



1  
00:00:05,869 --> 00:00:03,169  
live from NASA's Kennedy Space Center in

2  
00:00:07,789 --> 00:00:05,879  
Florida this is NASA shuttle operations

3  
00:00:10,600 --> 00:00:07,799  
where we're standing by for the arrival

4  
00:00:15,499 --> 00:00:10,610  
of the NASA Shuttle Carrier aircraft

5  
00:00:17,900 --> 00:00:15,509  
designated NASA 905 the SCA as it's

6  
00:00:19,160 --> 00:00:17,910  
known is enroute to Kennedy from Dryden

7  
00:00:23,859 --> 00:00:19,170  
Flight Research Center in California

8  
00:00:26,540 --> 00:00:23,869  
today it's a modified 747 jetliner

9  
00:00:28,849 --> 00:00:26,550  
modified to be able to carry a space

10  
00:00:31,910 --> 00:00:28,859  
shuttle on top and it's been utilized

11  
00:00:33,950 --> 00:00:31,920  
over many years for this function this

12  
00:00:35,810 --> 00:00:33,960  
however will be its final ferry flight

13  
00:00:38,090 --> 00:00:35,820

as it arrives at Kennedy Space Center

14

00:00:40,850 --> 00:00:38,100

for the last time and is prepared to

15

00:00:43,330 --> 00:00:40,860

ferry space shuttle endeavour from

16

00:00:46,340 --> 00:00:43,340

Florida to the California Science Center

17

00:00:50,299 --> 00:00:46,350

via Los Angeles International Airport in

18

00:00:53,569 --> 00:00:50,309

California currently we're expecting

19

00:00:55,970 --> 00:00:53,579

landing at about 5:05 p.m. Eastern Time

20

00:00:58,160 --> 00:00:55,980

the Shuttle Carrier aircraft will be

21

00:01:01,010 --> 00:00:58,170

landing on Kennedy's Shuttle Landing

22

00:01:05,899 --> 00:01:01,020

Facility runway one-five which is the

23

00:01:08,020 --> 00:01:05,909

northwest to southeast runway beautiful

24

00:01:11,030 --> 00:01:08,030

weather conditions here in Florida

25

00:01:13,010 --> 00:01:11,040

despite a front moving through over the

26

00:01:14,719 --> 00:01:13,020

last several days bringing afternoon

27

00:01:16,910 --> 00:01:14,729

thundershowers today the weather has

28

00:01:19,850 --> 00:01:16,920

cooperated we have an entirely new

29

00:01:21,530 --> 00:01:19,860

weather pattern hopefully pretending

30

00:01:25,160 --> 00:01:21,540

good weather for the entire ferry

31

00:01:26,510 --> 00:01:25,170

operation and the operations to attach

32

00:01:31,609 --> 00:01:26,520

Space Shuttle Endeavor

33

00:01:33,370 --> 00:01:31,619

to the Shuttle Carrier aircraft once it

34

00:01:36,770 --> 00:01:33,380

arrives the Shuttle Carrier aircraft

35

00:01:39,410 --> 00:01:36,780

will be prepared for this operation it's

36

00:01:41,539 --> 00:01:39,420

pilots will undergo weather briefings

37

00:01:45,170 --> 00:01:41,549

and work with the team here at Kennedy

38

00:01:51,109 --> 00:01:45,180

Space Center to prepare the aircraft as

39

00:01:53,319 --> 00:01:51,119

well as Space Shuttle Endeavor the

40

00:01:58,639 --> 00:01:53,329

Shuttle Carrier aircraft is commanded by

41

00:02:00,350 --> 00:01:58,649

veteran NASA pilot Jeff Moultrie and his

42

00:02:03,230 --> 00:02:00,360

pilot flying with him is Bill Rickey

43

00:02:06,230 --> 00:02:03,240

it's an entirely veteran crew of NASA

44

00:02:08,630 --> 00:02:06,240

pilots who have been with NASA for many

45

00:02:10,550 --> 00:02:08,640

years training astronauts and flying a

46

00:02:13,940 --> 00:02:10,560

whole series of aircraft including the

47

00:02:16,040 --> 00:02:13,950

Shuttle Carrier aircraft also aboard the

48

00:02:22,880 --> 00:02:16,050

today our three flight engineers henry

49

00:02:25,490 --> 00:02:22,890

taylor gary ash and larry LaRose they'll

50

00:02:28,130 --> 00:02:25,500

set the aircraft down and taxi over to

51  
00:02:35,180 --> 00:02:28,140  
the mate demate device which is located

52  
00:02:40,090 --> 00:02:35,190  
here at the shuttle landing facility the

53  
00:02:45,380 --> 00:02:43,040  
operation that was put in place here at

54  
00:02:47,030 --> 00:02:45,390  
Kennedy Space Center and also at the

55  
00:02:49,130 --> 00:02:47,040  
Dryden Flight Research Center at Edwards

56  
00:02:54,850 --> 00:02:49,140  
Air Force Base in California you can see

57  
00:03:01,370 --> 00:02:54,860  
it here in this picture it enables the

58  
00:03:05,270 --> 00:03:01,380  
large 747 to move underneath it which it

59  
00:03:07,220 --> 00:03:05,280  
will do on Friday what's going to happen

60  
00:03:10,220 --> 00:03:07,230  
after the Shuttle Carrier aircraft lands

61  
00:03:15,259 --> 00:03:10,230  
today and a whole series of operations

62  
00:03:17,000 --> 00:03:15,269  
begin on Friday morning at 5:00 space

63  
00:03:18,770 --> 00:03:17,010

shuttle Endeavour will be rolled out of

64

00:03:21,770 --> 00:03:18,780

the Vehicle Assembly Building here at

65

00:03:23,449 --> 00:03:21,780

Kennedy Space Center and over the course

66

00:03:26,270 --> 00:03:23,459

of about an hour it will be brought to

67

00:03:29,180 --> 00:03:26,280

this location at the mate demate device

68

00:03:30,890 --> 00:03:29,190

there's a yellow sling that you can see

69

00:03:33,410 --> 00:03:30,900

in this picture that will be affixed to

70

00:03:36,140 --> 00:03:33,420

the orbiter to the Space Shuttle

71

00:03:38,690 --> 00:03:36,150

Endeavor and then the crane will lift

72

00:03:42,470 --> 00:03:38,700

endeavour up into the air to a height

73

00:03:44,810 --> 00:03:42,480

that will enable it to fit underneath or

74

00:03:47,180 --> 00:03:44,820

above actually the 747 Shuttle Carrier

75

00:03:50,900 --> 00:03:47,190

aircraft which will taxi in underneath

76

00:03:54,380 --> 00:03:50,910

it and over the course of the day on

77

00:03:57,800 --> 00:03:54,390

Friday with the operation expected to be

78

00:04:01,190 --> 00:03:57,810

completed by 5:00 or 6:00 p.m. we expect

79

00:04:03,470 --> 00:04:01,200

that Space Shuttle Endeavor will be soft

80

00:04:06,559 --> 00:04:03,480

mated to the top of the Shuttle Carrier

81

00:04:08,360 --> 00:04:06,569

aircraft and then on Saturday some

82

00:04:11,870 --> 00:04:08,370

finishing touches will be performed to

83

00:04:14,240 --> 00:04:11,880

hard made it on Sunday the Shuttle

84

00:04:17,300 --> 00:04:14,250

Carrier aircraft with endeavour on top

85

00:04:21,110 --> 00:04:17,310

will back out of the mate demate device

86

00:04:23,330 --> 00:04:21,120

and then be readied for the ferry flight

87

00:05:01,970 --> 00:04:23,340

to California which will begin at

88

00:05:07,640 --> 00:05:04,400

back in April of this year space shuttle

89

00:05:09,650 --> 00:05:07,650

Discovery was prepared for its final

90

00:05:13,670 --> 00:05:09,660

ferry flight it flew to Dulles Airport

91

00:05:16,940 --> 00:05:13,680

in Washington and it was put atop NASA

92

00:05:18,530 --> 00:05:16,950

905 the same shuttle aircraft Shuttle

93

00:05:20,000 --> 00:05:18,540

Carrier aircraft and you can see the

94

00:05:22,160 --> 00:05:20,010

mating operation in this time-lapse

95

00:05:24,490 --> 00:05:22,170

video that we're looking at with the

96

00:05:28,880 --> 00:05:24,500

yellow sling going over top of discovery

97

00:05:41,690 --> 00:05:28,890

the workers busily preparing it and now

98

00:05:49,420 --> 00:05:43,520

there are four attach points for the

99

00:05:58,290 --> 00:05:52,960

the wheels are retracted landing gear is

100

00:06:02,110 --> 00:05:58,300

up and discovery is lifted into the air

101  
00:06:06,180 --> 00:06:02,120  
now the 747 Shuttle Carrier aircraft is

102  
00:06:08,920 --> 00:06:06,190  
brought into position carefully lined up

103  
00:06:12,040 --> 00:06:08,930  
it needs to match up with three attach

104  
00:06:14,590 --> 00:06:12,050  
points one in the front and two in the

105  
00:06:16,600 --> 00:06:14,600  
rear the same attach points that attach

106  
00:06:23,590 --> 00:06:16,610  
the space shuttles to the external tanks

107  
00:06:34,679 --> 00:06:23,600  
when they flew into space a soft meet

108  
00:06:40,619 --> 00:06:38,399  
and then the the work team will complete

109  
00:06:43,259 --> 00:06:40,629  
the operation of hard mating the Space

110  
00:06:45,689 --> 00:06:43,269  
Shuttle again this is space shuttle

111  
00:06:48,600 --> 00:06:45,699  
Discovery this was performed prior to

112  
00:06:57,690 --> 00:06:48,610  
Discovery's April 17th ferry flight to

113  
00:07:03,000 --> 00:07:01,350

and now we see NASA 905 the Shuttle

114

00:07:04,710 --> 00:07:03,010

Carrier aircraft as it makes its

115

00:07:07,200 --> 00:07:04,720

approach to Kennedy Space Center in

116

00:07:09,180 --> 00:07:07,210

Florida where we'll land this afternoon

117

00:07:11,090 --> 00:07:09,190

on Shuttle Landing Facility runway

118

00:07:14,250 --> 00:07:11,100

one-five

119

00:07:19,080 --> 00:07:14,260

once again Jeff Moultrie is at the

120

00:07:21,930 --> 00:07:19,090

command Bill Rickey is in the right seat

121

00:07:24,540 --> 00:07:21,940

and three flight engineers are all

122

00:07:30,090 --> 00:07:24,550

keeping an eye on systems it's a heavily

123

00:07:33,570 --> 00:07:30,100

modified Boeing 747 with unusual

124

00:07:35,880 --> 00:07:33,580

handling characteristics it takes a lot

125

00:07:39,090 --> 00:07:35,890

of experience to fly especially when a

126

00:07:39,900 --> 00:07:39,100

shuttle is mounted on top this is the

127

00:07:42,840 --> 00:07:39,910

same team

128

00:07:45,720 --> 00:07:42,850

predominantly that ferried space shuttle

129

00:07:48,360 --> 00:07:45,730

Discovery to Washington and Space

130

00:07:57,560 --> 00:07:48,370

Shuttle enterprise to JFK Airport in New

131

00:08:06,380 --> 00:08:00,440

NASA 905 took off from Edwards Air Force

132

00:08:07,820 --> 00:08:06,390

Base at 8:30 Pacific time today and has

133

00:08:18,210 --> 00:08:07,830

made a direct flight here to Kennedy

134

00:08:23,040 --> 00:08:20,430

the Shuttle Carrier aircraft has the

135

00:08:26,160 --> 00:08:23,050

three struts with associated interior

136

00:08:28,500 --> 00:08:26,170

structural strengthening to help

137

00:08:31,770 --> 00:08:28,510

facilitate carrying a shuttle on its

138

00:08:35,159 --> 00:08:31,780

back it also has two additional vertical

139

00:08:36,690 --> 00:08:35,169

stabilizers from a normal 747 one on

140

00:08:41,600 --> 00:08:36,700

each end of the standard horizontal

141

00:08:52,140 --> 00:08:44,159

all the seats and interior furnishings

142

00:09:00,410 --> 00:08:52,150

have been removed and it's an amazing

143

00:09:00,420 --> 00:09:05,490

landing gear are down

144

00:09:10,980 --> 00:09:08,100

as the 747 Shuttle Carrier aircraft

145

00:09:13,530 --> 00:09:10,990

makes a sweeping turn over the Space

146

00:09:15,360 --> 00:09:13,540

Coast of Florida again it's approaching

147

00:09:18,090 --> 00:09:15,370

from the northwest to the southeast and

148

00:09:44,150 --> 00:09:18,100

will land on runway one-five at the

149

00:09:49,460 --> 00:09:47,240

NASA's 905 is on final approach to the

150

00:09:52,520 --> 00:09:49,470

shuttle landing facility in preparation

151  
00:10:18,430 --> 00:09:52,530  
for NASA's final ferry flight of a space

152  
00:10:23,069 --> 00:10:20,379  
we're looking at a view from a camera

153  
00:10:28,990 --> 00:10:23,079  
mounted on the Vehicle Assembly Building

154  
00:10:33,510 --> 00:10:29,000  
and now we see a view from the runway

155  
00:10:33,520 --> 00:10:43,060  
and we have touchdown

156  
00:10:48,180 --> 00:10:45,430  
Shuttle Carrier aircraft returning to

157  
00:10:51,759 --> 00:10:48,190  
Kennedy Space Center for one final time

158  
00:10:55,439 --> 00:10:51,769  
it will perform this very flight across

159  
00:10:57,790 --> 00:10:55,449  
the country back to California and will

160  
00:11:00,189 --> 00:10:57,800  
then be flown to the Dryden Flight

161  
00:11:04,240 --> 00:11:00,199  
Research Center and retired it will

162  
00:11:05,889 --> 00:11:04,250  
become a part of NASA's Sofia program no

163  
00:11:16,300 --> 00:11:05,899

longer required for the space shuttle

164

00:11:20,970 --> 00:11:16,310

program you can see the struts mounted

165

00:12:03,400 --> 00:11:23,769

to which space shuttle Endeavour will be

166

00:12:07,230 --> 00:12:05,920

the ferry flight will be performed in

167

00:12:09,550 --> 00:12:07,240

several legs

168

00:12:12,699 --> 00:12:09,560

whereas space shuttle Discovery flew

169

00:12:14,050 --> 00:12:12,709

directly to Washington DC and Space

170

00:12:21,960 --> 00:12:14,060

Shuttle enterprise directly from

171

00:12:27,400 --> 00:12:24,730

deliver Space Shuttle Endeavor to the

172

00:12:29,650 --> 00:12:27,410

California Science Center which actually

173

00:12:32,559 --> 00:12:29,660

owns endeavour and has some say in the

174

00:12:34,210 --> 00:12:32,569

matter and intends to have a welcome

175

00:12:37,119 --> 00:12:34,220

ceremony at Los Angeles International

176

00:12:41,230 --> 00:12:37,129

Airport on September 20th keeping that

177

00:12:43,269 --> 00:12:41,240

in mind NASA managers have determined

178

00:12:47,019 --> 00:12:43,279

that the ferry flight will begin weather

179

00:12:53,319 --> 00:12:47,029

permitting on the morning of Monday

180

00:12:55,300 --> 00:12:53,329

September 17th at sunrise this Shuttle

181

00:12:57,309 --> 00:12:55,310

Carrier aircraft with endeavour atop

182

00:13:00,160 --> 00:12:57,319

will takeoff here from the Shuttle

183

00:13:03,340 --> 00:13:00,170

Landing Facility and make a flyover of

184

00:13:04,840 --> 00:13:03,350

the Space Coast flying over Kennedy

185

00:13:07,210 --> 00:13:04,850

Space Center in the Kennedy Space Center

186

00:13:09,910 --> 00:13:07,220

Visitor Complex and the nearby Cape

187

00:13:13,780 --> 00:13:09,920

Canaveral Air Force Station as well as

188

00:13:18,759 --> 00:13:13,790

Patrick Air Force Base at additional

189

00:13:20,650 --> 00:13:18,769

areas of the Space Coast to show off the

190

00:13:22,600 --> 00:13:20,660

Shuttle Carrier aircraft and space

191

00:13:24,759 --> 00:13:22,610

shuttle Endeavour one last time for the

192

00:13:28,179 --> 00:13:24,769

workforce and residence here of the

193

00:13:30,069 --> 00:13:28,189

Space Coast before flying back over the

194

00:13:40,830 --> 00:13:30,079

shuttle landing facility and waving

195

00:13:45,270 --> 00:13:43,440

that flyover of the Florida area as well

196

00:13:46,800 --> 00:13:45,280

as some additional flyovers on the ferry

197

00:13:50,280 --> 00:13:46,810

flight will all be performed at an

198

00:13:53,100 --> 00:13:50,290

altitude of about 1500 feet it's a

199

00:13:55,620 --> 00:13:53,110

spectacular sight to see this large 747

200

00:13:58,170 --> 00:13:55,630

with a space shuttle weighing 175

201  
00:14:03,780 --> 00:13:58,180  
thousand pounds itself mounted to the

202  
00:14:06,900 --> 00:14:03,790  
top after departing the Kennedy Space

203  
00:14:09,600 --> 00:14:06,910  
Center area the Shuttle Carrier aircraft

204  
00:14:15,810 --> 00:14:09,610  
will fly to the west and makes low

205  
00:14:18,270 --> 00:14:15,820  
flyovers of the Stennis Space Center in

206  
00:14:21,120 --> 00:14:18,280  
Mississippi NASA's Michoud assembly

207  
00:14:24,540 --> 00:14:21,130  
facility in New Orleans and then it will

208  
00:14:26,580 --> 00:14:24,550  
head to Houston where it will conduct a

209  
00:14:28,530 --> 00:14:26,590  
flyover of the Johnson Space Center and

210  
00:14:31,530 --> 00:14:28,540  
some other areas in the Houston area and

211  
00:14:37,470 --> 00:14:31,540  
land at ellington Field on the afternoon

212  
00:14:40,950 --> 00:14:37,480  
of September 17th it will remain there

213  
00:14:42,930 --> 00:14:40,960

until the morning of September 19th with

214

00:14:47,910 --> 00:14:42,940

the 18th being a weather contingency day

215

00:14:51,170 --> 00:14:47,920

just in case it will depart Houston take

216

00:14:55,080 --> 00:14:51,180

off for El Paso Texas refuel at Biggs

217

00:14:57,900 --> 00:14:55,090

Army Airfield and then take off for

218

00:15:02,640 --> 00:14:57,910

Dryden Flight Research Center at Edwards

219

00:15:05,850 --> 00:15:02,650

Air Force Base in California it will

220

00:15:08,430 --> 00:15:05,860

arrive there midday and then on the

221

00:15:12,000 --> 00:15:08,440

morning of September 20th it will take

222

00:15:14,010 --> 00:15:12,010

off and again conduct a very low flyover

223

00:15:16,320 --> 00:15:14,020

at 1,500 feet of several areas of

224

00:15:20,280 --> 00:15:16,330

northern California including Sacramento

225

00:15:22,860 --> 00:15:20,290

and San Francisco and then it will fly

226

00:15:25,080 --> 00:15:22,870

to the Los Angeles area fly over a

227

00:15:27,110 --> 00:15:25,090

number of landmarks there before landing

228

00:15:36,250 --> 00:15:27,120

at Los Angeles International Airport

229

00:15:40,570 --> 00:15:38,620

so a big week in store for the Shuttle

230

00:15:44,410 --> 00:15:40,580

Carrier aircraft Space Shuttle Endeavor

231

00:15:48,730 --> 00:15:44,420

and the crew and the workforce here at

232

00:15:50,170 --> 00:15:48,740

Kennedy Space Center and this is the

233

00:15:51,820 --> 00:15:50,180

first step with the arrival of the

234

00:16:17,230 --> 00:15:51,830

Shuttle Carrier aircraft here to the

235

00:16:24,549 --> 00:16:20,879

NASA space shuttles are being moved to

236

00:16:29,669 --> 00:16:24,559

locations around the country for a next

237

00:16:33,160 --> 00:16:29,679

generation of explorers to view and to

238

00:16:35,769 --> 00:16:33,170

gain inspiration from and to learn about

239

00:16:38,879 --> 00:16:35,779

the history of the shuttles discovery is

240

00:16:40,720 --> 00:16:38,889

at the udvar-hazy center part of the

241

00:16:43,179 --> 00:16:40,730

Smithsonian's National Air and Space

242

00:16:46,359 --> 00:16:43,189

Museum it's the annex at Dulles Airport

243

00:16:49,509 --> 00:16:46,369

in Washington DC Enterprise was the

244

00:16:53,619 --> 00:16:49,519

prototype Space Shuttle it performed the

245

00:16:55,480 --> 00:16:53,629

approach and landing tests in 1977 that

246

00:16:57,939 --> 00:16:55,490

were precursor to the orbital flights

247

00:17:01,389 --> 00:16:57,949

and really established the fact that the

248

00:17:02,829 --> 00:17:01,399

shuttle could land as a glider and this

249

00:17:05,319 --> 00:17:02,839

particular aircraft that you're looking

250

00:17:07,510 --> 00:17:05,329

at right now NASA 905 was the Shuttle

251

00:17:09,970 --> 00:17:07,520

Carrier aircraft that carried enterprise

252

00:17:13,329 --> 00:17:09,980

on those approach and landing tests way

253

00:17:15,309 --> 00:17:13,339

back in 1977 and we'll be performing the

254

00:17:19,630 --> 00:17:15,319

final fairy flight of the space shuttle

255

00:17:21,460 --> 00:17:19,640

program endeavour of course will be

256

00:17:24,789 --> 00:17:21,470

going to the California Science Center

257

00:17:26,639 --> 00:17:24,799

in Los Angeles and space shuttle

258

00:17:29,799 --> 00:17:26,649

Atlantis will stay here in Florida on

259

00:17:32,380 --> 00:17:29,809

November 2nd it will roll from Kennedy

260

00:17:51,760 --> 00:17:32,390

Space Center to the nearby Kennedy Space

261

00:17:57,430 --> 00:17:54,850

in Los Angeles after it arrives on

262

00:18:02,200 --> 00:17:57,440

September 20th the Shuttle Carrier

263

00:18:06,910 --> 00:18:02,210

aircraft will it will be placed on a

264

00:18:09,850 --> 00:18:06,920

location on the apron where at this very

265

00:18:13,330 --> 00:18:09,860

moment a team of NASA and its

266

00:18:16,540 --> 00:18:13,340

contractors is erecting a series of

267

00:18:18,790 --> 00:18:16,550

cranes and wind restraints to manually

268

00:18:20,890 --> 00:18:18,800

offload the shuttle from the top of the

269

00:18:24,880 --> 00:18:20,900

Shuttle Carrier aircraft in an operation

270

00:18:27,520 --> 00:18:24,890

that has been performed only twice in

271

00:18:31,120 --> 00:18:27,530

recent history and only once in past

272

00:18:32,860 --> 00:18:31,130

history and that was at Dulles and a

273

00:18:34,780 --> 00:18:32,870

John F Kennedy Airport in New York City

274

00:18:37,630 --> 00:18:34,790

to offload shuttles discovery and

275

00:18:39,299 --> 00:18:37,640

enterprise so the team is in California

276  
00:18:40,890 --> 00:18:39,309  
right now at Los Angeles International

277  
00:18:44,530 --> 00:18:40,900  
Airport

278  
00:18:47,680 --> 00:18:44,540  
building up this elaborate system of

279  
00:18:49,360 --> 00:18:47,690  
cranes and wind restraints that performs

280  
00:18:51,070 --> 00:18:49,370  
the same function as the mate demate

281  
00:18:57,880 --> 00:18:51,080  
device that you looked at a few moments

282  
00:18:59,950 --> 00:18:57,890  
ago it's a very slow process and a very

283  
00:19:01,210 --> 00:18:59,960  
careful process to safely remove the

284  
00:19:04,210 --> 00:19:01,220  
shuttle from the top of the Shuttle

285  
00:19:06,130 --> 00:19:04,220  
Carrier aircraft and once that operation

286  
00:19:08,830 --> 00:19:06,140  
is complete the two aircraft will go

287  
00:19:12,400 --> 00:19:08,840  
their separate ways the Shuttle Carrier

288  
00:19:18,750 --> 00:19:12,410

aircraft NASA 905 will go back to Dryden

289

00:19:24,940 --> 00:19:22,720

brought and transported towed basically

290

00:19:27,490 --> 00:19:24,950

through the city streets of Englewood in

291

00:19:30,100 --> 00:19:27,500

Los Angeles California on a 12 mile trek

292

00:19:36,409 --> 00:19:30,110

from LAX Airport to the California

293

00:19:41,060 --> 00:19:38,960

there also will be a large ceremony in a

294

00:19:43,909 --> 00:19:41,070

ribbon-cutting ceremony on October 30th

295

00:19:46,820 --> 00:19:43,919

at the California Science Center to open

296

00:19:52,460 --> 00:19:46,830

up the Samuel ocean space shuttle

297

00:20:06,870 --> 00:19:52,470

Endeavour display pavilion that will

298

00:20:13,889 --> 00:20:08,970

the flight crew aboard the shuttle

299

00:20:21,340 --> 00:20:13,899

carrier aircraft is making final

300

00:20:26,260 --> 00:20:23,289

your work is pretty much done for the

301

00:20:30,130 --> 00:20:26,270

day they will remain here at Kennedy

302

00:20:32,650 --> 00:20:30,140

Space Center and perform some work on

303

00:20:34,810 --> 00:20:32,660

the aircraft and preparation for the

304

00:20:38,230 --> 00:20:34,820

ferry flight which again will begin on

305

00:20:53,550 --> 00:20:38,240

Monday and for the mating operation that

306

00:20:58,260 --> 00:20:56,250

NASA 905 was one of two Shuttle Carrier

307

00:20:59,760 --> 00:20:58,270

aircraft that NASA operated over the

308

00:21:04,550 --> 00:20:59,770

course of the 30 years space shuttle

309

00:21:11,730 --> 00:21:04,560

program NASA 911 was retired recently

310

00:21:13,770 --> 00:21:11,740

and it too is no longer needed for the

311

00:22:05,460 --> 00:21:13,780

space shuttle program it is serving

312

00:22:09,419 --> 00:22:07,860

the Shuttle Carrier aircraft performed a

313

00:22:14,310 --> 00:22:09,429

number of ferry operations over the

314

00:22:17,990 --> 00:22:14,320

years when space shuttles were diverted

315

00:22:21,749 --> 00:22:18,000

to an alternate landing facility or

316

00:22:24,470 --> 00:22:21,759

early on when the shuttles were landing

317

00:22:27,060 --> 00:22:24,480

intentionally at Edwards Air Force Base

318

00:22:58,820 --> 00:22:27,070

and then flown back to Kennedy Space

319

00:23:04,660 --> 00:23:00,770

the Shuttle Carrier aircraft the

320

00:23:07,340 --> 00:23:04,670

modified 747 has four pratt & whitney

321

00:23:16,720 --> 00:23:07,350

gas turbine engines each producing

322

00:23:21,340 --> 00:23:19,420

with the space shuttle attached the

323

00:23:23,590 --> 00:23:21,350

Shuttle Carrier aircraft is typically

324

00:23:26,650 --> 00:23:23,600

cruising at an altitude of about 13 to

325

00:23:35,670 --> 00:23:26,660

15 thousand feet much lower than a

326

00:23:42,480 --> 00:23:38,430

and when there is a shuttle attached it

327

00:23:52,940 --> 00:23:42,490

typically can go about a thousand miles

328

00:24:09,550 --> 00:23:57,050

the aircraft holds a little bit more

329

00:24:15,490 --> 00:24:12,160

the ferry flight there's a meticulously

330

00:24:18,000 --> 00:24:15,500

planned operation that involves a team

331

00:24:20,940 --> 00:24:18,010

of NASA managers space shuttle program

332

00:24:25,090 --> 00:24:20,950

transition and retirement personnel

333

00:24:28,000 --> 00:24:25,100

whether officers safety personnel to

334

00:24:31,420 --> 00:24:28,010

ensure that every leg of it is performed

335

00:24:33,640 --> 00:24:31,430

safely there will be some reviews

336

00:24:36,820 --> 00:24:33,650

conducted over the next several days to

337

00:24:39,580 --> 00:24:36,830

review the weather and the progress of

338

00:24:41,920 --> 00:24:39,590

the mating operation before a go is

339

00:24:45,580 --> 00:24:41,930

given for the ferry flight on Monday

340

00:24:48,790 --> 00:24:45,590

morning again that flight if if all goes

341

00:24:51,940 --> 00:24:48,800

well is scheduled just after sunrise or

342

00:25:03,970 --> 00:24:51,950

at approximately 7:15 a.m. Monday

343

00:25:09,200 --> 00:25:06,560

in order to ensure that endeavour

344

00:25:11,390 --> 00:25:09,210

arrives at Los Angeles International

345

00:25:14,030 --> 00:25:11,400

Airport on the prescribed day of

346

00:25:17,990 --> 00:25:14,040

September 20th we'll begin the ferry

347

00:25:20,630 --> 00:25:18,000

flight on on Monday and then there will

348

00:25:26,270 --> 00:25:20,640

be a weather contingency day spent in

349

00:25:28,400 --> 00:25:26,280

Houston on Tuesday September 18th again

350

00:25:32,560 --> 00:25:28,410

the shuttle carrier aircraft and

351  
00:25:39,470 --> 00:25:34,820  
perform a flyover of the Space Coast

352  
00:25:42,909 --> 00:25:39,480  
area head to the west and flyover areas

353  
00:25:45,950 --> 00:25:42,919  
in Mississippi and Louisiana before

354  
00:25:48,980 --> 00:25:45,960  
flying over areas of Houston and landing

355  
00:25:50,780 --> 00:25:48,990  
there at ellington Field where it will

356  
00:25:55,520 --> 00:25:50,790  
remain on the ground for the duration of

357  
00:25:57,640 --> 00:25:55,530  
the 17th an all day on the 18th and then

358  
00:26:00,680 --> 00:25:57,650  
take off on the morning of the 19th

359  
00:26:05,500 --> 00:26:00,690  
westbound towards El Paso Texas it will

360  
00:26:10,010 --> 00:26:05,510  
take on fuel in El Paso and fly over

361  
00:26:13,100 --> 00:26:10,020  
white sands test facility and then head

362  
00:26:18,110 --> 00:26:13,110  
towards Edwards Air Force Base and the

363  
00:26:22,520 --> 00:26:18,120

Dryden Flight Research Center throughout

364

00:26:26,659 --> 00:26:22,530

the ferry flight NASA social media

365

00:26:33,620 --> 00:26:26,669

followers can follow hashtags pound ovie

366

00:26:35,630 --> 00:26:33,630

105 and pound spot the shuttle it will

367

00:26:37,970 --> 00:26:35,640

be quite exciting to see the amount of

368

00:26:41,750 --> 00:26:37,980

people posting pictures and sending

369

00:26:43,130 --> 00:26:41,760

pictures as the shuttle conducts its

370

00:27:38,610 --> 00:26:43,140

ferry flight across the United States

371

00:27:46,560 --> 00:27:43,500

and the door is open enabling the crew

372

00:27:50,039 --> 00:27:46,570

to complete its mission of the day again

373

00:27:54,450 --> 00:27:50,049

they departed Edwards Air Force Base at

374

00:27:56,940 --> 00:27:54,460

8:30 a.m. Pacific time Shuttle Carrier

375

00:27:59,460 --> 00:27:56,950

aircraft commander Jeff Moultrie pilot

376

00:28:11,889 --> 00:27:59,470

Bill Ricky and flight engineers Henry

377

00:28:16,820 --> 00:28:14,029

again they'll be remaining here at

378

00:28:19,099 --> 00:28:16,830

Kennedy Space Center in the area for the

379

00:28:21,259 --> 00:28:19,109

next several days taking care of their

380

00:28:23,690 --> 00:28:21,269

aircraft and preparing it for the ferry

381

00:28:27,259 --> 00:28:23,700

flight while the workforce at Kennedy

382

00:28:28,099 --> 00:28:27,269

which has been processing Space Shuttle

383

00:28:31,669 --> 00:28:28,109

Endeavor

384

00:28:33,529 --> 00:28:31,679

and preparing it for this will perform

385

00:29:26,880 --> 00:28:33,539

the maid operation at the mate demate

386

00:29:31,960 --> 00:29:29,649

now we see the flight crew coming out of

387

00:29:37,060 --> 00:29:31,970

NASA 905 out of the Shuttle Carrier

388

00:29:39,370 --> 00:29:37,070

aircraft again this is an experienced

389

00:29:41,310 --> 00:29:39,380

group of pilots that has flown with NASA

390

00:29:45,850 --> 00:29:41,320

for many many years in many capacities

391

00:29:48,370 --> 00:29:45,860

including training our astronauts they

392

00:29:50,760 --> 00:29:48,380

fly a variety of aircraft from the t-38

393

00:29:55,990 --> 00:29:50,770

high-performance Jets to this massive

394

00:29:58,810 --> 00:29:56,000

747 professional pilots and this will be

395

00:30:05,049 --> 00:29:58,820

their last space shuttle program ferry

396

00:30:08,320 --> 00:30:05,059

flight so with that we'll wrap up

397

00:30:11,919 --> 00:30:08,330

coverage and remind you that at 6:45

398

00:30:13,779 --> 00:30:11,929

a.m. on Monday September 17th NASA

399

00:30:16,570 --> 00:30:13,789

television will begin coverage of

400

00:30:18,940 --> 00:30:16,580

endeavours departure which is scheduled

401

00:30:22,180 --> 00:30:18,950

for sunrise or right about 7:15 a.m.

402

00:30:25,659 --> 00:30:22,190

Eastern Time and between now and then

403

00:30:26,889 --> 00:30:25,669

the mate demate the mating operation

404

00:30:30,010 --> 00:30:26,899

will take place at the mate demate

405

00:30:33,490 --> 00:30:30,020

device and if there are any changes to

406

00:30:35,560 --> 00:30:33,500

these plans we will of course update the

407

00:30:37,779 --> 00:30:35,570

NASA web so you can keep track of