



1
00:00:37,520 --> 00:01:01,990

so

2
00:01:05,990 --> 00:01:04,310

good morning everyone i'm roy malone the

3
00:01:07,590 --> 00:01:06,000

director of the michoud assembly

4
00:01:09,510 --> 00:01:07,600

facility

5
00:01:11,510 --> 00:01:09,520

and i will be your master of ceremonies

6
00:01:13,030 --> 00:01:11,520

for today's event

7
00:01:14,710 --> 00:01:13,040

thank you all for taking time out of

8
00:01:16,230 --> 00:01:14,720

your day to come and help us celebrate

9
00:01:18,230 --> 00:01:16,240

this milestone

10
00:01:19,670 --> 00:01:18,240

in our nation's space exploration

11
00:01:22,710 --> 00:01:19,680

program

12
00:01:24,550 --> 00:01:22,720

a special thanks goes to senator vitter

13
00:01:26,950 --> 00:01:24,560

congressman palazzo

14

00:01:28,870 --> 00:01:26,960

mayor landrieu and all our local state

15

00:01:31,350 --> 00:01:28,880

and government representatives and our

16

00:01:34,469 --> 00:01:31,360

local community leaders and especially

17

00:01:37,190 --> 00:01:34,479

our contractor and civil service team

18

00:01:38,870 --> 00:01:37,200

that help make today possible

19

00:01:41,749 --> 00:01:38,880

today's ribbing cutting on the vertical

20

00:01:44,870 --> 00:01:41,759

assembly center tool behind me

21

00:01:46,550 --> 00:01:44,880

signifies the final installation of all

22

00:01:48,710 --> 00:01:46,560

the major tools

23

00:01:51,590 --> 00:01:48,720

required to build the core stage of our

24

00:01:54,630 --> 00:01:51,600

nation's next great spaceship

25

00:01:57,830 --> 00:01:54,640

the space launch system we are now ready

26
00:01:59,990 --> 00:01:57,840
to begin welding the massive core stage

27
00:02:01,830 --> 00:02:00,000
putting it all together and testing it

28
00:02:03,670 --> 00:02:01,840
and getting it down to the cape

29
00:02:05,910 --> 00:02:03,680
in order to take our next step on our

30
00:02:07,749 --> 00:02:05,920
journey to mars

31
00:02:09,589 --> 00:02:07,759
it is an amazing piece of equipment and

32
00:02:11,750 --> 00:02:09,599
i'm proud to be here today

33
00:02:14,229 --> 00:02:11,760
to celeste break this milestone with all

34
00:02:19,750 --> 00:02:16,309
now will you please stand

35
00:02:22,630 --> 00:02:19,760
for the 2007 grammy award winner and

36
00:02:24,949 --> 00:02:22,640
four-time grammy nominee

37
00:02:25,910 --> 00:02:24,959
member of the louisiana music hall of

38
00:02:30,470 --> 00:02:25,920

fame

39

00:02:31,430 --> 00:02:30,480

who will be singing today's national

40

00:02:33,910 --> 00:02:31,440

anthem

41

00:02:44,869 --> 00:02:33,920

the sole queen of new orleans

42

00:02:53,670 --> 00:02:49,350

oh say can you see

43

00:02:57,910 --> 00:02:53,680

by the dawn's early light

44

00:03:02,309 --> 00:02:57,920

what so proudly we hail

45

00:03:06,710 --> 00:03:02,319

at the twilight's last gleaming

46

00:03:08,190 --> 00:03:06,720

whose broad stripes and bright stars

47

00:03:10,869 --> 00:03:08,200

through the

48

00:03:16,350 --> 00:03:10,879

perilous fight

49

00:03:19,270 --> 00:03:16,360

or the ramparts we watched were so

50

00:03:23,350 --> 00:03:19,280

gallantly streaming

51
00:03:27,670 --> 00:03:23,360
and the rockets red glare

52
00:03:29,430 --> 00:03:27,680
the bombs bursting in air

53
00:03:31,670 --> 00:03:29,440
gay proof

54
00:03:36,149 --> 00:03:31,680
through the night

55
00:03:41,270 --> 00:03:36,159
that our flag was still there

56
00:03:52,309 --> 00:03:41,280
oh say does that star-spangled

57
00:03:57,030 --> 00:03:54,949
and the home

58
00:04:02,869 --> 00:03:57,040
of the

59
00:04:02,879 --> 00:04:14,390
thank you so very much

60
00:04:19,670 --> 00:04:18,069
wow that was absolutely fantastic

61
00:04:21,349 --> 00:04:19,680
thank you miss thomas

62
00:04:23,430 --> 00:04:21,359
for that staggering and truly

63
00:04:25,270 --> 00:04:23,440

appropriate rendition

64

00:04:27,749 --> 00:04:25,280

now i'd like to take like to introduce

65

00:04:33,830 --> 00:04:27,759

you to the mayor of new orleans

66

00:04:36,790 --> 00:04:35,430

welcome sir

67

00:04:40,830 --> 00:04:36,800

appreciate it

68

00:04:46,550 --> 00:04:44,150

wow that's the first word

69

00:04:47,749 --> 00:04:46,560

that comes to mind as i stand in the

70

00:04:50,629 --> 00:04:47,759

shadow

71

00:04:53,030 --> 00:04:50,639

of this magnificent structure that is

72

00:04:55,990 --> 00:04:53,040

such an incredible symbol

73

00:04:58,550 --> 00:04:56,000

about who we are as a country and what

74

00:04:59,830 --> 00:04:58,560

we want to be as a people i want to

75

00:05:02,310 --> 00:04:59,840

help welcome

76

00:05:03,909 --> 00:05:02,320

u.s senator david vitter i know senator

77

00:05:05,270 --> 00:05:03,919

landrieu couldn't be here but her staff

78

00:05:07,830 --> 00:05:05,280

is with us

79

00:05:11,110 --> 00:05:07,840

representative palazzo thank you so much

80

00:05:12,629 --> 00:05:11,120

to general major bolden and to roy

81

00:05:13,990 --> 00:05:12,639

and to all of the dignitaries that are

82

00:05:15,990 --> 00:05:14,000

with us today

83

00:05:17,909 --> 00:05:16,000

irma thank you so much

84

00:05:19,990 --> 00:05:17,919

for that beautiful rendition of the

85

00:05:22,230 --> 00:05:20,000

star-spangled banner

86

00:05:24,790 --> 00:05:22,240

we take a moment to mourn

87

00:05:27,670 --> 00:05:24,800

the death of kasimo matasa

88

00:05:29,909 --> 00:05:27,680

who in the in the world of art and music

89

00:05:32,230 --> 00:05:29,919

was one of the best engineers

90

00:05:34,150 --> 00:05:32,240

of the sound that has produced the

91

00:05:37,189 --> 00:05:34,160

incredible culture of new orleans it has

92

00:05:39,350 --> 00:05:37,199

helped uh careers like irma thomas and

93

00:05:41,830 --> 00:05:39,360

so many other people

94

00:05:44,390 --> 00:05:41,840

part of the fabric of what makes new

95

00:05:45,430 --> 00:05:44,400

orleans such a great place art

96

00:05:48,790 --> 00:05:45,440

music

97

00:05:51,110 --> 00:05:48,800

engineering science all of those things

98

00:05:53,990 --> 00:05:51,120

fold together today

99

00:05:55,909 --> 00:05:54,000

as we step into the future and so i'm

100

00:05:58,230 --> 00:05:55,919

just so excited to be here nassau is

101

00:05:59,830 --> 00:05:58,240

such an important part

102

00:06:01,029 --> 00:05:59,840

of who we are as a nation and of course

103

00:06:03,830 --> 00:06:01,039

the nassau

104

00:06:06,790 --> 00:06:03,840

mission assembly facility in new orleans

105

00:06:09,510 --> 00:06:06,800

has been such an incredible part of our

106

00:06:11,590 --> 00:06:09,520

space exploration and what we do as a

107

00:06:13,350 --> 00:06:11,600

country the city of new orleans right

108

00:06:15,990 --> 00:06:13,360

now is this nation's most immediate

109

00:06:17,590 --> 00:06:16,000

laboratory for innovation and change and

110

00:06:19,110 --> 00:06:17,600

as we talk about manufacturing because

111

00:06:21,189 --> 00:06:19,120

we talk about science as we talk about

112

00:06:22,870 --> 00:06:21,199

space the city of new orleans in this

113

00:06:25,189 --> 00:06:22,880

facility and the people here and our

114

00:06:26,870 --> 00:06:25,199

partnership with all of the other fellow

115

00:06:28,790 --> 00:06:26,880

americans across the gulf coast and

116

00:06:30,150 --> 00:06:28,800

across the nation that have made this

117

00:06:32,550 --> 00:06:30,160

day possible

118

00:06:35,029 --> 00:06:32,560

we should all be very proud of the work

119

00:06:37,270 --> 00:06:35,039

that has been done by everybody as you

120

00:06:38,390 --> 00:06:37,280

stand behind us and look at this

121

00:06:41,990 --> 00:06:38,400

structure

122

00:06:44,710 --> 00:06:42,000

it is a skyscraper literally and it had

123

00:06:46,390 --> 00:06:44,720

to be designated as such this is going

124

00:06:47,350 --> 00:06:46,400

of course to be the tool that helps

125

00:06:49,430 --> 00:06:47,360

produce

126

00:06:51,830 --> 00:06:49,440

the parts that are necessary

127

00:06:54,150 --> 00:06:51,840

to take us to places that we have never

128

00:06:55,510 --> 00:06:54,160

been before and i can't think of a

129

00:06:58,070 --> 00:06:55,520

greater symbol

130

00:07:00,070 --> 00:06:58,080

for where the city of new orleans is

131

00:07:02,390 --> 00:07:00,080

in her history as we suffered

132

00:07:05,029 --> 00:07:02,400

from the devastation from 911 from

133

00:07:07,430 --> 00:07:05,039

katrina from rita from ike from gustav

134

00:07:09,029 --> 00:07:07,440

from the national oil spill uh to the

135

00:07:11,189 --> 00:07:09,039

national recession the people of new

136

00:07:12,950 --> 00:07:11,199

orleans said we were not going to quit

137

00:07:14,950 --> 00:07:12,960

and as we talked about re-engineering

138

00:07:17,189 --> 00:07:14,960

our lives we never built it back like it

139

00:07:19,270 --> 00:07:17,199

was with an eye towards the past we're

140

00:07:21,510 --> 00:07:19,280

beginning to build towards the future

141

00:07:24,309 --> 00:07:21,520

the way we should have always been and

142

00:07:26,870 --> 00:07:24,319

there's no greater symbol for our reach

143

00:07:29,990 --> 00:07:26,880

than this piece of equipment that stands

144

00:07:32,070 --> 00:07:30,000

behind us so as new orleans celebrates

145

00:07:34,230 --> 00:07:32,080

uh the investments that we made from the

146

00:07:36,629 --> 00:07:34,240

beginning of new orleans when andrew

147

00:07:38,870 --> 00:07:36,639

jackson uh won the battle of new orleans

148

00:07:41,589 --> 00:07:38,880

we built the higgins boats that helped

149

00:07:43,670 --> 00:07:41,599

win world war ii and right here we begin

150

00:07:46,309 --> 00:07:43,680

the march to the next great uh

151

00:07:48,629 --> 00:07:46,319

exploration in space which general i

152

00:07:51,749 --> 00:07:48,639

know will occur in 2018 which

153

00:07:53,430 --> 00:07:51,759

incidentally is a 300th anniversary of

154

00:07:55,510 --> 00:07:53,440

the great city of new orleans as we

155

00:07:57,189 --> 00:07:55,520

forge not only a great remembrance of

156

00:07:58,950 --> 00:07:57,199

our past but we begin to lay the

157

00:08:00,629 --> 00:07:58,960

foundation for our future and this is a

158

00:08:03,110 --> 00:08:00,639

wonderful symbol

159

00:08:04,950 --> 00:08:03,120

and a concrete example of how we are

160

00:08:06,629 --> 00:08:04,960

going to win this battle for the future

161

00:08:08,309 --> 00:08:06,639

so god bless you all thank you all so

162

00:08:17,749 --> 00:08:08,319

very much and we look forward to this

163

00:08:22,150 --> 00:08:19,510

thank you mary outlander

164

00:08:23,510 --> 00:08:22,160

now it is my honor to introduce our nasa

165

00:08:25,189 --> 00:08:23,520

administrator

166

00:08:33,269 --> 00:08:25,199

former astronaut

167

00:08:37,269 --> 00:08:34,790

thank you all very much

168

00:08:38,790 --> 00:08:37,279

and i'll tell you

169

00:08:40,790 --> 00:08:38,800

senator

170

00:08:42,630 --> 00:08:40,800

merely andrew thanks so much for your

171

00:08:44,310 --> 00:08:42,640

remarks and for coming out senator

172

00:08:47,269 --> 00:08:44,320

vitter thanks to you for coming

173

00:08:48,949 --> 00:08:47,279

congressman palazzo this is a big day

174

00:08:51,350 --> 00:08:48,959

the vertical assembly center is the

175

00:08:53,430 --> 00:08:51,360

final major tool

176

00:08:55,030 --> 00:08:53,440

uh completed at michoud assembly

177

00:08:57,430 --> 00:08:55,040

facility and this state-of-the-art

178

00:08:58,550 --> 00:08:57,440

tooling will weld together the massive

179

00:09:01,350 --> 00:08:58,560

core

180

00:09:03,990 --> 00:09:01,360

stage of the space launch system

181

00:09:06,230 --> 00:09:04,000

sls is a game changer you've heard

182

00:09:08,630 --> 00:09:06,240

you heard merely andrew talk about this

183

00:09:10,949 --> 00:09:08,640

is the beginning of the trip to mars and

184

00:09:13,030 --> 00:09:10,959

everything you've seen around here talks

185

00:09:14,550 --> 00:09:13,040

about that um i know there are at least

186

00:09:16,630 --> 00:09:14,560

two kids here

187

00:09:19,590 --> 00:09:16,640

um you know and they belong to patricia

188

00:09:22,070 --> 00:09:19,600

key who we recognized earlier today

189

00:09:25,350 --> 00:09:22,080

the boeing vehicle the boeing

190

00:09:27,110 --> 00:09:25,360

vehicle vertical assembly center project

191

00:09:28,790 --> 00:09:27,120

manager and she was recognized with a

192

00:09:29,910 --> 00:09:28,800

silver snoopy just earlier has her

193

00:09:30,630 --> 00:09:29,920

family here

194

00:09:32,310 --> 00:09:30,640

but

195

00:09:34,710 --> 00:09:32,320

what we're talking about here is for

196

00:09:36,630 --> 00:09:34,720

those kids and we all need to remember

197

00:09:38,870 --> 00:09:36,640

that this is not for any of us sitting

198

00:09:41,430 --> 00:09:38,880

here today what we're doing and what

199

00:09:45,110 --> 00:09:41,440

we're about is for for the young people

200

00:09:49,350 --> 00:09:47,269

we're on our way to mars and i really

201
00:09:50,949 --> 00:09:49,360
mean that the state of louisiana the

202
00:09:52,550 --> 00:09:50,959
city of new orleans along with

203
00:09:55,910 --> 00:09:52,560
neighboring states

204
00:09:57,829 --> 00:09:55,920
are a key part of building sls

205
00:09:59,509 --> 00:09:57,839
the core stage is the heart of the space

206
00:10:02,310 --> 00:09:59,519
launch system

207
00:10:04,949 --> 00:10:02,320
so new orleans michoud assembly facility

208
00:10:06,870 --> 00:10:04,959
is the lifeblood building the heart of

209
00:10:09,269 --> 00:10:06,880
america's next rocket

210
00:10:10,470 --> 00:10:09,279
to give you a sense of its size uh you

211
00:10:13,350 --> 00:10:10,480
know

212
00:10:15,829 --> 00:10:13,360
200 feet long the core stage is 46 feet

213
00:10:19,350 --> 00:10:15,839

longer than the shuttle's external tank

214

00:10:23,750 --> 00:10:19,360

with 20 with rs 25 engines integrated

215

00:10:26,389 --> 00:10:23,760

and the core stage is 212 or 58 feet

216

00:10:27,990 --> 00:10:26,399

longer than the et so it's big

217

00:10:29,990 --> 00:10:28,000

to put it mildly

218

00:10:32,069 --> 00:10:30,000

it's a big day for us because just two

219

00:10:34,710 --> 00:10:32,079

days ago at the kennedy space center we

220

00:10:37,269 --> 00:10:34,720

rolled orion out and if you look at the

221

00:10:38,870 --> 00:10:37,279

big diagram over there orion's the

222

00:10:41,269 --> 00:10:38,880

little thing at the top that's where the

223

00:10:43,269 --> 00:10:41,279

astronauts are going to be mark geyer is

224

00:10:45,430 --> 00:10:43,279

here who's the program manager for orion

225

00:10:47,350 --> 00:10:45,440

it was a huge day for mark and the team

226
00:10:49,910 --> 00:10:47,360
at the kennedy space center because

227
00:10:50,790 --> 00:10:49,920
orion rolled from its assembly facility

228
00:10:53,269 --> 00:10:50,800
at the

229
00:10:55,509 --> 00:10:53,279
um the neil armstrong operations in

230
00:10:56,630 --> 00:10:55,519
checkout building across the kennedy

231
00:10:58,870 --> 00:10:56,640
space center

232
00:11:00,790 --> 00:10:58,880
environs to the hypergolic production

233
00:11:03,509 --> 00:11:00,800
facility where it's going to be fueled

234
00:11:06,790 --> 00:11:03,519
for its first flight in december this

235
00:11:09,350 --> 00:11:06,800
december not december next year december

236
00:11:10,069 --> 00:11:09,360
years from now this december months from

237
00:11:11,670 --> 00:11:10,079
now

238
00:11:13,350 --> 00:11:11,680

that's significant because it will be

239

00:11:16,230 --> 00:11:13,360

the first time in more than 40 years

240

00:11:18,710 --> 00:11:16,240

that this great nation of ours

241

00:11:20,470 --> 00:11:18,720

you know has ever built and launched a

242

00:11:24,550 --> 00:11:20,480

vehicle intended to carry humans beyond

243

00:11:27,350 --> 00:11:24,560

low earth orbit that's a big big deal

244

00:11:29,430 --> 00:11:27,360

and as i said earlier the people of new

245

00:11:31,190 --> 00:11:29,440

orleans and this vicinity you should

246

00:11:33,350 --> 00:11:31,200

stick your chest out

247

00:11:35,829 --> 00:11:33,360

every single time somebody says where do

248

00:11:38,069 --> 00:11:35,839

you live what's near you and say i'm the

249

00:11:40,069 --> 00:11:38,079

i'm from the machu community and we're

250

00:11:43,269 --> 00:11:40,079

building the rocket that's going to take

251
00:11:44,470 --> 00:11:43,279
humans to mars and that is a big big

252
00:11:47,750 --> 00:11:44,480
deal

253
00:11:49,829 --> 00:11:47,760
the core stage is the heart of sls

254
00:11:52,069 --> 00:11:49,839
and it's like i said just as new orleans

255
00:11:55,110 --> 00:11:52,079
and michoud are essential to achieving

256
00:11:57,269 --> 00:11:55,120
america's great giant next giant leap

257
00:11:59,110 --> 00:11:57,279
nasa just recently completed rigorous

258
00:12:01,269 --> 00:11:59,120
technical and programmatic review of the

259
00:12:03,430 --> 00:12:01,279
space launch system and it passed with

260
00:12:05,430 --> 00:12:03,440
flying colors in fact no other

261
00:12:07,750 --> 00:12:05,440
exploration class space vehicle has

262
00:12:09,829 --> 00:12:07,760
progressed as far as sls

263
00:12:11,110 --> 00:12:09,839

since we built the space shuttle that

264

00:12:12,389 --> 00:12:11,120

was a long

265

00:12:13,750 --> 00:12:12,399

time ago

266

00:12:15,670 --> 00:12:13,760

and earlier this week the launch

267

00:12:17,829 --> 00:12:15,680

facilities needed to get this rocket off

268

00:12:20,310 --> 00:12:17,839

the ground passed a similar rigorous

269

00:12:22,790 --> 00:12:20,320

review marking additional progress on

270

00:12:25,509 --> 00:12:22,800

these deep space exploration systems

271

00:12:27,430 --> 00:12:25,519

this rocket again is a game changer for

272

00:12:29,030 --> 00:12:27,440

deep space exploration and will launch

273

00:12:31,350 --> 00:12:29,040

nasa astronauts

274

00:12:33,670 --> 00:12:31,360

to investigate asteroids and explore the

275

00:12:35,670 --> 00:12:33,680

surface of mars while opening new

276

00:12:36,629 --> 00:12:35,680

possibilities for science missions as

277

00:12:38,710 --> 00:12:36,639

well

278

00:12:40,949 --> 00:12:38,720

in addition to work on the massive sls

279

00:12:43,509 --> 00:12:40,959

core stage the orion spacecraft's

280

00:12:46,069 --> 00:12:43,519

primary structure as well was welded at

281

00:12:47,829 --> 00:12:46,079

machu by lockheed martin before it's

282

00:12:48,710 --> 00:12:47,839

completed to go to the kennedy space

283

00:12:50,550 --> 00:12:48,720

center

284

00:12:52,949 --> 00:12:50,560

that spacecraft will make its debut

285

00:12:55,110 --> 00:12:52,959

again in space this december on

286

00:12:57,910 --> 00:12:55,120

exploration flight test one the

287

00:12:59,829 --> 00:12:57,920

spacecraft's first flight to space

288

00:13:02,710 --> 00:12:59,839

astronauts eventually will travel in

289

00:13:04,870 --> 00:13:02,720

orion to an asteroid and then on to mars

290

00:13:07,670 --> 00:13:04,880

and it all begins

291

00:13:09,350 --> 00:13:07,680

right here at machu i see the mirror

292

00:13:11,110 --> 00:13:09,360

smiling down there and i'm glad to see

293

00:13:13,110 --> 00:13:11,120

the mirror smiling everybody else in

294

00:13:15,750 --> 00:13:13,120

this audience who's from this area ought

295

00:13:17,829 --> 00:13:15,760

to be smiling too it all begins right

296

00:13:20,150 --> 00:13:17,839

here now congressman palazzo and i have

297

00:13:21,910 --> 00:13:20,160

a we have an understanding nothing goes

298

00:13:23,030 --> 00:13:21,920

to space that doesn't go through

299

00:13:24,310 --> 00:13:23,040

mississippi

300

00:13:26,310 --> 00:13:24,320

because that's where all the engines get

301
00:13:28,069 --> 00:13:26,320
tested so i haven't forgotten marie

302
00:13:30,870 --> 00:13:28,079
all right semper fi

303
00:13:34,870 --> 00:13:32,550
together nasa and boeing and their

304
00:13:36,710 --> 00:13:34,880
supporting contractors are providing 600

305
00:13:38,949 --> 00:13:36,720
jobs in the construction of the core

306
00:13:39,990 --> 00:13:38,959
stage right here this facility's

307
00:13:41,750 --> 00:13:40,000
features

308
00:13:44,069 --> 00:13:41,760
also have attracted other federal

309
00:13:46,470 --> 00:13:44,079
agencies and private companies making

310
00:13:50,150 --> 00:13:46,480
michoud a multi-tenant campus that

311
00:13:52,470 --> 00:13:50,160
directly employs about 3 500 people i

312
00:13:54,069 --> 00:13:52,480
call this a federal city it's it's very

313
00:13:56,629 --> 00:13:54,079

similar to several other centers that we

314

00:13:57,990 --> 00:13:56,639

have and rory malone and his folk here i

315

00:13:59,030 --> 00:13:58,000

mean you know we're talking about the

316

00:14:01,430 --> 00:13:59,040

mayor

317

00:14:03,110 --> 00:14:01,440

of a federal city got a big job that he

318

00:14:05,269 --> 00:14:03,120

has to do

319

00:14:07,269 --> 00:14:05,279

that's the kind of real world impact we

320

00:14:09,110 --> 00:14:07,279

get from exploration in addition to the

321

00:14:11,269 --> 00:14:09,120

inspiration and hardware that's helping

322

00:14:13,189 --> 00:14:11,279

us craft our journey to mars

323

00:14:15,110 --> 00:14:13,199

i want to thank the workforce here i

324

00:14:17,189 --> 00:14:15,120

really really really want to thank the

325

00:14:19,189 --> 00:14:17,199

workforce here for their exceptional

326

00:14:22,470 --> 00:14:19,199

effort on this project and encourage

327

00:14:24,870 --> 00:14:22,480

everyone to follow the progress of sls

328

00:14:26,550 --> 00:14:24,880

it's going to be an exciting story

329

00:14:27,430 --> 00:14:26,560

i want to congratulate mayor landrieu

330

00:14:29,350 --> 00:14:27,440

again

331

00:14:31,750 --> 00:14:29,360

facility director roy malone and

332

00:14:34,069 --> 00:14:31,760

everyone who has helped us create this

333

00:14:35,670 --> 00:14:34,079

cutting edge tool and move us farther

334

00:14:36,710 --> 00:14:35,680

along in our journey

335

00:14:38,870 --> 00:14:36,720

today

336

00:14:41,350 --> 00:14:38,880

we witness a major milestone for the

337

00:14:43,829 --> 00:14:41,360

program and more proof that that the

338

00:14:46,949 --> 00:14:43,839

design of america's fir next great

339

00:14:48,710 --> 00:14:46,959

rocket is mature enough for production

340

00:14:49,990 --> 00:14:48,720

i want to acknowledge the bipartisan

341

00:14:51,269 --> 00:14:50,000

support that we've gotten from our

342

00:14:53,430 --> 00:14:51,279

congress

343

00:14:55,030 --> 00:14:53,440

that brought us here today that's no

344

00:14:56,790 --> 00:14:55,040

small feat

345

00:14:59,350 --> 00:14:56,800

in today's environment but we have

346

00:15:01,350 --> 00:14:59,360

continued to have bipartisan support on

347

00:15:02,949 --> 00:15:01,360

this and other space programs and i i

348

00:15:04,710 --> 00:15:02,959

really look forward to continuing that

349

00:15:06,310 --> 00:15:04,720

but it's going to take a lot of work on

350

00:15:07,829 --> 00:15:06,320

our part and a lot of work on the part

351

00:15:09,750 --> 00:15:07,839

of the congress so i look forward to

352

00:15:12,790 --> 00:15:09,760

continuing our work there

353

00:15:14,230 --> 00:15:12,800

now i'd like to introduce a person who's

354

00:15:16,470 --> 00:15:14,240

really been a friend of the space

355

00:15:18,069 --> 00:15:16,480

program for some time and that's senator

356

00:15:20,550 --> 00:15:18,079

david vitter who represents the great

357

00:15:28,790 --> 00:15:20,560

state of louisiana in the u.s senate

358

00:15:31,910 --> 00:15:30,949

thank you mr administrator

359

00:15:35,269 --> 00:15:31,920

well

360

00:15:38,069 --> 00:15:35,279

the mayor was certainly right wow

361

00:15:40,629 --> 00:15:38,079

but there's only one thing more

362

00:15:42,550 --> 00:15:40,639

impressive than this piece of equipment

363

00:15:45,829 --> 00:15:42,560

this structure

364

00:15:48,310 --> 00:15:45,839

and that's the team the human team

365

00:15:51,110 --> 00:15:48,320

that designed it and built it and will

366

00:15:54,629 --> 00:15:51,120

use it to work on

367

00:15:57,749 --> 00:15:54,639

and i'm so proud of that entire team

368

00:16:00,069 --> 00:15:57,759

i was a very small part of that team

369

00:16:02,389 --> 00:16:00,079

particularly when i was the top ranking

370

00:16:05,269 --> 00:16:02,399

republican on the space subcommittee we

371

00:16:07,509 --> 00:16:05,279

passed the last nasa reauthorization

372

00:16:09,829 --> 00:16:07,519

bill that that got us through that low

373

00:16:11,110 --> 00:16:09,839

point put us back on track toward this

374

00:16:13,430 --> 00:16:11,120

program

375

00:16:16,069 --> 00:16:13,440

uh but the rest of the team members are

376

00:16:19,030 --> 00:16:16,079

just outstanding of course it starts

377

00:16:21,269 --> 00:16:19,040

with nasa all of nasa so thank you mr

378

00:16:25,350 --> 00:16:21,279

administrator and patrick sherman and

379

00:16:28,790 --> 00:16:25,360

all of nasa here and around the country

380

00:16:31,990 --> 00:16:28,800

certainly involves the key contractors

381

00:16:34,310 --> 00:16:32,000

on this and other programs ginger barnes

382

00:16:37,350 --> 00:16:34,320

thank you and boeing and all of the

383

00:16:40,150 --> 00:16:37,360

contractors who make this possible this

384

00:16:43,509 --> 00:16:40,160

program this feat is only possible

385

00:16:45,749 --> 00:16:43,519

because of private industry as well it

386

00:16:48,150 --> 00:16:45,759

involves a lot of other political

387

00:16:49,509 --> 00:16:48,160

partners and stakeholders here thanks to

388

00:16:51,749 --> 00:16:49,519

all of you

389

00:16:54,550 --> 00:16:51,759

but really the members of the team i'm

390

00:16:57,670 --> 00:16:54,560

most proud of i'm maybe a little biased

391

00:16:59,910 --> 00:16:57,680

and parochial but it's the workforce

392

00:17:03,189 --> 00:16:59,920

that the administrator referenced right

393

00:17:06,470 --> 00:17:03,199

here at michoud and there isn't a better

394

00:17:12,069 --> 00:17:06,480

workforce at any nasa facility any

395

00:17:17,429 --> 00:17:15,110

i'll never forget visiting here soon

396

00:17:19,990 --> 00:17:17,439

after katrina hearing about all the

397

00:17:22,470 --> 00:17:20,000

members of the workforce who stayed here

398

00:17:26,069 --> 00:17:22,480

defended this campus and saved the

399

00:17:27,270 --> 00:17:26,079

taxpayer untold millions of fighting the

400

00:17:29,029 --> 00:17:27,280

flood event

401
00:17:30,950 --> 00:17:29,039
that day i was presented with a

402
00:17:34,789 --> 00:17:30,960
beautiful plaque that was made out of a

403
00:17:37,990 --> 00:17:34,799
tree that broke during katrina declaring

404
00:17:39,190 --> 00:17:38,000
this site fort missou it was during

405
00:17:41,990 --> 00:17:39,200
katrina

406
00:17:45,990 --> 00:17:42,000
and i still have that plaque display it

407
00:17:48,710 --> 00:17:46,000
proudly very very proudly in my office

408
00:17:51,190 --> 00:17:48,720
i'll never forget talking to so many of

409
00:17:53,830 --> 00:17:51,200
the workforce here particularly during

410
00:17:57,350 --> 00:17:53,840
the low point of the nasa program when

411
00:18:00,230 --> 00:17:57,360
we were full of uncertainty and concern

412
00:18:03,590 --> 00:18:00,240
quite frankly for the future but that

413
00:18:05,990 --> 00:18:03,600

workforce stuck it out and stayed here

414

00:18:09,750 --> 00:18:06,000

for the future and as we came out of

415

00:18:11,990 --> 00:18:09,760

that with the sls program i i visited

416

00:18:15,110 --> 00:18:12,000

then as well including the last time i

417

00:18:17,990 --> 00:18:15,120

was here was also with the administrator

418

00:18:19,669 --> 00:18:18,000

for an event here where we talked

419

00:18:23,430 --> 00:18:19,679

to the astronauts

420

00:18:25,669 --> 00:18:23,440

on the space station via his cell phone

421

00:18:27,510 --> 00:18:25,679

another wow moment who would have

422

00:18:28,950 --> 00:18:27,520

thought about that

423

00:18:31,750 --> 00:18:28,960

and certainly

424

00:18:33,990 --> 00:18:31,760

i look forward to the many

425

00:18:36,870 --> 00:18:34,000

further bright spots and important

426

00:18:39,830 --> 00:18:36,880

moments here to celebrate with the

427

00:18:41,430 --> 00:18:39,840

workforce thanks to all of you for

428

00:18:42,870 --> 00:18:41,440

everything

429

00:18:46,390 --> 00:18:42,880

you do

430

00:18:48,950 --> 00:18:46,400

you can absolutely hold your head proud

431

00:18:51,669 --> 00:18:48,960

and later on in life when kids or

432

00:18:54,630 --> 00:18:51,679

grandkids ask you know what did you do

433

00:18:57,669 --> 00:18:54,640

in your work life dad or grandpa

434

00:19:00,230 --> 00:18:57,679

you have a pretty darn good answer

435

00:19:03,669 --> 00:19:00,240

i helped build the biggest

436

00:19:11,029 --> 00:19:03,679

rocket in human history

437

00:19:15,669 --> 00:19:14,470

that took the longest flights in human

438

00:19:33,590 --> 00:19:15,679

history

439

00:19:38,630 --> 00:19:36,390

thank you senator federer

440

00:19:40,150 --> 00:19:38,640

i'd now like to introduce

441

00:19:41,110 --> 00:19:40,160

the chairman of the house science

442

00:19:47,750 --> 00:19:41,120

committee

443

00:19:50,710 --> 00:19:48,870

senator

444

00:19:52,870 --> 00:19:50,720

or correction

445

00:19:54,789 --> 00:19:52,880

yeah

446

00:20:06,630 --> 00:19:54,799

the honorable stephen palazzo

447

00:20:11,110 --> 00:20:08,789

roy i appreciate the promotion by the

448

00:20:13,029 --> 00:20:11,120

way but but we do have a senator in

449

00:20:14,149 --> 00:20:13,039

mississippi his name is thad cochran and

450

00:20:16,710 --> 00:20:14,159

he's also

451
00:20:18,710 --> 00:20:16,720
a huge supporter of america's space

452
00:20:20,390 --> 00:20:18,720
exploration program

453
00:20:23,430 --> 00:20:20,400
at a fundamental level

454
00:20:25,430 --> 00:20:23,440
space exploration the mission of nasa is

455
00:20:27,909 --> 00:20:25,440
about inspiration

456
00:20:29,510 --> 00:20:27,919
this inspiration fuels our desire to

457
00:20:32,230 --> 00:20:29,520
push the boundaries

458
00:20:35,590 --> 00:20:32,240
of the possible and reach beyond our own

459
00:20:37,990 --> 00:20:35,600
pale blue dot the space launch system

460
00:20:40,149 --> 00:20:38,000
will be the most powerful rocket ever

461
00:20:43,029 --> 00:20:40,159
built and will carry humanity into the

462
00:20:44,630 --> 00:20:43,039
next phase of the exploration of our

463
00:20:46,870 --> 00:20:44,640

solar system

464

00:20:49,750 --> 00:20:46,880

this critical asset is the essential

465

00:20:52,230 --> 00:20:49,760

component of our future deep space human

466

00:20:55,590 --> 00:20:52,240

exploration efforts

467

00:20:57,830 --> 00:20:55,600

the sls is not it's not just drawings on

468

00:21:00,070 --> 00:20:57,840

a sketch pad it is real

469

00:21:02,390 --> 00:21:00,080

you can see the hardware being built and

470

00:21:05,190 --> 00:21:02,400

the components being assembled

471

00:21:07,510 --> 00:21:05,200

the rs-25 engines that will be tested

472

00:21:09,190 --> 00:21:07,520

down the road at stennis space center

473

00:21:11,510 --> 00:21:09,200

and the core of the rocket that will be

474

00:21:13,750 --> 00:21:11,520

assembled here at michoud in the next

475

00:21:16,230 --> 00:21:13,760

couple of years represent the progress

476
00:21:18,870 --> 00:21:16,240
that is being made toward our goal of

477
00:21:20,950 --> 00:21:18,880
sending humans to mars

478
00:21:24,549 --> 00:21:20,960
we are working hard in congress to keep

479
00:21:26,789 --> 00:21:24,559
this program on schedule and on budget

480
00:21:29,430 --> 00:21:26,799
in tough times like these it is always a

481
00:21:32,470 --> 00:21:29,440
challenge but human space flight speaks

482
00:21:34,549 --> 00:21:32,480
of who we are as americans we are

483
00:21:36,710 --> 00:21:34,559
explorers

484
00:21:39,430 --> 00:21:36,720
as chairman of the space subcommittee i

485
00:21:42,470 --> 00:21:39,440
am committed to ensuring the sls gets

486
00:21:44,549 --> 00:21:42,480
the support it needs to be successful

487
00:21:46,950 --> 00:21:44,559
the hard-working men and women here at

488
00:21:49,750 --> 00:21:46,960

michoud and down the road at stennis are

489

00:21:53,110 --> 00:21:49,760

the embodiment of everything that space

490

00:21:55,270 --> 00:21:53,120

exploration represents they are nasa and

491

00:21:56,310 --> 00:21:55,280

they are the future of our exploration

492

00:21:58,710 --> 00:21:56,320

efforts

493

00:22:01,190 --> 00:21:58,720

i want to thank administrator bolden my

494

00:22:03,270 --> 00:22:01,200

good friend maureen semper fi thank you

495

00:22:04,870 --> 00:22:03,280

for mentioning stennis the path to space

496

00:22:06,230 --> 00:22:04,880

will go through

497

00:22:08,870 --> 00:22:06,240

mississippi

498

00:22:11,350 --> 00:22:08,880

uh for his visit here today and i look

499

00:22:13,590 --> 00:22:11,360

forward to continuing our work uh with

500

00:22:16,549 --> 00:22:13,600

you with the senator

501
00:22:19,669 --> 00:22:16,559
from louisiana to make sure nasa's human

502
00:22:21,350 --> 00:22:19,679
exploration program remains strong thank

503
00:22:28,310 --> 00:22:21,360
you for allowing me to be here thank you

504
00:22:28,320 --> 00:22:33,510
thank you congressman palazzo

505
00:22:36,789 --> 00:22:35,590
thank you gentlemen now it's my pleasure

506
00:22:39,430 --> 00:22:36,799
to introduce

507
00:22:41,350 --> 00:22:39,440
nasa astronaut patrick forrester

508
00:22:44,230 --> 00:22:41,360
who flew on the three space shuttle

509
00:22:45,909 --> 00:22:44,240
missions and has logged more than 950

510
00:22:48,870 --> 00:22:45,919
hours in space

511
00:22:51,830 --> 00:22:48,880
including four space walks totaling over

512
00:23:01,990 --> 00:22:51,840
25 hours of eva time

513
00:23:07,830 --> 00:23:05,430

well 32 days ago there were eight

514

00:23:10,149 --> 00:23:07,840

very excited young men and women

515

00:23:12,789 --> 00:23:10,159

standing right where you're sitting

516

00:23:15,990 --> 00:23:12,799

snapping pictures taking selfies with

517

00:23:17,270 --> 00:23:16,000

the bac and dreaming of going to space

518

00:23:19,029 --> 00:23:17,280

one day

519

00:23:21,990 --> 00:23:19,039

now those same eight astronaut

520

00:23:25,110 --> 00:23:22,000

candidates today find themselves out in

521

00:23:26,630 --> 00:23:25,120

the wilderness near lander wyoming

522

00:23:29,909 --> 00:23:26,640

as they're trekking through some pretty

523

00:23:32,870 --> 00:23:29,919

harsh terrain on the wind river mountain

524

00:23:34,710 --> 00:23:32,880

where nasa is testing their

525

00:23:37,510 --> 00:23:34,720

physical toughness their mental

526

00:23:38,710 --> 00:23:37,520

toughness their ability to work as a

527

00:23:41,269 --> 00:23:38,720

team

528

00:23:42,149 --> 00:23:41,279

their ability to explore and conquer

529

00:23:44,149 --> 00:23:42,159

that

530

00:23:46,070 --> 00:23:44,159

small area

531

00:23:47,990 --> 00:23:46,080

of wyoming

532

00:23:49,990 --> 00:23:48,000

and why are they doing that and so much

533

00:23:52,070 --> 00:23:50,000

more

534

00:23:55,830 --> 00:23:52,080

because one day they want to be on top

535

00:23:57,590 --> 00:23:55,840

of the sls hurtling into space

536

00:23:59,669 --> 00:23:57,600

and whether it's a trans lunar mission

537

00:24:02,470 --> 00:23:59,679

or an asteroid mission

538

00:24:05,430 --> 00:24:02,480

or perhaps even to mars

539

00:24:08,070 --> 00:24:05,440

it's why we do what we do

540

00:24:10,390 --> 00:24:08,080

and i have the privilege of representing

541

00:24:12,310 --> 00:24:10,400

those eight young people today as their

542

00:24:13,510 --> 00:24:12,320

supervisor and the person that takes

543

00:24:17,350 --> 00:24:13,520

them through

544

00:24:21,909 --> 00:24:19,669

as our administrator mentioned this is

545

00:24:22,950 --> 00:24:21,919

the first time in 40 years our nation

546

00:24:25,029 --> 00:24:22,960

has

547

00:24:27,750 --> 00:24:25,039

made this type of cost and schedule

548

00:24:30,070 --> 00:24:27,760

commitment to a heavy-lift vehicle

549

00:24:31,990 --> 00:24:30,080

and our administrator myself kent

550

00:24:35,510 --> 00:24:32,000

rominger maybe someone else in the room

551
00:24:37,430 --> 00:24:35,520
i've missed has had the opportunity

552
00:24:39,669 --> 00:24:37,440
to fly into space aboard that space

553
00:24:41,350 --> 00:24:39,679
shuttle that very space shuttle

554
00:24:42,710 --> 00:24:41,360
and we did some amazing things with it

555
00:24:45,750 --> 00:24:42,720
to include building our current

556
00:24:47,990 --> 00:24:45,760
international space station

557
00:24:50,710 --> 00:24:48,000
and we're getting some amazing science

558
00:24:52,710 --> 00:24:50,720
out of that but in the end as important

559
00:24:54,950 --> 00:24:52,720
as that science is it's not the main

560
00:24:56,230 --> 00:24:54,960
reason we go to exploit space we go to

561
00:24:58,630 --> 00:24:56,240
explore

562
00:25:01,510 --> 00:24:58,640
exploration is the expression of the

563
00:25:04,230 --> 00:25:01,520

human will beyond earth

564

00:25:06,390 --> 00:25:04,240

and it's really why we do what we do

565

00:25:08,310 --> 00:25:06,400

and so i'm here to thank everyone that

566

00:25:11,110 --> 00:25:08,320

has put their heart and soul

567

00:25:13,990 --> 00:25:11,120

into both this vac as we get ready to do

568

00:25:16,149 --> 00:25:14,000

the ribbon cutting and into the sls to

569

00:25:17,190 --> 00:25:16,159

make that possible that we would once

570

00:25:20,470 --> 00:25:17,200

again

571

00:25:22,070 --> 00:25:20,480

go off uh beyond low earth orbit so

572

00:25:24,549 --> 00:25:22,080

thank you for all you do and for the

573

00:25:26,710 --> 00:25:24,559

opportunity to represent all of those in

574

00:25:36,310 --> 00:25:26,720

the astronaut corps that dream of going

575

00:25:40,149 --> 00:25:37,830

thank you patrick

576

00:25:42,870 --> 00:25:40,159

before i introduce our next speaker

577

00:25:45,190 --> 00:25:42,880

let's watch a short video of the amazing

578

00:25:46,149 --> 00:25:45,200

progress seen here over the last two

579

00:25:58,470 --> 00:25:46,159

years

580

00:26:02,070 --> 00:26:00,149

recently the space launch system

581

00:26:04,390 --> 00:26:02,080

received authorization from the agency

582

00:26:06,310 --> 00:26:04,400

to proceed into the implementation phase

583

00:26:09,430 --> 00:26:06,320

this means that the path for the future

584

00:26:11,590 --> 00:26:09,440

of sos has been paved so the sls is

585

00:26:13,190 --> 00:26:11,600

really excited about our core stage it

586

00:26:15,430 --> 00:26:13,200

is what's happening right now in our

587

00:26:17,350 --> 00:26:15,440

program the installation of the vehicle

588

00:26:19,350 --> 00:26:17,360

assembly center at map is an important

589

00:26:20,950 --> 00:26:19,360

part of our mission the focus here at

590

00:26:23,590 --> 00:26:20,960

the michoud assembly facility in new

591

00:26:25,430 --> 00:26:23,600

orleans louisiana is factory readiness

592

00:26:27,590 --> 00:26:25,440

we're looking at weld operations coming

593

00:26:30,310 --> 00:26:27,600

online construction of facilities still

594

00:26:32,310 --> 00:26:30,320

ongoing and bringing online the assembly

595

00:26:34,070 --> 00:26:32,320

and integration areas to put together

596

00:26:36,470 --> 00:26:34,080

the integrated core stage and later the

597

00:26:38,470 --> 00:26:36,480

upper stage the core stage is the

598

00:26:40,310 --> 00:26:38,480

backbone it's the heart of the vehicle

599

00:26:43,830 --> 00:26:40,320

everything else hangs off of it the

600

00:26:45,830 --> 00:26:43,840

boosters the rs25 engines the icps this

601
00:26:47,909 --> 00:26:45,840
core stage is the core stays of the

602
00:26:50,310 --> 00:26:47,919
future it's the core stage designed for

603
00:26:52,630 --> 00:26:50,320
mars the future is now the different

604
00:26:55,110 --> 00:26:52,640
areas of the factory were first the weld

605
00:26:56,950 --> 00:26:55,120
areas on one portion of the factory the

606
00:26:59,190 --> 00:26:56,960
middle section of the factory has to do

607
00:27:01,350 --> 00:26:59,200
with our tank processing

608
00:27:03,430 --> 00:27:01,360
proof testing the tank cleaning the tank

609
00:27:05,110 --> 00:27:03,440
putting the epoxy primer on the tank and

610
00:27:07,110 --> 00:27:05,120
finally the thermal protection system

611
00:27:08,789 --> 00:27:07,120
foams and then the final area of the

612
00:27:10,870 --> 00:27:08,799
factory has to do with the assembly and

613
00:27:12,710 --> 00:27:10,880

integration areas because we're building

614

00:27:14,710 --> 00:27:12,720

a rocket and not the external tank of

615

00:27:16,710 --> 00:27:14,720

yesteryear on the shuttle program we

616

00:27:18,950 --> 00:27:16,720

need to bring on engine integration and

617

00:27:20,950 --> 00:27:18,960

avionics that we didn't have in prior

618

00:27:23,110 --> 00:27:20,960

processing that gives us a much more

619

00:27:24,389 --> 00:27:23,120

complex factory but we're excited with

620

00:27:26,870 --> 00:27:24,399

the challenge

621

00:27:29,990 --> 00:27:26,880

when we've completed it this factory

622

00:27:31,590 --> 00:27:30,000

with its people and his facilities will

623

00:27:45,830 --> 00:27:31,600

put together the first stage of the

624

00:27:50,630 --> 00:27:48,549

absolutely amazing stuff

625

00:27:51,669 --> 00:27:50,640

please let me introduce the nasa program

626
00:28:00,310 --> 00:27:51,679
manager

627
00:28:00,320 --> 00:28:03,990
thank you mayor roy

628
00:28:07,909 --> 00:28:06,310
uh a quick aside before i get going uh i

629
00:28:09,190 --> 00:28:07,919
want to say that whenever i come down

630
00:28:11,590 --> 00:28:09,200
here uh

631
00:28:13,590 --> 00:28:11,600
i always see roy and i see malcolm wood

632
00:28:15,029 --> 00:28:13,600
and the folks here at the team and and

633
00:28:16,389 --> 00:28:15,039
roy reminded me i was down here last

634
00:28:17,669 --> 00:28:16,399
week he said you came down here and you

635
00:28:19,590 --> 00:28:17,679
looked like a program manager you were

636
00:28:21,510 --> 00:28:19,600
kind of stern looking and serious and he

637
00:28:23,350 --> 00:28:21,520
says i always love it when you leave

638
00:28:25,190 --> 00:28:23,360

because you leave smiling

639

00:28:26,710 --> 00:28:25,200

and and it's true

640

00:28:28,870 --> 00:28:26,720

when you see something like this and you

641

00:28:30,950 --> 00:28:28,880

look up and and see the size of this

642

00:28:32,789 --> 00:28:30,960

thing you can't help but understand that

643

00:28:34,950 --> 00:28:32,799

this thing is real

644

00:28:36,870 --> 00:28:34,960

in two days we're going to celebrate the

645

00:28:39,990 --> 00:28:36,880

only the third anniversary of the

646

00:28:41,990 --> 00:28:40,000

kickoff of this program it was a concept

647

00:28:44,549 --> 00:28:42,000

at that point and now you're looking at

648

00:28:46,070 --> 00:28:44,559

a tool you see every bolt here every

649

00:28:48,470 --> 00:28:46,080

piece that came together to make this

650

00:28:50,789 --> 00:28:48,480

has happened in less than three years

651
00:28:52,470 --> 00:28:50,799
and we've got a nationwide team with

652
00:28:55,750 --> 00:28:52,480
with great partners

653
00:28:57,990 --> 00:28:55,760
boeing atk aerojet rocketdyne our sister

654
00:29:00,070 --> 00:28:58,000
programs the ground systems development

655
00:29:01,750 --> 00:29:00,080
office at kennedy space center and orion

656
00:29:04,149 --> 00:29:01,760
at johnson space center

657
00:29:06,710 --> 00:29:04,159
uh there's a whole bunch of people

658
00:29:09,669 --> 00:29:06,720
over 500 contractors in 42 states and

659
00:29:11,909 --> 00:29:09,679
sls alone working to pull this together

660
00:29:14,310 --> 00:29:11,919
and and stuff like this it doesn't build

661
00:29:17,029 --> 00:29:14,320
itself as everybody said before this is

662
00:29:19,350 --> 00:29:17,039
people these are individuals

663
00:29:20,710 --> 00:29:19,360

and uh and it's amazing to sit here and

664

00:29:22,950 --> 00:29:20,720

look at something like this if you're

665

00:29:24,310 --> 00:29:22,960

looking on tv you only see about a fifth

666

00:29:27,190 --> 00:29:24,320

of this tool

667

00:29:29,669 --> 00:29:27,200

if you're here in the room this tool

668

00:29:32,630 --> 00:29:29,679

uh from from about the weld head up to

669

00:29:35,029 --> 00:29:32,640

the top is one hydrogen tank of the core

670

00:29:37,350 --> 00:29:35,039

the core would stick 50 feet through the

671

00:29:39,590 --> 00:29:37,360

roof of this building then on top of

672

00:29:41,510 --> 00:29:39,600

that you have orion and its 100-foot

673

00:29:43,669 --> 00:29:41,520

stack and so it's great to come down

674

00:29:45,269 --> 00:29:43,679

here you actually get to see

675

00:29:47,510 --> 00:29:45,279

what this thing is going to be and how

676

00:29:48,870 --> 00:29:47,520

massive it is and it takes a massive

677

00:29:51,510 --> 00:29:48,880

tool to build a rocket that's going to

678

00:29:54,549 --> 00:29:51,520

take humans out beyond low-earth orbit

679

00:29:57,110 --> 00:29:54,559

and beyond the bounds that have held us

680

00:29:59,269 --> 00:29:57,120

for the last 40 years uh and and just

681

00:30:01,110 --> 00:29:59,279

one more little side story

682

00:30:02,870 --> 00:30:01,120

when i came down last week i saw one of

683

00:30:05,669 --> 00:30:02,880

the guys working on the tool and he had

684

00:30:07,190 --> 00:30:05,679

a he had a yellow jacket on and i looked

685

00:30:08,950 --> 00:30:07,200

around and so did everybody else and i

686

00:30:11,190 --> 00:30:08,960

said how do you guys tell who's bowing

687

00:30:13,110 --> 00:30:11,200

who's esab who's jacobs

688

00:30:15,110 --> 00:30:13,120

who's broadmoor and he said you know

689

00:30:16,630 --> 00:30:15,120

what i don't even know he said we're a

690

00:30:18,470 --> 00:30:16,640

team we get together every morning we

691

00:30:19,830 --> 00:30:18,480

have a safety meeting and we know what

692

00:30:20,630 --> 00:30:19,840

we have to do that day and we get it

693

00:30:23,110 --> 00:30:20,640

done

694

00:30:24,789 --> 00:30:23,120

and i will tell you that is a testament

695

00:30:25,909 --> 00:30:24,799

to a bunch of folks who have come

696

00:30:27,190 --> 00:30:25,919

together

697

00:30:28,630 --> 00:30:27,200

maybe from different places with

698

00:30:30,870 --> 00:30:28,640

different objectives but we're all

699

00:30:32,950 --> 00:30:30,880

working together towards one goal and so

700

00:30:35,269 --> 00:30:32,960

it's great to be here today the critical

701
00:30:37,269 --> 00:30:35,279
path of this rocket goes through this

702
00:30:39,190 --> 00:30:37,279
machine right here we passed our

703
00:30:41,909 --> 00:30:39,200
critical design review on the core

704
00:30:43,190 --> 00:30:41,919
there's 34 000 square feet of hardware

705
00:30:45,669 --> 00:30:43,200
sitting in the rest of this factory

706
00:30:47,110 --> 00:30:45,679
ready to come over here and be welded up

707
00:30:49,269 --> 00:30:47,120
i can tell you right now the team is

708
00:30:50,710 --> 00:30:49,279
really anxious for us to get done today

709
00:30:52,070 --> 00:30:50,720
and get out of here so they can get back

710
00:30:53,430 --> 00:30:52,080
on the tool and get it through its

711
00:30:55,510 --> 00:30:53,440
acceptance test and start putting

712
00:30:57,029 --> 00:30:55,520
hardware through it so good to be here

713
00:30:59,590 --> 00:30:57,039

today

714

00:31:01,190 --> 00:30:59,600

ready to have my partner ginger barnes

715

00:31:11,190 --> 00:31:01,200

and long-term friend come up and say a

716

00:31:16,310 --> 00:31:13,909

thank you todd it is so exciting to be

717

00:31:18,310 --> 00:31:16,320

here and i can feel the energy in this

718

00:31:20,310 --> 00:31:18,320

room can you can you sense the

719

00:31:21,830 --> 00:31:20,320

excitement about getting ready to go to

720

00:31:25,029 --> 00:31:21,840

mars

721

00:31:30,310 --> 00:31:27,830

the most exciting part of my job is

722

00:31:32,310 --> 00:31:30,320

representing the team that you see

723

00:31:34,710 --> 00:31:32,320

assembled here today and the ones we're

724

00:31:36,710 --> 00:31:34,720

representing who couldn't be here today

725

00:31:39,110 --> 00:31:36,720

and that's this incredible workforce

726
00:31:40,549 --> 00:31:39,120
that has made this possible many of you

727
00:31:42,149 --> 00:31:40,559
have talked about

728
00:31:43,590 --> 00:31:42,159
the people and the team that it takes to

729
00:31:45,590 --> 00:31:43,600
put this together

730
00:31:47,710 --> 00:31:45,600
and it is a team

731
00:31:51,029 --> 00:31:47,720
it's our state local and federal

732
00:31:52,870 --> 00:31:51,039
representatives it is our partners it's

733
00:31:55,190 --> 00:31:52,880
our customers

734
00:31:59,830 --> 00:31:55,200
it's the community all of that's

735
00:32:02,230 --> 00:31:59,840
important to building this big tool

736
00:32:03,909 --> 00:32:02,240
we're not only building we're not just

737
00:32:05,909 --> 00:32:03,919
making a rocket

738
00:32:08,630 --> 00:32:05,919

we're making history

739

00:32:11,669 --> 00:32:08,640

so this milestone of cutting the ribbon

740

00:32:14,710 --> 00:32:11,679

on the vertical assembly center is big

741

00:32:18,230 --> 00:32:14,720

the machine is big

742

00:32:20,389 --> 00:32:18,240

but it's so important we are also making

743

00:32:23,669 --> 00:32:20,399

history this is such a

744

00:32:26,549 --> 00:32:23,679

significant event because right now

745

00:32:29,029 --> 00:32:26,559

we are a hundred percent ready to build

746

00:32:31,509 --> 00:32:29,039

this rocket

747

00:32:43,669 --> 00:32:33,430

let's let's go do it

748

00:32:49,269 --> 00:32:46,630

thank you todd ginger

749

00:32:51,750 --> 00:32:49,279

it's now time to cut the ribbon on a

750

00:32:54,230 --> 00:32:51,760

truly modern marvel

751
00:32:56,389 --> 00:32:54,240
we're going to use this modern marvel to

752
00:32:58,789 --> 00:32:56,399
build another modern marvel

753
00:32:59,909 --> 00:32:58,799
the space launch system

754
00:33:01,269 --> 00:32:59,919
well those

755
00:33:04,710 --> 00:33:01,279
people that are participating in the

756
00:33:07,590 --> 00:33:04,720
cutting ceremony please come forward

757
00:33:29,509 --> 00:33:07,600
and help us prepare for the next step

758
00:33:29,519 --> 00:34:03,669
all right

759
00:34:07,029 --> 00:34:04,950
all together

760
00:34:07,990 --> 00:34:07,039
five four

761
00:34:09,030 --> 00:34:08,000
three

762
00:34:31,669 --> 00:34:09,040
two

763
00:34:31,679 --> 00:34:40,149

here we go

764

00:34:43,829 --> 00:34:42,790

t-minus 12 11

765

00:34:44,790 --> 00:34:43,839

10

766

00:34:45,829 --> 00:34:44,800

9

767

00:34:46,950 --> 00:34:45,839

8

768

00:34:47,909 --> 00:34:46,960

7

769

00:34:49,030 --> 00:34:47,919

six

770

00:34:50,149 --> 00:34:49,040

five

771

00:34:51,430 --> 00:34:50,159

four

772

00:34:52,389 --> 00:34:51,440

three

773

00:38:25,349 --> 00:34:52,399

two

774

00:38:25,359 --> 00:38:55,030

so

775

00:38:55,040 --> 00:39:07,430

do

776

00:39:55,589 --> 00:39:09,670

you're ready to fly that is the most

777

00:39:59,430 --> 00:39:57,670

would you start by explaining to us what

778

00:40:02,230 --> 00:39:59,440

you guys are doing down there today

779

00:40:30,309 --> 00:40:02,240

we're working on the technique and tool