



1
00:01:04,360 --> 00:00:31,680

[Music]

2
00:01:08,230 --> 00:01:06,550

[Applause]

3
00:01:09,830 --> 00:01:08,240

good afternoon

4
00:01:11,990 --> 00:01:09,840

thank you for joining us for this nasa

5
00:01:14,710 --> 00:01:12,000

town hall i am nasa astronaut nicole

6
00:01:16,310 --> 00:01:14,720

mann we are here to discuss the exciting

7
00:01:18,310 --> 00:01:16,320

announcement nasa leadership made this

8
00:01:20,230 --> 00:01:18,320

morning the changes announced this

9
00:01:22,469 --> 00:01:20,240

morning for nasa's human space flight

10
00:01:24,390 --> 00:01:22,479

programs will set the agency up for the

11
00:01:26,469 --> 00:01:24,400

next 20 years

12
00:01:28,950 --> 00:01:26,479

on behalf of the astronaut office we are

13
00:01:31,350 --> 00:01:28,960

excited to join you in this announcement

14

00:01:33,190 --> 00:01:31,360

for me personally this is a huge

15

00:01:33,990 --> 00:01:33,200

indication of the progress that we've

16

00:01:35,910 --> 00:01:34,000

made

17

00:01:38,149 --> 00:01:35,920

not only with increased operations in

18

00:01:39,990 --> 00:01:38,159

low earth orbit but the development of

19

00:01:41,429 --> 00:01:40,000

our missions to the moon under the

20

00:01:42,870 --> 00:01:41,439

artemis program

21

00:01:45,429 --> 00:01:42,880

now i know we're all excited to hear

22

00:01:47,510 --> 00:01:45,439

guidance from our leadership so without

23

00:01:51,180 --> 00:01:47,520

further ado i'll turn it over to nasa

24

00:01:54,230 --> 00:01:51,190

administrator bill nelson

25

00:01:56,870 --> 00:01:54,240

[Applause]

26

00:02:00,550 --> 00:01:56,880

good afternoon

27

00:02:04,469 --> 00:02:00,560

nessa turned science fiction

28

00:02:08,949 --> 00:02:04,479

into science fact

29

00:02:12,150 --> 00:02:08,959

in science in math and technology

30

00:02:15,030 --> 00:02:12,160

and thank you for your part

31

00:02:17,670 --> 00:02:15,040

of all of this accomplishment and what

32

00:02:19,830 --> 00:02:17,680

we endeavor to do as part of the nasa

33

00:02:22,390 --> 00:02:19,840

family

34

00:02:24,390 --> 00:02:22,400

adventurers and explorers reach the

35

00:02:27,589 --> 00:02:24,400

heavens

36

00:02:30,630 --> 00:02:27,599

scientists mathematicians intelligence

37

00:02:32,070 --> 00:02:30,640

make a breakthrough discovery and

38

00:02:35,430 --> 00:02:32,080

discoveries

39

00:02:39,830 --> 00:02:35,440
and technological advancements

40

00:02:41,830 --> 00:02:39,840
the nasa family helps humanity every day

41

00:02:44,630 --> 00:02:41,840
in 2010

42

00:02:49,430 --> 00:02:44,640
senator kay bailey hutchinson and i

43

00:02:50,790 --> 00:02:49,440
along with the obama biden white house

44

00:02:54,309 --> 00:02:50,800
we chartered

45

00:02:56,630 --> 00:02:54,319
a new path for nasa it was a dual track

46

00:02:59,750 --> 00:02:56,640
approach

47

00:03:02,470 --> 00:02:59,760
nasa would buy services in low earth

48

00:03:05,990 --> 00:03:02,480
orbit from commercial companies

49

00:03:09,350 --> 00:03:06,000
and set nasa's eyes on exploration

50

00:03:12,470 --> 00:03:09,360
farther out into the cosmos

51
00:03:15,110 --> 00:03:12,480
and since then we've seen unprecedented

52
00:03:16,869 --> 00:03:15,120
investment in the low earth orbit

53
00:03:18,869 --> 00:03:16,879
economy

54
00:03:21,670 --> 00:03:18,879
a decade ago

55
00:03:24,869 --> 00:03:21,680
the commercial crew and cargo program

56
00:03:26,229 --> 00:03:24,879
sit so far off but the proof's in the

57
00:03:29,270 --> 00:03:26,239
pudding

58
00:03:31,990 --> 00:03:29,280
just last week we saw the launch

59
00:03:33,030 --> 00:03:32,000
of the first all-private mission to

60
00:03:35,030 --> 00:03:33,040
space

61
00:03:38,070 --> 00:03:35,040
and not to mention the incredible

62
00:03:41,910 --> 00:03:38,080
achievements that teams across nasa

63
00:03:43,750 --> 00:03:41,920

have made on our exploration plans

64

00:03:45,190 --> 00:03:43,760

on sls

65

00:03:46,949 --> 00:03:45,200

orion

66

00:03:49,430 --> 00:03:46,959

and the exploration

67

00:03:54,710 --> 00:03:49,440

systems

68

00:03:57,350 --> 00:03:54,720

artemis one is nearly ready for launch

69

00:04:01,270 --> 00:03:57,360

teams have been working overtime kennedy

70

00:04:04,309 --> 00:04:01,280

to ensure that mission success

71

00:04:07,990 --> 00:04:04,319

and all this growth has led our human

72

00:04:11,670 --> 00:04:08,000

operations and exploration minister

73

00:04:14,390 --> 00:04:11,680

to grow substantially

74

00:04:16,949 --> 00:04:14,400

our human space flight programs in low

75

00:04:19,670 --> 00:04:16,959

earth orbit and development programs for

76

00:04:22,069 --> 00:04:19,680

deep space exploration

77

00:04:24,950 --> 00:04:22,079

all of this counts for nearly half of

78

00:04:28,310 --> 00:04:24,960

nasa's entire budget

79

00:04:31,749 --> 00:04:28,320

and so we've gathered here today to

80

00:04:35,110 --> 00:04:31,759

announce a modification

81

00:04:38,469 --> 00:04:35,120

going forward we will reorganize the

82

00:04:39,830 --> 00:04:38,479

agency's human spaceflight programs

83

00:04:43,350 --> 00:04:39,840

into two

84

00:04:45,189 --> 00:04:43,360

separate mission directorates

85

00:04:49,110 --> 00:04:45,199

effective immediately

86

00:04:51,270 --> 00:04:49,120

we are working to create the exploration

87

00:04:52,390 --> 00:04:51,280

systems development

88

00:04:54,950 --> 00:04:52,400

mission

89

00:04:57,990 --> 00:04:54,960

directorate

90

00:05:00,150 --> 00:04:58,000

uh jordan that expiration missions

91

00:05:02,710 --> 00:05:00,160

directorate and

92

00:05:05,350 --> 00:05:02,720

the space operations

93

00:05:06,870 --> 00:05:05,360

mission directorate

94

00:05:09,990 --> 00:05:06,880

spaceops

95

00:05:12,469 --> 00:05:10,000

will carry out space exploration

96

00:05:15,270 --> 00:05:12,479

research technology

97

00:05:17,670 --> 00:05:15,280

demonstrations of that technology

98

00:05:21,830 --> 00:05:17,680

space economy development

99

00:05:30,310 --> 00:05:25,749

exploration systems development

100

00:05:32,950 --> 00:05:30,320

will focus on what comes next

101
00:05:35,430 --> 00:05:32,960
both mission directorates

102
00:05:38,310 --> 00:05:35,440
are engineering the future of our moon

103
00:05:40,710 --> 00:05:38,320
to mars exploration approach from

104
00:05:43,189 --> 00:05:40,720
different ends of the space flight

105
00:05:45,990 --> 00:05:43,199
continuum

106
00:05:48,469 --> 00:05:46,000
this reorganization is about the future

107
00:05:50,469 --> 00:05:48,479
of space exploration

108
00:05:54,230 --> 00:05:50,479
it's about setting up

109
00:05:58,150 --> 00:05:56,230
creating two separate mission

110
00:06:00,790 --> 00:05:58,160
directorates

111
00:06:03,830 --> 00:06:00,800
ensures these critical areas have

112
00:06:07,029 --> 00:06:03,840
focused oversight

113
00:06:09,510 --> 00:06:07,039

both teams will support and execute for

114

00:06:12,790 --> 00:06:09,520

mission success

115

00:06:16,469 --> 00:06:12,800

and i have great confidence

116

00:06:19,430 --> 00:06:16,479

in kathy leaders and jim free

117

00:06:22,710 --> 00:06:19,440

they are the right people to lead these

118

00:06:25,590 --> 00:06:22,720

new mission directorates

119

00:06:27,590 --> 00:06:25,600

but today is more than an organizational

120

00:06:30,390 --> 00:06:27,600

change

121

00:06:32,390 --> 00:06:30,400

it's setting the stage for the next 20

122

00:06:35,430 --> 00:06:32,400

years

123

00:06:39,110 --> 00:06:35,440

it's defining nasa's future

124

00:06:43,029 --> 00:06:39,120

in a growing space economy

125

00:06:47,590 --> 00:06:43,039

it's maintaining leadership in space

126

00:06:51,749 --> 00:06:47,600

that it's a top priority for our agency

127

00:06:57,029 --> 00:06:55,189

this is how we lead

128

00:06:59,670 --> 00:06:57,039

we evolve

129

00:07:02,870 --> 00:06:59,680

by how we work

130

00:07:05,270 --> 00:07:02,880

we carry out our missions here on earth

131

00:07:07,110 --> 00:07:05,280

in low earth orbit

132

00:07:08,950 --> 00:07:07,120

at the moon

133

00:07:11,589 --> 00:07:08,960

at mars

134

00:07:15,029 --> 00:07:11,599

and beyond

135

00:07:17,830 --> 00:07:15,039

today nasa is the world's premier space

136

00:07:20,230 --> 00:07:17,840

agency there's no doubt about it let us

137

00:07:22,629 --> 00:07:20,240

strengthen it

138

00:07:25,430 --> 00:07:22,639

let us ensure the next generation of

139

00:07:26,710 --> 00:07:25,440

trailblazers and pioneers

140

00:07:32,070 --> 00:07:26,720

inherit

141

00:07:35,909 --> 00:07:34,469

the future is there

142

00:07:38,230 --> 00:07:35,919

it's for us

143

00:07:41,430 --> 00:07:38,240

to grasp

144

00:07:44,309 --> 00:07:41,440

onward and upward

145

00:07:46,150 --> 00:07:44,319

and i thank you for joining us in this

146

00:07:48,790 --> 00:07:46,160

town hall meeting

147

00:07:53,589 --> 00:07:48,800

i want to hand it over

148

00:07:57,980 --> 00:07:53,599

to a great deputy administrator

149

00:08:03,270 --> 00:07:57,990

shuttle commander pam melroy

150

00:08:05,350 --> 00:08:03,280

[Applause]

151
00:08:07,510 --> 00:08:05,360
thank you sir

152
00:08:10,070 --> 00:08:07,520
i want to underscore that this decision

153
00:08:12,469 --> 00:08:10,080
reflection of the incredible impact the

154
00:08:13,749 --> 00:08:12,479
nasa workforce has had over the past

155
00:08:16,390 --> 00:08:13,759
decade

156
00:08:18,710 --> 00:08:16,400
as the administrator described

157
00:08:21,830 --> 00:08:18,720
nasa has been wildly successful in

158
00:08:23,909 --> 00:08:21,840
stimulating a commercial space economy

159
00:08:27,270 --> 00:08:23,919
and much like a company that's growing

160
00:08:29,749 --> 00:08:27,280
in budget scope and vision

161
00:08:31,830 --> 00:08:29,759
we must adapt and restructure

162
00:08:33,990 --> 00:08:31,840
to facilitate and accommodate that

163
00:08:36,870 --> 00:08:34,000

growth

164

00:08:39,589 --> 00:08:36,880

for decades nasa had one human space

165

00:08:41,110 --> 00:08:39,599

flight program the space shuttle

166

00:08:43,350 --> 00:08:41,120

and we had two

167

00:08:45,509 --> 00:08:43,360

we built the space station and handed

168

00:08:48,389 --> 00:08:45,519

over to that

169

00:08:50,389 --> 00:08:48,399

now we're developing a train of

170

00:08:53,750 --> 00:08:50,399

technological innovation

171

00:08:55,590 --> 00:08:53,760

that stretches all the way to mars

172

00:08:57,750 --> 00:08:55,600

we already have multiple projects

173

00:09:00,630 --> 00:08:57,760

underway that support arms

174

00:09:03,670 --> 00:09:00,640

sls orion egs

175

00:09:05,910 --> 00:09:03,680

gateway next generation suits and then

176

00:09:09,190 --> 00:09:05,920

the human lander system

177

00:09:12,230 --> 00:09:09,200

and coming we have more programs leading

178

00:09:15,750 --> 00:09:12,240

to a sustained presence on the moon and

179

00:09:17,670 --> 00:09:15,760

mars that will require development

180

00:09:20,150 --> 00:09:17,680

the exploration systems development

181

00:09:23,190 --> 00:09:20,160

directorate will own that architecture

182

00:09:26,389 --> 00:09:23,200

for moon to mars and be responsible for

183

00:09:29,750 --> 00:09:26,399

the systems development portion of each

184

00:09:33,030 --> 00:09:29,760

capability of that architecture

185

00:09:34,310 --> 00:09:33,040

space operations will focus on the safe

186

00:09:36,949 --> 00:09:34,320

operation

187

00:09:39,030 --> 00:09:36,959

of our current leo systems

188

00:09:41,910 --> 00:09:39,040

and future systems

189

00:09:44,230 --> 00:09:41,920

as they complete developmental test and

190

00:09:46,310 --> 00:09:44,240

evaluation

191

00:09:47,829 --> 00:09:46,320

that includes completing commercial crew

192

00:09:50,870 --> 00:09:47,839

certification

193

00:09:54,550 --> 00:09:50,880

the commercialization of leo supporting

194

00:09:55,829 --> 00:09:54,560

the eventual commercial follow-on to iss

195

00:09:59,190 --> 00:09:55,839

and of course

196

00:10:01,190 --> 00:09:59,200

supporting exploration operations

197

00:10:03,030 --> 00:10:01,200

the restructuring of nasa's human

198

00:10:05,829 --> 00:10:03,040

exploration and operations mission

199

00:10:09,269 --> 00:10:05,839

directorates will help us safely and

200

00:10:11,350 --> 00:10:09,279

effectively manage this growth in scope

201
00:10:13,509 --> 00:10:11,360
we have the opportunity to better align

202
00:10:16,069 --> 00:10:13,519
our organization structure with

203
00:10:17,670 --> 00:10:16,079
increasing activities in leo and with

204
00:10:19,110 --> 00:10:17,680
our developmental exploration

205
00:10:21,509 --> 00:10:19,120
architecture

206
00:10:23,670 --> 00:10:21,519
and ensure the workforce has a focused

207
00:10:27,190 --> 00:10:23,680
oversight team in place

208
00:10:29,430 --> 00:10:27,200
to execute for mission success

209
00:10:31,509 --> 00:10:29,440
nasa has a history of setting ambitious

210
00:10:33,269 --> 00:10:31,519
goals and then accomplishing them

211
00:10:36,310 --> 00:10:33,279
reflecting our nation's commitment to

212
00:10:39,269 --> 00:10:36,320
discovery and innovation

213
00:10:40,630 --> 00:10:39,279

putting humans on mars for scientific

214

00:10:43,670 --> 00:10:40,640

exploration

215

00:10:45,030 --> 00:10:43,680

is that next big goal

216

00:10:47,509 --> 00:10:45,040

this decision

217

00:10:50,550 --> 00:10:47,519

and reorganization will step up for the

218

00:10:52,150 --> 00:10:50,560

next 20 years and beyond

219

00:10:53,990 --> 00:10:52,160

in the past decade we've seen what

220

00:10:55,269 --> 00:10:54,000

happens when nasa sets the vision for

221

00:10:57,590 --> 00:10:55,279

the future

222

00:10:59,430 --> 00:10:57,600

we get incredible innovation

223

00:11:00,790 --> 00:10:59,440

incredible gains for our nation's

224

00:11:04,310 --> 00:11:00,800

economy

225

00:11:08,470 --> 00:11:06,550

this is what the future will look like

226
00:11:09,430 --> 00:11:08,480
commercial space stations in low earth

227
00:11:11,350 --> 00:11:09,440
orbit

228
00:11:14,550 --> 00:11:11,360
building on the world-class research and

229
00:11:17,350 --> 00:11:14,560
development legacy of the iss

230
00:11:18,550 --> 00:11:17,360
a sustainable infrastructure around and

231
00:11:20,230 --> 00:11:18,560
on the moon

232
00:11:22,310 --> 00:11:20,240
where astronauts will carry out

233
00:11:25,430 --> 00:11:22,320
groundbreaking science that will enable

234
00:11:26,870 --> 00:11:25,440
us to live and work on another celestial

235
00:11:29,750 --> 00:11:26,880
body

236
00:11:32,870 --> 00:11:29,760
next generation suits communications

237
00:11:33,990 --> 00:11:32,880
power systems a moon base camp lunar

238
00:11:36,550 --> 00:11:34,000

rovers

239

00:11:38,150 --> 00:11:36,560

and ultimately humans on a transport

240

00:11:40,150 --> 00:11:38,160

vehicle to mars

241

00:11:42,949 --> 00:11:40,160

where we can replicate those lunar

242

00:11:44,870 --> 00:11:42,959

capabilities for science

243

00:11:48,550 --> 00:11:44,880

humans will study the history of the red

244

00:11:50,870 --> 00:11:48,560

planet and take that next giant leap in

245

00:11:53,430 --> 00:11:50,880

uncovering the mysteries of the universe

246

00:11:54,870 --> 00:11:53,440

and our place within it

247

00:11:57,269 --> 00:11:54,880

i want to thank you all for your

248

00:11:59,590 --> 00:11:57,279

incredible work here at nasa

249

00:12:01,350 --> 00:11:59,600

and now we take the next step to set

250

00:12:03,030 --> 00:12:01,360

ourselves up for success over the next

251
00:12:04,389 --> 00:12:03,040
two decades

252
00:12:07,350 --> 00:12:04,399
i know you'll all have a lot of

253
00:12:09,910 --> 00:12:07,360
questions about what this means for you

254
00:12:11,990 --> 00:12:09,920
but now i'd like to hand it over to our

255
00:12:13,590 --> 00:12:12,000
wonderful associate administrator bob

256
00:12:16,550 --> 00:12:13,600
bana

257
00:12:21,350 --> 00:12:18,870
[Applause]

258
00:12:23,430 --> 00:12:21,360
thank you pam and uh first off i just

259
00:12:25,430 --> 00:12:23,440
got to say how honored i am to be part

260
00:12:27,269 --> 00:12:25,440
of this amazing team

261
00:12:28,949 --> 00:12:27,279
you know

262
00:12:31,509 --> 00:12:28,959
the work our human exploration team

263
00:12:33,350 --> 00:12:31,519

continues to deliver every day

264

00:12:35,430 --> 00:12:33,360

from groundbreaking research aboard the

265

00:12:37,509 --> 00:12:35,440

international space station to test

266

00:12:39,910 --> 00:12:37,519

flights and crew rotation missions with

267

00:12:41,990 --> 00:12:39,920

the commercial crew program

268

00:12:43,590 --> 00:12:42,000

as well as the stacking and verification

269

00:12:45,430 --> 00:12:43,600

of the artemis one systems in the

270

00:12:47,750 --> 00:12:45,440

vehicle assembly building i don't know

271

00:12:50,790 --> 00:12:47,760

how many of you saw at a biblical test

272

00:12:53,269 --> 00:12:50,800

sunday it was absolutely amazing on the

273

00:12:55,190 --> 00:12:53,279

core stage the next time those

274

00:12:57,030 --> 00:12:55,200

umbilicals release and i can't wait to

275

00:13:01,350 --> 00:12:57,040

see it it's going to be on the main

276

00:13:03,030 --> 00:13:01,360

voyage of sls on artemis one

277

00:13:04,310 --> 00:13:03,040

and how about all the development of the

278

00:13:06,629 --> 00:13:04,320

new systems that will help us

279

00:13:08,629 --> 00:13:06,639

sustainably return to the moon

280

00:13:11,430 --> 00:13:08,639

your commitment to our nation's space

281

00:13:13,509 --> 00:13:11,440

program is inspiring generations of

282

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

future explorers

283

00:13:18,629 --> 00:13:15,760

the changes that pam outlined will allow

284

00:13:20,629 --> 00:13:18,639

us increased focus on our exploration

285

00:13:22,790 --> 00:13:20,639

goals and the commercial space

286

00:13:24,470 --> 00:13:22,800

marketplace

287

00:13:26,710 --> 00:13:24,480

kathy and jim are both leaders of the

288

00:13:29,590 --> 00:13:26,720

highest caliber and i'm excited to have

289

00:13:31,509 --> 00:13:29,600

them taking us into the next era of

290

00:13:33,829 --> 00:13:31,519

space exploration

291

00:13:35,910 --> 00:13:33,839

as some of you know jim spent many years

292

00:13:37,350 --> 00:13:35,920

supporting nasa programs across several

293

00:13:39,269 --> 00:13:37,360

nasa centers

294

00:13:40,629 --> 00:13:39,279

he served as both the deputy director

295

00:13:42,949 --> 00:13:40,639

and director of the glenn research

296

00:13:45,269 --> 00:13:42,959

center and after that is deputy

297

00:13:46,870 --> 00:13:45,279

associate administrator technical for

298

00:13:49,269 --> 00:13:46,880

bill gerstenmaier

299

00:13:51,670 --> 00:13:49,279

more recently jim has served as a member

300

00:13:53,910 --> 00:13:51,680

of the nasa advisory council

301
00:13:56,949 --> 00:13:53,920
he has excellent program and project

302
00:13:58,870 --> 00:13:56,959
management skills and offers both nasa

303
00:14:01,110 --> 00:13:58,880
and industry experience

304
00:14:03,430 --> 00:14:01,120
which will prove valuable as he leads

305
00:14:05,189 --> 00:14:03,440
the development of numerous initiatives

306
00:14:07,430 --> 00:14:05,199
that will return us to the moon in a

307
00:14:09,269 --> 00:14:07,440
sustainable manner

308
00:14:11,590 --> 00:14:09,279
kathy continually exceeds all

309
00:14:13,670 --> 00:14:11,600
expectations leaving her diverse team

310
00:14:15,670 --> 00:14:13,680
and achieving program results with

311
00:14:17,829 --> 00:14:15,680
extraordinary outcomes

312
00:14:19,590 --> 00:14:17,839
she played a critical role in developing

313
00:14:22,470 --> 00:14:19,600

and leading our commercial space

314

00:14:24,069 --> 00:14:22,480

initiatives for the last decade

315

00:14:26,470 --> 00:14:24,079

establishing

316

00:14:28,629 --> 00:14:26,480

a commercial economy on iss today

317

00:14:30,470 --> 00:14:28,639

commercial cargo and commercial crew

318

00:14:33,030 --> 00:14:30,480

absolutely amazing

319

00:14:35,269 --> 00:14:33,040

kathy's proven track record and her

320

00:14:37,590 --> 00:14:35,279

credibility with our aerospace and

321

00:14:40,790 --> 00:14:37,600

international partners is critical to

322

00:14:44,710 --> 00:14:40,800

our success as she continues to lead our

323

00:14:46,150 --> 00:14:44,720

high tempo space operations missions

324

00:14:47,189 --> 00:14:46,160

now we're extremely fortunate to have

325

00:14:49,670 --> 00:14:47,199

these two

326
00:14:51,670 --> 00:14:49,680
leaders both of whom who have received

327
00:14:54,150 --> 00:14:51,680
numerous awards and recognitions

328
00:14:55,590 --> 00:14:54,160
including the prestigious presidential

329
00:14:58,470 --> 00:14:55,600
rank award

330
00:15:00,470 --> 00:14:58,480
lead our human spaceflight endeavors

331
00:15:02,230 --> 00:15:00,480
and with that i'm going to turn it over

332
00:15:03,110 --> 00:15:02,240
to folks that you really want to hear

333
00:15:04,470 --> 00:15:03,120
from

334
00:15:06,069 --> 00:15:04,480
so jim

335
00:15:07,990 --> 00:15:06,079
i'm turning it over to you and it is

336
00:15:11,590 --> 00:15:08,000
great to have you back on board thank

337
00:15:15,110 --> 00:15:12,629
thank bob

338
00:15:18,150 --> 00:15:15,120

good afternoon um i'd like to first

339

00:15:21,350 --> 00:15:18,160

start by by thanking the industry and

340

00:15:23,189 --> 00:15:21,360

and pam and bob for the opportunity and

341

00:15:26,629 --> 00:15:23,199

i'd like to recognize kathy for all

342

00:15:29,110 --> 00:15:26,639

she's done uh in her time here in hilo

343

00:15:30,710 --> 00:15:29,120

uh it has truly been amazing so thank

344

00:15:32,629 --> 00:15:30,720

you for that kathy

345

00:15:35,030 --> 00:15:32,639

um as as all of you know i'm sure

346

00:15:36,389 --> 00:15:35,040

there's a lot of questions um first i

347

00:15:38,389 --> 00:15:36,399

want to make sure everyone knows we

348

00:15:40,949 --> 00:15:38,399

start with our artemis missions that we

349

00:15:43,189 --> 00:15:40,959

have today artemis one artemis two that

350

00:15:44,710 --> 00:15:43,199

are in the pipeline or miss three

351
00:15:46,629 --> 00:15:44,720
not far behind

352
00:15:48,870 --> 00:15:46,639
um that's our focus that's our

353
00:15:51,030 --> 00:15:48,880
responsibility so while we talk about

354
00:15:52,949 --> 00:15:51,040
developing things for the out years our

355
00:15:55,189 --> 00:15:52,959
our focus is near term in executing

356
00:15:57,749 --> 00:15:55,199
those missions but at the same time we

357
00:15:59,910 --> 00:15:57,759
now have the opportunity to continue

358
00:16:01,749 --> 00:15:59,920
refining and defining achievable

359
00:16:04,790 --> 00:16:01,759
long-term plans both for the lunar

360
00:16:06,310 --> 00:16:04,800
surface and for mars

361
00:16:08,470 --> 00:16:06,320
what we also have

362
00:16:10,710 --> 00:16:08,480
in the exploration systems development

363
00:16:13,110 --> 00:16:10,720

organization is an opportunity

364

00:16:15,110 --> 00:16:13,120

to take our approach to development a

365

00:16:18,069 --> 00:16:15,120

little bit differently we can hand it

366

00:16:19,910 --> 00:16:18,079

over to operations finish development

367

00:16:22,310 --> 00:16:19,920

hand it over to operations it doesn't

368

00:16:25,509 --> 00:16:22,320

mean it's operational but once we hand

369

00:16:28,230 --> 00:16:25,519

it off then we can move on to our our

370

00:16:30,550 --> 00:16:28,240

next thing our next development

371

00:16:33,189 --> 00:16:30,560

but what's core to this and and having

372

00:16:35,910 --> 00:16:33,199

been at the agency and honestly uh found

373

00:16:38,150 --> 00:16:35,920

when i left the agency how much i missed

374

00:16:39,670 --> 00:16:38,160

the people and it's all about the people

375

00:16:41,910 --> 00:16:39,680

and the people that make it work every

376

00:16:43,910 --> 00:16:41,920

day both in our nasa workforce and in

377

00:16:46,150 --> 00:16:43,920

our contractor workforce

378

00:16:48,150 --> 00:16:46,160

those people you will all be involved

379

00:16:50,310 --> 00:16:48,160

including our stakeholders

380

00:16:52,550 --> 00:16:50,320

and also centered central to that are

381

00:16:55,590 --> 00:16:52,560

international commercial partners as

382

00:16:58,710 --> 00:16:55,600

well that will remain a part of all

383

00:17:01,030 --> 00:16:58,720

future architecture that we develop

384

00:17:03,269 --> 00:17:01,040

so again i'd like to thank all of you

385

00:17:05,189 --> 00:17:03,279

for the opportunity for my family for

386

00:17:08,430 --> 00:17:05,199

allowing me to do this as well

387

00:17:14,390 --> 00:17:08,440

and let me turn it over kathy

388

00:17:17,669 --> 00:17:14,400

[Applause]

389

00:17:20,150 --> 00:17:17,679

wow what an exciting time you know

390

00:17:22,150 --> 00:17:20,160

other day i think somebody said this is

391

00:17:24,150 --> 00:17:22,160

going to be so great you're the dynamic

392

00:17:26,230 --> 00:17:24,160

duo so um

393

00:17:28,390 --> 00:17:26,240

i don't know which one of us is a batman

394

00:17:29,990 --> 00:17:28,400

and one's robin i have a feeling every

395

00:17:31,990 --> 00:17:30,000

once in a while will be switching back

396

00:17:33,909 --> 00:17:32,000

and forth but

397

00:17:35,270 --> 00:17:33,919

what that does convey to everybody is

398

00:17:37,909 --> 00:17:35,280

we're a team

399

00:17:38,789 --> 00:17:37,919

and it's going to take us together

400

00:17:41,270 --> 00:17:38,799

to go

401
00:17:43,510 --> 00:17:41,280
do all the things that bill and bob and

402
00:17:45,510 --> 00:17:43,520
pam are giving us to go do and to go

403
00:17:47,430 --> 00:17:45,520
make it happen

404
00:17:50,310 --> 00:17:47,440
jim talked about the importance keeping

405
00:17:54,070 --> 00:17:50,320
artemis 1 2 and 3 on track this is also

406
00:17:56,630 --> 00:17:54,080
about keeping us flying every day 365

407
00:17:59,750 --> 00:17:56,640
days a year on station and continue to

408
00:18:02,549 --> 00:17:59,760
expand that capability to do the most

409
00:18:04,390 --> 00:18:02,559
amazing things that we can do and

410
00:18:06,390 --> 00:18:04,400
have us create a commercial leo

411
00:18:07,510 --> 00:18:06,400
destination platform that we can

412
00:18:09,830 --> 00:18:07,520
continue

413
00:18:12,870 --> 00:18:09,840

to have and check out all the systems

414

00:18:15,350 --> 00:18:12,880

we're going to need to to have to be

415

00:18:17,750 --> 00:18:15,360

and maintain a sustainable operations

416

00:18:19,830 --> 00:18:17,760

around the moon so

417

00:18:22,310 --> 00:18:19,840

i can't tell jim how excited i am to

418

00:18:24,150 --> 00:18:22,320

start seeing these things coming over

419

00:18:26,150 --> 00:18:24,160

i can't tell you how excited i am to

420

00:18:27,669 --> 00:18:26,160

have a partner here

421

00:18:30,230 --> 00:18:27,679

i keep thinking two heads are better

422

00:18:32,390 --> 00:18:30,240

than one and and uh this is going to be

423

00:18:34,390 --> 00:18:32,400

a lot of fun and um

424

00:18:36,070 --> 00:18:34,400

as he and i have said you know we're

425

00:18:37,990 --> 00:18:36,080

here for our team

426

00:18:39,510 --> 00:18:38,000

uh there will be a transition and we

427

00:18:41,510 --> 00:18:39,520

know and sometimes it'll be hard but

428

00:18:44,070 --> 00:18:41,520

we're here for you we want to hear from

429

00:18:45,110 --> 00:18:44,080

you and we're going to be there for you

430

00:18:47,110 --> 00:18:45,120

to make us

431

00:18:49,909 --> 00:18:47,120

work through this transition and keep

432

00:18:52,310 --> 00:18:49,919

going on the tasks that bob and pam and

433

00:18:58,950 --> 00:18:52,320

bill are giving us to go do thank you

434

00:19:02,630 --> 00:19:00,710

thank you kathy and to all of our

435

00:19:04,870 --> 00:19:02,640

leadership now we'll move on to the

436

00:19:06,630 --> 00:19:04,880

question and answer session as a

437

00:19:09,110 --> 00:19:06,640

reminder we've collected questions in

438

00:19:11,350 --> 00:19:09,120

advance from the workforce so thank you

439

00:19:13,990 --> 00:19:11,360

to all who have submitted questions

440

00:19:15,510 --> 00:19:14,000

and the first question for pam

441

00:19:16,710 --> 00:19:15,520

while we've been preparing for this

442

00:19:18,630 --> 00:19:16,720

announcement

443

00:19:21,909 --> 00:19:18,640

we know one of the top questions on

444

00:19:26,789 --> 00:19:21,919

everyone's mind is why now

445

00:19:31,190 --> 00:19:29,190

so there's a lot of different reasons

446

00:19:33,270 --> 00:19:31,200

why the answer is now

447

00:19:36,710 --> 00:19:33,280

i'll try to pick the ones that i think

448

00:19:41,750 --> 00:19:38,870

the last decade

449

00:19:42,470 --> 00:19:41,760

has seen extraordinary change and growth

450

00:19:45,590 --> 00:19:42,480

the

451
00:19:48,549 --> 00:19:45,600
impact that nasa has had on commercial

452
00:19:51,190 --> 00:19:48,559
space has created new capabilities that

453
00:19:53,110 --> 00:19:51,200
we didn't even know we could rely on but

454
00:19:55,750 --> 00:19:53,120
they're going to help us

455
00:19:56,789 --> 00:19:55,760
tremendously as we go out into the solar

456
00:19:58,630 --> 00:19:56,799
system

457
00:20:00,630 --> 00:19:58,640
the other thing is there's been a lot of

458
00:20:03,110 --> 00:20:00,640
work put together to develop the

459
00:20:05,190 --> 00:20:03,120
capabilities that come with sls

460
00:20:07,510 --> 00:20:05,200
orion and egs

461
00:20:10,230 --> 00:20:07,520
and the work that has started for the

462
00:20:12,710 --> 00:20:10,240
next sets of development

463
00:20:15,029 --> 00:20:12,720

this is exactly the time for us to take

464

00:20:17,669 --> 00:20:15,039

a deep breath and say

465

00:20:20,149 --> 00:20:17,679

wow we have a chain of development

466

00:20:21,510 --> 00:20:20,159

programs no longer just one monolithic

467

00:20:24,870 --> 00:20:21,520

program

468

00:20:27,590 --> 00:20:24,880

how are we going to manage this huge

469

00:20:31,029 --> 00:20:27,600

change in scope as we prepare to fly

470

00:20:33,430 --> 00:20:31,039

artemis one this is a really good time

471

00:20:36,630 --> 00:20:33,440

to take this step i think we've learned

472

00:20:40,310 --> 00:20:36,640

a lot in the last decade and the future

473

00:20:42,710 --> 00:20:40,320

is starting to emerge much more clearly

474

00:20:43,830 --> 00:20:42,720

this is uh a change i think that's going

475

00:20:46,390 --> 00:20:43,840

to help us

476
00:20:51,430 --> 00:20:46,400
manage this growth and scope as we step

477
00:20:53,990 --> 00:20:52,390
thank you

478
00:20:55,830 --> 00:20:54,000
and this question is for mr

479
00:20:58,149 --> 00:20:55,840
administrator

480
00:21:00,470 --> 00:20:58,159
how will the agency ensure that moving

481
00:21:03,350 --> 00:21:00,480
forward all parts of the agency's

482
00:21:05,430 --> 00:21:03,360
missions including earth sciences and

483
00:21:07,909 --> 00:21:05,440
aeronautics research do not get left by

484
00:21:10,630 --> 00:21:07,919
the wayside

485
00:21:11,830 --> 00:21:10,640
because we're committed to nasa's

486
00:21:13,590 --> 00:21:11,840
total

487
00:21:14,830 --> 00:21:13,600
mission

488
00:21:20,710 --> 00:21:14,840

national

489

00:21:27,029 --> 00:21:22,870

why in the world would you

490

00:21:28,789 --> 00:21:27,039

leave something behind say in science

491

00:21:31,190 --> 00:21:28,799

look how the

492

00:21:32,390 --> 00:21:31,200

american people have gotten so charged

493

00:21:34,789 --> 00:21:32,400

up

494

00:21:36,470 --> 00:21:34,799

as a result of perseverance and now the

495

00:21:37,750 --> 00:21:36,480

little helicopter

496

00:21:40,149 --> 00:21:37,760

that's serving

497

00:21:42,789 --> 00:21:40,159

far beyond its design life

498

00:21:44,549 --> 00:21:42,799

and now is a rover

499

00:21:47,270 --> 00:21:44,559

a scout

500

00:21:49,510 --> 00:21:47,280

uh instead of just being a technology

501
00:21:51,590 --> 00:21:49,520
demonstration

502
00:21:53,830 --> 00:21:51,600
and i could go on and on

503
00:21:56,310 --> 00:21:53,840
uh in 23

504
00:21:59,590 --> 00:21:56,320
we have a uh

505
00:22:01,909 --> 00:21:59,600
a system launched on on a falcon heavy

506
00:22:03,750 --> 00:22:01,919
it's called viper it's going to the

507
00:22:05,669 --> 00:22:03,760
south pole

508
00:22:08,390 --> 00:22:05,679
it's going to land

509
00:22:11,510 --> 00:22:08,400
by the edge of a big crater there which

510
00:22:12,789 --> 00:22:11,520
we think has a lot of geological promise

511
00:22:15,830 --> 00:22:12,799
and

512
00:22:18,310 --> 00:22:15,840
it's looking for water

513
00:22:20,070 --> 00:22:18,320

because where there's water

514

00:22:23,190 --> 00:22:20,080

there's fuel

515

00:22:25,830 --> 00:22:23,200

and that could well be a gas station for

516

00:22:28,549 --> 00:22:25,840

us in the future for future missions

517

00:22:30,390 --> 00:22:28,559

including the one mars

518

00:22:32,710 --> 00:22:30,400

and that's another part of science don't

519

00:22:35,430 --> 00:22:32,720

forget the planetary science

520

00:22:37,270 --> 00:22:35,440

look what we are doing we're going back

521

00:22:39,110 --> 00:22:37,280

after 30 years

522

00:22:41,350 --> 00:22:39,120

to venus

523

00:22:43,350 --> 00:22:41,360

look what we're doing on december the

524

00:22:45,510 --> 00:22:43,360

17th

525

00:22:48,950 --> 00:22:45,520

we're launching a telescope that's going

526
00:22:51,190 --> 00:22:48,960
to be a million miles

527
00:22:54,310 --> 00:22:51,200
on the side of the earth away from the

528
00:22:55,909 --> 00:22:54,320
sun and it's going to look out into the

529
00:22:58,710 --> 00:22:55,919
heavens not

530
00:23:02,070 --> 00:22:58,720
like hubble looking at the array of the

531
00:23:04,230 --> 00:23:02,080
sky it's going to look through a keyhole

532
00:23:05,990 --> 00:23:04,240
and it's going to peer back

533
00:23:10,149 --> 00:23:06,000
over 13

534
00:23:12,070 --> 00:23:10,159
billion years of light

535
00:23:14,950 --> 00:23:12,080
it's going to look back to the light at

536
00:23:18,470 --> 00:23:14,960
the time shortly after the big bang at

537
00:23:20,789 --> 00:23:18,480
the formation of the first galaxies

538
00:23:24,390 --> 00:23:20,799

and of course i've only scratched the

539

00:23:27,350 --> 00:23:24,400

surface as to

540

00:23:30,070 --> 00:23:27,360

all the other programs

541

00:23:33,190 --> 00:23:30,080

i mentioned aeronautics pam and i are

542

00:23:34,789 --> 00:23:33,200

going out and see this needle-nosed

543

00:23:38,710 --> 00:23:34,799

x-59

544

00:23:40,549 --> 00:23:38,720

that's still at the skunk works

545

00:23:43,430 --> 00:23:40,559

that's going to

546

00:23:47,430 --> 00:23:43,440

open up commercial air travel where we

547

00:23:51,269 --> 00:23:47,440

can fly in half the time from distance

548

00:23:53,029 --> 00:23:51,279

a to distance b and we can fly over

549

00:23:56,950 --> 00:23:53,039

populated areas because it's going to be

550

00:24:03,350 --> 00:24:00,310

why would we sacrifice all that

551
00:24:05,830 --> 00:24:03,360
we don't want to we're not

552
00:24:08,390 --> 00:24:05,840
we can do all these things together and

553
00:24:10,470 --> 00:24:08,400
by the way let me remind you

554
00:24:11,990 --> 00:24:10,480
this is compared to other federal

555
00:24:15,430 --> 00:24:12,000
agencies

556
00:24:20,070 --> 00:24:15,440
this is a little agency

557
00:24:22,149 --> 00:24:20,080
about a 25 billion dollar agency

558
00:24:24,870 --> 00:24:22,159
but oh by the way

559
00:24:27,350 --> 00:24:24,880
it's a can-do agency

560
00:24:29,590 --> 00:24:27,360
and it keeps getting voted for the last

561
00:24:30,830 --> 00:24:29,600
nine years as the best place to work in

562
00:24:33,510 --> 00:24:30,840
the federal

563
00:24:35,990 --> 00:24:33,520

government and because we're a can-do

564

00:24:38,070 --> 00:24:36,000

agency we're going to do all of the

565

00:24:40,390 --> 00:24:38,080

above

566

00:24:42,310 --> 00:24:40,400

and we're going to make it happen and we

567

00:24:45,269 --> 00:24:42,320

are now

568

00:24:47,269 --> 00:24:45,279

as we stand on as we stand on the

569

00:24:50,230 --> 00:24:47,279

shoulders

570

00:24:53,029 --> 00:24:50,240

of the apollo generation

571

00:24:56,070 --> 00:24:53,039

we are going to lift up

572

00:24:59,350 --> 00:24:56,080

the artemis generation

573

00:25:04,789 --> 00:24:59,360

as we go back to the moon

574

00:25:08,789 --> 00:25:06,710

wow that's a lot if it doesn't get you

575

00:25:11,190 --> 00:25:08,799

excited i don't know what does

576

00:25:13,669 --> 00:25:11,200

this next question is for jim and it's

577

00:25:15,750 --> 00:25:13,679

got a couple of follow-on parts to it

578

00:25:17,590 --> 00:25:15,760

what initiatives will we pursue to

579

00:25:19,590 --> 00:25:17,600

ensure that the exploration mission

580

00:25:21,269 --> 00:25:19,600

directorate is on the cutting edge of

581

00:25:23,909 --> 00:25:21,279

technology development

582

00:25:25,269 --> 00:25:23,919

and helps nasa retain the identity as

583

00:25:27,990 --> 00:25:25,279

explorers

584

00:25:29,350 --> 00:25:28,000

will support have allow civil servants

585

00:25:32,149 --> 00:25:29,360

to hold a percentage of their

586

00:25:34,390 --> 00:25:32,159

intellectual property on technology that

587

00:25:35,510 --> 00:25:34,400

they develop in order to retain high

588

00:25:37,430 --> 00:25:35,520

performers

589

00:25:41,110 --> 00:25:37,440

will it also support an alternative

590

00:25:42,789 --> 00:25:41,120

funding structure that allows some

591

00:25:43,830 --> 00:25:42,799

okay about day two

592

00:25:44,789 --> 00:25:43,840

okay

593

00:25:48,630 --> 00:25:44,799

uh

594

00:25:51,990 --> 00:25:48,640

question

595

00:25:53,510 --> 00:25:52,000

it's um staying connected to stmd

596

00:25:55,590 --> 00:25:53,520

i think we we

597

00:25:57,750 --> 00:25:55,600

we have to do that right that's stmd's

598

00:25:59,669 --> 00:25:57,760

purpose is to continue that pipeline of

599

00:26:01,750 --> 00:25:59,679

technology development

600

00:26:02,630 --> 00:26:01,760

certainly we'll continue our development

601
00:26:04,390 --> 00:26:02,640
of

602
00:26:06,470 --> 00:26:04,400
how to help people

603
00:26:08,630 --> 00:26:06,480
live in space how to make systems work

604
00:26:09,750 --> 00:26:08,640
better in space that's ongoing today on

605
00:26:11,990 --> 00:26:09,760
iss

606
00:26:13,909 --> 00:26:12,000
so i think to me that's the the pipeline

607
00:26:16,070 --> 00:26:13,919
that keeps it going of course we'll on

608
00:26:17,350 --> 00:26:16,080
our missions continue to advance things

609
00:26:20,149 --> 00:26:17,360
there's there's

610
00:26:22,630 --> 00:26:20,159
no flying artemis one that'll do that as

611
00:26:24,789 --> 00:26:22,640
far as the employees keeping ip and and

612
00:26:27,190 --> 00:26:24,799
maybe this is my dated center director

613
00:26:28,950 --> 00:26:27,200

uh time here the employees still have

614

00:26:31,110 --> 00:26:28,960

the opportunity to

615

00:26:33,669 --> 00:26:31,120

to be on the patents to get the

616

00:26:36,630 --> 00:26:33,679

royalties for the for the long haul

617

00:26:38,390 --> 00:26:36,640

um so that that and again day two i

618

00:26:40,390 --> 00:26:38,400

don't think that's changed but

619

00:26:45,430 --> 00:26:40,400

that that to me is their their

620

00:26:49,590 --> 00:26:47,110

yes i don't think it's fair to put all

621

00:26:51,669 --> 00:26:49,600

of that on jim

622

00:26:54,310 --> 00:26:51,679

and i just want to say you know this is

623

00:26:56,470 --> 00:26:54,320

something we're looking at is uh how do

624

00:26:58,310 --> 00:26:56,480

we compensate our civil servants what is

625

00:26:59,990 --> 00:26:58,320

the role of the servant in the future

626
00:27:03,350 --> 00:27:00,000
how are we structured as we move into

627
00:27:05,830 --> 00:27:03,360
the future and uh we're working on that

628
00:27:08,710 --> 00:27:05,840
actively to ensure that we retain the

629
00:27:10,310 --> 00:27:08,720
best people and folks need to get credit

630
00:27:13,350 --> 00:27:10,320
for what they do but this is something

631
00:27:15,909 --> 00:27:13,360
that we'll work through together and

632
00:27:18,389 --> 00:27:15,919
we have an awesome uh human capital

633
00:27:23,190 --> 00:27:18,399
organization that will help us get to

634
00:27:26,149 --> 00:27:24,950
thank you and this next question is for

635
00:27:34,230 --> 00:27:26,159
kathy

636
00:27:37,750 --> 00:27:35,669
so we're really trying to create

637
00:27:40,470 --> 00:27:37,760
opportunity you know one of the things

638
00:27:44,630 --> 00:27:40,480

we're beginning to work on is and and

639

00:27:47,669 --> 00:27:44,640

actually got over 10 proposals for a new

640

00:27:50,549 --> 00:27:47,679

uh commercial leo destination potential

641

00:27:51,590 --> 00:27:50,559

you know we've learned is

642

00:27:53,830 --> 00:27:51,600

after

643

00:27:55,990 --> 00:27:53,840

obviously we're working on extending iss

644

00:27:57,669 --> 00:27:56,000

to 2030

645

00:27:59,190 --> 00:27:57,679

but but

646

00:28:01,909 --> 00:27:59,200

one of the primary reasons for the

647

00:28:03,510 --> 00:28:01,919

extension was to give us time to be able

648

00:28:06,789 --> 00:28:03,520

to

649

00:28:10,230 --> 00:28:06,799

establish

650

00:28:12,630 --> 00:28:10,240

a low earth orbit destination that is it

651
00:28:15,430 --> 00:28:12,640
will enable us to continue to test the

652
00:28:17,830 --> 00:28:15,440
systems that jim will be developing

653
00:28:21,990 --> 00:28:17,840
so that we can there's another place

654
00:28:24,310 --> 00:28:22,000
that can do 365 days a year and then be

655
00:28:26,310 --> 00:28:24,320
able to take you from you know this

656
00:28:29,190 --> 00:28:26,320
microgravity environment from a human

657
00:28:31,830 --> 00:28:29,200
perspective to a different gravity field

658
00:28:33,269 --> 00:28:31,840
here on earth and be able to really test

659
00:28:34,630 --> 00:28:33,279
those physical

660
00:28:37,190 --> 00:28:34,640
you know

661
00:28:38,950 --> 00:28:37,200
protocols that will need to develop to

662
00:28:40,389 --> 00:28:38,960
be able to go to mars

663
00:28:42,630 --> 00:28:40,399

and so

664

00:28:45,830 --> 00:28:42,640

you know one of our goals and pam talks

665

00:28:48,149 --> 00:28:45,840

about this is to continue to

666

00:28:51,350 --> 00:28:48,159

let industry know here are the things we

667

00:28:52,789 --> 00:28:51,360

need so that that they can be coming up

668

00:28:54,870 --> 00:28:52,799

with unique

669

00:28:57,510 --> 00:28:54,880

ways to be able to meet those needs and

670

00:28:59,110 --> 00:28:57,520

at the same time furthering our goals

671

00:29:01,350 --> 00:28:59,120

for exploration

672

00:29:03,110 --> 00:29:01,360

so

673

00:29:04,389 --> 00:29:03,120

i tell people we're looking for all of

674

00:29:06,549 --> 00:29:04,399

your ideas

675

00:29:08,389 --> 00:29:06,559

not only in that area but in other areas

676
00:29:10,549 --> 00:29:08,399
help us come up with solutions to the

677
00:29:12,310 --> 00:29:10,559
problems that we have in low earth orbit

678
00:29:13,110 --> 00:29:12,320
because i do firmly believe if we come

679
00:29:16,230 --> 00:29:13,120
up with

680
00:29:18,870 --> 00:29:16,240
solutions there it helps us as we're

681
00:29:21,590 --> 00:29:18,880
going and pursuing our lunar missions

682
00:29:23,830 --> 00:29:21,600
and then going out to mars and and

683
00:29:26,389 --> 00:29:23,840
wherever else jim is going to take us

684
00:29:28,310 --> 00:29:26,399
thanks

685
00:29:29,430 --> 00:29:28,320
thank you and this next question goes

686
00:29:32,950 --> 00:29:29,440
back to bob

687
00:29:37,909 --> 00:29:32,960
jim mentioned stmd how does stmd fit

688
00:29:43,510 --> 00:29:41,909

so we are not changing uh stmd

689

00:29:44,789 --> 00:29:43,520

the work that jim reuter and his team

690

00:29:46,630 --> 00:29:44,799

are doing is outstanding and we

691

00:29:48,870 --> 00:29:46,640

absolutely need that as we move forward

692

00:29:51,350 --> 00:29:48,880

integrated with

693

00:29:53,990 --> 00:29:51,360

exploration and it's a it's a feeder

694

00:29:55,510 --> 00:29:54,000

organization stmd is going to continue

695

00:29:56,789 --> 00:29:55,520

on with the clips missions it's going to

696

00:29:59,190 --> 00:29:56,799

continue to help develop the

697

00:30:01,430 --> 00:29:59,200

technologies that we need to be

698

00:30:03,430 --> 00:30:01,440

successful as we go back to the moon in

699

00:30:05,029 --> 00:30:03,440

a sustainable way as we learn what we

700

00:30:08,149 --> 00:30:05,039

need to learn on the lunar surface so

701

00:30:10,630 --> 00:30:08,159

that we can eventually go on to mars

702

00:30:13,190 --> 00:30:10,640

no no impact to stmd at this time we're

703

00:30:16,149 --> 00:30:13,200

going to continue to operate as a team

704

00:30:18,470 --> 00:30:16,159

and you know i gotta say you know going

705

00:30:20,950 --> 00:30:18,480

back to the administrators uh earlier

706

00:30:23,430 --> 00:30:20,960

answer i have never seen our agency

707

00:30:25,590 --> 00:30:23,440

working together so well so integrated

708

00:30:28,310 --> 00:30:25,600

between all our mission directorates

709

00:30:30,389 --> 00:30:28,320

executing our mission and we all feed

710

00:30:32,470 --> 00:30:30,399

into each other the technologies that

711

00:30:34,149 --> 00:30:32,480

we're developing what we need it's not

712

00:30:35,830 --> 00:30:34,159

like science is going off on their own

713

00:30:38,149 --> 00:30:35,840

doing what they want they're doing what

714

00:30:40,149 --> 00:30:38,159

they need to help us be successful with

715

00:30:43,110 --> 00:30:40,159

humans exploration is going to feed into

716

00:30:45,830 --> 00:30:43,120

operations stmd feeds into

717

00:30:48,070 --> 00:30:45,840

you know exploration and operations so

718

00:30:50,789 --> 00:30:48,080

we're totally integrated we move forward

719

00:30:52,549 --> 00:30:50,799

as one

720

00:30:54,549 --> 00:30:52,559

thank you sir that's good to hear

721

00:30:56,789 --> 00:30:54,559

this next question is for jim and kathy

722

00:30:59,430 --> 00:30:56,799

and it has to do with eva

723

00:31:01,029 --> 00:30:59,440

eva is comprised of a systems of people

724

00:31:03,350 --> 00:31:01,039

and hardware

725

00:31:05,509 --> 00:31:03,360

much more than just the spacesuit it

726
00:31:07,269 --> 00:31:05,519
integrates the human astronauts with

727
00:31:10,470 --> 00:31:07,279
other assets of human spaceflight

728
00:31:12,870 --> 00:31:10,480
systems the eva system supports both iss

729
00:31:13,909 --> 00:31:12,880
spaceops and artemis exploration

730
00:31:15,909 --> 00:31:13,919
missions

731
00:31:18,630 --> 00:31:15,919
how will this reorg clarify the

732
00:31:20,870 --> 00:31:18,640
hierarchy and integration of eva teams

733
00:31:23,430 --> 00:31:20,880
ranging from leadership to engineering

734
00:31:25,590 --> 00:31:23,440
and operations with the number of civil

735
00:31:28,230 --> 00:31:25,600
servants to charge their salary to

736
00:31:30,870 --> 00:31:28,240
problems or gap areas rather than

737
00:31:32,870 --> 00:31:30,880
specific projects in order to allow

738
00:31:36,389 --> 00:31:32,880

freedom of development and

739

00:31:39,909 --> 00:31:36,399

commercialization pursuits

740

00:31:44,870 --> 00:31:42,389

so i think what's really great

741

00:31:47,269 --> 00:31:44,880

as you become a and jimmy learned this

742

00:31:50,310 --> 00:31:47,279

and he was a center director is we got a

743

00:31:51,110 --> 00:31:50,320

great team at jsc working this first of

744

00:31:54,549 --> 00:31:51,120

all

745

00:31:56,630 --> 00:31:54,559

and vanessa and her team and

746

00:31:58,789 --> 00:31:56,640

are working and laying out actually a

747

00:32:01,590 --> 00:31:58,799

plan to be able to support

748

00:32:03,590 --> 00:32:01,600

our strategies for the development of

749

00:32:06,789 --> 00:32:03,600

suits not only for

750

00:32:07,669 --> 00:32:06,799

obviously the iss and being able to

751

00:32:09,269 --> 00:32:07,679

and

752

00:32:11,909 --> 00:32:09,279

i think one of the folks don't realize

753

00:32:15,029 --> 00:32:11,919

is getting a new suit on iss actually

754

00:32:17,590 --> 00:32:15,039

helps us test out and get ready for a

755

00:32:19,110 --> 00:32:17,600

suit on the lunar surface and so

756

00:32:21,269 --> 00:32:19,120

um

757

00:32:24,389 --> 00:32:21,279

you know jim's team obviously will be

758

00:32:26,389 --> 00:32:24,399

looking at the utility and requirement

759

00:32:28,070 --> 00:32:26,399

sets for a lunar suit because you have

760

00:32:30,230 --> 00:32:28,080

to it's so embedded in your in the

761

00:32:32,789 --> 00:32:30,240

architecture that you're developing

762

00:32:36,310 --> 00:32:32,799

and obviously we've been working with

763

00:32:38,710 --> 00:32:36,320

vanessa and her eva team at jsc to make

764

00:32:41,269 --> 00:32:38,720

sure that the continuum of that

765

00:32:44,230 --> 00:32:41,279

capability that allows us to test that

766

00:32:46,230 --> 00:32:44,240

capability on the iss provide utility

767

00:32:49,430 --> 00:32:46,240

with that suit on iss

768

00:32:52,149 --> 00:32:49,440

and then move on to supporting

769

00:32:53,509 --> 00:32:52,159

the development activities and

770

00:32:55,990 --> 00:32:53,519

comes back to

771

00:32:58,710 --> 00:32:56,000

the future sustaining operations on the

772

00:33:04,470 --> 00:33:01,750

vanessa has laid out an integrated plan

773

00:33:06,630 --> 00:33:04,480

support us and i'm absolutely confident

774

00:33:08,230 --> 00:33:06,640

that that team will be ready to go

775

00:33:11,190 --> 00:33:08,240

execute on this

776

00:33:12,789 --> 00:33:11,200

very very difficult mission and bring us

777

00:33:18,789 --> 00:33:12,799

and to be able to accomplish all the

778

00:33:22,549 --> 00:33:20,230

okay

779

00:33:24,710 --> 00:33:22,559

thank you there's a lot going on in the

780

00:33:26,710 --> 00:33:24,720

future now let's talk about the deep

781

00:33:28,230 --> 00:33:26,720

future or the far future jim this

782

00:33:30,549 --> 00:33:28,240

question is for you

783

00:33:33,110 --> 00:33:30,559

we know what we are doing is leading up

784

00:33:35,990 --> 00:33:33,120

to the first human land on mars

785

00:33:39,190 --> 00:33:36,000

but what comes after that and on mars

786

00:33:42,149 --> 00:33:39,200

after humans have landed there

787

00:33:44,549 --> 00:33:42,159

okay again day two but um i i guess what

788

00:33:46,710 --> 00:33:44,559

i'd say is the you keep hearing the word

789

00:33:49,350 --> 00:33:46,720

integrated and and the the last question

790

00:33:51,350 --> 00:33:49,360

for example of of the suits

791

00:33:53,669 --> 00:33:51,360

everything we're doing and kathy hit on

792

00:33:57,029 --> 00:33:53,679

it before stuff we're doing today is

793

00:33:59,029 --> 00:33:57,039

buying down those long-term risks so

794

00:33:59,830 --> 00:33:59,039

what we do after is all going to be

795

00:34:02,149 --> 00:33:59,840

built

796

00:34:04,870 --> 00:34:02,159

off of today so how do we how do we do

797

00:34:07,350 --> 00:34:04,880

the transportation to further out in

798

00:34:09,510 --> 00:34:07,360

space how do we get out into the nrho

799

00:34:12,149 --> 00:34:09,520

orbit how do we think about how we get

800

00:34:13,510 --> 00:34:12,159

to mars right those kind of

801
00:34:15,109 --> 00:34:13,520
technologies are going to take us

802
00:34:16,629 --> 00:34:15,119
further what do we learn when we're on

803
00:34:18,790 --> 00:34:16,639
the lunar surface

804
00:34:21,349 --> 00:34:18,800
um that's going to help us learn what we

805
00:34:23,909 --> 00:34:21,359
do when we're on mars and then all of

806
00:34:26,230 --> 00:34:23,919
that fed back with the human in the loop

807
00:34:27,750 --> 00:34:26,240
right mark mark just got extended to a

808
00:34:29,270 --> 00:34:27,760
year right everything we're learning

809
00:34:31,030 --> 00:34:29,280
from the six months missions to the

810
00:34:32,069 --> 00:34:31,040
one-year missions are buying down the

811
00:34:34,149 --> 00:34:32,079
risks

812
00:34:37,109 --> 00:34:34,159
that the human research program has

813
00:34:39,510 --> 00:34:37,119

given us so i think we have

814

00:34:42,790 --> 00:34:39,520

that groundwork tells us where we can go

815

00:34:45,990 --> 00:34:42,800

after mars but right now honestly um we

816

00:34:48,389 --> 00:34:46,000

have the chance to set a defined focused

817

00:34:50,629 --> 00:34:48,399

path to mars that's really what i want

818

00:34:53,270 --> 00:34:50,639

to do before we look too much further

819

00:34:55,510 --> 00:34:53,280

beyond it let me just tell you thomas is

820

00:34:57,030 --> 00:34:55,520

always coming up with new places for us

821

00:34:59,990 --> 00:34:57,040

to follow so

822

00:35:05,589 --> 00:35:00,000

we're looking for more places where bots

823

00:35:09,190 --> 00:35:08,069

okay and kathy back to you for one final

824

00:35:11,589 --> 00:35:09,200

question

825

00:35:13,270 --> 00:35:11,599

what becomes of the heo affordability

826

00:35:16,870 --> 00:35:13,280

initiative with this new mission

827

00:35:21,670 --> 00:35:18,870

hey bob told us today

828

00:35:23,670 --> 00:35:21,680

charge forward i can't tell you um you

829

00:35:24,790 --> 00:35:23,680

know it becomes even more important for

830

00:35:28,069 --> 00:35:24,800

us to

831

00:35:30,710 --> 00:35:28,079

figure out how to move to

832

00:35:32,069 --> 00:35:30,720

sustainable and cost-effective and

833

00:35:33,990 --> 00:35:32,079

reliable

834

00:35:36,069 --> 00:35:34,000

you know crew transportation for our

835

00:35:37,829 --> 00:35:36,079

exploration systems

836

00:35:40,150 --> 00:35:37,839

going forward so we can free up

837

00:35:41,190 --> 00:35:40,160

development money for jim to do the next

838

00:35:43,349 --> 00:35:41,200

step

839

00:35:45,349 --> 00:35:43,359

we've got a lot of things i can see he's

840

00:35:46,870 --> 00:35:45,359

got this list going on in his head right

841

00:35:48,310 --> 00:35:46,880

now and um

842

00:35:51,349 --> 00:35:48,320

it's going to be really really important

843

00:35:53,750 --> 00:35:51,359

for us to get to a place where we have

844

00:35:56,150 --> 00:35:53,760

to provide reliable

845

00:35:59,109 --> 00:35:56,160

and safe crew transportation for

846

00:36:00,950 --> 00:35:59,119

exploration systems um but

847

00:36:03,510 --> 00:36:00,960

it's really really critical for us to

848

00:36:04,950 --> 00:36:03,520

then be able to free up the resources

849

00:36:07,030 --> 00:36:04,960

for development

850

00:36:08,870 --> 00:36:07,040

and i'd i'd just like to add you know

851
00:36:11,510 --> 00:36:08,880
this isn't just a

852
00:36:14,150 --> 00:36:11,520
a heal initiative as it started off

853
00:36:16,550 --> 00:36:14,160
this is a directive from the ninth floor

854
00:36:17,990 --> 00:36:16,560
that we have to find a way to become

855
00:36:20,069 --> 00:36:18,000
more uh

856
00:36:21,430 --> 00:36:20,079
cost effective and efficient as we move

857
00:36:24,150 --> 00:36:21,440
forward with

858
00:36:26,390 --> 00:36:24,160
our artemis architecture and we had a

859
00:36:28,790 --> 00:36:26,400
telecon this morning both jim and kathy

860
00:36:31,589 --> 00:36:28,800
were in it jim of course has the initial

861
00:36:34,069 --> 00:36:31,599
job of getting us success on our initial

862
00:36:36,790 --> 00:36:34,079
artemis missions but just as we have

863
00:36:38,950 --> 00:36:36,800

restructured contracts on the shuttle on

864

00:36:41,030 --> 00:36:38,960

the international space station

865

00:36:43,829 --> 00:36:41,040

we have to move to a

866

00:36:46,470 --> 00:36:43,839

more sustainable model as we come out of

867

00:36:47,990 --> 00:36:46,480

the development phase and jim said it

868

00:36:51,589 --> 00:36:48,000

earlier you know there's a difference

869

00:36:52,630 --> 00:36:51,599

between being operational and operations

870

00:36:55,030 --> 00:36:52,640

you know

871

00:36:57,030 --> 00:36:55,040

it's never going to be truly operational

872

00:36:58,790 --> 00:36:57,040

is what we think about you know you just

873

00:37:00,390 --> 00:36:58,800

get in and go and you don't you know you

874

00:37:02,870 --> 00:37:00,400

kick the tires and go that's not going

875

00:37:05,270 --> 00:37:02,880

to ever be the case with the systems

876

00:37:08,310 --> 00:37:05,280

that we fly they're going to require

877

00:37:10,790 --> 00:37:08,320

extreme diligence by the team

878

00:37:12,710 --> 00:37:10,800

regardless of how the contract is

879

00:37:14,710 --> 00:37:12,720

structured so that we ensure that we are

880

00:37:16,390 --> 00:37:14,720

doing things in the absolute safest way

881

00:37:18,230 --> 00:37:16,400

that we understand the risk and we're

882

00:37:20,390 --> 00:37:18,240

going to be constantly learning on every

883

00:37:22,470 --> 00:37:20,400

flight and making modifications just as

884

00:37:24,310 --> 00:37:22,480

we did throughout the shuttle program

885

00:37:26,069 --> 00:37:24,320

but that doesn't mean we can't get to a

886

00:37:30,870 --> 00:37:26,079

more effective

887

00:37:34,390 --> 00:37:32,790

thank you and we have time for just one

888

00:37:36,870 --> 00:37:34,400

final question this is for the

889

00:37:38,630 --> 00:37:36,880

administrator and pam

890

00:37:40,630 --> 00:37:38,640

i was just uh people were curious on

891

00:37:42,550 --> 00:37:40,640

what kind of timeline we can expect for

892

00:37:44,150 --> 00:37:42,560

organizational changes to cascade

893

00:37:47,990 --> 00:37:44,160

throughout nasa based on these new

894

00:37:54,069 --> 00:37:51,030

well we are starting right now

895

00:37:55,510 --> 00:37:54,079

and uh there will be an implementation

896

00:37:57,430 --> 00:37:55,520

over time

897

00:38:01,270 --> 00:37:57,440

uh naturally

898

00:38:03,030 --> 00:38:01,280

uh and uh we're gonna feel that along as

899

00:38:05,829 --> 00:38:03,040

we go

900

00:38:13,030 --> 00:38:05,839

but uh this new uh

901
00:38:18,390 --> 00:38:15,589
so what we understand is uh you know

902
00:38:20,550 --> 00:38:18,400
what we're hearing from cfo and

903
00:38:24,310 --> 00:38:20,560
chico is

904
00:38:26,630 --> 00:38:24,320
90 to 120 days is normal for

905
00:38:27,990 --> 00:38:26,640
an effort like this

906
00:38:31,190 --> 00:38:28,000
i think it's just important to

907
00:38:33,030 --> 00:38:31,200
understand that we're not in a big rush

908
00:38:35,430 --> 00:38:33,040
to change things

909
00:38:37,829 --> 00:38:35,440
we have a lot of

910
00:38:39,910 --> 00:38:37,839
really important things happening and we

911
00:38:42,390 --> 00:38:39,920
have to keep our eye on the ball

912
00:38:43,750 --> 00:38:42,400
and that's what we're asking you

913
00:38:45,589 --> 00:38:43,760

doing what you're doing because you're

914

00:38:48,230 --> 00:38:45,599

doing really well

915

00:38:50,230 --> 00:38:48,240

and it's very very important that we

916

00:38:52,870 --> 00:38:50,240

take it one step at a time

917

00:38:55,190 --> 00:38:52,880

and we don't drop the ball anywhere

918

00:38:57,670 --> 00:38:55,200

along the way so we will take all the

919

00:39:02,550 --> 00:38:57,680

time we need to make the transition

920

00:39:06,310 --> 00:39:04,390

thank you and that will conclude our

921

00:39:08,550 --> 00:39:06,320

question and answer session i'd like to

922

00:39:09,670 --> 00:39:08,560

thank the nasa workforce for all of your

923

00:39:11,030 --> 00:39:09,680

questions

924

00:39:13,030 --> 00:39:11,040

just know that there's going to be many

925

00:39:15,270 --> 00:39:13,040

more opportunities to discuss this with

926
00:39:17,349 --> 00:39:15,280
leadership in the next coming days weeks

927
00:39:19,430 --> 00:39:17,359
and even months

928
00:39:20,950 --> 00:39:19,440
and for our speakers are there any final

929
00:39:26,790 --> 00:39:20,960
thoughts that you would like to share

930
00:39:30,630 --> 00:39:28,310
i thought i had about four people's

931
00:39:32,310 --> 00:39:30,640
worth of comments to think of something

932
00:39:34,069 --> 00:39:32,320
um

933
00:39:36,150 --> 00:39:34,079
i want to thank the team that has

934
00:39:37,829 --> 00:39:36,160
supported me for the last 15 months i

935
00:39:38,870 --> 00:39:37,839
really really really appreciate

936
00:39:41,349 --> 00:39:38,880
everybody

937
00:39:43,430 --> 00:39:41,359
but i also want to just make underscore

938
00:39:44,470 --> 00:39:43,440

that i'm really excited about working

939

00:39:46,950 --> 00:39:44,480

with jim

940

00:39:48,870 --> 00:39:46,960

and i know jim and i will you know be

941

00:39:50,230 --> 00:39:48,880

working with all of you and appreciate

942

00:39:52,630 --> 00:39:50,240

all your support as we're working

943

00:39:55,109 --> 00:39:52,640

through this it is a very exciting time

944

00:39:56,470 --> 00:39:55,119

for us and uh we're gonna need lots of

945

00:40:00,150 --> 00:39:56,480

help along the way

946

00:40:04,950 --> 00:40:02,630

that wasn't wasn't quite as easy

947

00:40:07,109 --> 00:40:04,960

the last last time um

948

00:40:10,470 --> 00:40:07,119

no it's uh you know it is i mentioned

949

00:40:12,470 --> 00:40:10,480

it's a great honor kathy and i see our

950

00:40:14,309 --> 00:40:12,480

job is to communicate with you where

951
00:40:16,470 --> 00:40:14,319
we're at with the reorganization what

952
00:40:18,950 --> 00:40:16,480
we're doing what the timeline is there

953
00:40:20,470 --> 00:40:18,960
are fixed things we have to go through

954
00:40:23,190 --> 00:40:20,480
we'll work through those but we'll

955
00:40:25,750 --> 00:40:23,200
communicate every step of the way

956
00:40:26,950 --> 00:40:25,760
pam said it stay focused on your jobs

957
00:40:28,950 --> 00:40:26,960
today

958
00:40:31,510 --> 00:40:28,960
especially those folks you know working

959
00:40:33,510 --> 00:40:31,520
with the crew in orbit and those folks

960
00:40:37,030 --> 00:40:33,520
working on artemis one as we push those

961
00:40:42,230 --> 00:40:39,670
i am just so excited about our future

962
00:40:45,430 --> 00:40:42,240
and uh in the team that we have in place

963
00:40:48,309 --> 00:40:45,440

to uh make that future a reality uh jim

964

00:40:50,950 --> 00:40:48,319

said it earlier uh coming back to nasa

965

00:40:52,390 --> 00:40:50,960

it's all about the people we have the

966

00:40:54,550 --> 00:40:52,400

most amazing

967

00:40:55,829 --> 00:40:54,560

workforce anywhere i've had the

968

00:40:58,390 --> 00:40:55,839

privilege of working with some pretty

969

00:41:01,270 --> 00:40:58,400

amazing teams in the marine corps as a

970

00:41:02,309 --> 00:41:01,280

test pilot and here at nasa but nasa

971

00:41:04,790 --> 00:41:02,319

nasa's

972

00:41:06,390 --> 00:41:04,800

nasa is a step above everybody else the

973

00:41:08,390 --> 00:41:06,400

quality of our workforce

974

00:41:09,510 --> 00:41:08,400

in what you accomplish on a day-to-day

975

00:41:12,069 --> 00:41:09,520

basis

976
00:41:15,030 --> 00:41:12,079
it's phenomenal and i as i said earlier

977
00:41:17,349 --> 00:41:15,040
i'm just so honored and proud to be part

978
00:41:19,349 --> 00:41:17,359
of this team we are going to charge

979
00:41:20,950 --> 00:41:19,359
forward into the future we are going to

980
00:41:25,970 --> 00:41:20,960
be successful and it's going to be

981
00:41:30,230 --> 00:41:27,190
[Music]

982
00:41:32,630 --> 00:41:30,240
i'd just like to say that

983
00:41:34,950 --> 00:41:32,640
the question about the future happens

984
00:41:36,630 --> 00:41:34,960
after 2040 resonated with me because i'm

985
00:41:37,910 --> 00:41:36,640
spending a lot of my time thinking about

986
00:41:38,790 --> 00:41:37,920
that too

987
00:41:40,390 --> 00:41:38,800
and

988
00:41:42,630 --> 00:41:40,400

in particular

989

00:41:45,109 --> 00:41:42,640

we haven't talked about it today but the

990

00:41:47,990 --> 00:41:45,119

massive existential threat that climate

991

00:41:50,710 --> 00:41:48,000

change offers us and the critical role

992

00:41:53,430 --> 00:41:50,720

that aeronautics is going to play in

993

00:41:56,150 --> 00:41:53,440

reducing emissions for the future to

994

00:41:58,630 --> 00:41:56,160

reach the targets for 2050 and in

995

00:42:00,230 --> 00:41:58,640

addition our planetary science and our

996

00:42:02,150 --> 00:42:00,240

earth science

997

00:42:03,990 --> 00:42:02,160

looking at the earth and understanding

998

00:42:06,069 --> 00:42:04,000

and providing the information that we

999

00:42:07,589 --> 00:42:06,079

need to make the decisions that are

1000

00:42:08,630 --> 00:42:07,599

essential

1001
00:42:10,069 --> 00:42:08,640
uh

1002
00:42:12,550 --> 00:42:10,079
that's a lot

1003
00:42:14,710 --> 00:42:12,560
we're talking about humanity

1004
00:42:16,630 --> 00:42:14,720
going out into the solar system

1005
00:42:17,670 --> 00:42:16,640
and saving the earth

1006
00:42:20,230 --> 00:42:17,680
and

1007
00:42:21,030 --> 00:42:20,240
i couldn't be more proud of the team

1008
00:42:24,150 --> 00:42:21,040
and

1009
00:42:28,550 --> 00:42:24,160
the work that you're doing every day

1010
00:42:34,630 --> 00:42:32,069
it's a truth that

1011
00:42:37,510 --> 00:42:34,640
you really like and love what you're

1012
00:42:40,230 --> 00:42:37,520
doing it's not work

1013
00:42:43,109 --> 00:42:40,240

and i think that's very applicable to

1014

00:42:45,829 --> 00:42:43,119

the people of nasa

1015

00:42:49,670 --> 00:42:45,839

uh and that's why we're such an amazing

1016

00:42:53,990 --> 00:42:49,680

team an amazing family

1017

00:42:54,790 --> 00:42:54,000

i want to thank you also because 90

1018

00:42:57,109 --> 00:42:54,800

of

1019

00:42:59,750 --> 00:42:57,119

nasa's civil servants are double

1020

00:43:03,030 --> 00:42:59,760

vaccinated

1021

00:43:05,750 --> 00:43:03,040

and this plague of coped that we've been

1022

00:43:11,430 --> 00:43:09,190

it has held us up

1023

00:43:12,950 --> 00:43:11,440

it has caused

1024

00:43:16,790 --> 00:43:12,960

a financial

1025

00:43:21,750 --> 00:43:16,800

and it has caused a personal toll

1026
00:43:30,470 --> 00:43:26,309
it has indeed caused the untimely death

1027
00:43:33,190 --> 00:43:30,480
of a number of our nasa family members

1028
00:43:35,030 --> 00:43:33,200
so i want you all

1029
00:43:36,870 --> 00:43:35,040
please

1030
00:43:39,990 --> 00:43:36,880
to

1031
00:43:42,309 --> 00:43:40,000
seriously consider if you have not been

1032
00:43:43,270 --> 00:43:42,319
vaccinated

1033
00:43:46,790 --> 00:43:43,280
do it

1034
00:43:50,710 --> 00:43:48,390
of course you'll be doing it for

1035
00:43:53,510 --> 00:43:50,720
yourself

1036
00:43:56,309 --> 00:43:53,520
but do it for nasa

1037
00:44:00,610 --> 00:43:56,319
and do it for our country

1038
00:44:08,390 --> 00:44:06,550

[Applause]

1039

00:44:10,069 --> 00:44:08,400

nasa leadership will discuss this

1040

00:44:11,990 --> 00:44:10,079

exciting development for human space

1041

00:44:14,710 --> 00:44:12,000

flight with members of the media today

1042

00:44:16,390 --> 00:44:14,720

at 30 pm eastern time

1043

00:44:19,030 --> 00:44:16,400

that teleconference will be streamed

1044

00:44:21,750 --> 00:44:19,040

live all to listen in and thank you all

1045

00:44:24,390 --> 00:44:21,760

for being here today i am certainly

1046

00:44:26,630 --> 00:44:24,400

excited and motivated for the future of

1047

00:44:28,150 --> 00:44:26,640

human exploration and i was going to say

1048

00:44:29,430 --> 00:44:28,160

get back to work but after the

1049

00:44:30,870 --> 00:44:29,440

administrator

1050

00:44:33,430 --> 00:44:30,880

pointed it out let's all get back to

1051

00:44:35,190 --> 00:44:33,440

doing what we love thank