



# Phone-in Question

1  
00:00:09,669 --> 00:00:06,869  
good afternoon everyone this is the

2  
00:00:12,310 --> 00:00:09,679  
pre-launch news conference for nasa's

3  
00:00:13,830 --> 00:00:12,320  
iris mission iris to be launched aboard

4  
00:00:15,829 --> 00:00:13,840  
an orbital sciences

5  
00:00:18,230 --> 00:00:15,839  
pegasus xl

6  
00:00:20,070 --> 00:00:18,240  
and here to talk about the launch and

7  
00:00:22,870 --> 00:00:20,080  
the spacecraft

8  
00:00:25,269 --> 00:00:22,880  
is jeffrey yoder the deputy associate

9  
00:00:27,189 --> 00:00:25,279  
administrator for programs for the

10  
00:00:30,550 --> 00:00:27,199  
science mission directorate at nasa

11  
00:00:35,590 --> 00:00:33,350  
tim dunn the nasa launch director from

12  
00:00:39,990 --> 00:00:35,600  
the kennedy space center in florida for

13  
00:00:45,110 --> 00:00:42,630

brian baldwin the pegasus launch vehicle

14

00:00:48,950 --> 00:00:45,120

program director for orbital sciences

15

00:00:54,069 --> 00:00:52,470

gary kushner the iris project manager

16

00:00:56,229 --> 00:00:54,079

from the lockheed martin solar and

17

00:00:59,670 --> 00:00:56,239

astrophysics laboratory in palo alto

18

00:01:03,430 --> 00:01:01,750

and first lieutenant jennifer kelly the

19

00:01:05,830 --> 00:01:03,440

launch weather officer

20

00:01:08,149 --> 00:01:05,840

from the u.s air force 30th operations

21

00:01:09,670 --> 00:01:08,159

support squadron at vandenberg air force

22

00:01:12,149 --> 00:01:09,680

base

23

00:01:13,830 --> 00:01:12,159

and we'll begin first with jeffrey yoder

24

00:01:16,149 --> 00:01:13,840

thank you george

25

00:01:18,230 --> 00:01:16,159

so iris and you'll hear a lot more about

26

00:01:20,310 --> 00:01:18,240

the science aspects of it later but it's

27

00:01:22,469 --> 00:01:20,320

the next mission on the next satellite

28

00:01:24,789 --> 00:01:22,479

to launch in our nasa small explorers

29

00:01:26,390 --> 00:01:24,799

program of course the small explorers

30

00:01:28,310 --> 00:01:26,400

program is a

31

00:01:30,710 --> 00:01:28,320

innovative way

32

00:01:32,789 --> 00:01:30,720

to produce world-class science

33

00:01:34,310 --> 00:01:32,799

with with collaboration

34

00:01:35,830 --> 00:01:34,320

and it won't talk about the science

35

00:01:37,429 --> 00:01:35,840

aspects of it but

36

00:01:39,030 --> 00:01:37,439

iris especially when you look at the

37

00:01:41,030 --> 00:01:39,040

partnerships that have been involved

38

00:01:44,389 --> 00:01:41,040

that we have

39

00:01:47,030 --> 00:01:44,399

with uh to achieve this great science

40

00:01:49,830 --> 00:01:47,040

it involves government private industry

41

00:01:51,830 --> 00:01:49,840

academia and international partners so

42

00:01:54,389 --> 00:01:51,840

i'd like to just take a little time to

43

00:01:57,270 --> 00:01:54,399

uh to thank the the various partners

44

00:01:59,429 --> 00:01:57,280

that uh and members of the team

45

00:02:01,270 --> 00:01:59,439

first the nasa explorers program office

46

00:02:02,709 --> 00:02:01,280

at goddard who oversees the explorers

47

00:02:05,590 --> 00:02:02,719

activities for us

48

00:02:07,830 --> 00:02:05,600

uh within the heliophysics division

49

00:02:09,669 --> 00:02:07,840

second the principal investigator

50

00:02:11,190 --> 00:02:09,679

is low institution is the lockheed

51  
00:02:12,710 --> 00:02:11,200  
martin

52  
00:02:13,910 --> 00:02:12,720  
in palo alto and you'll hear more about

53  
00:02:16,390 --> 00:02:13,920  
that later

54  
00:02:18,150 --> 00:02:16,400  
the nasa ames research

55  
00:02:20,070 --> 00:02:18,160  
is responsible for the ground commanding

56  
00:02:22,790 --> 00:02:20,080  
flight operations

57  
00:02:26,070 --> 00:02:22,800  
and data telemetry the nasa launch

58  
00:02:28,470 --> 00:02:26,080  
services program at ksc

59  
00:02:29,910 --> 00:02:28,480  
for the launch vehicle selection

60  
00:02:31,350 --> 00:02:29,920  
and uh the

61  
00:02:33,350 --> 00:02:31,360  
additional activities that you'll hear

62  
00:02:35,750 --> 00:02:33,360  
here later on today

63  
00:02:38,390 --> 00:02:35,760

the smithsonian aerospace observatory in

64

00:02:39,910 --> 00:02:38,400

cambridge massachusetts for the

65

00:02:42,229 --> 00:02:39,920

for the design of the telescope for the

66

00:02:44,710 --> 00:02:42,239

spectrograph

67

00:02:46,949 --> 00:02:44,720

montana state university for the design

68

00:02:49,190 --> 00:02:46,959

of the spectrograph itself

69

00:02:51,509 --> 00:02:49,200

the norwegian space space center and

70

00:02:53,750 --> 00:02:51,519

nasa's uh near earth network provide the

71

00:02:56,070 --> 00:02:53,760

ground stations communication

72

00:02:58,309 --> 00:02:56,080

and orbital sciences corporation for

73

00:03:00,550 --> 00:02:58,319

providing the I-1011 as well as the

74

00:03:03,350 --> 00:03:00,560

pegasus will launch this vehicle as you

75

00:03:06,229 --> 00:03:03,360

can see we have a dynamic diverse team

76

00:03:07,990 --> 00:03:06,239

that i couldn't be more proud of

77

00:03:10,070 --> 00:03:08,000

so with that george i'll turn it back to

78

00:03:12,949 --> 00:03:10,080

you all right thank you very much and

79

00:03:14,630 --> 00:03:12,959

now to tim dunn our nasa launch director

80

00:03:18,229 --> 00:03:14,640

from the kennedy space center for the

81

00:03:19,990 --> 00:03:18,239

iris launch tim thank you george i'm

82

00:03:22,550 --> 00:03:20,000

proud to be here today representing the

83

00:03:24,630 --> 00:03:22,560

men and women of nasa's launch services

84

00:03:27,270 --> 00:03:24,640

program and i'm thrilled to be the

85

00:03:29,350 --> 00:03:27,280

launch director for the iris mission

86

00:03:31,270 --> 00:03:29,360

the solar science that iris uncovers

87

00:03:32,789 --> 00:03:31,280

will advance our understanding of our

88

00:03:34,949 --> 00:03:32,799

favorite star

89

00:03:36,710 --> 00:03:34,959

working alongside our orbital sciences

90

00:03:39,350 --> 00:03:36,720

corporation colleagues

91

00:03:41,509 --> 00:03:39,360

the engineers and analysts of nasa lsp

92

00:03:43,350 --> 00:03:41,519

take great pride in launching the iris

93

00:03:45,350 --> 00:03:43,360

mission

94

00:03:47,030 --> 00:03:45,360

nasa has a terrific record flying on the

95

00:03:49,190 --> 00:03:47,040

pegasus xl

96

00:03:50,869 --> 00:03:49,200

we have launched 18 missions on this

97

00:03:53,190 --> 00:03:50,879

unique launch system

98

00:03:56,550 --> 00:03:53,200

iris will be the 19th nasa mission on

99

00:03:57,990 --> 00:03:56,560

pegasus and the 42nd overall pegasus

100

00:04:02,070 --> 00:03:58,000

launch

101  
00:04:05,190 --> 00:04:02,080  
dropped from the belly of the venerable

102  
00:04:07,830 --> 00:04:05,200  
I-1011 orbital carrier aircraft over the

103  
00:04:09,670 --> 00:04:07,840  
pacific ocean northwest of vanderberg

104  
00:04:11,910 --> 00:04:09,680  
air force base

105  
00:04:14,390 --> 00:04:11,920  
i'd like now to show a video of the

106  
00:04:16,469 --> 00:04:14,400  
orbital sciences team building up the

107  
00:04:18,150 --> 00:04:16,479  
pegasus xl launch vehicle

108  
00:04:19,990 --> 00:04:18,160  
and the mated iris spacecraft here at

109  
00:04:22,390 --> 00:04:20,000  
vanderberg air force base

110  
00:04:24,790 --> 00:04:22,400  
here you see a nice video of the

111  
00:04:26,230 --> 00:04:24,800  
processing facility building 1555 here

112  
00:04:28,230 --> 00:04:26,240  
on vanderberg

113  
00:04:32,390 --> 00:04:28,240

gorgeous shot there of the first stage

114

00:04:36,230 --> 00:04:34,550

a nice shot from the rear looking

115

00:04:37,510 --> 00:04:36,240

forward you see the two additional

116

00:04:40,790 --> 00:04:37,520

stages the

117

00:04:43,990 --> 00:04:40,800

second and third stages ahead

118

00:04:46,310 --> 00:04:44,000

we see uh a glimpse here next uh this is

119

00:04:48,629 --> 00:04:46,320

the business end of pegasus

120

00:04:51,830 --> 00:04:48,639

and there's all three stages great shot

121

00:04:55,990 --> 00:04:53,670

here's the mating of the first and

122

00:04:59,270 --> 00:04:56,000

second stages

123

00:05:00,950 --> 00:04:59,280

you see orbital's crew technicians uh

124

00:05:01,990 --> 00:05:00,960

working very carefully around the flight

125

00:05:03,749 --> 00:05:02,000

hardware

126  
00:05:06,150 --> 00:05:03,759  
and this is the completed vehicle there

127  
00:05:07,749 --> 00:05:06,160  
is the payload fairing insulation around

128  
00:05:10,390 --> 00:05:07,759  
the iris spacecraft you'll see the

129  
00:05:11,830 --> 00:05:10,400  
spacecraft in a later presentation

130  
00:05:14,310 --> 00:05:11,840  
this is the installation of the

131  
00:05:16,710 --> 00:05:14,320  
completed vehicle onto the ait the

132  
00:05:17,990 --> 00:05:16,720  
assembly integration trailer that we use

133  
00:05:19,909 --> 00:05:18,000  
to roll out

134  
00:05:22,550 --> 00:05:19,919  
to the runway

135  
00:05:24,469 --> 00:05:22,560  
and this is just last

136  
00:05:27,510 --> 00:05:24,479  
last week here we have rollout on the

137  
00:05:29,510 --> 00:05:27,520  
19th of june from building 1555

138  
00:05:31,749 --> 00:05:29,520

and transport over to the hot pad

139

00:05:34,790 --> 00:05:31,759

processing area near the vanderberg air

140

00:05:37,590 --> 00:05:34,800

force base runway

141

00:05:40,950 --> 00:05:37,600

this is coming onto the airfield here

142

00:05:43,670 --> 00:05:40,960

and you see the I-1011 there

143

00:05:45,029 --> 00:05:43,680

the pegasus completed vehicle rolling on

144

00:05:47,110 --> 00:05:45,039

the ait

145

00:05:49,350 --> 00:05:47,120

under the belly

146

00:05:52,070 --> 00:05:49,360

going to be put on the hooks here

147

00:05:57,510 --> 00:05:52,080

and mated into a flight configuration

148

00:06:00,629 --> 00:05:58,950

it was a little bit windy that day

149

00:06:02,309 --> 00:06:00,639

they've obviously turned the sound down

150

00:06:04,830 --> 00:06:02,319

on the wind here

151  
00:06:07,110 --> 00:06:04,840  
and this is removal of the assembly

152  
00:06:08,790 --> 00:06:07,120  
trailer and we're going to finish up a

153  
00:06:12,629 --> 00:06:08,800  
beautiful shot from the front side of

154  
00:06:17,749 --> 00:06:14,790  
the irish launch campaign has gone very

155  
00:06:20,309 --> 00:06:17,759  
well over the past week the pegasus team

156  
00:06:22,950 --> 00:06:20,319  
has been busy with launch preparations

157  
00:06:25,670 --> 00:06:22,960  
last tuesday on the 18th of june the

158  
00:06:27,749 --> 00:06:25,680  
combined nasa and orbital sciences team

159  
00:06:29,350 --> 00:06:27,759  
held a flight readiness review

160  
00:06:32,230 --> 00:06:29,360  
where we assessed the preparations and

161  
00:06:35,350 --> 00:06:32,240  
readiness of the pegasus xl vehicle the

162  
00:06:37,749 --> 00:06:35,360  
l-1011 aircraft range assets and of

163  
00:06:39,990 --> 00:06:37,759

course the iris spacecraft

164

00:06:41,909 --> 00:06:40,000

after transport and mate to the aircraft

165

00:06:43,510 --> 00:06:41,919

we performed the combined systems test

166

00:06:45,270 --> 00:06:43,520

with the spacecraft and rocket last

167

00:06:47,430 --> 00:06:45,280

thursday

168

00:06:49,189 --> 00:06:47,440

and just over the past two days

169

00:06:51,510 --> 00:06:49,199

including this morning we've performed

170

00:06:53,990 --> 00:06:51,520

two wet dress rehearsals to exercise and

171

00:06:56,230 --> 00:06:54,000

prepare the entire pegasus iris launch

172

00:07:00,309 --> 00:06:56,240

team including orbital

173

00:07:02,550 --> 00:07:00,319

lockheed martin nasa and the air force

174

00:07:04,150 --> 00:07:02,560

we are currently working one open issue

175

00:07:05,990 --> 00:07:04,160

at this time

176

00:07:08,550 --> 00:07:06,000

we are awaiting the final readiness of

177

00:07:09,830 --> 00:07:08,560

the power systems that supply vanderberg

178

00:07:11,830 --> 00:07:09,840

air force base

179

00:07:15,029 --> 00:07:11,840

facilities that support the western

180

00:07:16,950 --> 00:07:15,039

range operations control center

181

00:07:19,110 --> 00:07:16,960

an effect of the central california

182

00:07:21,830 --> 00:07:19,120

coast power outage that we experienced

183

00:07:24,230 --> 00:07:21,840

this past sunday night was damage to the

184

00:07:26,390 --> 00:07:24,240

power systems that feed these critical

185

00:07:28,550 --> 00:07:26,400

range facilities

186

00:07:30,790 --> 00:07:28,560

repairs to the power equipment should be

187

00:07:32,790 --> 00:07:30,800

complete later today

188

00:07:35,029 --> 00:07:32,800

and allow the range team to perform the

189

00:07:36,950 --> 00:07:35,039

required I minus one configuration

190

00:07:38,390 --> 00:07:36,960

checks tomorrow

191

00:07:40,469 --> 00:07:38,400

due to this issue

192

00:07:42,830 --> 00:07:40,479

we will delay our first launch attempt

193

00:07:45,749 --> 00:07:42,840

from wednesday evening to thursday

194

00:07:47,589 --> 00:07:45,759

evening tomorrow we will conduct the

195

00:07:48,629 --> 00:07:47,599

launch readiness review for the iris

196

00:07:51,430 --> 00:07:48,639

mission

197

00:07:53,589 --> 00:07:51,440

senior managers from nasa ksc

198

00:07:55,029 --> 00:07:53,599

goddard space flight center ames

199

00:07:57,189 --> 00:07:55,039

research center

200

00:07:59,430 --> 00:07:57,199

and nasa headquarters as well as orbital

201  
00:08:01,830 --> 00:07:59,440  
sciences corporation and the air force

202  
00:08:04,469 --> 00:08:01,840  
will assess the entire readiness of the

203  
00:08:06,550 --> 00:08:04,479  
mission the rocket aircraft spacecraft

204  
00:08:09,749 --> 00:08:06,560  
and range assets to proceed with a

205  
00:08:14,469 --> 00:08:12,550  
given a go coming out of lrr on thursday

206  
00:08:16,629 --> 00:08:14,479  
the crew would begin arriving on console

207  
00:08:18,629 --> 00:08:16,639  
mid-afternoon pacific time

208  
00:08:21,430 --> 00:08:18,639  
we'll begin our final launch activities

209  
00:08:23,749 --> 00:08:21,440  
at approximately 3 pm

210  
00:08:26,070 --> 00:08:23,759  
by preparing the l-1011 orbital carrier

211  
00:08:28,150 --> 00:08:26,080  
aircraft for takeoff

212  
00:08:29,749 --> 00:08:28,160  
after pegasus power on

213  
00:08:31,909 --> 00:08:29,759

aircraft engine start and ground

214

00:08:34,709 --> 00:08:31,919

preparations are complete the aircraft

215

00:08:37,110 --> 00:08:34,719

will take off one hour prior to launch

216

00:08:38,310 --> 00:08:37,120

and fly northwest toward the target drop

217

00:08:39,990 --> 00:08:38,320

zone

218

00:08:42,709 --> 00:08:40,000

the launch crew here at vandenbergh air

219

00:08:44,230 --> 00:08:42,719

force base and the aircraft crew will

220

00:08:46,470 --> 00:08:44,240

perform the final preparations of

221

00:08:49,269 --> 00:08:46,480

pegasus and iris including the fts

222

00:08:50,949 --> 00:08:49,279

checks and switching iris spacecraft to

223

00:08:52,710 --> 00:08:50,959

internal power

224

00:08:55,110 --> 00:08:52,720

once in the target dropbox over the

225

00:08:56,870 --> 00:08:55,120

pacific ocean and after aligning the

226

00:08:59,829 --> 00:08:56,880

aircraft on a southerly heading

227

00:09:02,230 --> 00:08:59,839

verifying altitude and airspeed we will

228

00:09:04,389 --> 00:09:02,240

be ready for pegasus release from the

229

00:09:06,829 --> 00:09:04,399

aircraft and first stage ignition

230

00:09:10,870 --> 00:09:06,839

thursday evening at 7

231

00:09:14,550 --> 00:09:10,880

27 and 34 seconds pm pacific time which

232

00:09:17,350 --> 00:09:14,560

is the middle of our five minute window

233

00:09:20,870 --> 00:09:17,360

to summarize the pegasus xl rocket the

234

00:09:23,110 --> 00:09:20,880

iris payload and the aircraft are ready

235

00:09:25,509 --> 00:09:23,120

tomorrow we will assess range readiness

236

00:09:27,190 --> 00:09:25,519

at our lr

237

00:09:29,590 --> 00:09:27,200

and the combined government and

238

00:09:31,590 --> 00:09:29,600

contractor team is both prepared and

239

00:09:33,350 --> 00:09:31,600

excited to launch this important science

240

00:09:36,389 --> 00:09:33,360

spacecraft

241

00:09:38,550 --> 00:09:36,399

back to you george thank you tim and now

242

00:09:40,710 --> 00:09:38,560

to brian baldwin the pegasus launch

243

00:09:42,949 --> 00:09:40,720

vehicle program director from orbital

244

00:09:43,990 --> 00:09:42,959

sciences corporation brian thank you

245

00:09:45,829 --> 00:09:44,000

george

246

00:09:48,470 --> 00:09:45,839

on behalf of orbital sciences

247

00:09:50,389 --> 00:09:48,480

corporation and the pegasus program

248

00:09:52,389 --> 00:09:50,399

we want to know how pleased we are to be

249

00:09:54,070 --> 00:09:52,399

here at this point in the mission it's

250

00:09:58,070 --> 00:09:54,080

uh

251  
00:09:59,829 --> 00:09:58,080  
thousands of man hours to get to this

252  
00:10:01,509 --> 00:09:59,839  
point and so

253  
00:10:03,190 --> 00:10:01,519  
it's been a great effort by the team and

254  
00:10:04,470 --> 00:10:03,200  
and we're we're pleased to be a part of

255  
00:10:06,150 --> 00:10:04,480  
that

256  
00:10:08,630 --> 00:10:06,160  
we'll show you a short video in a moment

257  
00:10:11,590 --> 00:10:08,640  
here but just to give you an idea of

258  
00:10:15,269 --> 00:10:11,600  
what's what happens in a pegasus launch

259  
00:10:16,790 --> 00:10:15,279  
um when we reach the drop point and uh

260  
00:10:19,829 --> 00:10:16,800  
the command is given from the launch

261  
00:10:22,630 --> 00:10:19,839  
conductor to to the pilot to release the

262  
00:10:23,990 --> 00:10:22,640  
the pegasus vehicle here we go

263  
00:10:28,550 --> 00:10:24,000

all right

264

00:10:29,990 --> 00:10:28,560  
five seconds prior to ignition that

265

00:10:32,310 --> 00:10:30,000  
allows us

266

00:10:33,990 --> 00:10:32,320  
an opportunity to arm our flight

267

00:10:36,870 --> 00:10:34,000  
termination system

268

00:10:38,150 --> 00:10:36,880  
the motor will burn for about 68 70

269

00:10:41,990 --> 00:10:38,160  
seconds

270

00:10:44,790 --> 00:10:42,000  
um here we are in second stage

271

00:10:46,630 --> 00:10:44,800  
fairing will be jettisoned about 37

272

00:10:48,790 --> 00:10:46,640  
seconds into this burn so you'll see the

273

00:10:51,590 --> 00:10:48,800  
fairing fall away

274

00:10:53,030 --> 00:10:51,600  
at the end of stage 2

275

00:10:55,670 --> 00:10:53,040  
burnout here

276  
00:11:03,350 --> 00:10:55,680  
we'll be going 12 000 miles per hour and

277  
00:11:09,590 --> 00:11:05,750  
there you can see the separation

278  
00:11:09,600 --> 00:11:13,430  
this is the third stage burning here

279  
00:11:17,509 --> 00:11:15,269  
we'll separate the spacecraft will be

280  
00:11:19,110 --> 00:11:17,519  
separated about 13 minutes into the

281  
00:11:20,150 --> 00:11:19,120  
flight

282  
00:11:22,389 --> 00:11:20,160  
um

283  
00:11:24,389 --> 00:11:22,399  
after successful insertion of the

284  
00:11:25,590 --> 00:11:24,399  
spacecraft

285  
00:11:27,430 --> 00:11:25,600  
we will

286  
00:11:30,389 --> 00:11:27,440  
turn off our telemetry transmitters

287  
00:11:32,150 --> 00:11:30,399  
about 840 seconds which is about 14

288  
00:11:34,310 --> 00:11:32,160

minutes into the flight and we have a

289

00:11:37,350 --> 00:11:34,320

couple of other things to do prior to

290

00:11:39,910 --> 00:11:37,360

completing our particular mission

291

00:11:41,910 --> 00:11:39,920

we will perform a collision

292

00:11:43,350 --> 00:11:41,920

and contamination avoidance maneuver

293

00:11:45,350 --> 00:11:43,360

will back away

294

00:11:47,190 --> 00:11:45,360

uh from the spacecraft because because

295

00:11:49,030 --> 00:11:47,200

both the spacecraft and the third stage

296

00:11:50,870 --> 00:11:49,040

will be orbital at that point

297

00:11:53,829 --> 00:11:50,880

uh we'll back away to

298

00:11:55,910 --> 00:11:53,839

verify make sure that we have uh

299

00:11:59,190 --> 00:11:55,920

you know clean separation between the

300

00:12:02,790 --> 00:11:59,200

spacecraft then we'll about uh

301  
00:12:04,550 --> 00:12:02,800  
1300 1400 seconds into the mission we'll

302  
00:12:07,590 --> 00:12:04,560  
go ahead and

303  
00:12:09,430 --> 00:12:07,600  
vent our tanks rcs tanks and we'll be

304  
00:12:10,870 --> 00:12:09,440  
done at that point so we look forward to

305  
00:12:12,949 --> 00:12:10,880  
a great mission

306  
00:12:15,430 --> 00:12:12,959  
uh and a great science coming out of

307  
00:12:16,790 --> 00:12:15,440  
this effort so back to you george thank

308  
00:12:19,030 --> 00:12:16,800  
you brian

309  
00:12:21,430 --> 00:12:19,040  
and now to gary kushner the iris project

310  
00:12:24,470 --> 00:12:21,440  
manager from the lockheed martin solar

311  
00:12:25,430 --> 00:12:24,480  
and astrophysics laboratory in palo alto

312  
00:12:27,110 --> 00:12:25,440  
gary

313  
00:12:28,790 --> 00:12:27,120

thank you george i'm very proud to be

314

00:12:30,150 --> 00:12:28,800

here representing the entire irish

315

00:12:32,069 --> 00:12:30,160

project team

316

00:12:33,990 --> 00:12:32,079

we're also excited to be here and

317

00:12:36,550 --> 00:12:34,000

prepare for launch

318

00:12:38,470 --> 00:12:36,560

the first graphic i thought i'd show you

319

00:12:40,069 --> 00:12:38,480

is uh you saw in

320

00:12:41,670 --> 00:12:40,079

tim's picture the

321

00:12:44,150 --> 00:12:41,680

fairing this is what's actually inside

322

00:12:46,870 --> 00:12:44,160

the fairing this is the observatory with

323

00:12:48,870 --> 00:12:46,880

sol rays deployed the observatory is

324

00:12:51,269 --> 00:12:48,880

about seven feet long

325

00:12:53,110 --> 00:12:51,279

and about four feet wide at the base the

326

00:12:54,550 --> 00:12:53,120

spacecraft with the solar rays deployed

327

00:12:56,550 --> 00:12:54,560

it's 12 feet wide

328

00:12:58,310 --> 00:12:56,560

uh next picture

329

00:13:00,389 --> 00:12:58,320

um the

330

00:13:02,230 --> 00:13:00,399

the the we will be in a sun synchronous

331

00:13:05,190 --> 00:13:02,240

orbit will be sun pointing the entire

332

00:13:07,430 --> 00:13:05,200

time a 97 degree inclination and we pass

333

00:13:08,870 --> 00:13:07,440

over the same point on earth about every

334

00:13:11,430 --> 00:13:08,880

97 minutes

335

00:13:15,269 --> 00:13:11,440

we're a small satellite we're about 400

336

00:13:18,230 --> 00:13:15,279

pounds and we consume about 350 watts

337

00:13:19,990 --> 00:13:18,240

the next oh i'm sorry but the in this

338

00:13:21,670 --> 00:13:20,000

picture you can see the instrument in

339

00:13:23,350 --> 00:13:21,680

the spacecraft the instrument consists

340

00:13:25,750 --> 00:13:23,360

of the telescope assembly which is in

341

00:13:27,910 --> 00:13:25,760

green and the spectrograph which is in

342

00:13:29,190 --> 00:13:27,920

light blue and the spacecraft itself is

343

00:13:30,710 --> 00:13:29,200

in orange

344

00:13:32,710 --> 00:13:30,720

next slide

345

00:13:34,389 --> 00:13:32,720

this is the instrument assembly here you

346

00:13:36,710 --> 00:13:34,399

can see from the left of the white

347

00:13:38,710 --> 00:13:36,720

collar is the telescope assembly

348

00:13:40,230 --> 00:13:38,720

and to the right is a spectrograph and

349

00:13:43,030 --> 00:13:40,240

i'll have a graphic showing the

350

00:13:45,670 --> 00:13:43,040

breakdown of that and the next one is a

351  
00:13:47,269 --> 00:13:45,680  
graphic of the instrument assembly and

352  
00:13:49,110 --> 00:13:47,279  
in the next image

353  
00:13:52,470 --> 00:13:49,120  
you'll see a cutaway

354  
00:13:54,310 --> 00:13:52,480  
let's see did we get the next next image

355  
00:13:56,470 --> 00:13:54,320  
there we go you'll see a cutaway you can

356  
00:13:58,470 --> 00:13:56,480  
see some of the optics inside and then

357  
00:14:00,389 --> 00:13:58,480  
the next image you'll see the light

358  
00:14:02,230 --> 00:14:00,399  
paths so the sun would be to your right

359  
00:14:04,069 --> 00:14:02,240  
the light would enter that front door

360  
00:14:06,470 --> 00:14:04,079  
hit the telescope on the left the orange

361  
00:14:08,629 --> 00:14:06,480  
rays represent the telescope section and

362  
00:14:10,629 --> 00:14:08,639  
then the left side is a spectrograph the

363  
00:14:14,310 --> 00:14:10,639

four different colors represent the four

364

00:14:16,550 --> 00:14:14,320

different spectroscopic channels we have

365

00:14:18,310 --> 00:14:16,560

supporting that next image

366

00:14:20,389 --> 00:14:18,320

we have the spacecraft which i mentioned

367

00:14:22,870 --> 00:14:20,399

is four foot diameter about 16 inches

368

00:14:24,230 --> 00:14:22,880

high it's a full complete spacecraft the

369

00:14:25,750 --> 00:14:24,240

only thing we don't have is we do not

370

00:14:28,389 --> 00:14:25,760

have any propulsion

371

00:14:30,949 --> 00:14:28,399

uh and the next image will show the

372

00:14:33,509 --> 00:14:30,959

expanded view of the various components

373

00:14:35,269 --> 00:14:33,519

inside it's a it's an aluminum bus with

374

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

eight bays and in each bay we have

375

00:14:40,230 --> 00:14:37,600

several components we have the

376

00:14:43,670 --> 00:14:40,240

flight computer we have the power system

377

00:14:45,910 --> 00:14:43,680

we have acs components including

378

00:14:49,269 --> 00:14:45,920

star trackers magnetometers reaction

379

00:14:50,710 --> 00:14:49,279

wheels and we also have the battery

380

00:14:52,230 --> 00:14:50,720

so it's a like i said it's a complete

381

00:14:54,150 --> 00:14:52,240

spacecraft

382

00:14:56,150 --> 00:14:54,160

next image

383

00:14:58,069 --> 00:14:56,160

this is how the observatory will look

384

00:14:59,750 --> 00:14:58,079

fully stowed and that is how it looks

385

00:15:02,710 --> 00:14:59,760

inside the fairing

386

00:15:04,230 --> 00:15:02,720

and that's with the sole raise folded up

387

00:15:07,030 --> 00:15:04,240

i think that's all i have for the

388

00:15:09,670 --> 00:15:07,040

graphics and then next we'll show a

389

00:15:11,750 --> 00:15:09,680

video now

390

00:15:14,389 --> 00:15:11,760

and the video will show us arriving at

391

00:15:16,550 --> 00:15:14,399

vandenberg this was on april 16th of

392

00:15:18,230 --> 00:15:16,560

this year after finishing all the

393

00:15:20,949 --> 00:15:18,240

testing at lockheed martin all the

394

00:15:23,670 --> 00:15:20,959

environmental testing this is obviously

395

00:15:24,949 --> 00:15:23,680

us unloading from a truck on a special

396

00:15:27,030 --> 00:15:24,959

transportation

397

00:15:29,189 --> 00:15:27,040

frame we're wrapped in protective

398

00:15:30,629 --> 00:15:29,199

material we're contamination sensitive

399

00:15:32,150 --> 00:15:30,639

so we have to maintain a clean

400

00:15:34,629 --> 00:15:32,160

environment until we're placed in the

401  
00:15:35,910 --> 00:15:34,639  
clean tent which you'll see in a short

402  
00:15:38,150 --> 00:15:35,920  
moment

403  
00:15:41,670 --> 00:15:38,160  
this is the team preparing to transfer

404  
00:15:43,590 --> 00:15:41,680  
from the transportation fixture over to

405  
00:15:45,269 --> 00:15:43,600  
well it'll be the handling fixture this

406  
00:15:48,310 --> 00:15:45,279  
is the team while they're doing the

407  
00:15:49,829 --> 00:15:48,320  
transfer while we're at vanderberg we

408  
00:15:53,030 --> 00:15:49,839  
after we ship we do what are called

409  
00:15:55,269 --> 00:15:53,040  
functional tests we make sure that the

410  
00:15:57,590 --> 00:15:55,279  
observatory survived at shipment we

411  
00:16:00,230 --> 00:15:57,600  
exercise all the mechanisms we check out

412  
00:16:02,230 --> 00:16:00,240  
all the systems we also do tests with

413  
00:16:03,829 --> 00:16:02,240

the mission operations center back at

414

00:16:05,829 --> 00:16:03,839

aims so we can connect through the

415

00:16:08,230 --> 00:16:05,839

internet and do mission simulations we

416

00:16:10,230 --> 00:16:08,240

call them

417

00:16:11,590 --> 00:16:10,240

and then we also do as we get ready to

418

00:16:13,430 --> 00:16:11,600

mate with the rocket which you can see

419

00:16:15,189 --> 00:16:13,440

in the background there this is us going

420

00:16:17,030 --> 00:16:15,199

into the tent we do what are called

421

00:16:19,030 --> 00:16:17,040

integration integrated verification

422

00:16:20,710 --> 00:16:19,040

tests where we connect electrically with

423

00:16:23,350 --> 00:16:20,720

the rocket and do tests to make sure we

424

00:16:26,150 --> 00:16:23,360

both communicate well and then we after

425

00:16:28,470 --> 00:16:26,160

we mate we do more

426

00:16:29,910 --> 00:16:28,480

detailed tests called flight simulations

427

00:16:32,230 --> 00:16:29,920

and here you can see the team getting

428

00:16:34,069 --> 00:16:32,240

ready to move the observatory over to

429

00:16:35,509 --> 00:16:34,079

the rocket and they will mate to the

430

00:16:36,790 --> 00:16:35,519

third stage

431

00:16:38,790 --> 00:16:36,800

even though we're in a clean tent we

432

00:16:39,509 --> 00:16:38,800

still keep some protective covering on

433

00:16:41,350 --> 00:16:39,519

it

434

00:16:43,350 --> 00:16:41,360

and there's the front of the third stage

435

00:16:44,550 --> 00:16:43,360

and the rocket being and the observatory

436

00:16:46,069 --> 00:16:44,560

being mated

437

00:16:48,150 --> 00:16:46,079

there is the first half of the fairing

438

00:16:50,550 --> 00:16:48,160

being installed that's a great shot of

439

00:16:52,710 --> 00:16:50,560

the observatory the last shot you'll see

440

00:16:56,870 --> 00:16:52,720

the observatory before they put on the

441

00:17:00,389 --> 00:16:59,430

and that that is pretty much the end of

442

00:17:01,590 --> 00:17:00,399

the video

443

00:17:03,749 --> 00:17:01,600

and um

444

00:17:06,789 --> 00:17:03,759

the next graphic will show the timeline

445

00:17:08,150 --> 00:17:06,799

once we launch as brian noted uh we

446

00:17:09,429 --> 00:17:08,160

about

447

00:17:11,110 --> 00:17:09,439

see

448

00:17:13,350 --> 00:17:11,120

two minutes later after launch we'll

449

00:17:15,669 --> 00:17:13,360

separate and then as brian mentioned 13

450

00:17:17,669 --> 00:17:15,679

minutes later we will i'm sorry we will

451  
00:17:19,909 --> 00:17:17,679  
separate the fairing after two minutes

452  
00:17:21,590 --> 00:17:19,919  
we will separate from the third stage

453  
00:17:23,110 --> 00:17:21,600  
after 13 minutes

454  
00:17:26,150 --> 00:17:23,120  
three minutes after that we'll deploy

455  
00:17:28,230 --> 00:17:26,160  
our solar rays and uh the third stage

456  
00:17:29,350 --> 00:17:28,240  
will do it's a walk away from us

457  
00:17:31,190 --> 00:17:29,360  
and then we are supposed to be

458  
00:17:32,789 --> 00:17:31,200  
connecting with tdrs but if we don't we

459  
00:17:34,390 --> 00:17:32,799  
will our first ground station contact

460  
00:17:35,750 --> 00:17:34,400  
will be at 28 minutes

461  
00:17:37,430 --> 00:17:35,760  
so we will be able to monitor these

462  
00:17:39,110 --> 00:17:37,440  
critical events either through tdrs or

463  
00:17:41,430 --> 00:17:39,120

we'll get our first acquisition in 28

464

00:17:43,669 --> 00:17:41,440

minutes and then about an hour and 13

465

00:17:45,669 --> 00:17:43,679

minutes after launch will be pointed at

466

00:17:47,909 --> 00:17:45,679

the sun in what we call course mode

467

00:17:50,470 --> 00:17:47,919

where we'll actually be on station power

468

00:17:53,110 --> 00:17:50,480

positive solar rays will be receiving

469

00:17:54,789 --> 00:17:53,120

their energy and we'll be the telescope

470

00:17:56,789 --> 00:17:54,799

will be facing the sun

471

00:17:59,190 --> 00:17:56,799

on the next graphic

472

00:18:01,270 --> 00:17:59,200

what we do after that we then power on

473

00:18:04,310 --> 00:18:01,280

the instrument on the second day and for

474

00:18:05,590 --> 00:18:04,320

the first 21 days we are doing checkouts

475

00:18:07,350 --> 00:18:05,600

we're doing like those functional tests

476

00:18:09,430 --> 00:18:07,360

we do on the ground we're spinning

477

00:18:11,510 --> 00:18:09,440

wheels we're checking out we're doing

478

00:18:14,710 --> 00:18:11,520

various calibrations and we open the

479

00:18:16,630 --> 00:18:14,720

telescope door on the 21st day we do we

480

00:18:18,549 --> 00:18:16,640

don't do it until then to protect it

481

00:18:20,390 --> 00:18:18,559

from contamination

482

00:18:22,390 --> 00:18:20,400

after the 21st day we have nine more

483

00:18:24,390 --> 00:18:22,400

days of engineering checkouts and then

484

00:18:26,310 --> 00:18:24,400

we hand over to the science team they

485

00:18:28,150 --> 00:18:26,320

begin their calibrations testing their

486

00:18:30,230 --> 00:18:28,160

timelines and then we begin the full

487

00:18:31,430 --> 00:18:30,240

science program which is scheduled for

488

00:18:32,390 --> 00:18:31,440

two years

489

00:18:34,150 --> 00:18:32,400

if

490

00:18:35,909 --> 00:18:34,160

then that is pretty much what i had to

491

00:18:37,270 --> 00:18:35,919

discuss back to you george all right

492

00:18:39,270 --> 00:18:37,280

thank you gary

493

00:18:41,510 --> 00:18:39,280

and now for a look at the weather

494

00:18:43,190 --> 00:18:41,520

forecast for thursday first lieutenant

495

00:18:45,909 --> 00:18:43,200

jennifer kelly our launch weather

496

00:18:48,070 --> 00:18:45,919

officer from the u.s air force 30th

497

00:18:50,310 --> 00:18:48,080

operations support squadron thank you

498

00:18:52,150 --> 00:18:50,320

sir good afternoon

499

00:18:53,750 --> 00:18:52,160

june is the transition from spring into

500

00:18:55,270 --> 00:18:53,760

summer for vandenberg air force base

501  
00:18:56,470 --> 00:18:55,280  
marked by fog and temperatures in the

502  
00:18:57,990 --> 00:18:56,480  
mid 60s

503  
00:18:59,590 --> 00:18:58,000  
currently we have a low pressure system

504  
00:19:01,830 --> 00:18:59,600  
west of british columbia producing

505  
00:19:03,270 --> 00:19:01,840  
significant clouds and precipitation

506  
00:19:04,710 --> 00:19:03,280  
along the coast

507  
00:19:06,390 --> 00:19:04,720  
the clouds associated with this low

508  
00:19:08,150 --> 00:19:06,400  
pressure system will be pushed back to

509  
00:19:10,230 --> 00:19:08,160  
the northwest tonight and tomorrow as

510  
00:19:11,909 --> 00:19:10,240  
the ridge builds from the east this will

511  
00:19:13,990 --> 00:19:11,919  
provide improving conditions and clear

512  
00:19:16,150 --> 00:19:14,000  
skies by tomorrow afternoon

513  
00:19:17,830 --> 00:19:16,160

looking at the satellite image

514

00:19:19,510 --> 00:19:17,840

you can see cloud cover associated with

515

00:19:21,590 --> 00:19:19,520

the low pressure system along the coast

516

00:19:24,070 --> 00:19:21,600

to our north while to our south you see

517

00:19:25,750 --> 00:19:24,080

clearing associated with that high

518

00:19:27,990 --> 00:19:25,760

residual moisture will produce a layer

519

00:19:29,750 --> 00:19:28,000

of stratus clouds thursday with high

520

00:19:31,190 --> 00:19:29,760

pressure compressing that stratus layer

521

00:19:32,630 --> 00:19:31,200

and generating warmer temperatures at

522

00:19:34,070 --> 00:19:32,640

the surface

523

00:19:36,230 --> 00:19:34,080

models are agreeing that our primary

524

00:19:38,150 --> 00:19:36,240

concern for launch will be ceilings and

525

00:19:40,230 --> 00:19:38,160

visibilities decreasing as evening

526

00:19:42,470 --> 00:19:40,240

approaches

527

00:19:44,310 --> 00:19:42,480

forecasts for june 27th will see

528

00:19:46,070 --> 00:19:44,320

improving conditions compared to today

529

00:19:47,750 --> 00:19:46,080

as that ridge builds in

530

00:19:50,390 --> 00:19:47,760

this will result in lingering stratus

531

00:19:52,789 --> 00:19:50,400

clouds between 500 and 1000 feet and

532

00:19:54,549 --> 00:19:52,799

visibility reduced to 3 miles

533

00:19:56,230 --> 00:19:54,559

winds remaining out of the northwest at

534

00:19:57,510 --> 00:19:56,240

8 to 12 knots and temperatures in the

535

00:19:59,190 --> 00:19:57,520

low 60s

536

00:20:01,270 --> 00:19:59,200

along the flight path and in the drop

537

00:20:02,870 --> 00:20:01,280

zone we'll see clear skies and little to

538

00:20:04,630 --> 00:20:02,880

no turbulence

539

00:20:07,590 --> 00:20:04,640

this will produce an overall probability

540

00:20:09,110 --> 00:20:07,600

of violation for t 0 of 20 percent with

541

00:20:11,909 --> 00:20:09,120

an area of concern for ceilings and

542

00:20:13,909 --> 00:20:11,919

visibilities thank you back to you sir

543

00:20:15,590 --> 00:20:13,919

all right thank you lieutenant kelly and

544

00:20:17,590 --> 00:20:15,600

we're ready now to

545

00:20:19,990 --> 00:20:17,600

take questions please give your name and

546

00:20:21,590 --> 00:20:20,000

affiliation when the microphone comes to

547

00:20:25,190 --> 00:20:21,600

you we'll start here in the front with

548

00:20:28,870 --> 00:20:27,430

nora wallace santa barbara news press mr

549

00:20:30,950 --> 00:20:28,880

dunn could you go into a greater

550

00:20:32,870 --> 00:20:30,960

explanation about the power outage and

551  
00:20:35,909 --> 00:20:32,880  
the effect on the

552  
00:20:37,990 --> 00:20:35,919  
mission any details about who was out at

553  
00:20:38,710 --> 00:20:38,000  
uh the site when the outage occurred and

554  
00:20:40,630 --> 00:20:38,720  
just

555  
00:20:42,789 --> 00:20:40,640  
a greater explanation i can give an

556  
00:20:44,950 --> 00:20:42,799  
overview of of the situation i don't

557  
00:20:47,430 --> 00:20:44,960  
want to go into too many details it's

558  
00:20:49,830 --> 00:20:47,440  
certainly range equipment and uh someone

559  
00:20:51,510 --> 00:20:49,840  
from the uh the base or the 30th space

560  
00:20:53,510 --> 00:20:51,520  
wing should address the specifics of

561  
00:20:54,710 --> 00:20:53,520  
that and actually i think we may have

562  
00:20:56,549 --> 00:20:54,720  
someone in the off

563  
00:20:58,870 --> 00:20:56,559

of the audience that can do that but in

564

00:21:00,630 --> 00:20:58,880

general there was an event if you were

565

00:21:01,990 --> 00:21:00,640

on the central california coast sunday

566

00:21:03,669 --> 00:21:02,000

night you were aware that we were

567

00:21:05,750 --> 00:21:03,679

without power for

568

00:21:08,230 --> 00:21:05,760

the period of a couple of hours

569

00:21:09,830 --> 00:21:08,240

affecting the entire region including

570

00:21:12,870 --> 00:21:09,840

obviously vanderberg

571

00:21:14,470 --> 00:21:12,880

related to that there were some as power

572

00:21:16,789 --> 00:21:14,480

was restored

573

00:21:18,470 --> 00:21:16,799

on the base it appears that there was an

574

00:21:20,710 --> 00:21:18,480

issue with uh

575

00:21:24,070 --> 00:21:20,720

equipment that feeds a transformer into

576

00:21:26,549 --> 00:21:24,080

the critical range facilities uh that

577

00:21:27,750 --> 00:21:26,559

took power down for that entire critical

578

00:21:29,270 --> 00:21:27,760

complex

579

00:21:31,909 --> 00:21:29,280

um so

580

00:21:34,070 --> 00:21:31,919

the air force and the wing have been

581

00:21:37,510 --> 00:21:34,080

working uh very feverishly as you can

582

00:21:39,350 --> 00:21:37,520

imagine since uh early yesterday morning

583

00:21:41,270 --> 00:21:39,360

we just finished up a meeting right

584

00:21:43,190 --> 00:21:41,280

before this press conference

585

00:21:44,390 --> 00:21:43,200

on the go forward plan

586

00:21:46,710 --> 00:21:44,400

putting in place

587

00:21:49,270 --> 00:21:46,720

all the necessary activities to support

588

00:21:51,350 --> 00:21:49,280

a thursday evening launch

589

00:21:53,510 --> 00:21:51,360

that's probably the extent of what i

590

00:21:56,710 --> 00:21:53,520

could share with you

591

00:21:59,029 --> 00:21:56,720

i do see colonel uh burton catledge he

592

00:22:02,149 --> 00:21:59,039

is the second range operations squadron

593

00:22:03,909 --> 00:22:02,159

commander um colonel catlej anything to

594

00:22:05,350 --> 00:22:03,919

add uh do we have a microphone that we

595

00:22:07,909 --> 00:22:05,360

could

596

00:22:09,350 --> 00:22:07,919

i'm going to put you on the spot

597

00:22:11,029 --> 00:22:09,360

i'm lieutenant colonel burton cottage

598

00:22:13,430 --> 00:22:11,039

i'm the second range operations squadron

599

00:22:15,110 --> 00:22:13,440

commander what tim said is correct

600

00:22:16,630 --> 00:22:15,120

we had a fire in one of our electrical

601  
00:22:19,750 --> 00:22:16,640  
switching boxes

602  
00:22:21,990 --> 00:22:19,760  
and it feeds about five transformers

603  
00:22:22,870 --> 00:22:22,000  
there's a particular piece a copper bus

604  
00:22:25,830 --> 00:22:22,880  
bar

605  
00:22:27,590 --> 00:22:25,840  
to be specific that has to be fabricated

606  
00:22:30,070 --> 00:22:27,600  
and reinstalled

607  
00:22:33,029 --> 00:22:30,080  
before we can apply power back to these

608  
00:22:35,110 --> 00:22:33,039  
buildings that flow our telemetry

609  
00:22:38,870 --> 00:22:35,120  
and

610  
00:22:40,950 --> 00:22:38,880  
information back from the range sensors

611  
00:22:42,549 --> 00:22:40,960  
so obviously this is a more of a safety

612  
00:22:44,390 --> 00:22:42,559  
hazard than anything else and so we want

613  
00:22:45,190 --> 00:22:44,400

to make sure that the the piece that we

614

00:22:47,909 --> 00:22:45,200

have

615

00:22:51,029 --> 00:22:47,919

is uh is correct it's fabricated correct

616

00:22:53,510 --> 00:22:51,039

which we're estimated to be back in

617

00:22:56,390 --> 00:22:53,520

vandenberg this evening once that piece

618

00:22:57,909 --> 00:22:56,400

is uh installed and we've tested it and

619

00:22:59,029 --> 00:22:57,919

we brought up all the range equipments

620

00:23:01,270 --> 00:22:59,039

and we've gone through the extensive

621

00:23:02,390 --> 00:23:01,280

testing and rehearsing that we need to

622

00:23:04,149 --> 00:23:02,400

do

623

00:23:05,350 --> 00:23:04,159

we feel confident that we'd be able to

624

00:23:07,669 --> 00:23:05,360

support a

625

00:23:09,190 --> 00:23:07,679

thursday evening launch so

626  
00:23:10,870 --> 00:23:09,200  
everything is going nominally we believe

627  
00:23:12,470 --> 00:23:10,880  
that we're uh once these pieces come

628  
00:23:15,909 --> 00:23:12,480  
that we'll be able to support that but

629  
00:23:16,789 --> 00:23:15,919  
once again safety is important and uh we

630  
00:23:18,470 --> 00:23:16,799  
we're gonna wait until we have those

631  
00:23:21,590 --> 00:23:18,480  
pieces in place and the range configured

632  
00:23:21,600 --> 00:23:24,870  
there's forward questions

633  
00:23:32,710 --> 00:23:27,830  
any other questions from the media for

634  
00:23:36,630 --> 00:23:34,470  
all right if not

635  
00:23:38,070 --> 00:23:36,640  
thank you colonel catledge and uh we'll

636  
00:23:39,350 --> 00:23:38,080  
go on to other

637  
00:23:41,510 --> 00:23:39,360  
questions

638  
00:23:45,430 --> 00:23:41,520

justin

639

00:23:47,510 --> 00:23:45,440  
spaceflightnow.com both for

640

00:23:48,710 --> 00:23:47,520  
uh tim and for brian could you talk a

641

00:23:51,350 --> 00:23:48,720  
little bit about

642

00:23:52,870 --> 00:23:51,360  
the future prospects for pegasus beyond

643

00:23:54,630 --> 00:23:52,880  
this launch

644

00:23:56,789 --> 00:23:54,640  
and do you view this as a sentimental

645

00:23:59,510 --> 00:23:56,799  
launch of potentially being the final

646

00:24:01,029 --> 00:23:59,520  
pegasus i guess brian i can make a just

647

00:24:05,110 --> 00:24:01,039  
a brief comment and then turn it over to

648

00:24:08,149 --> 00:24:05,120  
you obviously uh so uh iris is the last

649

00:24:09,909 --> 00:24:08,159  
manifested mission on the pegasus launch

650

00:24:12,789 --> 00:24:09,919  
vehicle a launch vehicle that's been

651  
00:24:15,110 --> 00:24:12,799  
very good to nasa and we certainly hope

652  
00:24:17,029 --> 00:24:15,120  
it's not the last

653  
00:24:18,950 --> 00:24:17,039  
brian okay

654  
00:24:20,149 --> 00:24:18,960  
yeah we hope it's not the last as well

655  
00:24:22,310 --> 00:24:20,159  
by the way

656  
00:24:23,990 --> 00:24:22,320  
but there there are uh currently a

657  
00:24:26,390 --> 00:24:24,000  
couple of opportunities that we will

658  
00:24:28,549 --> 00:24:26,400  
have the uh opportunity i believe to

659  
00:24:30,710 --> 00:24:28,559  
propose on so we certainly don't think

660  
00:24:35,350 --> 00:24:30,720  
this is the end and uh look forward to

661  
00:24:35,360 --> 00:24:39,510  
all right any uh further questions

662  
00:24:39,520 --> 00:24:44,390  
all right janine

663  
00:24:48,950 --> 00:24:46,070

janine scully santa maria times the long

664

00:24:49,830 --> 00:24:48,960

poke record are there any more pegasus

665

00:24:53,590 --> 00:24:49,840

um

666

00:24:55,590 --> 00:24:53,600

vehicles or in parts uh built and ready

667

00:24:58,390 --> 00:24:55,600

to be used or would you have to restart

668

00:24:59,269 --> 00:24:58,400

the manufacturing line

669

00:25:01,590 --> 00:24:59,279

well

670

00:25:03,750 --> 00:25:01,600

uh we don't have a set of motors

671

00:25:05,990 --> 00:25:03,760

currently so so we would you know have

672

00:25:07,430 --> 00:25:06,000

to order another set of motors from atk

673

00:25:10,149 --> 00:25:07,440

there are a few

674

00:25:13,750 --> 00:25:10,159

um primary parts that i that i have

675

00:25:15,190 --> 00:25:13,760

additional uh backups on but

676

00:25:17,029 --> 00:25:15,200

you know it's not like restarting the

677

00:25:19,590 --> 00:25:17,039

production line we build these on a one

678

00:25:21,110 --> 00:25:19,600

by one or two at a time so

679

00:25:22,710 --> 00:25:21,120

we have a lot of common hardware with

680

00:25:29,510 --> 00:25:22,720

our other launch vehicles so that we

681

00:25:32,710 --> 00:25:31,190

nora follow up

682

00:25:35,029 --> 00:25:32,720

follow up on that so

683

00:25:36,470 --> 00:25:35,039

uh typically in the history of uh space

684

00:25:38,630 --> 00:25:36,480

flight there's something special put on

685

00:25:40,070 --> 00:25:38,640

a rocket if it's a last one or um some

686

00:25:41,430 --> 00:25:40,080

special ceremony can you explain if

687

00:25:43,269 --> 00:25:41,440

anything like that happened with this

688

00:25:45,029 --> 00:25:43,279

one well we don't consider it the last

689

00:25:49,350 --> 00:25:45,039

one so there's nothing special on this

690

00:25:55,510 --> 00:25:51,750

all right any uh other questions here in

691

00:25:58,470 --> 00:25:57,029

just another

692

00:26:00,549 --> 00:25:58,480

question on the range what's the

693

00:26:02,710 --> 00:26:00,559

availability on the range beyond

694

00:26:04,870 --> 00:26:02,720

thursday if the issue isn't resolved or

695

00:26:07,590 --> 00:26:04,880

you have another scrub or something

696

00:26:10,310 --> 00:26:07,600

so we had two dates scheduled on the

697

00:26:12,549 --> 00:26:10,320

range wednesday and thursday obviously

698

00:26:15,269 --> 00:26:12,559

we'll not be using wednesday

699

00:26:17,669 --> 00:26:15,279

we'll go to our backup date there are

700

00:26:20,710 --> 00:26:17,679

other customers on the western range

701  
00:26:23,990 --> 00:26:20,720  
that have scheduled tests booked on

702  
00:26:26,149 --> 00:26:24,000  
friday and actually through the weekend

703  
00:26:27,350 --> 00:26:26,159  
obviously if we are not able to get off

704  
00:26:29,029 --> 00:26:27,360  
on

705  
00:26:31,190 --> 00:26:29,039  
thursday we would

706  
00:26:33,190 --> 00:26:31,200  
hope to get another opportunity while we

707  
00:26:34,710 --> 00:26:33,200  
have the entire team assembled here and

708  
00:26:36,630 --> 00:26:34,720  
ready to go

709  
00:26:39,269 --> 00:26:36,640  
we have begun discussions with other

710  
00:26:40,070 --> 00:26:39,279  
range customers and colonel catletch's

711  
00:26:41,909 --> 00:26:40,080  
uh

712  
00:26:43,110 --> 00:26:41,919  
personnel working through range

713  
00:26:45,669 --> 00:26:43,120

scheduling

714

00:26:48,950 --> 00:26:45,679

they're aware of our our intent

715

00:26:51,110 --> 00:26:48,960

so we'll let that process play out and

716

00:26:52,950 --> 00:26:51,120

see where we are and hopefully we get a

717

00:26:57,190 --> 00:26:52,960

solid launch on thursday night we don't

718

00:27:00,789 --> 00:26:59,269

all right i think we have a question on

719

00:27:02,950 --> 00:27:00,799

the phone from lisa krieger from the

720

00:27:26,710 --> 00:27:02,960

mercury news

721

00:27:30,630 --> 00:27:28,789

all right looks like we will continue

722

00:27:33,269 --> 00:27:30,640

that one

723

00:27:35,350 --> 00:27:33,279

is not at hand at any rate

724

00:27:36,630 --> 00:27:35,360

jennifer have you got any questions from

725

00:27:37,990 --> 00:27:36,640

online

726

00:27:42,630 --> 00:27:38,000

we have

727

00:27:46,630 --> 00:27:44,710

this question is for gary can you talk

728

00:27:50,070 --> 00:27:46,640

about any of the the engineering

729

00:27:52,070 --> 00:27:50,080

challenges faced by the iris team

730

00:27:55,669 --> 00:27:52,080

preparing for launch

731

00:27:59,590 --> 00:27:57,750

you know irises these are one-off

732

00:28:08,789 --> 00:27:59,600

scientific instruments

733

00:28:13,430 --> 00:28:10,230

we had

734

00:28:15,110 --> 00:28:13,440

let's see i'm trying to think of a few

735

00:28:17,190 --> 00:28:15,120

early in the build you know with the

736

00:28:19,110 --> 00:28:17,200

spectrograph is a very complicated

737

00:28:22,070 --> 00:28:19,120

engine we have 18 optics in there so we

738

00:28:25,110 --> 00:28:22,080

did an early prototype of that and

739

00:28:26,549 --> 00:28:25,120

did vibration testing of all the optics

740

00:28:29,830 --> 00:28:26,559

that one took us a little time to get

741

00:28:31,110 --> 00:28:29,840

together and calibrated when we had the

742

00:28:33,669 --> 00:28:31,120

spacecraft you know there are a few

743

00:28:36,389 --> 00:28:33,679

components that took a little extra

744

00:28:37,750 --> 00:28:36,399

effort some our comm units required some

745

00:28:41,029 --> 00:28:37,760

extra work

746

00:28:43,909 --> 00:28:42,549

those are kind of the main ones i'm

747

00:28:48,789 --> 00:28:43,919

trying to think

748

00:28:48,799 --> 00:28:53,350

just the general you know build flow

749

00:28:57,430 --> 00:28:55,909

that's all i think right now

750

00:28:59,590 --> 00:28:57,440

all right we're going to take another

751  
00:29:01,909 --> 00:28:59,600  
attempt at the phone in question there's

752  
00:29:03,909 --> 00:29:01,919  
about a three second delay uh lisa

753  
00:29:08,230 --> 00:29:03,919  
krieger from the mercury news want to

754  
00:29:12,470 --> 00:29:10,070  
thank you wonder if you could explain

755  
00:29:14,470 --> 00:29:12,480  
for the layperson how iris will advance

756  
00:29:17,669 --> 00:29:14,480  
our understanding of the sun what what

757  
00:29:19,750 --> 00:29:17,679  
types of mysteries do you hope to solve

758  
00:29:20,950 --> 00:29:19,760  
um we're gonna have a science briefing

759  
00:29:22,789 --> 00:29:20,960  
and the scientists will be up wouldn't

760  
00:29:25,110 --> 00:29:22,799  
that well will you be able to stay on

761  
00:29:26,389 --> 00:29:25,120  
for that

762  
00:29:28,070 --> 00:29:26,399  
yeah we do have a science briefing

763  
00:29:29,510 --> 00:29:28,080

coming up right after this one that'll

764

00:29:31,990 --> 00:29:29,520

go into more of that

765

00:29:38,950 --> 00:29:32,000

background yeah i'd much rather have dr

766

00:29:44,310 --> 00:29:40,789

all right have we any other questions

767

00:29:48,870 --> 00:29:46,789

all right in that event we're going to

768

00:29:51,669 --> 00:29:48,880

pause long enough to change the

769

00:29:53,190 --> 00:29:51,679

participants on the dyas and then we'll

770

00:29:55,269 --> 00:29:53,200

be right back with the mission science

771

00:29:57,669 --> 00:29:55,279

briefing that will cover answer just the

772

00:29:59,909 --> 00:29:57,679

question that she had

773

00:30:02,549 --> 00:29:59,919

and that will conclude our pre-launch

774

00:30:04,950 --> 00:30:02,559

news conference stand by next for

775

00:30:07,190 --> 00:30:04,960

our mission science briefing thank you

