,309 --> 01:07:57,039
nro dr chris scalise and admiral sharp

1731
01:08:01,109 --> 01:08:00,319
director of nga and our space executive

1732
01:08:03,270 --> 01:08:01,119
and

1733
01:08:05,910 --> 01:08:03,280
really it will come as a surprise to no

1734
01:08:07,829 --> 01:08:05,920
one i suspect certainly not to you that

1735
01:08:09,190 --> 01:08:07,839
science technology engineering and

1736
01:08:11,430 --> 01:08:09,200
mathematics

1737
01:08:13,589 --> 01:08:11,440
are absolutely critical to our work in

1738
01:08:15,829 --> 01:08:13,599

the intelligence community

1739
01:08:17,110 --> 01:08:15,839
generally but especially when it comes

1740
01:08:18,309 --> 01:08:17,120
to space

1741
01:08:20,789 --> 01:08:18,319
and what i thought i would do is just

1742
01:08:22,630 --> 01:08:20,799
give some examples as you indicate

1743
01:08:25,349 --> 01:08:22,640
really of the work that we're doing

1744
01:08:27,749 --> 01:08:25,359
which will only intensify as we work to

1745
01:08:29,910 --> 01:08:27,759
support essentially the priorities

1746
01:08:32,309 --> 01:08:29,920
framework that you've mentioned at the

1747
01:08:34,390 --> 01:08:32,319
beginning of this discussion

1748
01:08:36,789 --> 01:08:34,400
so of course a major aspect of our work

1749
01:08:39,430 --> 01:08:36,799
is focused on being the nation's ears

1750
01:08:41,590 --> 01:08:39,440
and eyes in space

1751
01:08:43,910 --> 01:08:41,600
providing what we often refer to as

1752
01:08:46,070 --> 01:08:43,920
domain awareness and doing so allows us

1753
01:08:48,470 --> 01:08:46,080
to support efforts to protect and defend

1754
01:08:50,470 --> 01:08:48,480
u.s and allied national security

1755
01:08:52,709 --> 01:08:50,480
interests in space which is fundamental

1756
01:08:55,669 --> 01:08:52,719
to enabling the development

1757
01:08:57,510 --> 01:08:55,679
and use of space for peaceful purposes

1758
01:08:59,990 --> 01:08:57,520
including a competitive and burgeoning

1759
01:09:01,669 --> 01:09:00,000
u.s commercial space sector

1760
01:09:04,149 --> 01:09:01,679
and as you know there are serious and as

1761
01:09:05,669 --> 01:09:04,159
we've discussed and growing threats in

1762
01:09:06,789 --> 01:09:05,679
space that we're focused on which

1763
01:09:08,950 --> 01:09:06,799

include the development of

1764
01:09:09,910 --> 01:09:08,960
anti-satellite weapons by both china and

1765
01:09:11,910 --> 01:09:09,920
russia

1766
01:09:13,590 --> 01:09:11,920
and we work with our colleagues across

1767
01:09:15,189 --> 01:09:13,600
the government with agencies like the

1768
01:09:16,870 --> 01:09:15,199
commerce department and also with the

1769
01:09:18,709 --> 01:09:16,880
department of defense

1770
01:09:20,229 --> 01:09:18,719
to assist in their efforts to address

1771
01:09:22,229 --> 01:09:20,239
such threats to a domain that is

1772
01:09:24,229 --> 01:09:22,239
fundamentally a source of innovation and

1773
01:09:26,470 --> 01:09:24,239
opportunity for mankind

1774
01:09:28,870 --> 01:09:26,480
but what is perhaps less known is that

1775
01:09:30,789 --> 01:09:28,880
the intelligence community has a history

1776
01:09:32,390 --> 01:09:30,799
of working closely with academia and

1777
01:09:34,709 --> 01:09:32,400
industry partners

1778
01:09:37,749 --> 01:09:34,719
to use our capabilities and expertise to

1779
01:09:40,309 --> 01:09:37,759
help solve scientific challenges facing

1780
01:09:42,149 --> 01:09:40,319
our nation and the world challenges that

1781
01:09:44,550 --> 01:09:42,159
are many of the priorities that you've

1782
01:09:46,070 --> 01:09:44,560
mentioned including obviously climate

1783
01:09:47,990 --> 01:09:46,080
gina did

1784
01:09:50,070 --> 01:09:48,000
you've identified and our efforts in

1785
01:09:52,229 --> 01:09:50,080
space make it possible for us to provide

1786
01:09:54,709 --> 01:09:52,239
critical information to those responding

1787
01:09:57,270 --> 01:09:54,719
to natural disasters to predict the

1788
01:09:59,510 --> 01:09:57,280

impact of as well as to devise ways of

1789
01:10:01,430 --> 01:09:59,520
addressing as you just noted climate

1790
01:10:03,830 --> 01:10:01,440
change and to support the establishment

1791
01:10:05,910 --> 01:10:03,840
of norms first sustainable space

1792
01:10:07,830 --> 01:10:05,920
environment and of course all of this

1793
01:10:10,630 --> 01:10:07,840
relies on our ability to recruit and

1794
01:10:13,110 --> 01:10:10,640
retain stem professionals as without

1795
01:10:15,189 --> 01:10:13,120
them none of this would be possible

1796
01:10:16,950 --> 01:10:15,199
and for example in in 2015 when the

1797
01:10:19,669 --> 01:10:16,960
united states assumed chairmanship of

1798
01:10:21,590 --> 01:10:19,679
the arctic council the united states

1799
01:10:23,510 --> 01:10:21,600
made a concerted effort to enhance our

1800
01:10:25,990 --> 01:10:23,520
understanding of the impact of climate

1801
01:10:28,149 --> 01:10:26,000
change on the arctic and in that context

1802
01:10:30,630 --> 01:10:28,159
nga collected with the national science

1803
01:10:33,030 --> 01:10:30,640
foundation the university of minnesota's

1804
01:10:34,550 --> 01:10:33,040
polar geospatial center with support

1805
01:10:35,910 --> 01:10:34,560
from other academic and corporate

1806
01:10:37,590 --> 01:10:35,920
partners

1807
01:10:39,750 --> 01:10:37,600
on a public private initiative to

1808
01:10:41,830 --> 01:10:39,760
produce high-resolution digital

1809
01:10:44,470 --> 01:10:41,840
elevation models of the arctic and

1810
01:10:46,630 --> 01:10:44,480
antarctic regions using unclassified

1811
01:10:47,830 --> 01:10:46,640
commercially procured optical stereo

1812
01:10:50,390 --> 01:10:47,840
imagery

1813
01:10:52,229 --> 01:10:50,400

super computing and open source software

1814
01:10:54,390 --> 01:10:52,239
and the entire data set was made

1815
01:10:56,310 --> 01:10:54,400
publicly available and released

1816
01:10:58,070 --> 01:10:56,320
and catapulted the arctic region from

1817
01:10:59,990 --> 01:10:58,080
one of the worst to one of the best

1818
01:11:01,590 --> 01:11:00,000
mapped regions on earth and those are

1819
01:11:04,070 --> 01:11:01,600
the kinds of projects we want to do

1820
01:11:05,830 --> 01:11:04,080
going forward to support your initiative

1821
01:11:07,430 --> 01:11:05,840
needless to say these sorts of projects

1822
01:11:09,350 --> 01:11:07,440
and the development of space systems

1823
01:11:11,590 --> 01:11:09,360
more generally requires a highly

1824
01:11:13,430 --> 01:11:11,600
technical workforce but we also have

1825
01:11:15,110 --> 01:11:13,440
found that it's a virtuous cycle in a

1826
01:11:17,030 --> 01:11:15,120
sense as you mentioned

1827
01:11:18,870 --> 01:11:17,040
in other words we found that giving

1828
01:11:20,550 --> 01:11:18,880
students the opportunity to work on

1829
01:11:23,270 --> 01:11:20,560
space systems

1830
01:11:24,830 --> 01:11:23,280
tends to inspire them to pursue stem

1831
01:11:26,870 --> 01:11:24,840
fields of

1832
01:11:29,430 --> 01:11:26,880
education and to support increased

1833
01:11:31,910 --> 01:11:29,440
participation in stem fields for example

1834
01:11:33,590 --> 01:11:31,920
nro created an internship program that

1835
01:11:35,990 --> 01:11:33,600
introduces students to the various

1836
01:11:38,550 --> 01:11:36,000
aspects of space system development by

1837
01:11:40,310 --> 01:11:38,560
assigning them to actual missions so

1838
01:11:43,110 --> 01:11:40,320

they can gain experience and really feel

1839
01:11:44,870 --> 01:11:43,120
the excitement of space development

1840
01:11:46,870 --> 01:11:44,880
students have participated in mission

1841
01:11:49,590 --> 01:11:46,880
design orbit design they have

1842
01:11:52,149 --> 01:11:49,600
investigated advanced concepts and even

1843
01:11:53,910 --> 01:11:52,159
had a chance to support launches it

1844
01:11:55,830 --> 01:11:53,920
makes us all feel like we want to go be

1845
01:11:57,910 --> 01:11:55,840
an nro intern i think

1846
01:11:59,830 --> 01:11:57,920
but nro's partnership with nasa has

1847
01:12:01,590 --> 01:11:59,840
expanded their intern program to allow

1848
01:12:04,070 --> 01:12:01,600
students without clearances to

1849
01:12:05,910 --> 01:12:04,080
experience space development firsthand

1850
01:12:08,229 --> 01:12:05,920
and have the option of choosing nro as

1851
01:12:09,350 --> 01:12:08,239
their next experience once they have a

1852
01:12:11,350 --> 01:12:09,360
clearance

1853
01:12:13,669 --> 01:12:11,360
and frankly nasa has been a critical

1854
01:12:16,070 --> 01:12:13,679
partner in our efforts across the board

1855
01:12:17,910 --> 01:12:16,080
as we both need rocket scientists

1856
01:12:20,470 --> 01:12:17,920
engineers i.t professionals

1857
01:12:22,390 --> 01:12:20,480
mathematicians physicists and so on

1858
01:12:24,550 --> 01:12:22,400
and in addition to recruitment efforts

1859
01:12:27,110 --> 01:12:24,560
on higher at higher educational

1860
01:12:29,430 --> 01:12:27,120
institutions we engage locally across

1861
01:12:32,229 --> 01:12:29,440
the country at the elementary and the

1862
01:12:34,470 --> 01:12:32,239
secondary schools levels to encourage at

1863
01:12:36,870 --> 01:12:34,480

least an awareness of stem because we

1864
01:12:39,590 --> 01:12:36,880
need people with degrees in all fields

1865
01:12:41,669 --> 01:12:39,600
and the more they're aware of stem

1866
01:12:43,669 --> 01:12:41,679
the more able they are to contribute in

1867
01:12:45,830 --> 01:12:43,679
a highly technical organization along

1868
01:12:48,149 --> 01:12:45,840
the lines of what we've been discussing

1869
01:12:50,070 --> 01:12:48,159
so finally i just i also want to stress

1870
01:12:52,149 --> 01:12:50,080
that was we engage in recruitment and

1871
01:12:54,550 --> 01:12:52,159
retention of stem professionals

1872
01:12:56,550 --> 01:12:54,560
we are focused on diversity we have

1873
01:12:58,790 --> 01:12:56,560
expanded our outreach with colleges and

1874
01:13:00,390 --> 01:12:58,800
universities with strong stem programs

1875
01:13:02,950 --> 01:13:00,400
that also are minority serving

1876
01:13:05,189 --> 01:13:02,960
institutions to diversify our recruiting

1877
01:13:06,790 --> 01:13:05,199
pool is this is an area where we just

1878
01:13:09,030 --> 01:13:06,800
need to do better

1879
01:13:11,110 --> 01:13:09,040
through our efforts we hope to grow an

1880
01:13:12,870 --> 01:13:11,120
increasingly diverse stem community and

1881
01:13:15,270 --> 01:13:12,880
whether they work for the community the

1882
01:13:16,709 --> 01:13:15,280
intelligence community or choose other

1883
01:13:18,870 --> 01:13:16,719
organizations

1884
01:13:20,790 --> 01:13:18,880
doing so contributes to the overall u.s

1885
01:13:22,790 --> 01:13:20,800
economy and these individuals will have

1886
01:13:23,830 --> 01:13:22,800
relevant experience to support aerospace

1887
01:13:25,990 --> 01:13:23,840
companies

1888
01:13:29,189 --> 01:13:26,000

i.t organizations academia other

1889
01:13:31,189 --> 01:13:29,199
high-tech organizations in general but

1890
01:13:33,030 --> 01:13:31,199
thank you so much for doing this thank

1891
01:13:35,270 --> 01:13:33,040
you um

1892
01:13:37,189 --> 01:13:35,280
the list that you you provided us i

1893
01:13:37,910 --> 01:13:37,199
think highlights also that when we think

1894
01:13:43,430 --> 01:13:37,920
of

1895
01:13:48,950 --> 01:13:43,440
are necessary to support space activity

1896
01:13:54,149 --> 01:13:50,470
which makes it exciting for those who

1897
01:13:59,750 --> 01:13:57,110
with that let's move on to

1898
01:14:02,630 --> 01:13:59,760
general dickinson

1899
01:14:05,110 --> 01:14:02,640
has been an extraordinary leader of the

1900
01:14:05,990 --> 01:14:05,120
u.s space command and general i'd like

1901
01:14:07,510 --> 01:14:06,000
to

1902
01:14:09,350 --> 01:14:07,520
ask you if you could

1903
01:14:11,350 --> 01:14:09,360
discuss a bit about

1904
01:14:13,990 --> 01:14:11,360
the fact that you require the department

1905
01:14:16,709 --> 01:14:14,000
of defense requires highly skilled

1906
01:14:18,950 --> 01:14:16,719
individuals who are dedicated who are

1907
01:14:20,470 --> 01:14:18,960
disciplined who

1908
01:14:23,189 --> 01:14:20,480
are just

1909
01:14:24,870 --> 01:14:23,199
courageous in an extraordinary way in

1910
01:14:27,669 --> 01:14:24,880
terms of their service to our country

1911
01:14:29,350 --> 01:14:27,679
and in service of our national security

1912
01:14:32,229 --> 01:14:29,360
can you talk a bit about the

1913
01:14:36,390 --> 01:14:32,239

significance of a stem education

1914
01:14:38,310 --> 01:14:36,400
to our uniformed military force

1915
01:14:40,550 --> 01:14:38,320
thank you madam vice president i'm

1916
01:14:42,550 --> 01:14:40,560
honored today to sit here representing

1917
01:14:43,830 --> 01:14:42,560
general mark canelli the chairman of the

1918
01:14:45,350 --> 01:14:43,840
joint chiefs of staff in the

1919
01:14:47,110 --> 01:14:45,360
administration's first meeting of the

1920
01:14:48,709 --> 01:14:47,120
national space council

1921
01:14:50,229 --> 01:14:48,719
you know there is no question that the

1922
01:14:52,709 --> 01:14:50,239
nation as a whole must broaden the

1923
01:14:54,550 --> 01:14:52,719
pipeline of stem-capable americans so

1924
01:14:56,630 --> 01:14:54,560
that employers including the armed

1925
01:14:58,550 --> 01:14:56,640
services in the department of defense

1926
01:15:00,630 --> 01:14:58,560
can recruit the talent that we need to

1927
01:15:02,870 --> 01:15:00,640
address tomorrow's challenges

1928
01:15:05,270 --> 01:15:02,880
inherently space is a technically

1929
01:15:07,430 --> 01:15:05,280
challenging domain space specialists and

1930
01:15:09,910 --> 01:15:07,440
operators require a thorough grasp of

1931
01:15:12,470 --> 01:15:09,920
physics mathematics and

1932
01:15:15,510 --> 01:15:12,480
unique environments to understand

1933
01:15:17,590 --> 01:15:15,520
protect and operate in the space domain

1934
01:15:19,110 --> 01:15:17,600
it is critical to have a workforce with

1935
01:15:21,830 --> 01:15:19,120
strong foundations in the stem

1936
01:15:24,229 --> 01:15:21,840
disciplines so we can protect and defend

1937
01:15:25,750 --> 01:15:24,239
against existing and emerging threats to

1938
01:15:27,990 --> 01:15:25,760

the space domain

1939
01:15:30,149 --> 01:15:28,000
and this joint force requirement extends

1940
01:15:32,229 --> 01:15:30,159
across all the armed forces all the

1941
01:15:35,030 --> 01:15:32,239
combatant commands and all the domains

1942
01:15:38,310 --> 01:15:35,040
that we currently operate in air land

1943
01:15:40,229 --> 01:15:38,320
maritime and in this case space it's a

1944
01:15:42,310 --> 01:15:40,239
national security priority i think to

1945
01:15:44,709 --> 01:15:42,320
protect the space domain from the

1946
01:15:47,270 --> 01:15:44,719
disruptive and destructive actions by

1947
01:15:50,310 --> 01:15:47,280
adversaries these space missions rely

1948
01:15:52,310 --> 01:15:50,320
heavily on stem therefore our workforce

1949
01:15:55,030 --> 01:15:52,320
must bring that capability to the

1950
01:15:57,830 --> 01:15:55,040
forefront and employ the next generation

1951
01:16:01,110 --> 01:15:57,840
of diverse technical talent

1952
01:16:04,070 --> 01:16:01,120
we need space for stem savvy soldiers

1953
01:16:06,550 --> 01:16:04,080
marines sailors airmen and guardians to

1954
01:16:09,830 --> 01:16:06,560
meet this priority and successfully

1955
01:16:11,430 --> 01:16:09,840
execute space missions on earth in orbit

1956
01:16:13,590 --> 01:16:11,440
and even beyond

1957
01:16:16,070 --> 01:16:13,600
u.s space command and u.s space force

1958
01:16:18,070 --> 01:16:16,080
have initiated exciting new programs and

1959
01:16:20,470 --> 01:16:18,080
tapped into existing programs that

1960
01:16:22,149 --> 01:16:20,480
encourage stem education and seed

1961
01:16:24,310 --> 01:16:22,159
interest in future career stem

1962
01:16:26,630 --> 01:16:24,320
opportunities with the government the

1963
01:16:29,110 --> 01:16:26,640

u.s space force recently launched the

1964
01:16:31,830 --> 01:16:29,120
university partnership program to

1965
01:16:34,470 --> 01:16:31,840
identify develop and retain a diverse

1966
01:16:36,470 --> 01:16:34,480
stem qualified workforce to further its

1967
01:16:39,189 --> 01:16:36,480
mission to secure the nation's interests

1968
01:16:41,350 --> 01:16:39,199
and maintain its advantages in space

1969
01:16:43,750 --> 01:16:41,360
in addition programs such as the dod

1970
01:16:44,870 --> 01:16:43,760
smart program premier college intern

1971
01:16:51,910 --> 01:16:44,880
program

1972
01:16:54,870 --> 01:16:51,920
opportunities for stem talent to get a

1973
01:16:55,990 --> 01:16:54,880
foot in the door and a taste for future

1974
01:16:57,590 --> 01:16:56,000
careers

1975
01:16:59,910 --> 01:16:57,600
we are committed to carrying this

1976
01:17:02,709 --> 01:16:59,920
momentum forward through interagency

1977
01:17:05,110 --> 01:17:02,719
exchange programs as future steps and

1978
01:17:07,110 --> 01:17:05,120
strengthening national capability the

1979
01:17:09,350 --> 01:17:07,120
services and the department of defense

1980
01:17:11,590 --> 01:17:09,360
are expanding outreach and engagement at

1981
01:17:14,790 --> 01:17:11,600
the university level to encourage and

1982
01:17:17,189 --> 01:17:14,800
inspire minds to pursue careers directly

1983
01:17:19,189 --> 01:17:17,199
impacting our national interests

1984
01:17:21,430 --> 01:17:19,199
again madam vice president i appreciate

1985
01:17:23,510 --> 01:17:21,440
the opportunity today to comment on this

1986
01:17:26,709 --> 01:17:23,520
important issue and the importance of

1987
01:17:29,110 --> 01:17:26,719
stem to our united states armed forces

1988
01:17:31,990 --> 01:17:29,120

thank you general

1989
01:17:34,630 --> 01:17:32,000
and that's a great segue to

1990
01:17:36,229 --> 01:17:34,640
our nasa administrator bill nelson

1991
01:17:38,310 --> 01:17:36,239
and um

1992
01:17:40,950 --> 01:17:38,320
i know the president

1993
01:17:42,950 --> 01:17:40,960
talks often with me about

1994
01:17:45,910 --> 01:17:42,960
your role of leadership

1995
01:17:48,630 --> 01:17:45,920
for so many years and your consistency

1996
01:17:50,870 --> 01:17:48,640
in terms of your enthusiasm

1997
01:17:53,590 --> 01:17:50,880
about what we have yet to do

1998
01:17:55,350 --> 01:17:53,600
and our capacity to get there and

1999
01:17:57,189 --> 01:17:55,360
so

2000
01:17:58,630 --> 01:17:57,199
if you can talk a bit administrator

2001
01:18:00,790 --> 01:17:58,640
nelson about

2002
01:18:04,149 --> 01:18:00,800
the efforts in particular that nasa is

2003
01:18:07,030 --> 01:18:04,159
taking on the issue of stem and um and

2004
01:18:10,149 --> 01:18:07,040
what you see as our our challenges but

2005
01:18:12,709 --> 01:18:10,159
also our goal to increase and inspire

2006
01:18:15,430 --> 01:18:12,719
the number of students will pursue a

2007
01:18:17,350 --> 01:18:15,440
stem profession

2008
01:18:19,910 --> 01:18:17,360
thank you madam vice president thank you

2009
01:18:21,750 --> 01:18:19,920
for being an enthusiastic

2010
01:18:24,310 --> 01:18:21,760
vice president

2011
01:18:25,189 --> 01:18:24,320
which harkens back

2012
01:18:27,990 --> 01:18:25,199
to

2013
01:18:29,350 --> 01:18:28,000

president johnson when he was vice

2014
01:18:31,990 --> 01:18:29,360
president

2015
01:18:33,750 --> 01:18:32,000
establishing the first national space

2016
01:18:35,750 --> 01:18:33,760
council

2017
01:18:37,590 --> 01:18:35,760
and we know that

2018
01:18:41,189 --> 01:18:37,600
that work

2019
01:18:43,990 --> 01:18:41,199
took us to the moon successfully

2020
01:18:47,350 --> 01:18:44,000
in a great space race

2021
01:18:48,310 --> 01:18:47,360
that was the apollo generation

2022
01:18:52,390 --> 01:18:48,320
now

2023
01:18:55,510 --> 01:18:52,400
it is the artemis generation

2024
01:18:56,950 --> 01:18:55,520
and the picture to your left

2025
01:19:00,390 --> 01:18:56,960
is of

2026
01:19:02,790 --> 01:19:00,400
artemis one being stacked in the vehicle

2027
01:19:06,430 --> 01:19:02,800
assembly building

2028
01:19:11,510 --> 01:19:06,440
it is the most powerful rocket ever

2029
01:19:13,669 --> 01:19:11,520
8.8 million pounds of thrust at launch

2030
01:19:16,229 --> 01:19:13,679
and it will take us back

2031
01:19:18,950 --> 01:19:16,239
to the moon

2032
01:19:21,110 --> 01:19:18,960
as already has been stated here and

2033
01:19:24,229 --> 01:19:21,120
thank you to everybody because you've

2034
01:19:26,950 --> 01:19:24,239
told what nasa does

2035
01:19:29,110 --> 01:19:26,960
particularly since we work with all of

2036
01:19:31,189 --> 01:19:29,120
you

2037
01:19:33,910 --> 01:19:31,199
it will take us back to the moon where

2038
01:19:37,030 --> 01:19:33,920

we are going to learn

2039
01:19:40,870 --> 01:19:37,040
how to exist for a long duration under

2040
01:19:42,229 --> 01:19:40,880
very hostile and adverse conditions

2041
01:19:45,830 --> 01:19:42,239
in order

2042
01:19:47,189 --> 01:19:45,840
to go with humans to mars

2043
01:19:50,709 --> 01:19:47,199
now

2044
01:19:54,070 --> 01:19:50,719
how this relates to stem

2045
01:19:55,750 --> 01:19:54,080
just look at the sparkle in the eyes of

2046
01:19:57,750 --> 01:19:55,760
the kids

2047
01:20:02,229 --> 01:19:57,760
when the topic

2048
01:20:05,990 --> 01:20:02,239
of space and space flight opens up

2049
01:20:08,229 --> 01:20:06,000
it opens their little minds into

2050
01:20:09,990 --> 01:20:08,239
wanting to get involved and we saw that

2051
01:20:12,229 --> 01:20:10,000
that was the case

2052
01:20:13,350 --> 01:20:12,239
in the apollo generation

2053
01:20:15,910 --> 01:20:13,360
for

2054
01:20:18,390 --> 01:20:15,920
a couple of generations thereafter look

2055
01:20:21,750 --> 01:20:18,400
at the engineers and the mathematicians

2056
01:20:24,470 --> 01:20:21,760
and the technicians that we have

2057
01:20:28,950 --> 01:20:27,270
nasa like so many of you and thank you

2058
01:20:32,470 --> 01:20:28,960
for what you're doing

2059
01:20:33,830 --> 01:20:32,480
we have paid interns and fellowships

2060
01:20:36,229 --> 01:20:33,840
we get them in

2061
01:20:39,189 --> 01:20:36,239
we have them work

2062
01:20:41,590 --> 01:20:39,199
with the nasa professionals

2063
01:20:43,350 --> 01:20:41,600

they bend hardware they

2064
01:20:46,550 --> 01:20:43,360
write code

2065
01:20:48,470 --> 01:20:46,560
they write all kinds of things they do

2066
01:20:51,030 --> 01:20:48,480
additive manufacturing

2067
01:20:54,470 --> 01:20:51,040
and as a result of that 30 percent of

2068
01:20:56,070 --> 01:20:54,480
our interns come to work for nasa

2069
01:21:02,470 --> 01:20:56,080
so

2070
01:21:04,390 --> 01:21:02,480
a direct cause

2071
01:21:06,149 --> 01:21:04,400
it is also

2072
01:21:07,990 --> 01:21:06,159
a result

2073
01:21:09,189 --> 01:21:08,000
of our space program

2074
01:21:13,510 --> 01:21:09,199
thank you ma'am

2075
01:21:18,950 --> 01:21:16,870
uh and this is a perfect segue to go to

2076
01:21:21,030 --> 01:21:18,960
our education secretary

2077
01:21:23,110 --> 01:21:21,040
miguel cordona and

2078
01:21:24,709 --> 01:21:23,120
mr secretary

2079
01:21:25,830 --> 01:21:24,719
in addition to

2080
01:21:28,550 --> 01:21:25,840
the

2081
01:21:31,830 --> 01:21:28,560
great potential that we have as as

2082
01:21:34,870 --> 01:21:31,840
administrator nelson mentioned to to

2083
01:21:36,950 --> 01:21:34,880
in induce that sparkle in the eyes of

2084
01:21:38,550 --> 01:21:36,960
our children and to let them know what

2085
01:21:39,750 --> 01:21:38,560
we believe in them and what they can

2086
01:21:40,830 --> 01:21:39,760
believe

2087
01:21:43,669 --> 01:21:40,840
is

2088
01:21:45,030 --> 01:21:43,679

possible can you talk a bit about the

2089
01:21:47,830 --> 01:21:45,040
challenges

2090
01:21:50,390 --> 01:21:47,840
within our educational system

2091
01:21:51,669 --> 01:21:50,400
for all children to be able to have that

2092
01:21:53,590 --> 01:21:51,679
opportunity

2093
01:21:55,510 --> 01:21:53,600
to open their eyes and their minds to

2094
01:21:57,910 --> 01:21:55,520
the possibility

2095
01:22:00,229 --> 01:21:57,920
of space and in particular i have in

2096
01:22:02,470 --> 01:22:00,239
mind the the challenges that may exist

2097
01:22:04,470 --> 01:22:02,480
that become barriers

2098
01:22:06,390 --> 01:22:04,480
to all children having access to a stem

2099
01:22:08,470 --> 01:22:06,400
education that include

2100
01:22:10,550 --> 01:22:08,480
the work that we need to do to provide

2101
01:22:12,550 --> 01:22:10,560
resources to teachers the work that we

2102
01:22:14,070 --> 01:22:12,560
need to do to address

2103
01:22:16,550 --> 01:22:14,080
the fact that many

2104
01:22:19,590 --> 01:22:16,560
schools in our country being in rural or

2105
01:22:21,510 --> 01:22:19,600
urban communities don't have technology

2106
01:22:23,189 --> 01:22:21,520
they don't have a lab

2107
01:22:25,270 --> 01:22:23,199
they may not have just the practical

2108
01:22:27,669 --> 01:22:25,280
resources that are necessary to to

2109
01:22:29,510 --> 01:22:27,679
expose a child to the wonders of science

2110
01:22:31,350 --> 01:22:29,520
and technology and engineering and math

2111
01:22:33,910 --> 01:22:31,360
can you talk a bit about that sure thank

2112
01:22:36,229 --> 01:22:33,920
you very much uh madam vice president

2113
01:22:38,310 --> 01:22:36,239

for the question but also for having the

2114
01:22:40,229 --> 01:22:38,320
department of education at the table

2115
01:22:42,229 --> 01:22:40,239
this very important work

2116
01:22:43,990 --> 01:22:42,239
we are eager to advance the national

2117
01:22:45,910 --> 01:22:44,000
space council's priorities by ensuring

2118
01:22:48,229 --> 01:22:45,920
that every student

2119
01:22:51,030 --> 01:22:48,239
in every community across the country

2120
01:22:53,510 --> 01:22:51,040
can access a rich rigorous

2121
01:22:55,990 --> 01:22:53,520
high quality education that includes

2122
01:22:58,629 --> 01:22:56,000
study in science technology engineering

2123
01:23:00,310 --> 01:22:58,639
and math i know the degree secretary

2124
01:23:01,910 --> 01:23:00,320
martin and others on the team are also

2125
01:23:03,270 --> 01:23:01,920
engaged in this work and excited about

2126
01:23:05,030 --> 01:23:03,280
this work

2127
01:23:07,430 --> 01:23:05,040
one of the biggest challenges we're

2128
01:23:09,110 --> 01:23:07,440
seeing is that students far too often

2129
01:23:10,390 --> 01:23:09,120
students of color and young women and

2130
01:23:12,550 --> 01:23:10,400
girls

2131
01:23:14,149 --> 01:23:12,560
simply don't see themselves in rows of

2132
01:23:16,310 --> 01:23:14,159
stem

2133
01:23:19,830 --> 01:23:16,320
recent survey of young people ages 13

2134
01:23:21,590 --> 01:23:19,840
through 29 found that students of color

2135
01:23:25,830 --> 01:23:21,600
in particular simply didn't feel they

2136
01:23:27,350 --> 01:23:25,840
had a place or a career pathway in stem

2137
01:23:29,510 --> 01:23:27,360
and there's disparate access to stem

2138
01:23:31,030 --> 01:23:29,520

coursework in our schools only 50

2139
01:23:33,350 --> 01:23:31,040
percent of our high schools across the

2140
01:23:36,070 --> 01:23:33,360
country offer calculus

2141
01:23:37,910 --> 01:23:36,080
and that number drops at 38 percent for

2142
01:23:39,669 --> 01:23:37,920
high schools with high enrollments of

2143
01:23:41,750 --> 01:23:39,679
black and latino students

2144
01:23:44,310 --> 01:23:41,760
it's unacceptable

2145
01:23:46,229 --> 01:23:44,320
as a nation we can and should make stem

2146
01:23:48,870 --> 01:23:46,239
and space careers a possibility for

2147
01:23:51,350 --> 01:23:48,880
every young person who has ever looked

2148
01:23:55,110 --> 01:23:51,360
up at the sky and marveled

2149
01:23:56,629 --> 01:23:55,120
all students are stem students

2150
01:23:59,189 --> 01:23:56,639
while we're eager to inspire the next

2151
01:24:01,750 --> 01:23:59,199
generation of space explorers we also

2152
01:24:03,270 --> 01:24:01,760
need to expand stem education

2153
01:24:04,709 --> 01:24:03,280
and how it's defined and how it's

2154
01:24:06,629 --> 01:24:04,719
delivered

2155
01:24:08,390 --> 01:24:06,639
to more effectively reach a majority of

2156
01:24:11,669 --> 01:24:08,400
students including students who may not

2157
01:24:12,870 --> 01:24:11,679
pursue a four-year college education for

2158
01:24:14,870 --> 01:24:12,880
example

2159
01:24:16,950 --> 01:24:14,880
welders are needed at nasa to build

2160
01:24:18,950 --> 01:24:16,960
these rockets right and i'm sure the

2161
01:24:22,149 --> 01:24:18,960
astronauts in the room appreciate a good

2162
01:24:25,910 --> 01:24:23,590
we're going to do this by working with

2163
01:24:28,070 --> 01:24:25,920

states industries and communities to

2164
01:24:31,830 --> 01:24:28,080
strengthen and diversify the continuum

2165
01:24:33,990 --> 01:24:31,840
of stem education from pre-kindergarten

2166
01:24:35,110 --> 01:24:34,000
through college

2167
01:24:36,709 --> 01:24:35,120
for example

2168
01:24:38,550 --> 01:24:36,719
in partnership with

2169
01:24:40,870 --> 01:24:38,560
nasa the department of education

2170
01:24:43,030 --> 01:24:40,880
currently supports the 21st century

2171
01:24:45,750 --> 01:24:43,040
community learning center national

2172
01:24:48,390 --> 01:24:45,760
activities funds to develop stem design

2173
01:24:49,750 --> 01:24:48,400
challenges for students in third to

2174
01:24:51,750 --> 01:24:49,760
eighth grade

2175
01:24:53,750 --> 01:24:51,760
these challenges are based on real

2176
01:24:55,910 --> 01:24:53,760
mission data and experiences that occur

2177
01:24:57,189 --> 01:24:55,920
during human and robotic exploration of

2178
01:24:58,629 --> 01:24:57,199
the solar system

2179
01:25:00,550 --> 01:24:58,639
we need we need to invest in these

2180
01:25:02,950 --> 01:25:00,560
opportunities and expand

2181
01:25:05,030 --> 01:25:02,960
who they're available to

2182
01:25:06,870 --> 01:25:05,040
at the post-secondary education level

2183
01:25:09,270 --> 01:25:06,880
the department of education is working

2184
01:25:11,430 --> 01:25:09,280
with hbcus like hampton u

2185
01:25:13,270 --> 01:25:11,440
and uh hispanic serving institutions and

2186
01:25:14,870 --> 01:25:13,280
the minority science and engineering

2187
01:25:17,110 --> 01:25:14,880
improvement program

2188
01:25:18,790 --> 01:25:17,120

to bring stem coursework to more

2189
01:25:20,790 --> 01:25:18,800
students

2190
01:25:22,870 --> 01:25:20,800
we want these qualified diverse

2191
01:25:24,310 --> 01:25:22,880
graduates to come work for all my

2192
01:25:27,669 --> 01:25:24,320
colleagues around the table so please

2193
01:25:29,669 --> 01:25:27,679
when they get out of school hire them

2194
01:25:30,709 --> 01:25:29,679
importantly we must also invest in our

2195
01:25:34,310 --> 01:25:30,719
teachers

2196
01:25:36,310 --> 01:25:34,320
preparing and inspiring the 21st century

2197
01:25:38,550 --> 01:25:36,320
workforce right now

2198
01:25:41,189 --> 01:25:38,560
we want our students to see what they

2199
01:25:42,470 --> 01:25:41,199
can be to be competitive in the global

2200
01:25:44,149 --> 01:25:42,480
economy

2201
01:25:47,030 --> 01:25:44,159
and as our country's population grows

2202
01:25:49,510 --> 01:25:47,040
more diverse the us must catch up with

2203
01:25:51,990 --> 01:25:49,520
other industrialized nations in stem

2204
01:25:54,229 --> 01:25:52,000
outcomes for our students and stem

2205
01:25:57,030 --> 01:25:54,239
career pathways for all communities

2206
01:25:59,910 --> 01:25:57,040
education will get us there thank you

2207
01:26:02,390 --> 01:25:59,920
thank you thank you very much

2208
01:26:04,870 --> 01:26:02,400
and um

2209
01:26:06,709 --> 01:26:04,880
on the point of uh welders i think we

2210
01:26:09,350 --> 01:26:06,719
should go now to our labor assistant

2211
01:26:11,110 --> 01:26:09,360
secretary for policy raj nayak

2212
01:26:12,790 --> 01:26:11,120
who is there

2213
01:26:14,470 --> 01:26:12,800

and

2214
01:26:16,629 --> 01:26:14,480
again as with the department of

2215
01:26:19,189 --> 01:26:16,639
education we welcome as a new member to

2216
01:26:20,390 --> 01:26:19,199
the council the department of labor

2217
01:26:22,390 --> 01:26:20,400
i've talked many times with the

2218
01:26:24,470 --> 01:26:22,400
secretary about the work that you all

2219
01:26:26,229 --> 01:26:24,480
are doing there can you um talk

2220
01:26:28,470 --> 01:26:26,239
specifically about

2221
01:26:30,229 --> 01:26:28,480
the opportunities that we have in terms

2222
01:26:32,629 --> 01:26:30,239
of collaboration with the private sector

2223
01:26:34,629 --> 01:26:32,639
with labor unions and others around the

2224
01:26:36,950 --> 01:26:34,639
training the apprenticeships

2225
01:26:39,110 --> 01:26:36,960
for the the important work of welders

2226
01:26:40,470 --> 01:26:39,120
electricians and others

2227
01:26:42,070 --> 01:26:40,480
yeah thank you madam vice president for

2228
01:26:43,910 --> 01:26:42,080
your leadership in space and for good

2229
01:26:45,430 --> 01:26:43,920
jobs secretary walsh and deputy

2230
01:26:46,790 --> 01:26:45,440
secretary sue are very sorry to miss

2231
01:26:48,709 --> 01:26:46,800
this chance to bring deal into the

2232
01:26:50,550 --> 01:26:48,719
conversation uh they're on the west

2233
01:26:52,149 --> 01:26:50,560
coast today and this week engaging with

2234
01:26:54,070 --> 01:26:52,159
port stakeholders on some supply chain

2235
01:26:56,229 --> 01:26:54,080
and labor dynamics but at the department

2236
01:26:57,669 --> 01:26:56,239
of labor everything we do is based on a

2237
01:27:00,310 --> 01:26:57,679
worker-centered vision that starts with

2238
01:27:01,430 --> 01:27:00,320

you and president biden equity and job

2239
01:27:03,430 --> 01:27:01,440
quality are at the center of the

2240
01:27:05,590 --> 01:27:03,440
department's work our goal is to help

2241
01:27:07,030 --> 01:27:05,600
connect workers to high quality jobs

2242
01:27:09,270 --> 01:27:07,040
that are accessible to people who are

2243
01:27:10,629 --> 01:27:09,280
too often marginalized we know the

2244
01:27:12,390 --> 01:27:10,639
department of labor and the workforce

2245
01:27:14,229 --> 01:27:12,400
system as a whole can play a key role in

2246
01:27:15,910 --> 01:27:14,239
building and supporting a pipeline into

2247
01:27:16,709 --> 01:27:15,920
the skilled jobs in the space arena as

2248
01:27:18,470 --> 01:27:16,719
well

2249
01:27:19,669 --> 01:27:18,480
as you suggested just now and in your

2250
01:27:21,189 --> 01:27:19,679
opening address

2251
01:27:22,870 --> 01:27:21,199
one great way to develop the next

2252
01:27:24,229 --> 01:27:22,880
generation of skilled craft skilled

2253
01:27:26,390 --> 01:27:24,239
craftspeople in the jobs that you

2254
01:27:28,149 --> 01:27:26,400
suggest like welding is to invest in

2255
01:27:30,070 --> 01:27:28,159
registered apprenticeships which is a

2256
01:27:32,390 --> 01:27:30,080
proven workforce model and the gold

2257
01:27:33,669 --> 01:27:32,400
standard of job training system

2258
01:27:35,189 --> 01:27:33,679
we're focused on making registered

2259
01:27:37,510 --> 01:27:35,199
apprenticeships successful for workers

2260
01:27:39,030 --> 01:27:37,520
across industries and backgrounds

2261
01:27:41,750 --> 01:27:39,040
focusing on workers who are making low

2262
01:27:43,830 --> 01:27:41,760
wages workers of color women workers

2263
01:27:45,189 --> 01:27:43,840

with disabilities veterans returning

2264
01:27:46,950 --> 01:27:45,199
citizens and youth

2265
01:27:49,030 --> 01:27:46,960
apprentices earn while they learn and

2266
01:27:51,110 --> 01:27:49,040
get a pathway to well-paying careers and

2267
01:27:52,709 --> 01:27:51,120
the ability to advance in those careers

2268
01:27:54,149 --> 01:27:52,719
and they're also an important lever for

2269
01:27:55,270 --> 01:27:54,159
gender equity

2270
01:27:57,189 --> 01:27:55,280
for example we have a registered

2271
01:27:59,030 --> 01:27:57,199
apprenticeship program today at nasa's

2272
01:28:00,790 --> 01:27:59,040
langley research center focused on

2273
01:28:02,470 --> 01:28:00,800
electoral technicians and mechanical

2274
01:28:04,790 --> 01:28:02,480
engineering technicians where nearly

2275
01:28:06,390 --> 01:28:04,800
half the percentage are women

2276
01:28:08,550 --> 01:28:06,400
this administration is working to expand

2277
01:28:10,550 --> 01:28:08,560
those efforts to empower workers and

2278
01:28:12,149 --> 01:28:10,560
help more americans take advantage of

2279
01:28:14,390 --> 01:28:12,159
quality training that leads to good

2280
01:28:15,750 --> 01:28:14,400
union middle class jobs while developing

2281
01:28:17,270 --> 01:28:15,760
the workforce vital to the space

2282
01:28:18,629 --> 01:28:17,280
industry and the department of labor is

2283
01:28:19,910 --> 01:28:18,639
really excited to be at the table for

2284
01:28:22,470 --> 01:28:19,920
these conversations so thank you for

2285
01:28:24,790 --> 01:28:22,480
having us thank you very much

2286
01:28:27,270 --> 01:28:24,800
and when we think about labor and the

2287
01:28:28,870 --> 01:28:27,280
workforce the federal government is i

2288
01:28:30,950 --> 01:28:28,880

think by many accounts the largest

2289
01:28:34,229 --> 01:28:30,960
employer in the country and so that

2290
01:28:36,310 --> 01:28:34,239
brings me to the uh office of management

2291
01:28:39,030 --> 01:28:36,320
and budget and the deputy director

2292
01:28:42,390 --> 01:28:39,040
jason miller to talk a bit about how we

2293
01:28:45,270 --> 01:28:42,400
can within the federal workforce

2294
01:28:48,070 --> 01:28:45,280
attract and retain a diverse and a

2295
01:28:53,430 --> 01:28:48,080
skilled workforce to meet the demands

2296
01:28:56,709 --> 01:28:55,350
thank you madam vice president thank you

2297
01:28:58,470 --> 01:28:56,719
for your leadership thank you for that

2298
01:28:59,590 --> 01:28:58,480
question i think built into that

2299
01:29:02,070 --> 01:28:59,600
question

2300
01:29:03,990 --> 01:29:02,080
is a recognition that as a government

2301
01:29:05,590 --> 01:29:04,000
our single most important asset is our

2302
01:29:07,510 --> 01:29:05,600
people the dedicated public servants

2303
01:29:09,590 --> 01:29:07,520
across all our agencies

2304
01:29:11,430 --> 01:29:09,600
and something that you have charged us

2305
01:29:13,430 --> 01:29:11,440
with the president's charges with is

2306
01:29:16,070 --> 01:29:13,440
being a model employer

2307
01:29:17,990 --> 01:29:16,080
two weeks ago on november 17th

2308
01:29:20,550 --> 01:29:18,000
we launched the biden harris management

2309
01:29:21,750 --> 01:29:20,560
agenda and the first of our three

2310
01:29:23,990 --> 01:29:21,760
priorities is strengthening and

2311
01:29:25,990 --> 01:29:24,000
empowering federal workforce there is

2312
01:29:27,510 --> 01:29:26,000
commitment across all of our agencies

2313
01:29:29,990 --> 01:29:27,520

across this entire administration as

2314
01:29:32,550 --> 01:29:30,000
leaders so the principles and vision

2315
01:29:34,550 --> 01:29:32,560
laid out with this within this agenda

2316
01:29:36,070 --> 01:29:34,560
one piece of that something that many of

2317
01:29:37,990 --> 01:29:36,080
my colleagues has covered

2318
01:29:39,750 --> 01:29:38,000
inspiring young people inspiring young

2319
01:29:41,350 --> 01:29:39,760
people to stem inspiring young people to

2320
01:29:43,990 --> 01:29:41,360
service

2321
01:29:46,629 --> 01:29:44,000
stepping back one of the challenges that

2322
01:29:48,070 --> 01:29:46,639
we all recognize is that today

2323
01:29:50,629 --> 01:29:48,080
while we are the largest employer our

2324
01:29:52,550 --> 01:29:50,639
2.2 million federal civilian workforce

2325
01:29:55,510 --> 01:29:52,560
less than seven percent is under the age

2326
01:29:57,270 --> 01:29:55,520
of 30. that's a problem that we need

2327
01:29:59,110 --> 01:29:57,280
to tackle head on

2328
01:30:01,270 --> 01:29:59,120
we clearly need to do more we have

2329
01:30:03,030 --> 01:30:01,280
ongoing initiatives underway right now

2330
01:30:05,110 --> 01:30:03,040
including work across agencies to

2331
01:30:07,350 --> 01:30:05,120
enhance diversity equity inclusion and

2332
01:30:09,750 --> 01:30:07,360
accessibility and to bolster the

2333
01:30:11,669 --> 01:30:09,760
national security workforce within those

2334
01:30:13,750 --> 01:30:11,679
initiatives we have a number of specific

2335
01:30:15,590 --> 01:30:13,760
strategies to recruit and retain diverse

2336
01:30:16,870 --> 01:30:15,600
technical talent you've heard about a

2337
01:30:18,390 --> 01:30:16,880
number of those initiatives and the

2338
01:30:20,070 --> 01:30:18,400

programs here today

2339
01:30:21,830 --> 01:30:20,080
including the talent necessary to

2340
01:30:23,030 --> 01:30:21,840
achieve mission goals in our space

2341
01:30:24,709 --> 01:30:23,040
programs

2342
01:30:27,110 --> 01:30:24,719
things like collective efforts around

2343
01:30:28,790 --> 01:30:27,120
paid internships shared hiring actions

2344
01:30:30,149 --> 01:30:28,800
for early career candidates and

2345
01:30:32,950 --> 01:30:30,159
something that i think we all need to do

2346
01:30:35,030 --> 01:30:32,960
is enhance our hr capacity across the

2347
01:30:37,510 --> 01:30:35,040
federal government i believe we are

2348
01:30:38,950 --> 01:30:37,520
poised as an administration to drive and

2349
01:30:40,790 --> 01:30:38,960
coordinate implementation of these

2350
01:30:42,550 --> 01:30:40,800
efforts under the governing structure of

2351
01:30:43,830 --> 01:30:42,560
the binding harris management agenda to

2352
01:30:45,750 --> 01:30:43,840
realize that vision of the federal

2353
01:30:47,590 --> 01:30:45,760
government as a model employer to

2354
01:30:49,110 --> 01:30:47,600
strengthen and empower our workforce as

2355
01:30:51,510 --> 01:30:49,120
chair of the president's management

2356
01:30:53,350 --> 01:30:51,520
council i am personally committed to

2357
01:30:55,830 --> 01:30:53,360
making sure that we are doing everything

2358
01:30:57,990 --> 01:30:55,840
in this space to deliver

2359
01:31:00,709 --> 01:30:58,000
strengthen our workforce bring in more

2360
01:31:02,870 --> 01:31:00,719
diverse technical talent and make sure

2361
01:31:04,310 --> 01:31:02,880
that we are an employer of choice that

2362
01:31:06,390 --> 01:31:04,320
those young children that secretary

2363
01:31:08,470 --> 01:31:06,400

cardona talked about want to come to our

2364
01:31:10,390 --> 01:31:08,480
agencies and know that the impact that

2365
01:31:13,270 --> 01:31:10,400
they can have is powerful thank you

2366
01:31:15,669 --> 01:31:13,280
madam vice president thank you very much

2367
01:31:17,990 --> 01:31:15,679
and our last

2368
01:31:19,830 --> 01:31:18,000
panelist on this subject

2369
01:31:21,750 --> 01:31:19,840
is with the office of science and

2370
01:31:25,590 --> 01:31:21,760
technology she is the policy deputy

2371
01:31:28,070 --> 01:31:25,600
director dr alondra nelson and

2372
01:31:31,830 --> 01:31:28,080
if you can talk a bit about

2373
01:31:32,950 --> 01:31:31,840
how we can collaborate across

2374
01:31:34,229 --> 01:31:32,960
civil

2375
01:31:35,910 --> 01:31:34,239
commercial

2376
01:31:39,030 --> 01:31:35,920
government channels

2377
01:31:41,910 --> 01:31:39,040
in a way that is about recruiting a new

2378
01:31:43,430 --> 01:31:41,920
generation of diverse

2379
01:31:44,790 --> 01:31:43,440
and talented

2380
01:31:47,350 --> 01:31:44,800
folks that

2381
01:31:49,990 --> 01:31:47,360
that can also see a pathway in their

2382
01:31:52,229 --> 01:31:50,000
career for growth and for sustainability

2383
01:31:53,669 --> 01:31:52,239
can you talk a bit about that yes yes

2384
01:31:55,510 --> 01:31:53,679
thank you good afternoon madam vice

2385
01:31:57,270 --> 01:31:55,520
president and space council members and

2386
01:31:58,950 --> 01:31:57,280
all of you joining us i'm delighted to

2387
01:32:00,870 --> 01:31:58,960
be here to represent the office of

2388
01:32:03,590 --> 01:32:00,880

science and technology policy and our

2389
01:32:05,189 --> 01:32:03,600
director dr eric lander

2390
01:32:06,870 --> 01:32:05,199
thank you madam vice president for your

2391
01:32:08,870 --> 01:32:06,880
leadership and for your commitment to

2392
01:32:10,550 --> 01:32:08,880
making stem education and equity a core

2393
01:32:11,669 --> 01:32:10,560
part of the work of the national space

2394
01:32:13,270 --> 01:32:11,679
council

2395
01:32:15,430 --> 01:32:13,280
the united states is truly at an

2396
01:32:17,510 --> 01:32:15,440
inflection point the stakes are high but

2397
01:32:19,430 --> 01:32:17,520
the possibilities are endless and we

2398
01:32:21,350 --> 01:32:19,440
cannot afford to fail

2399
01:32:23,830 --> 01:32:21,360
it is crucial that everyone be able to

2400
01:32:26,550 --> 01:32:23,840
participate in and contribute to science

2401
01:32:28,310 --> 01:32:26,560
and technology because it's the bedrock

2402
01:32:30,790 --> 01:32:28,320
of new scientific and technological

2403
01:32:32,950 --> 01:32:30,800
insights it's how america remains

2404
01:32:34,390 --> 01:32:32,960
globally competitive and it is the right

2405
01:32:35,590 --> 01:32:34,400
thing to do

2406
01:32:37,669 --> 01:32:35,600
to keep leading

2407
01:32:39,669 --> 01:32:37,679
the world in pioneering technologies

2408
01:32:42,229 --> 01:32:39,679
industries and the jobs of the future we

2409
01:32:43,990 --> 01:32:42,239
need everyone on the team

2410
01:32:46,229 --> 01:32:44,000
we not only want to recruit technical

2411
01:32:48,470 --> 01:32:46,239
talent from across all of america we

2412
01:32:50,390 --> 01:32:48,480
want to equitably support their ability

2413
01:32:53,189 --> 01:32:50,400

to thrive and succeed in the next

2414
01:32:54,470 --> 01:32:53,199
generation of space exploration

2415
01:32:56,950 --> 01:32:54,480
as we heard

2416
01:32:58,790 --> 01:32:56,960
at ostp many times over the last few

2417
01:33:01,270 --> 01:32:58,800
months that we've engaged in our this

2418
01:33:03,189 --> 01:33:01,280
time is now round table series and a

2419
01:33:05,270 --> 01:33:03,199
public ideation challenge

2420
01:33:07,750 --> 01:33:05,280
the crucial subject of advancing equity

2421
01:33:10,070 --> 01:33:07,760
in science and technology includes

2422
01:33:11,990 --> 01:33:10,080
providing early and mid-career support

2423
01:33:13,510 --> 01:33:12,000
that meets the needs of scientists

2424
01:33:15,590 --> 01:33:13,520
technologies technologists and

2425
01:33:17,110 --> 01:33:15,600
researchers from all backgrounds

2426
01:33:19,189 --> 01:33:17,120
including those with caretaking

2427
01:33:21,430 --> 01:33:19,199
responsibilities those from rural

2428
01:33:23,510 --> 01:33:21,440
america those with different functional

2429
01:33:25,510 --> 01:33:23,520
abilities and those at the thousands of

2430
01:33:27,430 --> 01:33:25,520
community colleges historically black

2431
01:33:29,590 --> 01:33:27,440
colleges and universities and other

2432
01:33:32,629 --> 01:33:29,600
minority serving institutions that

2433
01:33:34,470 --> 01:33:32,639
educate students that look like america

2434
01:33:36,390 --> 01:33:34,480
we look forward to building these and

2435
01:33:38,870 --> 01:33:36,400
many other on-ramps and bridges

2436
01:33:41,110 --> 01:33:38,880
alongside the policy councils and stem

2437
01:33:42,790 --> 01:33:41,120
agencies represented at this meeting to

2438
01:33:43,990 --> 01:33:42,800

support the learners and innovators of

2439
01:33:45,910 --> 01:33:44,000
the future

2440
01:33:47,910 --> 01:33:45,920
as this council well knows the full

2441
01:33:50,229 --> 01:33:47,920
complement of technologies we need to

2442
01:33:51,189 --> 01:33:50,239
explore mars for example do not yet

2443
01:33:53,189 --> 01:33:51,199
exist

2444
01:33:55,430 --> 01:33:53,199
from suitable propulsion systems to

2445
01:33:58,390 --> 01:33:55,440
generative technologies that can support

2446
01:34:00,950 --> 01:33:58,400
nc2 development of structures and food

2447
01:34:02,830 --> 01:34:00,960
for extended visits to robust human

2448
01:34:05,510 --> 01:34:02,840
factors research

2449
01:34:07,430 --> 01:34:05,520
including equitable access to space and

2450
01:34:10,149 --> 01:34:07,440
inclusive space governance norms that

2451
01:34:12,550 --> 01:34:10,159
benefit all of humankind

2452
01:34:15,189 --> 01:34:12,560
by crafting a robust space strategy and

2453
01:34:17,430 --> 01:34:15,199
a space stem strategy that includes all

2454
01:34:19,510 --> 01:34:17,440
and invites collaboration across federal

2455
01:34:21,430 --> 01:34:19,520
agencies and with the private sector

2456
01:34:23,590 --> 01:34:21,440
including industry philanthropy and the

2457
01:34:25,510 --> 01:34:23,600
american public we can catalyze a

2458
01:34:27,669 --> 01:34:25,520
paradigm shift in how we uncover the

2459
01:34:29,590 --> 01:34:27,679
discoveries of tomorrow

2460
01:34:31,910 --> 01:34:29,600
nasa clearly has long pioneered

2461
01:34:33,430 --> 01:34:31,920
successful stem education programs and

2462
01:34:35,350 --> 01:34:33,440
provides really a foundation for the

2463
01:34:37,030 --> 01:34:35,360

work that we need to build on and

2464
01:34:39,110 --> 01:34:37,040
there's much more innovation that can

2465
01:34:40,390 --> 01:34:39,120
take place in the space of stem

2466
01:34:42,070 --> 01:34:40,400
education

2467
01:34:43,750 --> 01:34:42,080
for example there's an opportunity in

2468
01:34:45,669 --> 01:34:43,760
bridging educational and national

2469
01:34:47,990 --> 01:34:45,679
service initiatives such as the

2470
01:34:49,750 --> 01:34:48,000
establishment of scholarship for service

2471
01:34:51,910 --> 01:34:49,760
programs that can help foster a new

2472
01:34:53,669 --> 01:34:51,920
generation of leading scientists and

2473
01:34:55,270 --> 01:34:53,679
technologists and engage them in the

2474
01:34:57,189 --> 01:34:55,280
work of government

2475
01:34:59,510 --> 01:34:57,199
or the creation of fellowship programs

2476
01:35:01,590 --> 01:34:59,520
that offer bridging experiences across a

2477
01:35:03,270 --> 01:35:01,600
range of civil commercial national

2478
01:35:05,750 --> 01:35:03,280
security and international space

2479
01:35:07,830 --> 01:35:05,760
experiences as well as our federal space

2480
01:35:08,709 --> 01:35:07,840
research laboratories increasing the

2481
01:35:11,990 --> 01:35:08,719
sense of

2482
01:35:13,750 --> 01:35:12,000
participation in our national affairs

2483
01:35:15,910 --> 01:35:13,760
some of our most recent and successful

2484
01:35:18,149 --> 01:35:15,920
planetary missions reflect our highest

2485
01:35:20,070 --> 01:35:18,159
goals for ourselves towards which we

2486
01:35:22,870 --> 01:35:20,080
must continue to strive

2487
01:35:24,390 --> 01:35:22,880
perseverance curiosity spirit and

2488
01:35:26,870 --> 01:35:24,400

opportunity

2489
01:35:29,189 --> 01:35:26,880
indeed now is the time and this is truly

2490
01:35:30,550 --> 01:35:29,199
our opportunity to position america's

2491
01:35:32,149 --> 01:35:30,560
best resource

2492
01:35:34,629 --> 01:35:32,159
our people and their unparalleled

2493
01:35:37,030 --> 01:35:34,639
diversity and excellence for success in

2494
01:35:39,350 --> 01:35:37,040
the next generation of our space program

2495
01:35:41,270 --> 01:35:39,360
this is the work that ostp is honored to

2496
01:35:42,629 --> 01:35:41,280
do in partnership with all of you and we

2497
01:35:44,070 --> 01:35:42,639
look forward to working with the

2498
01:35:45,910 --> 01:35:44,080
national space council under your

2499
01:35:48,149 --> 01:35:45,920
leadership madam vice president to

2500
01:35:50,550 --> 01:35:48,159
advance this work

2501
01:35:53,510 --> 01:35:50,560
thank you so very much dr nelson and i

2502
01:35:56,390 --> 01:35:53,520
will tell you that president biden

2503
01:35:58,390 --> 01:35:56,400
and i share a great level of enthusiasm

2504
01:36:00,470 --> 01:35:58,400
about the work that is occurring out of

2505
01:36:02,310 --> 01:36:00,480
the office of science and technology and

2506
01:36:04,550 --> 01:36:02,320
please give our best to

2507
01:36:07,590 --> 01:36:04,560
dr lander uh

2508
01:36:08,830 --> 01:36:07,600
so on in conclusion about this panel uh

2509
01:36:11,669 --> 01:36:08,840
what has become

2510
01:36:13,430 --> 01:36:11,679
apparent on each panel

2511
01:36:15,669 --> 01:36:13,440
discussion is the

2512
01:36:16,950 --> 01:36:15,679
need for coordination but the overlap of

2513
01:36:19,910 --> 01:36:16,960

interest

2514
01:36:21,350 --> 01:36:19,920
as it relates to the work that we can do

2515
01:36:23,350 --> 01:36:21,360
from the civil sector from the

2516
01:36:25,990 --> 01:36:23,360
commercial sector from the government

2517
01:36:27,350 --> 01:36:26,000
sector and stem therefore is no

2518
01:36:28,229 --> 01:36:27,360
different

2519
01:36:30,790 --> 01:36:28,239
we

2520
01:36:32,470 --> 01:36:30,800
need stem across all of these sectors

2521
01:36:33,430 --> 01:36:32,480
and we have the capacity to actually

2522
01:36:35,910 --> 01:36:33,440
work

2523
01:36:38,310 --> 01:36:35,920
with these sectors to

2524
01:36:40,390 --> 01:36:38,320
to to achieve our common goal which is

2525
01:36:43,430 --> 01:36:40,400
to increase the workforce increase the

2526
01:36:45,350 --> 01:36:43,440
skill set and thereby increasing not

2527
01:36:47,830 --> 01:36:45,360
only human capacity of those individuals

2528
01:36:50,070 --> 01:36:47,840
who benefit from the education but

2529
01:36:53,270 --> 01:36:50,080
increase our nation's capacity to

2530
01:36:55,350 --> 01:36:53,280
actually uh innovate

2531
01:36:58,310 --> 01:36:55,360
so to that end i'm asking the office of

2532
01:36:59,270 --> 01:36:58,320
science and technology policy to lead an

2533
01:37:01,830 --> 01:36:59,280
effort

2534
01:37:04,950 --> 01:37:01,840
to address two things in particular one

2535
01:37:07,109 --> 01:37:04,960
how we can use space to inspire

2536
01:37:09,030 --> 01:37:07,119
new stem students

2537
01:37:12,229 --> 01:37:09,040
and to how

2538
01:37:14,790 --> 01:37:12,239

to identify how we can

2539
01:37:17,030 --> 01:37:14,800
and and how we must identify and then

2540
01:37:19,109 --> 01:37:17,040
reduce barriers

2541
01:37:21,189 --> 01:37:19,119
uh to entering and staying in the space

2542
01:37:22,950 --> 01:37:21,199
workforce so these are two of the

2543
01:37:24,709 --> 01:37:22,960
charges that we have issued to the

2544
01:37:25,990 --> 01:37:24,719
office of science and technology policy

2545
01:37:27,350 --> 01:37:26,000
and we look forward to the results of

2546
01:37:29,750 --> 01:37:27,360
that work

2547
01:37:32,070 --> 01:37:29,760
the space council staff and the national

2548
01:37:33,270 --> 01:37:32,080
security council have also agreed to

2549
01:37:36,310 --> 01:37:33,280
examine

2550
01:37:38,950 --> 01:37:36,320
existing and proposed stem education

2551
01:37:41,590 --> 01:37:38,960
initiatives including specifically and

2552
01:37:44,470 --> 01:37:41,600
i'm particularly interested in this the

2553
01:37:46,709 --> 01:37:44,480
potential to modernize the national

2554
01:37:49,430 --> 01:37:46,719
defense education act

2555
01:37:52,070 --> 01:37:49,440
in a way that we can develop a skilled

2556
01:37:53,590 --> 01:37:52,080
space workforce to

2557
01:37:55,669 --> 01:37:53,600
do a number of things including strength

2558
01:37:57,910 --> 01:37:55,679
in our national defense so we look

2559
01:37:59,669 --> 01:37:57,920
forward to the work that will occur in

2560
01:38:02,390 --> 01:37:59,679
that regard

2561
01:38:04,709 --> 01:38:02,400
with that i would like to invite admiral

2562
01:38:07,030 --> 01:38:04,719
james ellis

2563
01:38:10,950 --> 01:38:07,040

to say a few words on behalf of the

2564
01:38:13,109 --> 01:38:10,960
users advisory group and i believe

2565
01:38:15,510 --> 01:38:13,119
there you are

2566
01:38:17,750 --> 01:38:15,520
the users advisory group

2567
01:38:19,590 --> 01:38:17,760
consists of commercial academic and

2568
01:38:22,629 --> 01:38:19,600
other non-federal entities to provide

2569
01:38:26,310 --> 01:38:22,639
the national space council advice on all

2570
01:38:28,149 --> 01:38:26,320
matters of space and admiral ellis

2571
01:38:29,270 --> 01:38:28,159
based on your experience having been the

2572
01:38:32,149 --> 01:38:29,280
chair

2573
01:38:33,910 --> 01:38:32,159
of of the advisory group

2574
01:38:35,430 --> 01:38:33,920
i'd appreciate any

2575
01:38:37,910 --> 01:38:35,440
words that you can offer in terms of

2576
01:38:39,750 --> 01:38:37,920
your perspective on how the advisory

2577
01:38:41,430 --> 01:38:39,760
group can support what we have discussed

2578
01:38:43,109 --> 01:38:41,440
this afternoon

2579
01:38:44,709 --> 01:38:43,119
vice president

2580
01:38:46,629 --> 01:38:44,719
chair of the national space council and

2581
01:38:47,830 --> 01:38:46,639
distinguished members of this important

2582
01:38:49,350 --> 01:38:47,840
body

2583
01:38:51,270 --> 01:38:49,360
i appreciate your giving me the

2584
01:38:53,830 --> 01:38:51,280
opportunity to provide an update on the

2585
01:38:55,830 --> 01:38:53,840
activities of your users advisory group

2586
01:38:57,430 --> 01:38:55,840
as you conclude this your inaugural

2587
01:38:59,430 --> 01:38:57,440
meeting

2588
01:39:01,750 --> 01:38:59,440

the users advisory group was created by

2589
01:39:03,590 --> 01:39:01,760
enabling legislation in order to provide

2590
01:39:05,590 --> 01:39:03,600
an independent voice in the shaping of

2591
01:39:07,669 --> 01:39:05,600
national space policy

2592
01:39:08,790 --> 01:39:07,679
to all those who facilitate the use of

2593
01:39:10,709 --> 01:39:08,800
space

2594
01:39:12,709 --> 01:39:10,719
employ its benefits

2595
01:39:15,350 --> 01:39:12,719
promote its security

2596
01:39:17,189 --> 01:39:15,360
or inspired by the cosmos in all its

2597
01:39:18,709 --> 01:39:17,199
dimensions

2598
01:39:20,550 --> 01:39:18,719
as we approach the end of our second

2599
01:39:22,550 --> 01:39:20,560
term it will not surprise you to see

2600
01:39:25,430 --> 01:39:22,560
that much of what we have undertaken

2601
01:39:27,270 --> 01:39:25,440
over these last three years matches many

2602
01:39:29,669 --> 01:39:27,280
of the issues that you've highlighted in

2603
01:39:31,030 --> 01:39:29,679
today's discussions

2604
01:39:32,790 --> 01:39:31,040
our exploration and discovery

2605
01:39:34,229 --> 01:39:32,800
subcommittee has been primarily focused

2606
01:39:36,709 --> 01:39:34,239
on reviewing and understanding the

2607
01:39:38,790 --> 01:39:36,719
proposed lunar architecture for a return

2608
01:39:41,669 --> 01:39:38,800
mission to the moon and the further

2609
01:39:43,510 --> 01:39:41,679
objective of going on to mars

2610
01:39:45,830 --> 01:39:43,520
the economic development and industrial

2611
01:39:47,910 --> 01:39:45,840
base subcommittee is focused jointly on

2612
01:39:49,990 --> 01:39:47,920
the economic and security aspects of

2613
01:39:51,910 --> 01:39:50,000

near-earth operations such as the

2614
01:39:54,550 --> 01:39:51,920
international space station and

2615
01:39:56,629 --> 01:39:54,560
potential follow-on capabilities we've

2616
01:39:59,270 --> 01:39:56,639
also focused on the stresses imposed on

2617
01:40:03,990 --> 01:39:59,280
the u.s aerospace industrial base

2618
01:40:05,350 --> 01:40:04,000
and its workers by the kovit 19 pandemic

2619
01:40:08,229 --> 01:40:05,360
the technology and innovation

2620
01:40:11,109 --> 01:40:08,239
subcommittee explored three focus areas

2621
01:40:13,830 --> 01:40:11,119
critical space technology road maps

2622
01:40:16,870 --> 01:40:13,840
space traffic management proposals

2623
01:40:20,830 --> 01:40:16,880
and the security of and confidence in

2624
01:40:23,109 --> 01:40:20,840
both space derived and space related

2625
01:40:24,870 --> 01:40:23,119
data the education and outreach

2626
01:40:26,390 --> 01:40:24,880
subcommittee explored ways to improve

2627
01:40:28,310 --> 01:40:26,400
our country's education system in

2628
01:40:30,470 --> 01:40:28,320
support of continuing american

2629
01:40:32,149 --> 01:40:30,480
preeminence in space

2630
01:40:33,830 --> 01:40:32,159
the subcommittee received input from

2631
01:40:34,950 --> 01:40:33,840
across the field of education and

2632
01:40:36,629 --> 01:40:34,960
training

2633
01:40:37,830 --> 01:40:36,639
with special focus on underserved

2634
01:40:39,430 --> 01:40:37,840
communities

2635
01:40:40,709 --> 01:40:39,440
historically black colleges and

2636
01:40:44,470 --> 01:40:40,719
universities

2637
01:40:45,830 --> 01:40:44,480
and stem education-focused non-profits

2638
01:40:48,070 --> 01:40:45,840

the subcommittee made several

2639
01:40:49,750 --> 01:40:48,080
recommendations including the addition

2640
01:40:52,149 --> 01:40:49,760
of the secretary of education to the

2641
01:40:54,629 --> 01:40:52,159
national space council and we note with

2642
01:40:56,390 --> 01:40:54,639
pleasure your recent actions to do just

2643
01:40:57,990 --> 01:40:56,400
that

2644
01:40:59,830 --> 01:40:58,000
the space policy and international

2645
01:41:03,030 --> 01:40:59,840
engagement subcommittee of the uag

2646
01:41:04,790 --> 01:41:03,040
explored how best to sustain and advance

2647
01:41:05,990 --> 01:41:04,800
u.s leadership in the global space

2648
01:41:07,750 --> 01:41:06,000
enterprise

2649
01:41:09,109 --> 01:41:07,760
by building effective and collaborative

2650
01:41:11,669 --> 01:41:09,119
relationships

2651
01:41:13,750 --> 01:41:11,679
among more than 100 space-faring and

2652
01:41:15,990 --> 01:41:13,760
space-reliant nations

2653
01:41:18,709 --> 01:41:16,000
while at the same time recognizing that

2654
01:41:20,070 --> 01:41:18,719
we must have policy guidelines and norms

2655
01:41:22,310 --> 01:41:20,080
of behavior

2656
01:41:25,109 --> 01:41:22,320
to deal with states that pursue a less

2657
01:41:28,629 --> 01:41:25,119
aligned extremely aggressive or

2658
01:41:30,709 --> 01:41:28,639
adversarial ideology

2659
01:41:32,310 --> 01:41:30,719
finally madam vice president and as you

2660
01:41:33,350 --> 01:41:32,320
and your council members have already

2661
01:41:34,950 --> 01:41:33,360
noted

2662
01:41:36,950 --> 01:41:34,960
the national security and economic

2663
01:41:39,510 --> 01:41:36,960

prosperity of the united states are

2664
01:41:41,990 --> 01:41:39,520
inextricably linked to space

2665
01:41:44,310 --> 01:41:42,000
but the technological advances in

2666
01:41:47,270 --> 01:41:44,320
and increase national security reliance

2667
01:41:49,750 --> 01:41:47,280
on space systems must be matched by

2668
01:41:53,350 --> 01:41:49,760
coherent supporting capabilities and

2669
01:41:55,430 --> 01:41:53,360
clearly articulated national policies

2670
01:41:58,629 --> 01:41:55,440
the national security subcommittee of

2671
01:42:01,109 --> 01:41:58,639
the uag and other less public classified

2672
01:42:03,189 --> 01:42:01,119
conversations offered what we believe

2673
01:42:05,030 --> 01:42:03,199
were constructive refinements as the

2674
01:42:07,669 --> 01:42:05,040
nation has begun to appropriately

2675
01:42:11,590 --> 01:42:07,679
reshape its national security space

2676
01:42:13,590 --> 01:42:11,600
organizations and capabilities

2677
01:42:15,669 --> 01:42:13,600
in closing madam vice president i want

2678
01:42:17,990 --> 01:42:15,679
to thank you on behalf of all of the

2679
01:42:19,910 --> 01:42:18,000
members of the users advisory group for

2680
01:42:21,350 --> 01:42:19,920
the opportunity to serve your national

2681
01:42:23,270 --> 01:42:21,360
space council

2682
01:42:24,390 --> 01:42:23,280
and for the support we have unfailingly

2683
01:42:25,830 --> 01:42:24,400
received

2684
01:42:28,870 --> 01:42:25,840
from the national space council

2685
01:42:30,470 --> 01:42:28,880
executive secretary now chirag parikh

2686
01:42:32,390 --> 01:42:30,480
and his team

2687
01:42:34,149 --> 01:42:32,400
i also want to publicly acknowledge the

2688
01:42:37,189 --> 01:42:34,159

exceptional contributions over these

2689
01:42:39,669 --> 01:42:37,199
past three years of our supporting nasa

2690
01:42:44,470 --> 01:42:39,679
designated federal officers led by our

2691
01:42:46,709 --> 01:42:44,480
uag executive secretary mr j.j miller

2692
01:42:49,030 --> 01:42:46,719
finally i especially commend to you the

2693
01:42:50,229 --> 01:42:49,040
service of the six uag subcommittee

2694
01:42:52,790 --> 01:42:50,239
chairs

2695
01:42:54,950 --> 01:42:52,800
my full partners in this journey

2696
01:42:57,030 --> 01:42:54,960
time does not permit me to list their

2697
01:42:59,350 --> 01:42:57,040
names but each of them gave generously

2698
01:43:01,590 --> 01:42:59,360
of their time and talent to shepherd our

2699
01:43:03,430 --> 01:43:01,600
collective efforts

2700
01:43:06,229 --> 01:43:03,440
they began as trusted colleagues and

2701
01:43:09,030 --> 01:43:06,239
became true friends along the way

2702
01:43:11,669 --> 01:43:09,040
all of them exemplifying gandhi's words

2703
01:43:14,149 --> 01:43:11,679
that the best way to find yourself

2704
01:43:15,910 --> 01:43:14,159
is to lose yourself in the service of

2705
01:43:17,990 --> 01:43:15,920
others

2706
01:43:19,590 --> 01:43:18,000
madam vice president the last few years

2707
01:43:21,669 --> 01:43:19,600
have brought a new energy

2708
01:43:22,870 --> 01:43:21,679
and a new vitality to the space

2709
01:43:24,790 --> 01:43:22,880
community

2710
01:43:26,550 --> 01:43:24,800
we appreciate the focus that you and the

2711
01:43:29,270 --> 01:43:26,560
national space council bring to our

2712
01:43:30,550 --> 01:43:29,280
nation's role in space and as an

2713
01:43:31,910 --> 01:43:30,560

organization

2714
01:43:33,590 --> 01:43:31,920
we look forward to innovatively

2715
01:43:35,830 --> 01:43:33,600
supporting your efforts

2716
01:43:38,709 --> 01:43:35,840
as you confront both challenges and

2717
01:43:41,750 --> 01:43:38,719
opportunities in defining the future of

2718
01:43:45,189 --> 01:43:41,760
the nation's space enterprise thank you

2719
01:43:47,109 --> 01:43:45,199
thank you very much thank you admiral

2720
01:43:49,590 --> 01:43:47,119
well we have concluded the business of

2721
01:43:51,030 --> 01:43:49,600
this meeting again as our inaugural

2722
01:43:53,189 --> 01:43:51,040
meeting with

2723
01:43:54,950 --> 01:43:53,199
many areas of priority three of which

2724
01:43:57,510 --> 01:43:54,960
have been discussed this afternoon but

2725
01:43:59,350 --> 01:43:57,520
many more which we will discuss publicly

2726
01:44:01,270 --> 01:43:59,360
and as a council

2727
01:44:02,470 --> 01:44:01,280
over the coming days weeks and months

2728
01:44:04,390 --> 01:44:02,480
ahead

2729
01:44:08,470 --> 01:44:04,400
i do want to thank all of the members of

2730
01:44:10,790 --> 01:44:08,480
the president's cabinet you each take on

2731
01:44:12,470 --> 01:44:10,800
so many challenges

2732
01:44:15,910 --> 01:44:12,480
in these days of

2733
01:44:18,310 --> 01:44:15,920
various priorities and and crises and

2734
01:44:21,109 --> 01:44:18,320
yet you continue

2735
01:44:22,229 --> 01:44:21,119
to innovate you continue to see what is

2736
01:44:23,590 --> 01:44:22,239
possible

2737
01:44:26,390 --> 01:44:23,600
beyond the

2738
01:44:28,070 --> 01:44:26,400

the needs of of a particular moment but

2739
01:44:30,709 --> 01:44:28,080
what we can do to invest in the future

2740
01:44:31,830 --> 01:44:30,719
of our nation and in your capacity of

2741
01:44:34,709 --> 01:44:31,840
leadership

2742
01:44:36,790 --> 01:44:34,719
you inspire me i think you inspire

2743
01:44:39,030 --> 01:44:36,800
so many people not only in your agencies

2744
01:44:41,109 --> 01:44:39,040
but in our country about what

2745
01:44:43,510 --> 01:44:41,119
we as the united states

2746
01:44:45,910 --> 01:44:43,520
do in our role of leadership

2747
01:44:47,830 --> 01:44:45,920
not only for the people of our country

2748
01:44:49,910 --> 01:44:47,840
but the people of the world and so i

2749
01:44:51,910 --> 01:44:49,920
want to thank you each for the time that

2750
01:44:54,229 --> 01:44:51,920
you and your staffs have put in

2751
01:44:55,270 --> 01:44:54,239
to the framework that we are unveiling

2752
01:44:57,830 --> 01:44:55,280
today

2753
01:45:00,390 --> 01:44:57,840
and the commitments we are making going

2754
01:45:02,470 --> 01:45:00,400
forward and with that we will conclude

2755
01:45:04,229 --> 01:45:02,480
this meeting i thank you all for being a

2756
01:45:10,620 --> 01:45:04,239
part of this and i look forward to our

2757
01:45:14,880 --> 01:45:13,230
[Applause]

2758
01:45:27,590 --> 01:45:14,890
[Music]

2759
01:45:27,600 --> 01:45:33,510
murder

2760
01:45:36,950 --> 01:45:34,950
that we are always

2761
01:45:38,470 --> 01:45:36,960
focused on the public health and the

2762
01:45:39,669 --> 01:45:38,480
health and well-being of the american

2763
01:45:44,229 --> 01:45:39,679

people and we will continue to

2764
01:45:44,239 --> 01:46:00,250
thank you