
NASA
SPACEX

1
00:00:07,269 --> 00:00:05,430
good evening and welcome everyone to our

2
00:00:09,990 --> 00:00:07,279
post-launch news conference for the

3
00:00:11,830 --> 00:00:10,000
spacex commercial resupply services one

4
00:00:13,509 --> 00:00:11,840
mission it's always a great occasion

5
00:00:14,950 --> 00:00:13,519
when we are here for a post-launch news

6
00:00:17,830 --> 00:00:14,960
conference and we are pleased to be

7
00:00:20,390 --> 00:00:17,840
joined this evening by sam chamimi to my

8
00:00:22,150 --> 00:00:20,400
immediate left sam is director of the

9
00:00:24,150 --> 00:00:22,160
international space station from nasa

10
00:00:28,070 --> 00:00:24,160
headquarters in washington

11
00:00:29,750 --> 00:00:28,080
and by spacex president gwen shotwell

12
00:00:32,229 --> 00:00:29,760
we'll begin with some opening comments

13
00:00:34,310 --> 00:00:32,239

and then be happy to take questions sam

14
00:00:36,870 --> 00:00:34,320
ah thanks uh it's a great evening to be

15
00:00:38,869 --> 00:00:36,880
here in florida uh i would like to

16
00:00:41,350 --> 00:00:38,879
congratulate spacex on a beautiful

17
00:00:44,709 --> 00:00:41,360
launch and a successful deployment of

18
00:00:46,310 --> 00:00:44,719
the dragon spacecraft into orbit and

19
00:00:47,910 --> 00:00:46,320
i'll also like to thank all the other

20
00:00:50,790 --> 00:00:47,920
organizations that made this possible

21
00:00:53,590 --> 00:00:50,800
here tonight including the nasa teams

22
00:00:55,029 --> 00:00:53,600
the faa and the air force

23
00:00:56,950 --> 00:00:55,039
and look forward to working with the

24
00:00:59,750 --> 00:00:56,960
spacex

25
00:01:01,750 --> 00:00:59,760
teams to for a successful mission here

26
00:01:04,310 --> 00:01:01,760
in the next few days

27
00:01:07,750 --> 00:01:05,350
my turn

28
00:01:09,670 --> 00:01:07,760
uh obviously it's uh great to be here

29
00:01:12,390 --> 00:01:09,680
again this evening i wanted to

30
00:01:15,030 --> 00:01:12,400
congratulate the spacex team this is the

31
00:01:19,109 --> 00:01:15,040
first time we've lifted off at our

32
00:01:21,030 --> 00:01:19,119
planned first t-zero which is excellent

33
00:01:22,870 --> 00:01:21,040
we did insert dragon into a

34
00:01:24,789 --> 00:01:22,880
picture-perfect orbit

35
00:01:26,710 --> 00:01:24,799
within two or three kilometers on both

36
00:01:28,950 --> 00:01:26,720
apogee and perigee

37
00:01:31,670 --> 00:01:28,960
and dragon is on its way to station

38
00:01:32,630 --> 00:01:31,680

we also deployed the solar arrays for

39
00:01:38,390 --> 00:01:32,640
dragon

40
00:01:45,429 --> 00:01:42,710
and that is the gnc bay door unlatching

41
00:01:47,749 --> 00:01:45,439
that door needs to unlatch and fully

42
00:01:49,590 --> 00:01:47,759
deploy and lock itself in the open

43
00:01:50,550 --> 00:01:49,600
condition in order for us to

44
00:01:52,389 --> 00:01:50,560
successfully birth with the

45
00:01:53,670 --> 00:01:52,399
international space station so we'll be

46
00:01:56,310 --> 00:01:53,680
looking for that to happen in the next

47
00:01:58,230 --> 00:01:56,320
hour or so

48
00:02:00,230 --> 00:01:58,240
okay we'll uh take questions here we

49
00:02:01,990 --> 00:02:00,240
have uh traditional news media members

50
00:02:04,709 --> 00:02:02,000
as well as people from our nasa social

51
00:02:06,069 --> 00:02:04,719
who are reporting on social media

52
00:02:08,070 --> 00:02:06,079
we would like for you to please state

53
00:02:09,749 --> 00:02:08,080
your name your affiliation and to whom

54
00:02:11,750 --> 00:02:09,759
you're addressing your question and

55
00:02:14,070 --> 00:02:11,760
we'll start with marcia dunn marcia

56
00:02:16,550 --> 00:02:14,080
associated press from his shot well um

57
00:02:18,390 --> 00:02:16,560
talk about the stress level it left off

58
00:02:20,830 --> 00:02:18,400
today how does it compare the one in may

59
00:02:23,270 --> 00:02:20,840
and does the victory seem as sweet as it

60
00:02:26,390 --> 00:02:23,280
did some months back and have you had

61
00:02:27,910 --> 00:02:26,400
any conversation yet with elon musk

62
00:02:29,430 --> 00:02:27,920
uh elon and i have emailed back and

63
00:02:30,309 --> 00:02:29,440

forth a couple times i've not talked to

64
00:02:32,949 --> 00:02:30,319
him

65
00:02:34,710 --> 00:02:32,959
i as soon as i uh heard that the solar

66
00:02:36,710 --> 00:02:34,720
rays deployed i had to jump in my car

67
00:02:38,790 --> 00:02:36,720
from lcc and get here so it would be

68
00:02:40,390 --> 00:02:38,800
illegal for me to be emailing and

69
00:02:44,309 --> 00:02:40,400
talking on my cell phone

70
00:02:47,750 --> 00:02:45,750
you know actually i was quite calm

71
00:02:50,550 --> 00:02:47,760
tonight a little bit surprised

72
00:02:53,190 --> 00:02:50,560
but everything was going so well

73
00:02:54,869 --> 00:02:53,200
with the operations leading up to the to

74
00:02:57,589 --> 00:02:54,879
the final countdown

75
00:03:00,390 --> 00:02:57,599
definitely got the heart moving a bit at

76
00:03:02,229 --> 00:03:00,400
t minus 10 seconds

77
00:03:03,190 --> 00:03:02,239
but overall this one was a little bit

78
00:03:04,390 --> 00:03:03,200
easier

79
00:03:05,990 --> 00:03:04,400
from my perspective

80
00:03:07,830 --> 00:03:06,000
i'm not sure that everybody at space of

81
00:03:09,110 --> 00:03:07,840
the 2000 men and women at spacex feel

82
00:03:11,990 --> 00:03:09,120
the same but i'll find out when i fly

83
00:03:15,350 --> 00:03:13,589
in that little bit of exchange what did

84
00:03:17,190 --> 00:03:15,360
elon have to say about this well i

85
00:03:19,190 --> 00:03:17,200
congratulated him he congratulated me it

86
00:03:22,309 --> 00:03:19,200
was kind of email hugs i guess you could

87
00:03:25,190 --> 00:03:23,910
bill bill harwich cbs well i just wonder

88
00:03:26,390 --> 00:03:25,200

if you did get a chance to call anybody

89
00:03:27,990 --> 00:03:26,400
we were looking at some video and it

90
00:03:29,990 --> 00:03:28,000
looks like about 120 or so there's a

91
00:03:31,509 --> 00:03:30,000
pretty good flash in the plume and some

92
00:03:32,949 --> 00:03:31,519
apparent debris coming out and obviously

93
00:03:34,869 --> 00:03:32,959
you got where you were going so it

94
00:03:37,430 --> 00:03:34,879
probably doesn't matter but just curious

95
00:03:40,229 --> 00:03:37,440
well we i do know we had an anomaly on

96
00:03:41,750 --> 00:03:40,239
engine one uh i have no data about it uh

97
00:03:42,949 --> 00:03:41,760
i was trying to get the prop guys before

98
00:03:44,470 --> 00:03:42,959
i came in here tonight but there just

99
00:03:46,550 --> 00:03:44,480
wasn't there wasn't enough time to

100
00:03:48,949 --> 00:03:46,560
connect with anybody

101
00:03:50,789 --> 00:03:48,959
so i'll report on that tomorrow we'll

102
00:03:52,710 --> 00:03:50,799
have a release on that tomorrow but the

103
00:03:54,710 --> 00:03:52,720
falcon 9 was designed to lose engines

104
00:03:55,830 --> 00:03:54,720
and still make missions so it did what

105
00:03:57,830 --> 00:03:55,840
it was supposed to do and that would

106
00:03:59,270 --> 00:03:57,840
explain why you burn longer than i guess

107
00:04:00,470 --> 00:03:59,280
if you do right if you do have issues

108
00:04:01,910 --> 00:04:00,480
with an engine you would end up burning

109
00:04:04,309 --> 00:04:01,920
longer to get get where you need to go

110
00:04:06,630 --> 00:04:04,319
okay thanks

111
00:04:08,390 --> 00:04:06,640
okay down front

112
00:04:10,949 --> 00:04:08,400
jim siegel celebration independent

113
00:04:12,710 --> 00:04:10,959

newspaper a question for either sam or

114
00:04:15,110 --> 00:04:12,720
maybe gwen

115
00:04:18,550 --> 00:04:15,120
in the next year or so uh what percent

116
00:04:21,749 --> 00:04:18,560
of the iss's uh

117
00:04:23,430 --> 00:04:21,759
needs are going to be supplied by spacex

118
00:04:25,830 --> 00:04:23,440
and then separately

119
00:04:28,790 --> 00:04:25,840
by all of the commercial uh companies

120
00:04:31,990 --> 00:04:28,800
that you mentioned earlier i don't have

121
00:04:34,550 --> 00:04:32,000
a specific uh percentage-wise but a

122
00:04:36,629 --> 00:04:34,560
large percentage of the needs for the

123
00:04:37,510 --> 00:04:36,639
utilization the space station and the

124
00:04:38,550 --> 00:04:37,520
crew

125
00:04:47,270 --> 00:04:38,560
and

126
00:04:52,230 --> 00:04:49,749
uh tarek malik

127
00:04:54,870 --> 00:04:52,240
thank you tarek malik with space.com for

128
00:04:56,950 --> 00:04:54,880
uh for gwen gwen uh you mentioned

129
00:04:59,270 --> 00:04:56,960
i guess the the maybe the the sense of

130
00:05:01,029 --> 00:04:59,280
more ease for this flight then than than

131
00:05:03,270 --> 00:05:01,039
back in may but i'm curious if there's

132
00:05:04,390 --> 00:05:03,280
like a rubber stamp for operationality

133
00:05:05,909 --> 00:05:04,400
now for

134
00:05:07,510 --> 00:05:05,919
for the whole launch system now that

135
00:05:10,790 --> 00:05:07,520
you've as you mentioned you hit your

136
00:05:12,950 --> 00:05:10,800
first t0 on the on the dot uh this time

137
00:05:14,870 --> 00:05:12,960
um which which i know my staff and i

138
00:05:16,390 --> 00:05:14,880

were talking about that as well and i'm

139
00:05:17,990 --> 00:05:16,400
just wondering if that's if that's the

140
00:05:19,270 --> 00:05:18,000
case i mean is there a point where you

141
00:05:20,950 --> 00:05:19,280
say we are

142
00:05:22,310 --> 00:05:20,960
completely operational is there always

143
00:05:25,110 --> 00:05:22,320
room for improvement and i have a

144
00:05:27,189 --> 00:05:25,120
follow-up things okay well for me that's

145
00:05:29,670 --> 00:05:27,199
two different things being operational

146
00:05:32,230 --> 00:05:29,680
and room for improvement uh i think we

147
00:05:34,150 --> 00:05:32,240
will continue to always improve uh we

148
00:05:36,870 --> 00:05:34,160
will learn from our flights and continue

149
00:05:39,350 --> 00:05:36,880
to improve the vehicle um given that we

150
00:05:41,189 --> 00:05:39,360
are looking towards a flying crew on

151
00:05:44,150 --> 00:05:41,199
these on these vehicles we want to make

152
00:05:45,749 --> 00:05:44,160
sure that we address any and all

153
00:05:47,110 --> 00:05:45,759
items that we find

154
00:05:50,469 --> 00:05:47,120
and learn about with the vehicle to make

155
00:05:55,749 --> 00:05:51,749
i forget the first part of your question

156
00:05:58,390 --> 00:05:55,759
sorry tarek just uh about just declaring

157
00:06:00,230 --> 00:05:58,400
oh are we operational uh

158
00:06:01,909 --> 00:06:00,240
air force actually has a rule that after

159
00:06:03,830 --> 00:06:01,919
three flights successful flights of a

160
00:06:06,230 --> 00:06:03,840
particular vehicle you've demonstrated

161
00:06:09,670 --> 00:06:06,240
your design reliability and after seven

162
00:06:11,270 --> 00:06:09,680
to nine additional more flights um or

163
00:06:12,629 --> 00:06:11,280

excuse me after seven or nine flights

164
00:06:15,830 --> 00:06:12,639
you basically have demonstrated your

165
00:06:17,029 --> 00:06:15,840
production your qa systems etc so we're

166
00:06:18,790 --> 00:06:17,039
operating this was an operational

167
00:06:21,270 --> 00:06:18,800
mission so we're operational doesn't

168
00:06:22,790 --> 00:06:21,280
mean we're not going to stop learning

169
00:06:25,670 --> 00:06:22,800
and ensuring that these vehicles are as

170
00:06:28,070 --> 00:06:25,680
reliable as we can possibly make them

171
00:06:29,350 --> 00:06:28,080
mark mark raderman with talking space

172
00:06:31,029 --> 00:06:29,360
question for sam

173
00:06:33,189 --> 00:06:31,039
you've got a variety of vehicles to

174
00:06:34,950 --> 00:06:33,199
carry cargo to the iss for the

175
00:06:37,189 --> 00:06:34,960
international partners how important is

176
00:06:39,270 --> 00:06:37,199
that not to take away from spacex

177
00:06:41,909 --> 00:06:39,280
because i know the country and everyone

178
00:06:43,749 --> 00:06:41,919
is thrilled to have this flight tonight

179
00:06:46,790 --> 00:06:43,759
but how important is it for the variety

180
00:06:49,589 --> 00:06:46,800
with capabilities that each has

181
00:06:51,110 --> 00:06:49,599
to have the capabilities that the spacex

182
00:06:53,430 --> 00:06:51,120
has with the dragon vehicle with the

183
00:06:56,390 --> 00:06:53,440
especially with the return is really

184
00:06:58,710 --> 00:06:56,400
critical to the utilization of the space

185
00:07:00,070 --> 00:06:58,720
station it's also critical that we bring

186
00:07:03,830 --> 00:07:00,080
spacex

187
00:07:05,749 --> 00:07:03,840
orbital on to us we ought to fully

188
00:07:08,150 --> 00:07:05,759

utilize the capability of space station

189
00:07:09,749 --> 00:07:08,160
and to ensure that we have a robust

190
00:07:11,589 --> 00:07:09,759
capability having this similar

191
00:07:14,150 --> 00:07:11,599
transportation

192
00:07:17,589 --> 00:07:14,160
capability as a space station is

193
00:07:18,390 --> 00:07:17,599
critical to its long-term health

194
00:07:20,390 --> 00:07:18,400
okay

195
00:07:22,309 --> 00:07:20,400
stephen clark with space flight now for

196
00:07:24,390 --> 00:07:22,319
gwen uh just curious if you have an

197
00:07:26,309 --> 00:07:24,400
update on the deployment of the orbcom

198
00:07:28,550 --> 00:07:26,319
secondary payload i do know we

199
00:07:30,629 --> 00:07:28,560
successfully deployed orbcom

200
00:07:33,029 --> 00:07:30,639
but i don't have any information other

201
00:07:38,469 --> 00:07:35,589
okay ron front here hi stacy severn

202
00:07:41,909 --> 00:07:38,479
nasa's social media um burning question

203
00:07:43,909 --> 00:07:41,919
did the ice cream go up in what flavor

204
00:07:45,990 --> 00:07:43,919
it did go up but i did not know the

205
00:07:49,589 --> 00:07:46,000
flavor do you know bluebonnet vanilla

206
00:07:54,950 --> 00:07:51,270
all right we're going to i wasn't going

207
00:07:58,150 --> 00:07:56,790
we'll take one more question here and

208
00:07:59,830 --> 00:07:58,160
then we'll go to our phone bridge and

209
00:08:01,909 --> 00:07:59,840
then come back all right sarah zolkovic

210
00:08:03,909 --> 00:08:01,919
nhk this question is for sam at the

211
00:08:05,589 --> 00:08:03,919
podium the administrator spoke about

212
00:08:07,670 --> 00:08:05,599
nasa's leadership with the international

213
00:08:09,749 --> 00:08:07,680

space industry um how does this

214
00:08:12,150 --> 00:08:09,759
partnership with spacex help maintain

215
00:08:15,350 --> 00:08:12,160
leadership for america

216
00:08:18,390 --> 00:08:15,360
certainly having the commercial supply

217
00:08:20,309 --> 00:08:18,400
supply of cargo and eventually crew

218
00:08:22,309 --> 00:08:20,319
will provide

219
00:08:24,070 --> 00:08:22,319
the u.s to fulfill its leadership

220
00:08:26,230 --> 00:08:24,080
responsibilities in the international

221
00:08:28,230 --> 00:08:26,240
space station program we have leadership

222
00:08:30,550 --> 00:08:28,240
responsibilities for crew and cargo and

223
00:08:33,990 --> 00:08:30,560
sustainment of the program and it also

224
00:08:35,509 --> 00:08:34,000
provides a very broad capability here in

225
00:08:36,630 --> 00:08:35,519
the u.s that

226
00:08:39,029 --> 00:08:36,640
is

227
00:08:41,029 --> 00:08:39,039
more likely to be more robust than our

228
00:08:42,070 --> 00:08:41,039
partner partners and

229
00:08:44,550 --> 00:08:42,080
in such

230
00:08:46,630 --> 00:08:44,560
capabilities since we have a remote

231
00:08:48,870 --> 00:08:46,640
government and commercial industry

232
00:08:50,310 --> 00:08:48,880
capabilities

233
00:08:53,829 --> 00:08:50,320
okay let's go to the phone bridge we

234
00:08:55,670 --> 00:08:53,839
have tmc satellite spotlight on the line

235
00:08:58,470 --> 00:08:55,680
go ahead with your question please hi

236
00:08:59,910 --> 00:08:58,480
doug money here um this is to gwen um

237
00:09:01,910 --> 00:08:59,920
can you talk a little bit about your

238
00:09:04,389 --> 00:09:01,920

manifest both for the rest of this year

239
00:09:06,230 --> 00:09:04,399
and in 2013 what you have on the agenda

240
00:09:08,389 --> 00:09:06,240
number one and number two if you could

241
00:09:10,070 --> 00:09:08,399
address um you know are you feeling more

242
00:09:12,150 --> 00:09:10,080
confident that you can meet manifest now

243
00:09:14,070 --> 00:09:12,160
that you've had um basically two

244
00:09:16,710 --> 00:09:14,080
successful well knock on wood two

245
00:09:20,790 --> 00:09:16,720
successful flights so far with um

246
00:09:26,230 --> 00:09:23,509
so the the manifest the next flight that

247
00:09:30,150 --> 00:09:26,240
we have on the falcon 9 manifest is the

248
00:09:31,750 --> 00:09:30,160
spacex crs2 mission which

249
00:09:35,430 --> 00:09:31,760
we have a two-week window we'll start

250
00:09:37,110 --> 00:09:35,440
that honor about january 18th of 2013.

251
00:09:38,150 --> 00:09:37,120
then we have the rollout of the upgraded

252
00:09:39,430 --> 00:09:38,160
falcon

253
00:09:42,710 --> 00:09:39,440
9

254
00:09:45,829 --> 00:09:42,720
which will fly ses or excuse me

255
00:09:47,110 --> 00:09:45,839
cassiopei for canada ses

256
00:09:50,470 --> 00:09:47,120
tycom

257
00:09:52,790 --> 00:09:50,480
orbcom we have crs3 and crs4 to execute

258
00:09:54,470 --> 00:09:52,800
next year and we'd like to lift off the

259
00:09:57,590 --> 00:09:54,480
heavy next year from vandenberg air

260
00:10:01,590 --> 00:09:59,350
so am i more comfortable launching no

261
00:10:03,590 --> 00:10:01,600
question every successful flight we have

262
00:10:05,590 --> 00:10:03,600
um makes everybody feel a little bit

263
00:10:08,710 --> 00:10:05,600

better uh doesn't mean that we still

264
00:10:10,069 --> 00:10:08,720
don't have a really hard job to do

265
00:10:11,430 --> 00:10:10,079
and

266
00:10:14,389 --> 00:10:11,440
yeah so we still have a lot of work to

267
00:10:17,990 --> 00:10:14,399
do getting the station is still hard

268
00:10:20,790 --> 00:10:18,000
did you have a follow-up question

269
00:10:22,069 --> 00:10:20,800
uh no thank you okay thank you uh back

270
00:10:24,069 --> 00:10:22,079
with jim

271
00:10:27,430 --> 00:10:24,079
uh jim siegel again from the celebration

272
00:10:31,110 --> 00:10:27,440
independent newspaper uh for gwen

273
00:10:34,230 --> 00:10:31,120
uh what aspect uh what what is the most

274
00:10:36,470 --> 00:10:34,240
difficult aspect of this mission from uh

275
00:10:37,910 --> 00:10:36,480
spacex's point of view

276
00:10:40,710 --> 00:10:37,920
launch is always

277
00:10:42,230 --> 00:10:40,720
uh a worry moment so there's no question

278
00:10:44,150 --> 00:10:42,240
that launch is tough and then i think as

279
00:10:46,069 --> 00:10:44,160
far as

280
00:10:47,990 --> 00:10:46,079
the level of difficulty it would be when

281
00:10:50,630 --> 00:10:48,000
you're approaching space station on the

282
00:10:52,069 --> 00:10:50,640
r bar um and you're because you're

283
00:10:54,230 --> 00:10:52,079
basically in close proximity to the

284
00:10:57,269 --> 00:10:54,240
international space station it's a crude

285
00:10:58,630 --> 00:10:57,279
uh 100 billion dollar

286
00:11:00,069 --> 00:10:58,640
orbiting body so you want to be really

287
00:11:01,670 --> 00:11:00,079
careful as you do that so it takes the

288
00:11:03,190 --> 00:11:01,680

opera it's it's tough on the operators

289
00:11:07,670 --> 00:11:03,200
it has crew on it too

290
00:11:14,230 --> 00:11:08,710
todd

291
00:11:15,670 --> 00:11:14,240
with the manifest you just laid out it

292
00:11:17,269 --> 00:11:15,680
sounds like you're really going to have

293
00:11:19,430 --> 00:11:17,279
to pick up the pace in terms of

294
00:11:22,630 --> 00:11:19,440
production as well as launch operations

295
00:11:24,710 --> 00:11:22,640
and i wonder um whether you feel as if

296
00:11:27,030 --> 00:11:24,720
these first four flights of the falcon 9

297
00:11:29,590 --> 00:11:27,040
has prepared you to do that

298
00:11:32,389 --> 00:11:29,600
and just as a follow i was wondering if

299
00:11:33,590 --> 00:11:32,399
you could update me or refresh my memory

300
00:11:44,470 --> 00:11:33,600
on

301
00:11:46,069 --> 00:11:44,480
this moment was going to come for quite

302
00:11:48,710 --> 00:11:46,079
some time so we've been preparing for

303
00:11:50,629 --> 00:11:48,720
production for many years we're actually

304
00:11:52,550 --> 00:11:50,639
just completing a remodel of the factory

305
00:11:54,870 --> 00:11:52,560
to ensure that we can build

306
00:11:57,509 --> 00:11:54,880
these cores uh to meet our manifest and

307
00:11:58,710 --> 00:11:57,519
our customer requirements so um frankly

308
00:12:00,629 --> 00:11:58,720
i think the harder thing is getting a

309
00:12:02,550 --> 00:12:00,639
million pounds off the deck rather than

310
00:12:04,629 --> 00:12:02,560
building a bunch of these each year i'm

311
00:12:07,590 --> 00:12:04,639
not going to trivialize that but

312
00:12:09,590 --> 00:12:07,600
that's a that's a royal problem to have

313
00:12:11,590 --> 00:12:09,600

and you ask about eelv i'd rather focus

314
00:12:14,069 --> 00:12:11,600
on this particular mission here today on

315
00:12:16,069 --> 00:12:14,079
the other hand we obviously are uh going

316
00:12:18,790 --> 00:12:16,079
hard after uh being able to compete for

317
00:12:20,629 --> 00:12:18,800
eelv missions

318
00:12:22,949 --> 00:12:20,639
targ thank you uh talkmalik with

319
00:12:25,190 --> 00:12:22,959
space.com uh i think for for both quinn

320
00:12:27,829 --> 00:12:25,200
and sam you mentioned some of the big

321
00:12:29,430 --> 00:12:27,839
steps uh coming up in an hour for for

322
00:12:31,430 --> 00:12:29,440
dragon and i'm

323
00:12:33,590 --> 00:12:31,440
wondering about the the cruise tomorrow

324
00:12:36,069 --> 00:12:33,600
what you're going to be watching uh uh

325
00:12:38,470 --> 00:12:36,079
then in in the spacecraft systems or how

326
00:12:40,790 --> 00:12:38,480
the the transition from launch to uh to

327
00:12:44,389 --> 00:12:40,800
cruise to the station is going to go um

328
00:12:48,949 --> 00:12:45,910
let me take that yeah

329
00:12:50,710 --> 00:12:48,959
okay so the gnc bay door is supposed to

330
00:12:52,230 --> 00:12:50,720
uh

331
00:12:55,110 --> 00:12:52,240
um

332
00:12:58,389 --> 00:12:55,120
open uh and latch at two two hours and

333
00:13:01,030 --> 00:12:58,399
43 minutes into the mission

334
00:13:03,990 --> 00:13:01,040
so actually about an hour uh from right

335
00:13:06,470 --> 00:13:04,000
now um we'll be watching the uh the

336
00:13:08,389 --> 00:13:06,480
relative nav all the navigation sensors

337
00:13:10,949 --> 00:13:08,399
um over the next day or so we will

338
00:13:13,590 --> 00:13:10,959

initiate uh our first co electro eco

339
00:13:15,430 --> 00:13:13,600
elliptic burn about 21 hours into the

340
00:13:16,790 --> 00:13:15,440
mission um

341
00:13:18,310 --> 00:13:16,800
and then we'll be

342
00:13:20,389 --> 00:13:18,320
approaching station

343
00:13:23,509 --> 00:13:20,399
at about 40

344
00:13:25,590 --> 00:13:23,519
to 48 hours uh we'll be approaching

345
00:13:27,670 --> 00:13:25,600
station not birthing in that time frame

346
00:13:29,670 --> 00:13:27,680
um and so what will be key to look out

347
00:13:32,150 --> 00:13:29,680
for is when we initiate the cuckoo the

348
00:13:33,910 --> 00:13:32,160
cots uhf communications unit uh that's

349
00:13:36,710 --> 00:13:33,920
the uhf coms that we have with the

350
00:13:41,750 --> 00:13:36,720
international space station um and then

351
00:13:45,750 --> 00:13:43,750
your question for sam earlier you asked

352
00:13:47,350 --> 00:13:45,760
a little bit about nasa leadership and

353
00:13:50,069 --> 00:13:47,360
you you kind of answered in the context

354
00:13:53,509 --> 00:13:50,079
of competit cooperation with the iss

355
00:13:56,389 --> 00:13:53,519
as the iss program manager now

356
00:13:58,069 --> 00:13:56,399
the u.s will not be alone soon with the

357
00:13:59,910 --> 00:13:58,079
soon chinese and the indians are trying

358
00:14:01,670 --> 00:13:59,920
to catch up in space the chinese are

359
00:14:03,670 --> 00:14:01,680
working towards building a space station

360
00:14:06,389 --> 00:14:03,680
in the context of this launch

361
00:14:08,470 --> 00:14:06,399
how does this cooperation with spacex

362
00:14:10,710 --> 00:14:08,480
and your other commercial partners help

363
00:14:12,870 --> 00:14:10,720

the us and nasa maintain that leadership

364
00:14:15,350 --> 00:14:12,880
role given the burgeoning international

365
00:14:17,350 --> 00:14:15,360
competition in space it not only

366
00:14:19,910 --> 00:14:17,360
broadens the capabilities here

367
00:14:21,350 --> 00:14:19,920
domestically uh but also

368
00:14:23,829 --> 00:14:21,360
you know to to

369
00:14:25,990 --> 00:14:23,839
operate and and do business in space if

370
00:14:28,389 --> 00:14:26,000
you will it also broadens the industry

371
00:14:30,629 --> 00:14:28,399
based on the ground the employment in

372
00:14:31,509 --> 00:14:30,639
various locations across the country

373
00:14:34,230 --> 00:14:31,519
and

374
00:14:35,910 --> 00:14:34,240
in that way it strengthens not only the

375
00:14:37,670 --> 00:14:35,920
the base of the industry but also the

376
00:14:39,269 --> 00:14:37,680
capabilities that we're deploying in

377
00:14:41,670 --> 00:14:39,279
space

378
00:14:43,430 --> 00:14:41,680
it also provide the basis for companies

379
00:14:45,670 --> 00:14:43,440
like spacex to do other things other

380
00:14:47,430 --> 00:14:45,680
than just go to space station eventually

381
00:14:49,350 --> 00:14:47,440
so we're looking forward to that as well

382
00:14:51,590 --> 00:14:49,360
so it's not just the government itself

383
00:14:54,389 --> 00:14:51,600
providing leadership it is industry

384
00:14:56,870 --> 00:14:54,399
itself providing leadership as well

385
00:15:00,310 --> 00:14:56,880
which is which is more than china or

386
00:15:01,910 --> 00:15:00,320
india or other countries are doing today

387
00:15:03,030 --> 00:15:01,920
yes this is james tutton with valencia

388
00:15:05,670 --> 00:15:03,040

voice i have a question for miss

389
00:15:07,990 --> 00:15:05,680
shotwell are there any plans for the

390
00:15:09,829 --> 00:15:08,000
future in florida and with spacex like

391
00:15:11,189 --> 00:15:09,839
future employment or expansion

392
00:15:12,629 --> 00:15:11,199
employment or anything like that well

393
00:15:14,550 --> 00:15:12,639
there's no question we're going to

394
00:15:16,949 --> 00:15:14,560
continue to increase our employment here

395
00:15:19,110 --> 00:15:16,959
in florida um i'm i'm pretty sure we're

396
00:15:21,910 --> 00:15:19,120
going to overwhelm this range with long

397
00:15:23,910 --> 00:15:21,920
with launches of uh of falcon 9's and

398
00:15:25,590 --> 00:15:23,920
falcon 9's and dragons from here i do

399
00:15:29,030 --> 00:15:25,600
look very much look forward to bringing

400
00:15:30,870 --> 00:15:29,040
ses and tycom here next year those

401
00:15:32,710 --> 00:15:30,880
those vehicles are those launches would

402
00:15:34,710 --> 00:15:32,720
have otherwise gone either to the

403
00:15:36,230 --> 00:15:34,720
russians the europeans or the chinese so

404
00:15:39,269 --> 00:15:36,240
i'm really happy to be bringing those

405
00:15:43,910 --> 00:15:41,910
mark mark raderman with talking space

406
00:15:46,069 --> 00:15:43,920
question for you gwen uh i appreciate

407
00:15:48,470 --> 00:15:46,079
the truth about the fact that this is

408
00:15:51,509 --> 00:15:48,480
not easy that it is a difficult

409
00:15:54,870 --> 00:15:51,519
uh operation to to do

410
00:15:56,069 --> 00:15:54,880
do you think anyone will catch you catch

411
00:15:58,069 --> 00:15:56,079
catch me

412
00:16:01,110 --> 00:15:58,079
catch spacex and the business that

413
00:16:05,430 --> 00:16:01,120

you're doing so well in

414
00:16:08,870 --> 00:16:07,189
let's put it this way spacex strives to

415
00:16:10,629 --> 00:16:08,880
be ahead of everybody how's that all our

416
00:16:12,629 --> 00:16:10,639
competitors

417
00:16:18,150 --> 00:16:12,639
thank you

418
00:16:24,790 --> 00:16:22,629
jim siegel celebration independent news

419
00:16:26,949 --> 00:16:24,800
a question for sam i believe

420
00:16:29,749 --> 00:16:26,959
um are there certain types of payloads

421
00:16:33,030 --> 00:16:29,759
that are better suited than others for

422
00:16:35,189 --> 00:16:33,040
for spacex for a dragon and so on

423
00:16:37,110 --> 00:16:35,199
compared to say what the what the

424
00:16:38,150 --> 00:16:37,120
russians are taking up to the space

425
00:16:40,870 --> 00:16:38,160
station

426
00:16:43,110 --> 00:16:40,880
actually the spacex uh dragon and trunk

427
00:16:45,350 --> 00:16:43,120
capabilities are greater than what we

428
00:16:48,069 --> 00:16:45,360
can do to say on

429
00:16:50,069 --> 00:16:48,079
progress uh for

430
00:16:51,829 --> 00:16:50,079
dry goods for instance progress does

431
00:16:56,069 --> 00:16:51,839
have the capability to provide

432
00:16:58,870 --> 00:16:56,079
propellant uh on the russian segment so

433
00:17:00,870 --> 00:16:58,880
in some ways it's it is uh more capable

434
00:17:04,230 --> 00:17:00,880
and but different capabilities than

435
00:17:08,069 --> 00:17:06,630
all right seeing no further questions um

436
00:17:09,669 --> 00:17:08,079
i'll put you on the spot and see if

437
00:17:12,470 --> 00:17:09,679
either of you has any closing comments

438
00:17:14,230 --> 00:17:12,480

and if not we'll we'll wrap it up

439
00:17:17,110 --> 00:17:14,240
uh i'd like to take the opportunity once

440
00:17:19,270 --> 00:17:17,120
again to thank nasa spacex would not be

441
00:17:21,029 --> 00:17:19,280
where we are today without the help and

442
00:17:23,110 --> 00:17:21,039
support and leadership that they've

443
00:17:25,990 --> 00:17:23,120
provided us over the last well since

444
00:17:28,309 --> 00:17:26,000
august of 2006. so i'd like to thank

445
00:17:30,230 --> 00:17:28,319
them again thanks very much

446
00:17:32,630 --> 00:17:30,240
also the additional mission partners

447
00:17:34,630 --> 00:17:32,640
that we had here the u.s air force mike

448
00:17:36,870 --> 00:17:34,640
did clear the weather for us which was

449
00:17:38,630 --> 00:17:36,880
fabulous

450
00:17:41,750 --> 00:17:38,640
the faa and actually i'm going to give

451
00:17:44,630 --> 00:17:41,760
some kudos to fcc as well

452
00:17:47,430 --> 00:17:44,640
and i'd like to just congratulate spacex

453
00:17:49,430 --> 00:17:47,440
on on going from where we were in 2006

454
00:17:51,750 --> 00:17:49,440
which is which is quite a while ago now

455
00:17:54,310 --> 00:17:51,760
it seems to where we are today i think

456
00:17:55,990 --> 00:17:54,320
the the relationship has matured very

457
00:17:58,549 --> 00:17:56,000
nicely over the years

458
00:18:00,870 --> 00:17:58,559
and uh today's launch and successful

459
00:18:01,909 --> 00:18:00,880
mission here will be proof of that

460
00:18:03,909 --> 00:18:01,919
so

461
00:18:05,990 --> 00:18:03,919
thank you all right thank you when we

462
00:18:08,710 --> 00:18:06,000
close we're going to replay the launch

463
00:18:11,430 --> 00:18:08,720

the great launch of the spacex falcon 9

464
00:18:13,990 --> 00:18:11,440
and dragon on nasa television and in the

465
00:18:17,029 --> 00:18:14,000
coming days on wednesday october 10th

466
00:18:19,750 --> 00:18:17,039
we'll begin coverage of grapple at 3 a.m

467
00:18:21,909 --> 00:18:19,760
central time 4 a.m eastern time the

468
00:18:25,029 --> 00:18:21,919
actual grapple should occur at 6 22

469
00:18:27,990 --> 00:18:25,039
central 7 22 a.m eastern and then we'll

470
00:18:31,190 --> 00:18:28,000
also carry a coverage of birthing that

471
00:18:33,510 --> 00:18:31,200
will begin at 9 15 eastern 8 15 central

472
00:18:36,789 --> 00:18:33,520
and the actual birth will take place at

473
00:18:38,710 --> 00:18:36,799
8 40 central 9 40 eastern

474
00:18:40,230 --> 00:18:38,720
once again thank you for coming you can

475
00:18:44,390 --> 00:18:40,240
keep track of the mission and our

476
00:18:52,710 --> 00:18:45,750
station

477
00:18:55,510 --> 00:18:53,669
10

478
00:18:56,789 --> 00:18:55,520
9

479
00:18:57,830 --> 00:18:56,799
seven seven

480
00:18:58,789 --> 00:18:57,840
six

481
00:18:59,830 --> 00:18:58,799
five

482
00:19:00,789 --> 00:18:59,840
four

483
00:19:01,830 --> 00:19:00,799
three

484
00:19:05,669 --> 00:19:01,840
two

485
00:19:10,310 --> 00:19:07,270
and liftoff

486
00:19:12,310 --> 00:19:10,320
liftoff of the spacex falcon 9 rocket

487
00:19:14,630 --> 00:19:12,320
launching dragon to the international