



Welcome  
Discovery

FEATHERLITE

1  
00:00:06,710 --> 00:00:04,390  
good morning

2  
00:00:09,350 --> 00:00:06,720  
live from the smithsonian national air

3  
00:00:10,230 --> 00:00:09,360  
and space museum stephen f udvar-hazy

4  
00:00:12,230 --> 00:00:10,240  
center

5  
00:00:13,350 --> 00:00:12,240  
we're live on nasa television awaiting

6  
00:00:18,150 --> 00:00:13,360  
the

7  
00:00:19,910 --> 00:00:18,160  
very first ever space shuttle

8  
00:00:21,750 --> 00:00:19,920  
which has been maintained as part of the

9  
00:00:23,509 --> 00:00:21,760  
national collection

10  
00:00:25,589 --> 00:00:23,519  
as we prepared for that

11  
00:00:26,790 --> 00:00:25,599  
we are

12  
00:00:29,109 --> 00:00:26,800  
watching

13  
00:00:31,109 --> 00:00:29,119

video that has been taken by nasa

14

00:00:31,990 --> 00:00:31,119

television over the last several days as

15

00:00:33,430 --> 00:00:32,000

we

16

00:00:35,750 --> 00:00:33,440

prepared to bring space shuttle

17

00:00:47,590 --> 00:00:35,760

discovery to the national air and space

18

00:00:51,910 --> 00:00:49,670

news media are gathered here at the air

19

00:00:53,990 --> 00:00:51,920

and space museum's udvar hazy center and

20

00:00:56,950 --> 00:00:54,000

awaiting enterprise

21

00:00:59,349 --> 00:00:56,960

enterprise will be backed out and moved

22

00:01:00,310 --> 00:00:59,359

on to a

23

00:01:02,950 --> 00:01:00,320

cement

24

00:01:05,109 --> 00:01:02,960

pathway behind a stage where it will

25

00:01:07,190 --> 00:01:05,119

join its fellow orbiter space shuttle

26  
00:01:10,149 --> 00:01:07,200  
discovery for a ceremony that will begin

27  
00:01:12,789 --> 00:01:10,159  
here at 11 a.m eastern time live on nasa

28  
00:01:14,630 --> 00:01:12,799  
television at which time nasa will turn

29  
00:01:32,630 --> 00:01:14,640  
over discovery

30  
00:01:37,590 --> 00:01:34,390  
space shuttle enterprise was the very

31  
00:01:40,149 --> 00:01:37,600  
first ever space shuttle it was

32  
00:01:42,069 --> 00:01:40,159  
originally named the constitution

33  
00:01:45,030 --> 00:01:42,079  
in honor of the u.s constitution's

34  
00:01:47,190 --> 00:01:45,040  
bicentennial but after

35  
00:01:49,990 --> 00:01:47,200  
a public campaign from a number of fans

36  
00:01:56,230 --> 00:01:50,000  
of the star trek television show

37  
00:01:59,830 --> 00:01:57,749  
even though enterprise never flew in

38  
00:02:01,749 --> 00:01:59,840

space it was an important part of the

39

00:02:12,390 --> 00:02:01,759

history of nasa and the space shuttle

40

00:02:16,309 --> 00:02:14,309

the work that the astronaut crews fred

41

00:02:18,710 --> 00:02:16,319

hayes gordon fullerton joe engel and

42

00:02:20,630 --> 00:02:18,720

dick truly did to

43

00:02:23,190 --> 00:02:20,640

conduct approach and landing tests was

44

00:02:25,270 --> 00:02:23,200

integral in determining the flight

45

00:02:27,270 --> 00:02:25,280

capabilities and the landing feasibility

46

00:02:44,309 --> 00:02:27,280

of the space shuttle before columbia

47

00:02:47,990 --> 00:02:46,070

in preparation for the delivery of space

48

00:02:50,949 --> 00:02:48,000

shuttle discovery to the national air

49

00:02:53,589 --> 00:02:50,959

and space museum's udvar housing center

50

00:02:55,030 --> 00:02:53,599

nasa's shuttle aircraft designated nasa

51  
00:02:57,190 --> 00:02:55,040  
905

52  
00:02:59,509 --> 00:02:57,200  
was flown from the west coast to the

53  
00:03:07,350 --> 00:02:59,519  
east coast it was based at the dryden

54  
00:03:11,990 --> 00:03:10,149  
it flew across country

55  
00:03:16,390 --> 00:03:12,000  
on its way to kennedy space center in

56  
00:03:21,670 --> 00:03:18,790  
and here we see nasa 905 taxing in

57  
00:03:27,670 --> 00:03:21,680  
preparation for its flight

58  
00:03:32,309 --> 00:03:29,509  
the shuttle carrier aircraft have been

59  
00:03:33,990 --> 00:03:32,319  
in use for many years shuttling and

60  
00:03:35,750 --> 00:03:34,000  
ferrying space shuttles across the

61  
00:03:38,470 --> 00:03:35,760  
country following shuttle landings at

62  
00:03:39,990 --> 00:03:38,480  
the edwards air force base

63  
00:03:42,550 --> 00:03:40,000

and here we see the shuttle carrier

64

00:03:47,589 --> 00:03:42,560

aircraft on final approach

65

00:03:52,550 --> 00:03:50,149

it taxied up and awaited the arrival of

66

00:03:56,470 --> 00:03:52,560

space shuttle discovery which had been

67

00:03:58,830 --> 00:03:56,480

housed in the vehicle assembly building

68

00:04:01,670 --> 00:03:58,840

discovery was rolled to the mate demate

69

00:04:03,429 --> 00:04:01,680

device where it was placed on a sling

70

00:04:05,589 --> 00:04:03,439

lifted above the ground

71

00:04:08,309 --> 00:04:05,599

and awaited the arrival of the shuttle

72

00:04:10,229 --> 00:04:08,319

carrier aircraft to be taxied underneath

73

00:04:12,309 --> 00:04:10,239

here we see the shuttle air

74

00:04:15,190 --> 00:04:12,319

shuttle carrier aircraft

75

00:04:16,949 --> 00:04:15,200

as it makes its way directly

76

00:04:19,030 --> 00:04:16,959  
on the center line

77

00:04:21,590 --> 00:04:19,040  
to be placed and spotted for

78

00:04:23,110 --> 00:04:21,600  
attachment of discovery

79

00:04:29,749 --> 00:04:23,120  
here we see the workers carefully

80

00:04:33,270 --> 00:04:31,430  
discovery was attached at the same

81

00:04:35,030 --> 00:04:33,280  
points that the external tank attached

82

00:04:37,110 --> 00:04:35,040  
when she flew in space

83

00:04:38,469 --> 00:04:37,120  
and here discovery is making her final

84

00:04:41,030 --> 00:04:38,479  
flight

85

00:04:43,430 --> 00:04:41,040  
from kennedy space center

86

00:04:45,909 --> 00:04:43,440  
aloft and about to begin a flyover of

87

00:04:48,150 --> 00:04:45,919  
the space coast for

88

00:04:58,390 --> 00:04:48,160

residents and workers to take one final

89

00:05:03,029 --> 00:05:00,629

the aircraft flew at about

90

00:05:07,990 --> 00:05:03,039

fifteen thousand feet and route to the

91

00:05:12,230 --> 00:05:11,189

here it's making a low flyover of the

92

00:05:22,550 --> 00:05:12,240

beach

93

00:05:26,070 --> 00:05:24,070

discovery arrived in the nation's

94

00:05:28,870 --> 00:05:26,080

capital

95

00:05:30,710 --> 00:05:28,880

on tuesday and made a spectacular fly

96

00:05:32,950 --> 00:05:30,720

around the national mall

97

00:05:35,430 --> 00:05:32,960

and other historic monuments

98

00:05:37,670 --> 00:05:35,440

the national harbor the white house the

99

00:05:39,830 --> 00:05:37,680

washington monument

100

00:05:41,670 --> 00:05:39,840

thousands and thousands of washington dc

101  
00:05:43,670 --> 00:05:41,680  
residents came out

102  
00:05:45,990 --> 00:05:43,680  
stopped their cars along the roads

103  
00:05:48,870 --> 00:05:46,000  
thronged along bridges

104  
00:05:50,469 --> 00:05:48,880  
it was an amazing sight

105  
00:05:51,830 --> 00:05:50,479  
something that had not been seen in

106  
00:05:55,749 --> 00:05:51,840  
washington since space shuttle

107  
00:05:55,759 --> 00:05:59,670  
here's the nation's capitol building

108  
00:06:05,350 --> 00:06:03,110  
the flyover took more than an hour

109  
00:06:07,510 --> 00:06:05,360  
and the pilots

110  
00:06:09,590 --> 00:06:07,520  
and their engineers

111  
00:06:11,510 --> 00:06:09,600  
did a spectacular job of ensuring that

112  
00:06:13,990 --> 00:06:11,520  
as many people as possible in the area

113  
00:06:15,430 --> 00:06:14,000

washington dc were able to see the space

114

00:06:19,590 --> 00:06:15,440

shuttle discovery

115

00:06:24,469 --> 00:06:22,309

and here it's making its landing

116

00:06:28,230 --> 00:06:24,479

at washington's dulles international

117

00:06:28,240 --> 00:06:35,270

this occurred at 1105 a.m on tuesday

118

00:06:41,189 --> 00:06:38,550

the shuttle carrier aircraft piloted by

119

00:06:45,749 --> 00:06:41,199

jeff moultrie and bill rickey

120

00:06:49,990 --> 00:06:47,430

and overnight

121

00:06:51,990 --> 00:06:50,000

space shuttle discovery was lifted off

122

00:06:52,950 --> 00:06:52,000

of the shuttle carrier aircraft and it

123

00:06:55,589 --> 00:06:52,960

will be

124

00:06:56,950 --> 00:06:55,599

towed to the same area where enterprise

125

00:07:15,270 --> 00:06:56,960

will be

126

00:07:19,830 --> 00:07:17,589

enterprise was the very first space

127

00:07:22,150 --> 00:07:19,840

shuttle built

128

00:07:24,790 --> 00:07:22,160

it was commissioned actually during the

129

00:07:27,189 --> 00:07:24,800

apollo era the formation of the shuttle

130

00:07:29,749 --> 00:07:27,199

program

131

00:07:31,830 --> 00:07:29,759

it was constructed and here we see cast

132

00:07:33,830 --> 00:07:31,840

members of the star trek television

133

00:07:36,390 --> 00:07:33,840

series

134

00:07:41,510 --> 00:07:36,400

as constitution was renamed

135

00:07:45,830 --> 00:07:43,670

the shuttle was involved in

136

00:07:47,430 --> 00:07:45,840

very important work early on

137

00:07:50,230 --> 00:07:47,440

proving that it could be attached to a

138

00:07:52,469 --> 00:07:50,240

shuttle carrier aircraft that

139

00:07:56,950 --> 00:07:52,479

it was stable in flight that it could be

140

00:08:00,070 --> 00:07:58,390

here it is detached

141

00:08:02,550 --> 00:08:00,080

from the shuttle carrier aircraft to

142

00:08:05,110 --> 00:08:02,560

begin a free flight

143

00:08:06,790 --> 00:08:05,120

with pilots at the controls

144

00:08:09,110 --> 00:08:06,800

making a landing

145

00:08:10,830 --> 00:08:09,120

at the dry lake bed at edwards air force

146

00:08:13,589 --> 00:08:10,840

base in

147

00:08:16,070 --> 00:08:13,599

california once again proving the

148

00:08:17,110 --> 00:08:16,080

capability of the shuttle to land as a

149

00:08:19,990 --> 00:08:17,120

glider

150

00:08:22,390 --> 00:08:20,000

a massive vehicle

151  
00:08:26,629 --> 00:08:22,400  
that could fly into space and land as a

152  
00:08:30,790 --> 00:08:28,950  
these approach and landing tests

153  
00:08:33,350 --> 00:08:30,800  
conducted before the first shuttle

154  
00:08:35,029 --> 00:08:33,360  
flight in the late 80s were very

155  
00:08:52,630 --> 00:08:35,039  
important to

156  
00:08:56,949 --> 00:08:54,310  
once the important work of enterprise

157  
00:09:00,550 --> 00:08:58,790  
she was retired to the national

158  
00:09:02,630 --> 00:09:00,560  
collection at the national air and space

159  
00:09:05,030 --> 00:09:02,640  
museum in washington dc here at the

160  
00:09:07,910 --> 00:09:05,040  
udvar hazy center and here we see

161  
00:09:09,750 --> 00:09:07,920  
enterprise being rolled into the hangar

162  
00:09:14,710 --> 00:09:09,760  
where in just a few minutes she will

163  
00:09:14,720 --> 00:09:20,070

when discovery is moved into the hanger

164

00:09:23,509 --> 00:09:22,470

enterprise will make its way back over

165

00:09:25,829 --> 00:09:23,519

to uh

166

00:09:27,750 --> 00:09:25,839

dulles international airport

167

00:09:29,750 --> 00:09:27,760

and be placed atop the shuttle carrier

168

00:09:34,790 --> 00:09:29,760

aircraft for a ferry flight to new york

169

00:09:40,870 --> 00:09:37,750

enterprise has been here for many years

170

00:09:42,150 --> 00:09:40,880

and has served as a a tool to educate

171

00:09:45,990 --> 00:09:42,160

and inspire

172

00:09:50,310 --> 00:09:47,670

and we're back live

173

00:09:57,430 --> 00:09:50,320

awaiting the rollback of enterprise out

174

00:10:02,470 --> 00:09:59,750

once again enterprise will

175

00:10:04,150 --> 00:10:02,480

greet her sister ship discovery for a

176

00:10:06,949 --> 00:10:04,160

ceremony that will be carried live on

177

00:10:28,310 --> 00:10:06,959

nasa television this morning

178

00:10:32,630 --> 00:10:30,470

enterprise will be going to the sea air

179

00:10:34,389 --> 00:10:32,640

and space museum the intrepid sea air

180

00:10:37,509 --> 00:10:34,399

and space museum

181

00:10:45,670 --> 00:10:37,519

in new york a fabulous museum facility

182

00:10:50,550 --> 00:10:47,829

initially the shuttle will

183

00:10:53,350 --> 00:10:50,560

be ferried to new york city to

184

00:10:56,069 --> 00:10:53,360

john f kennedy international airport and

185

00:10:59,670 --> 00:10:56,079

will remain there while an elaborate set

186

00:11:01,750 --> 00:10:59,680

of cranes that were used to offload

187

00:11:04,790 --> 00:11:01,760

shuttle discovery from the shuttle area

188

00:11:07,110 --> 00:11:04,800

or shuttle carrier aircraft overnight

189

00:11:09,990 --> 00:11:07,120

will be disassembled and carried to new

190

00:11:11,509 --> 00:11:10,000

york and reassembled on the airport

191

00:11:13,750 --> 00:11:11,519

tarmac there

192

00:11:15,350 --> 00:11:13,760

for the offload of enterprise and here

193

00:11:17,990 --> 00:11:15,360

we see first movement

194

00:11:22,230 --> 00:11:18,000

as the tail cone of shuttle enterprise

195

00:11:22,240 --> 00:11:42,710

the hangar at the udvarhazi center

196

00:11:47,590 --> 00:11:44,550

enterprise is being pushed

197

00:11:50,310 --> 00:11:47,600

uh by a tug similar to those that push

198

00:11:55,990 --> 00:11:50,320

back commercial airliners from the gates

199

00:11:59,910 --> 00:11:57,670

is a practice that has been used at

200

00:12:01,990 --> 00:11:59,920

kennedy space center for moving space

201  
00:12:17,829 --> 00:12:02,000  
shuttles around between buildings for

202  
00:12:21,430 --> 00:12:20,310  
workers from nasa and united space

203  
00:12:23,750 --> 00:12:21,440  
alliance

204  
00:12:25,670 --> 00:12:23,760  
have been here in the washington dc over

205  
00:12:28,790 --> 00:12:25,680  
the last year

206  
00:12:32,550 --> 00:12:28,800  
helping to prepare enterprise for this

207  
00:12:36,790 --> 00:12:34,629  
ensuring that it has the structural

208  
00:12:38,550 --> 00:12:36,800  
integrity to withstand a ferry flight to

209  
00:12:41,030 --> 00:12:38,560  
top the shuttle carrier aircraft which

210  
00:12:43,110 --> 00:12:41,040  
is a modified boeing 747

211  
00:12:53,509 --> 00:12:43,120  
she checked out fine

212  
00:12:56,550 --> 00:12:55,670  
backing the enterprise out of the hangar

213  
00:12:58,870 --> 00:12:56,560

is a

214

00:13:01,350 --> 00:12:58,880

a slow meticulous process because the

215

00:13:03,190 --> 00:13:01,360

vertical stabilizer that extends into

216

00:13:04,870 --> 00:13:03,200

the air

217

00:13:06,629 --> 00:13:04,880

is taller than the normal opening of the

218

00:13:07,750 --> 00:13:06,639

door and there's a cutout section that

219

00:13:10,310 --> 00:13:07,760

is visible

220

00:13:13,910 --> 00:13:10,320

through which the

221

00:13:15,829 --> 00:13:13,920

vertical stabilizer will pass

222

00:13:17,990 --> 00:13:15,839

very carefully

223

00:13:19,509 --> 00:13:18,000

so this is a slow process until

224

00:13:47,030 --> 00:13:19,519

enterprise is backed completely out of

225

00:13:47,040 --> 00:13:52,230

while enterprise never flew in space

226

00:13:55,670 --> 00:13:53,910

her

227

00:13:58,150 --> 00:13:55,680

approach in landing tests and capture

228

00:14:00,470 --> 00:13:58,160

flights were very important to learning

229

00:14:02,629 --> 00:14:00,480

more about the shuttle and she also made

230

00:14:05,590 --> 00:14:02,639

a number of other flights

231

00:14:08,629 --> 00:14:05,600

on top of the shuttle carrier aircraft

232

00:14:11,030 --> 00:14:08,639

during may and june of 1983 enterprise

233

00:14:13,509 --> 00:14:11,040

was ferried to the paris france air show

234

00:14:15,829 --> 00:14:13,519

as well as to germany italy

235

00:14:17,350 --> 00:14:15,839

england and

236

00:14:20,949 --> 00:14:17,360

and then was returned to the dryden

237

00:14:26,389 --> 00:14:23,829

and in the april through october 1984

238

00:14:29,030 --> 00:14:26,399

time period enterprise was ferry to

239

00:14:31,189 --> 00:14:29,040

vandenberg air force base in california

240

00:14:33,590 --> 00:14:31,199

and to mobile alabama

241

00:14:51,829 --> 00:14:33,600

and from there taken by barge to new

242

00:14:51,839 --> 00:15:05,269

100.

243

00:15:05,279 --> 00:15:21,590

um

244

00:15:21,600 --> 00:15:34,870

okay

245

00:15:34,880 --> 00:16:22,150

i got two

246

00:16:27,110 --> 00:16:24,629

in nasa nomenclature all of the space

247

00:16:29,509 --> 00:16:27,120

shuttle orbiters received a an orbiter

248

00:16:31,030 --> 00:16:29,519

vehicle number

249

00:16:35,030 --> 00:16:31,040

and enterprise

250

00:16:40,150 --> 00:16:35,040

was orbiter vehicle or ov 101 and of

251  
00:16:43,590 --> 00:16:41,910  
and as all of the shuttles were

252  
00:16:46,629 --> 00:16:43,600  
constructed and built and turned over to

253  
00:16:48,710 --> 00:16:46,639  
nasa they also came with a title

254  
00:16:53,189 --> 00:16:48,720  
similar to a car title

255  
00:16:56,949 --> 00:16:54,870  
space shuttle discovery which also is

256  
00:16:57,910 --> 00:16:56,959  
here on the ground in the washington dc

257  
00:17:05,029 --> 00:16:57,920  
area

258  
00:17:10,949 --> 00:17:07,990  
once enterprise ov 101 is backed out of

259  
00:17:15,669 --> 00:17:13,350  
and towed to place behind a stage where

260  
00:17:17,110 --> 00:17:15,679  
our ceremony will be conducted later

261  
00:17:19,110 --> 00:17:17,120  
this morning

262  
00:17:21,029 --> 00:17:19,120  
discovery will make the same journey

263  
00:17:24,630 --> 00:17:21,039

from the opposite direction and the two

264

00:17:27,590 --> 00:17:24,640

shuttles ov-101 enterprise and ov-103

265

00:17:28,710 --> 00:17:27,600

discovery will be joined nose-to-nose as

266

00:17:30,870 --> 00:17:28,720

a backdrop

267

00:17:32,549 --> 00:17:30,880

to this magnificent

268

00:17:34,310 --> 00:17:32,559

celebration that

269

00:17:37,029 --> 00:17:34,320

will occur in the nation's capital as

270

00:17:38,950 --> 00:17:37,039

nasa turns over space shuttle discovery

271

00:17:48,150 --> 00:17:38,960

to the smithsonian national air and

272

00:17:48,160 --> 00:18:01,909

okay

273

00:18:05,990 --> 00:18:04,070

and here we see the uh the setting for

274

00:18:08,390 --> 00:18:06,000

the

275

00:18:11,909 --> 00:18:08,400

celebration that will occur later today

276

00:18:15,190 --> 00:18:13,350

the crew of the

277

00:18:16,710 --> 00:18:15,200

national air and space museum has worked

278

00:18:19,590 --> 00:18:16,720

hard to plan

279

00:18:21,190 --> 00:18:19,600

an event that will be memorable for

280

00:18:28,150 --> 00:18:21,200

all those in attendance and all those

281

00:18:32,070 --> 00:18:29,909

and while the space shuttle orbiters no

282

00:18:33,190 --> 00:18:32,080

longer will be flying they will continue

283

00:18:35,430 --> 00:18:33,200

their mission

284

00:18:39,190 --> 00:18:35,440

to inspire and educate

285

00:18:40,549 --> 00:18:39,200

as thousands and thousands of people

286

00:18:42,710 --> 00:18:40,559

from around the world have an

287

00:18:45,029 --> 00:18:42,720

opportunity to learn from what they have

288

00:18:47,350 --> 00:18:45,039

accomplished in museums across the

289

00:18:49,510 --> 00:18:47,360

country here in washington dc at the

290

00:18:51,750 --> 00:18:49,520

national air and space museum

291

00:18:53,990 --> 00:18:51,760

in new york city at the intrepid sea air

292

00:18:55,669 --> 00:18:54,000

and space museum

293

00:18:56,950 --> 00:18:55,679

in california

294

00:18:58,789 --> 00:18:56,960

at the

295

00:19:00,470 --> 00:18:58,799

california science center where space

296

00:19:01,510 --> 00:19:00,480

shuttle endeavour will go later this

297

00:19:03,750 --> 00:19:01,520

year

298

00:19:06,150 --> 00:19:03,760

and at the kennedy space center visitor

299

00:19:08,870 --> 00:19:06,160

complex where space shuttle atlantis

300

00:19:11,190 --> 00:19:08,880

will be on display

301  
00:19:13,270 --> 00:19:11,200  
once again enterprise will be making her

302  
00:19:15,190 --> 00:19:13,280  
way to new york city to the intrepid sea

303  
00:19:16,950 --> 00:19:15,200  
air and space museum

304  
00:19:25,270 --> 00:19:16,960  
within the next several days weather

305  
00:19:25,280 --> 00:19:29,990  
and we see the vertical stabilizer

306  
00:19:33,990 --> 00:19:32,470  
lofting up in the air and

307  
00:19:36,390 --> 00:19:34,000  
clearing its way

308  
00:19:39,510 --> 00:19:36,400  
past the vertical slit

309  
00:20:15,029 --> 00:19:39,520  
in the opening above the the main

310  
00:20:19,190 --> 00:20:16,710  
a proud moment

311  
00:20:21,350 --> 00:20:19,200  
as the american flag and

312  
00:20:23,830 --> 00:20:21,360  
clearly marked the united states space

313  
00:20:26,149 --> 00:20:23,840

shuttle enterprise

314

00:20:28,310 --> 00:20:26,159

exits the hangar at the national air and

315

00:20:30,230 --> 00:20:28,320

space museum udvar housing center where

316

00:20:32,630 --> 00:20:30,240

she has been on display

317

00:20:44,789 --> 00:20:32,640

for many years

318

00:21:02,390 --> 00:20:48,710

majestic site a space shuttle orbiter

319

00:21:02,400 --> 00:21:17,590

very nice

320

00:21:21,510 --> 00:21:19,190

shuttle enterprise

321

00:21:23,830 --> 00:21:21,520

has a tail cone affixed uh covering up

322

00:21:26,549 --> 00:21:23,840

where main engines would be

323

00:21:29,430 --> 00:21:26,559

and this will enable uh

324

00:21:31,669 --> 00:21:29,440

more stability and airworthiness

325

00:21:34,230 --> 00:21:31,679

once she is mounted to the top of the

326

00:21:41,029 --> 00:21:34,240

shuttle carrier aircraft and making her

327

00:21:45,669 --> 00:21:43,350

there we see the tail cone

328

00:21:48,070 --> 00:21:45,679

it's a massive structure

329

00:21:49,750 --> 00:21:48,080

in many pieces that take some time to

330

00:21:51,669 --> 00:21:49,760

assemble

331

00:21:54,149 --> 00:21:51,679

a very experienced workforce from the

332

00:21:55,750 --> 00:21:54,159

kennedy space center in florida

333

00:21:57,750 --> 00:21:55,760

has been here

334

00:21:59,430 --> 00:21:57,760

consisting of nasa and contractor

335

00:22:02,310 --> 00:21:59,440

workers to

336

00:22:04,390 --> 00:22:02,320

prepare enterprise for today and for the

337

00:22:05,990 --> 00:22:04,400

next several days as she is

338

00:22:08,149 --> 00:22:06,000

lifted by crane to the top of the

339

00:22:10,470 --> 00:22:08,159

shuttle carrier aircraft and

340

00:22:19,750 --> 00:22:10,480

prepared for the flight to the

341

00:22:24,149 --> 00:22:22,549

a beautiful view head on of enterprise

342

00:22:29,029 --> 00:22:24,159

as she has completed backing out of the

343

00:22:33,990 --> 00:22:32,149

transit a short distance to the location

344

00:22:46,149 --> 00:22:34,000

where she will be parked in preparation

345

00:22:51,110 --> 00:22:47,430

once again

346

00:22:53,669 --> 00:22:51,120

this massive aircraft that uh

347

00:22:56,470 --> 00:22:53,679

weighs in the vicinity of 160 to a

348

00:22:58,390 --> 00:22:56,480

hundred seventy five thousand pounds is

349

00:22:59,909 --> 00:22:58,400

able to be moved

350

00:23:01,990 --> 00:22:59,919

with a tug

351  
00:23:03,510 --> 00:23:02,000  
a commercial tug that uh

352  
00:23:04,950 --> 00:23:03,520  
would be the same

353  
00:23:09,590 --> 00:23:04,960  
you would find at a

354  
00:23:09,600 --> 00:23:29,990  
thank you

355  
00:23:34,710 --> 00:23:32,789  
space shuttles are iconic

356  
00:23:42,789 --> 00:23:34,720  
very distinctive

357  
00:23:45,909 --> 00:23:44,549  
and they all have stories to tell and

358  
00:23:47,590 --> 00:23:45,919  
those stories will be told in the

359  
00:23:52,870 --> 00:23:47,600  
museums where they will be located

360  
00:23:59,269 --> 00:23:55,590  
the space shuttles collectively

361  
00:24:01,830 --> 00:23:59,279  
over 30 years in the program

362  
00:24:04,149 --> 00:24:01,840  
deployed communication satellites the

363  
00:24:06,789 --> 00:24:04,159

hubble space telescope

364

00:24:08,470 --> 00:24:06,799

repaired satellites

365

00:24:09,590 --> 00:24:08,480

constructed the international space

366

00:24:13,190 --> 00:24:09,600

station

367

00:24:13,200 --> 00:24:22,710

or the location for scientific test beds

368

00:24:27,510 --> 00:24:25,190

and helped the united states maintain

369

00:24:30,830 --> 00:24:27,520

its leadership in space

370

00:24:32,950 --> 00:24:30,840

a leadership role that continues as

371

00:24:34,070 --> 00:24:32,960

nasa turns

372

00:24:38,470 --> 00:24:34,080

to the

373

00:24:41,430 --> 00:24:39,669

and

374

00:24:43,430 --> 00:24:41,440

is working on constructing the largest

375

00:24:45,510 --> 00:24:43,440

rocket ever that will take american

376  
00:24:59,909 --> 00:24:45,520  
astronauts farther into space than ever

377  
00:24:59,919 --> 00:25:14,070  
okay

378  
00:25:19,110 --> 00:25:16,549  
space shuttle enterprise orbiter vehicle

379  
00:25:21,750 --> 00:25:19,120  
101 making a slow roll

380  
00:25:24,710 --> 00:25:21,760  
to uh her location here

381  
00:26:00,950 --> 00:25:24,720  
behind the stage

382  
00:26:05,830 --> 00:26:02,950  
thousands and thousands of visitors are

383  
00:26:08,070 --> 00:26:05,840  
anticipated to attend the smithsonian

384  
00:26:11,909 --> 00:26:08,080  
national air and space museum stephen f

385  
00:26:15,510 --> 00:26:11,919  
udvarhazy center today for this

386  
00:26:18,070 --> 00:26:15,520  
welcome discovery festival it kicks off

387  
00:26:19,750 --> 00:26:18,080  
a several day festival of educational

388  
00:26:21,029 --> 00:26:19,760

activities

389

00:26:23,350 --> 00:26:21,039

learning

390

00:26:24,390 --> 00:26:23,360

experiences and an opportunity

391

00:26:26,710 --> 00:26:24,400

to see

392

00:26:31,269 --> 00:26:26,720

space shuttle enterprise

393

00:26:41,590 --> 00:26:33,029

and nasa television will be carrying all

394

00:26:46,390 --> 00:26:44,549

nasa's associate administrator for human

395

00:26:48,149 --> 00:26:46,400

exploration and operations william

396

00:26:50,310 --> 00:26:48,159

gerstenmaier will be

397

00:26:52,549 --> 00:26:50,320

on nasa television

398

00:26:53,990 --> 00:26:52,559

between 10 30 and 11 today

399

00:26:55,750 --> 00:26:54,000

talking about

400

00:26:57,110 --> 00:26:55,760

his experiences in the space shuttle

401  
00:26:59,269 --> 00:26:57,120  
program and

402  
00:27:01,350 --> 00:26:59,279  
working with and

403  
00:27:02,789 --> 00:27:01,360  
managing

404  
00:27:04,549 --> 00:27:02,799  
many of the aspects of the shuttle

405  
00:27:06,310 --> 00:27:04,559  
program

406  
00:27:07,909 --> 00:27:06,320  
i'm talking about the people with whom

407  
00:27:10,950 --> 00:27:07,919  
he's worked

408  
00:27:13,190 --> 00:27:10,960  
the amazing workforce that constructed

409  
00:27:16,230 --> 00:27:13,200  
maintained

410  
00:27:18,389 --> 00:27:16,240  
and prepared each shuttle for flight

411  
00:27:20,789 --> 00:27:18,399  
the teams that operated mission control

412  
00:27:23,750 --> 00:27:20,799  
in houston the teams that trained the

413  
00:27:26,310 --> 00:27:23,760

astronauts and the astronauts themselves

414

00:27:32,230 --> 00:27:26,320

and then at 11 o'clock this morning the

415

00:27:32,240 --> 00:27:37,269

with a host of vips

416

00:27:41,590 --> 00:27:40,310

and throngs of

417

00:27:45,909 --> 00:27:41,600

attendees

418

00:27:52,789 --> 00:27:47,430

and once again we'll be carried live on

419

00:28:08,789 --> 00:27:54,950

looking at the windows close up on space

420

00:28:12,389 --> 00:28:10,630

here's a team of united space alliance

421

00:28:15,350 --> 00:28:12,399

workers who have been here in the

422

00:28:16,789 --> 00:28:15,360

washington dc area helping to prepare

423

00:28:19,190 --> 00:28:16,799

enterprise

424

00:28:20,950 --> 00:28:19,200

and to prepare discovery

425

00:28:23,269 --> 00:28:20,960

and they will be here again for several

426  
00:28:25,669 --> 00:28:23,279  
more days to prepare enterprise to fly

427  
00:28:27,350 --> 00:28:25,679  
to new york city

428  
00:28:29,510 --> 00:28:27,360  
united space alliance the prime

429  
00:28:42,149 --> 00:28:29,520  
contractor for nasa's space shuttle

430  
00:28:42,159 --> 00:28:48,950  
this is the vertical stabilizer

431  
00:28:54,549 --> 00:28:52,230  
now which can expand with speed brake to

432  
00:29:09,190 --> 00:28:54,559  
slow the shuttle upon landing

433  
00:29:12,389 --> 00:29:11,350  
the space shuttle is the first ever

434  
00:29:13,750 --> 00:29:12,399  
reusable

435  
00:29:16,070 --> 00:29:13,760  
spacecraft

436  
00:29:18,549 --> 00:29:16,080  
and when it was in flight prior to its

437  
00:29:20,630 --> 00:29:18,559  
retirement last year

438  
00:29:23,029 --> 00:29:20,640

virtually all elements were reusable

439

00:29:24,630 --> 00:29:23,039

except for the external tank the large

440

00:29:26,389 --> 00:29:24,640

orange structure that contained the

441

00:29:28,389 --> 00:29:26,399

liquid propellant that fed the shuttle's

442

00:29:30,630 --> 00:29:28,399

main engines

443

00:29:32,950 --> 00:29:30,640

both the shuttle orbiter itself and the

444

00:29:35,669 --> 00:29:32,960

solid rocket boosters the

445

00:29:38,870 --> 00:29:35,679

the twin boosters attached to the sides

446

00:29:42,230 --> 00:29:40,630

were recovered and reused for every

447

00:29:52,149 --> 00:29:42,240

flight

448

00:29:54,870 --> 00:29:53,190

none of which could have happened

449

00:29:56,710 --> 00:29:54,880

without the important

450

00:29:58,470 --> 00:29:56,720

research that was conducted by this

451  
00:30:21,590 --> 00:29:58,480  
space shuttle orbiter here

452  
00:30:27,190 --> 00:30:23,669  
here comes enterprise passing the

453  
00:30:39,350 --> 00:30:29,269  
a prelude to the two orbiters nose to

454  
00:30:43,269 --> 00:30:40,950  
there have only been very few occasions

455  
00:30:45,590 --> 00:30:43,279  
when space shuttles have

456  
00:30:47,750 --> 00:30:45,600  
rolled at the same time and and been so

457  
00:31:00,870 --> 00:30:47,760  
near each other as they will be today

458  
00:31:08,070 --> 00:31:02,630  
the two shuttles will remain nose to

459  
00:31:11,750 --> 00:31:09,269  
when

460  
00:31:14,149 --> 00:31:11,760  
enterprise will back up discovery will

461  
00:31:16,070 --> 00:31:14,159  
roll into its hanger for

462  
00:31:18,389 --> 00:31:16,080  
permanent display

463  
00:31:20,470 --> 00:31:18,399

and enterprise will make its way

464

00:31:23,269 --> 00:31:20,480

to dulles international airport in

465

00:31:26,310 --> 00:31:23,279

preparation to be lifted to the shuttle

466

00:31:28,149 --> 00:31:26,320

carrier aircraft and sent to its new

467

00:31:41,110 --> 00:31:28,159

home at the intrepid sea air and space

468

00:31:41,120 --> 00:31:52,549

here

469

00:31:57,909 --> 00:31:54,470

a slow

470

00:32:00,710 --> 00:31:57,919

safe roll to ensure that everything

471

00:32:03,269 --> 00:32:00,720

goes well as

472

00:32:05,110 --> 00:32:03,279

the workers from nasa

473

00:32:06,870 --> 00:32:05,120

the national air and space museum and

474

00:32:09,190 --> 00:32:06,880

united space alliance

475

00:32:21,110 --> 00:32:09,200

roll space shuttle enterprise into place

476

00:32:26,389 --> 00:32:23,430

a beautiful sight in the early morning

477

00:32:32,470 --> 00:32:26,399

sunshine in washington dc as

478

00:32:54,230 --> 00:32:33,909

having seen the light of day for the

479

00:32:59,269 --> 00:32:56,389

weather permitting

480

00:33:00,950 --> 00:32:59,279

enterprise will

481

00:33:02,789 --> 00:33:00,960

be affixed to the top of the shuttle

482

00:33:05,669 --> 00:33:02,799

carrier aircraft over the next several

483

00:33:07,269 --> 00:33:05,679

days and is planned to make its flight

484

00:33:10,789 --> 00:33:07,279

to new york city

485

00:33:12,870 --> 00:33:10,799

on monday april 23rd

486

00:33:13,990 --> 00:33:12,880

weather forecasters in the washington

487

00:33:15,990 --> 00:33:14,000

area

488

00:33:17,990 --> 00:33:16,000

are not predicting

489

00:33:19,990 --> 00:33:18,000

pristine weather however over the next

490

00:33:21,909 --> 00:33:20,000

few days so

491

00:33:23,350 --> 00:33:21,919

those operations will

492

00:33:25,590 --> 00:33:23,360

be scheduled

493

00:33:31,029 --> 00:33:25,600

to avoid any

494

00:33:35,269 --> 00:33:33,110

and it will make the flight to new york

495

00:33:37,590 --> 00:33:35,279

when that work is done whether it occurs

496

00:33:41,029 --> 00:33:37,600

on monday or not

497

00:33:42,310 --> 00:33:41,039

but as of now that is the schedule and

498

00:33:44,630 --> 00:33:42,320

nasa

499

00:33:47,190 --> 00:33:44,640

expects that uh

500

00:34:01,990 --> 00:33:47,200

that will be uh maintained until we know

501  
00:34:09,589 --> 00:34:04,389  
enterprise again was the very first

502  
00:34:14,629 --> 00:34:12,470  
followed by columbia

503  
00:34:16,550 --> 00:34:14,639  
challenger

504  
00:34:17,909 --> 00:34:16,560  
discovery

505  
00:34:43,669 --> 00:34:17,919  
atlantis

506  
00:34:48,069 --> 00:34:45,829  
the birthday of enterprise when

507  
00:34:50,230 --> 00:34:48,079  
she was rolled out of her assembly

508  
00:34:52,790 --> 00:34:50,240  
facility at rockwell's air force plant

509  
00:34:54,950 --> 00:34:52,800  
42 in palmdale california

510  
00:35:05,510 --> 00:34:54,960  
was september 17

511  
00:35:10,390 --> 00:35:07,990  
the nine month long approach and landing

512  
00:35:13,109 --> 00:35:10,400  
test program was conducted from february

513  
00:35:15,270 --> 00:35:13,119

through november 1977 at the dryden

514

00:35:16,950 --> 00:35:15,280

flight research facility

515

00:35:18,790 --> 00:35:16,960

and it demonstrated that the orbiter

516

00:35:20,950 --> 00:35:18,800

could fly in the atmosphere and land

517

00:35:23,190 --> 00:35:20,960

like an airplane

518

00:35:24,069 --> 00:35:23,200

except without power

519

00:35:26,870 --> 00:35:24,079

it

520

00:35:28,150 --> 00:35:26,880

was a large glider

521

00:35:31,190 --> 00:35:28,160

some were

522

00:35:33,589 --> 00:35:31,200

not confident in its uh

523

00:35:35,270 --> 00:35:33,599

aerodynamic capabilities but it proved

524

00:35:37,829 --> 00:35:35,280

itself

525

00:35:39,829 --> 00:35:37,839

on several occasions and set the stage

526  
00:35:42,150 --> 00:35:39,839  
for moving ahead with the space shuttle

527  
00:36:28,710 --> 00:35:42,160  
program and what was to become the first

528  
00:36:28,720 --> 00:36:40,630  
foreign

529  
00:36:45,750 --> 00:36:43,349  
there are a number of uh

530  
00:36:48,630 --> 00:36:45,760  
nasa astronauts and former astronauts

531  
00:36:50,310 --> 00:36:48,640  
who will be here in attendance today

532  
00:36:51,990 --> 00:36:50,320  
making their way around the space

533  
00:36:55,030 --> 00:36:52,000  
shuttles they'll be a part of the

534  
00:36:57,670 --> 00:36:55,040  
ceremony as well

535  
00:37:00,550 --> 00:36:57,680  
one of the attendees will be

536  
00:37:03,670 --> 00:37:00,560  
one of the original pilots of enterprise

537  
00:37:05,829 --> 00:37:03,680  
for the approach and landing tests

538  
00:37:07,670 --> 00:37:05,839

joe engel

539

00:37:09,910 --> 00:37:07,680

joe also

540

00:37:11,510 --> 00:37:09,920

flew space shuttle discovery

541

00:37:13,270 --> 00:37:11,520

the only person to have flown both of

542

00:37:25,670 --> 00:37:13,280

the space shuttles that will be here in

543

00:37:25,680 --> 00:37:56,710

uh

544

00:38:00,790 --> 00:37:58,310

and space shuttle enterprise is

545

00:38:02,710 --> 00:38:00,800

positioned for today's welcome discovery

546

00:38:04,470 --> 00:38:02,720

ceremony

547

00:38:07,430 --> 00:38:04,480

enterprise will be

548

00:38:09,349 --> 00:38:07,440

greeting her sister ship nose to nose

549

00:38:12,550 --> 00:38:09,359

for a ceremony that will be carried live

550

00:38:26,710 --> 00:38:12,560

on nasa television at 11 a.m eastern

551  
00:38:26,720 --> 00:38:41,910  
very nice

552  
00:38:46,710 --> 00:38:44,470  
along with joe engel

553  
00:38:49,910 --> 00:38:46,720  
dick truly fred hayes and gordon

554  
00:38:52,710 --> 00:38:49,920  
fullerton all flew the

555  
00:38:55,190 --> 00:38:52,720  
five approach and landing test flights

556  
00:38:56,950 --> 00:38:55,200  
that helped demonstrate the ability of

557  
00:38:59,990 --> 00:38:56,960  
the space shuttle

558  
00:39:25,109 --> 00:39:00,000  
to descend and land safely on the runway

559  
00:39:29,270 --> 00:39:27,270  
number of dignitaries and guests will be

560  
00:39:30,470 --> 00:39:29,280  
in attendance today

561  
00:40:13,109 --> 00:39:30,480  
a number of people who have worked on

562  
00:40:17,750 --> 00:40:15,829  
astronauts typically are seen wearing

563  
00:40:20,069 --> 00:40:17,760

their blue flight jackets or blue flight

564

00:40:23,030 --> 00:40:20,079

suits

565

00:40:25,190 --> 00:40:23,040

and we have seen this morning one

566

00:40:26,950 --> 00:40:25,200

person already

567

00:40:28,309 --> 00:40:26,960

around the aircraft and that was joe

568

00:40:31,030 --> 00:40:28,319

engel

569

00:40:43,589 --> 00:40:31,040

one of the original pilots

570

00:40:48,390 --> 00:40:45,589

with enterprise in place the crowd is

571

00:41:00,950 --> 00:40:50,710

it's a majestic site especially to be

572

00:41:06,230 --> 00:41:02,710

it's hard to get a

573

00:41:08,870 --> 00:41:06,240

a true grasp of the size

574

00:41:11,109 --> 00:41:08,880

of the ship

575

00:41:15,190 --> 00:41:11,119

and unless you are privileged enough to

576  
00:41:19,829 --> 00:41:17,750  
and it is amazing to realize that the

577  
00:41:20,870 --> 00:41:19,839  
space shuttles launched

578  
00:41:22,550 --> 00:41:20,880  
vertically

579  
00:41:25,910 --> 00:41:22,560  
like a rocket

580  
00:41:28,309 --> 00:41:25,920  
maneuvered meticulously through space

581  
00:41:29,990 --> 00:41:28,319  
docked with other spacecraft while both

582  
00:41:31,670 --> 00:41:30,000  
the shuttle and the spacecraft were

583  
00:41:35,109 --> 00:41:31,680  
traveling at seventeen thousand five

584  
00:41:37,589 --> 00:41:35,119  
hundred miles an hour and then

585  
00:41:38,790 --> 00:41:37,599  
performed a breaking

586  
00:41:40,470 --> 00:41:38,800  
burn to

587  
00:41:42,230 --> 00:41:40,480  
deorbit

588  
00:41:44,470 --> 00:41:42,240

and within an hour

589

00:41:48,230 --> 00:41:44,480

back on the ground having descended and

590

00:41:49,750 --> 00:41:48,240

slowed down from 17 500 miles an hour to

591

00:41:50,710 --> 00:41:49,760

zero right on the center line of a

592

00:41:53,910 --> 00:41:50,720

runway

593

00:41:57,270 --> 00:41:53,920

an amazing spaceship an amazing

594

00:41:58,550 --> 00:41:57,280

accomplishment of american ingenuity

595

00:41:59,910 --> 00:41:58,560

one that

596

00:42:58,870 --> 00:41:59,920

will be carried on with the next

597

00:43:02,710 --> 00:43:01,510

the uh and here we see the setup for the

598

00:43:04,069 --> 00:43:02,720

uh

599

00:43:06,150 --> 00:43:04,079

for the program that will be carried

600

00:43:09,190 --> 00:43:06,160

live on nasa television later enterprise

601  
00:43:12,550 --> 00:43:09,200  
is in place to the right of the screen

602  
00:43:14,630 --> 00:43:12,560  
discovery's nose will will move in place

603  
00:43:17,510 --> 00:43:14,640  
the stage is set

604  
00:43:19,270 --> 00:43:17,520  
the transfer of discovery

605  
00:43:22,710 --> 00:43:19,280  
to the national air and space museum

606  
00:44:13,109 --> 00:43:24,829  
once again that ceremony will begin at

607  
00:44:13,119 --> 00:44:47,670  
thank you

608  
00:44:47,680 --> 00:44:51,589  
all right

609  
00:44:56,230 --> 00:44:53,510  
so with space shuttle enterprise the

610  
00:44:59,030 --> 00:44:56,240  
very first space shuttle ever built and

611  
00:45:00,630 --> 00:44:59,040  
the first to fly in the atmosphere

612  
00:45:02,630 --> 00:45:00,640  
in place for

613  
00:45:04,950 --> 00:45:02,640

our ceremony today and with space

614

00:45:06,630 --> 00:45:04,960

shuttle discovery having been

615

00:45:10,550 --> 00:45:06,640

removed from the shuttle carrier

616

00:45:13,910 --> 00:45:10,560

aircraft and put on its landing gear

617

00:45:16,470 --> 00:45:13,920

for the final time at 4 30 a.m today

618

00:45:18,870 --> 00:45:16,480

discovery will be rolled into place nose

619

00:45:21,510 --> 00:45:18,880

to nose with enterprise

620

00:45:23,589 --> 00:45:21,520

and nasa television will be back

621

00:45:25,589 --> 00:45:23,599

with live coverage of today's welcome

622

00:45:27,750 --> 00:45:25,599

discovery ceremony

623

00:45:30,309 --> 00:45:27,760

live from the smithsonian national air

624

00:45:51,910 --> 00:45:30,319

and space museum stephen f udvar housing

625

00:45:56,470 --> 00:45:53,750

and this concludes nasa television's

626

00:45:59,510 --> 00:45:56,480

coverage of space shuttle enterprise

627

00:46:01,349 --> 00:45:59,520

backing out from the udvar-hazy center

628

00:46:03,589 --> 00:46:01,359

and put in place once again we'll be

629

00:46:06,630 --> 00:46:03,599

back with live coverage of the ceremony