
SPACEX

1
00:00:16,710 --> 00:00:13,749
nasa set out on a new course to space in

2
00:00:18,950 --> 00:00:16,720
2010 to establish a space transportation

3
00:00:21,590 --> 00:00:18,960
system using america's aerospace

4
00:00:23,670 --> 00:00:21,600
industrial expertise combined with

5
00:00:26,310 --> 00:00:23,680
nasa's extensive space flight flight

6
00:00:30,950 --> 00:00:28,830
the goal develop a new american

7
00:00:33,430 --> 00:00:30,960
spacecraft capable of safely and

8
00:00:35,350 --> 00:00:33,440
reliably sending nasa astronauts and

9
00:00:39,270 --> 00:00:35,360
others into low-earth orbit in a

10
00:00:43,750 --> 00:00:41,430
this one-of-a-kind effort by nasa's

11
00:00:46,150 --> 00:00:43,760
commercial crew program will produce an

12
00:00:47,910 --> 00:00:46,160
american space transportation system at

13
00:00:49,830 --> 00:00:47,920

a fraction of the cost of previous

14
00:00:52,150 --> 00:00:49,840
spacecraft and with a greater

15
00:01:12,230 --> 00:00:52,160
reliability and safety factor than ever

16
00:01:17,270 --> 00:01:14,469
after four years of intense efforts by

17
00:01:19,670 --> 00:01:17,280
nasa and its partners the agency is on

18
00:01:22,070 --> 00:01:19,680
the verge of taking the final steps to

19
00:01:37,749 --> 00:01:22,080
culminate in operational flights to the

20
00:01:37,759 --> 00:01:48,149
first agency

21
00:01:52,870 --> 00:01:50,310
good afternoon i'm stephanie shearholt

22
00:01:55,190 --> 00:01:52,880
from nasa's office of communications we

23
00:01:57,109 --> 00:01:55,200
are here today at kennedy space center

24
00:01:59,270 --> 00:01:57,119
to make an historic announcement about

25
00:02:01,429 --> 00:01:59,280
the future of human space flight i'm

26
00:02:02,789 --> 00:02:01,439
joined by nasa administrator charles

27
00:02:04,469 --> 00:02:02,799
bolden

28
00:02:05,910 --> 00:02:04,479
kennedy space center director robert

29
00:02:08,070 --> 00:02:05,920
cavanagh

30
00:02:09,990 --> 00:02:08,080
commercial crew program manager kathy

31
00:02:14,390 --> 00:02:10,000
leaders

32
00:02:18,390 --> 00:02:16,390
each participant will be making some

33
00:02:20,229 --> 00:02:18,400
opening remarks and then we'll take a

34
00:02:22,710 --> 00:02:20,239
few questions

35
00:02:24,550 --> 00:02:22,720
mr mr cabana well good afternoon and

36
00:02:26,550 --> 00:02:24,560
welcome to the kennedy space center i'm

37
00:02:27,830 --> 00:02:26,560
really glad that you could all come out

38
00:02:30,790 --> 00:02:27,840

this afternoon

39
00:02:32,790 --> 00:02:30,800
and see the progress that we are making

40
00:02:35,509 --> 00:02:32,800
as we transform

41
00:02:37,990 --> 00:02:35,519
america's premier launch site into a

42
00:02:39,990 --> 00:02:38,000
spaceport like no other

43
00:02:41,990 --> 00:02:40,000
we've made a lot of history

44
00:02:44,309 --> 00:02:42,000
traveling from here and i think the

45
00:02:46,309 --> 00:02:44,319
announcement that we have this afternoon

46
00:02:49,830 --> 00:02:46,319
you're going to see that we're ready to

47
00:02:52,390 --> 00:02:49,840
accomplish much much more

48
00:02:54,630 --> 00:02:52,400
someone who's left the shores of

49
00:02:57,509 --> 00:02:54,640
this planet from out here i wish

50
00:02:59,110 --> 00:02:57,519
everyone had that view that some of us

51
00:02:59,910 --> 00:02:59,120
here at this table have been able to

52
00:03:03,190 --> 00:02:59,920
have

53
00:03:05,990 --> 00:03:03,200
underway today

54
00:03:07,350 --> 00:03:06,000
it's making that possibility come a lot

55
00:03:10,229 --> 00:03:07,360
closer

56
00:03:12,949 --> 00:03:10,239
the possibility for everyone to someday

57
00:03:14,790 --> 00:03:12,959
see our planet earth from space

58
00:03:16,229 --> 00:03:14,800
now don't get me wrong we've got a lot

59
00:03:17,670 --> 00:03:16,239
more work to do

60
00:03:19,910 --> 00:03:17,680
to get there

61
00:03:22,309 --> 00:03:19,920
but i know a lot of us are cheering on

62
00:03:24,949 --> 00:03:22,319
the success of our commercial crew

63
00:03:27,589 --> 00:03:24,959

program and it's not because of what it

64
00:03:28,869 --> 00:03:27,599
means to nasa human space flight but

65
00:03:32,309 --> 00:03:28,879
what it means

66
00:03:34,390 --> 00:03:32,319
to human space flight for everyone

67
00:03:36,550 --> 00:03:34,400
we also have a great advocate

68
00:03:37,430 --> 00:03:36,560
up in washington dc

69
00:03:38,949 --> 00:03:37,440
and

70
00:03:41,589 --> 00:03:38,959
that's where charlie bolden has been

71
00:03:42,789 --> 00:03:41,599
working for years

72
00:03:45,990 --> 00:03:42,799
to

73
00:03:48,470 --> 00:03:46,000
take what we are doing how we are coming

74
00:03:51,430 --> 00:03:48,480
up with a new way to

75
00:03:54,149 --> 00:03:51,440
perform spacecraft development at nasa

76
00:03:55,190 --> 00:03:54,159
and he's been a tireless champion of the

77
00:03:57,750 --> 00:03:55,200
commercial

78
00:04:01,670 --> 00:03:57,760
crew program and the potential of this

79
00:04:03,830 --> 00:04:01,680
new partnership strategy that we have

80
00:04:05,190 --> 00:04:03,840
and i believe it represents the first

81
00:04:05,990 --> 00:04:05,200
steps

82
00:04:08,309 --> 00:04:06,000
from

83
00:04:10,789 --> 00:04:08,319
planet earth and going on to

84
00:04:12,710 --> 00:04:10,799
tomorrow's one day into deep space and i

85
00:04:14,390 --> 00:04:12,720
think when we look back on this this

86
00:04:15,509 --> 00:04:14,400
trip from planet earth

87
00:04:17,509 --> 00:04:15,519
to mars

88
00:04:20,310 --> 00:04:17,519

we're going to see that it was

89
00:04:23,510 --> 00:04:20,320
on a road that was paved by the team

90
00:04:26,629 --> 00:04:23,520
that charlie's led and so it's my

91
00:04:29,110 --> 00:04:26,639
pleasure to introduce my friend and

92
00:04:31,189 --> 00:04:29,120
fellow traveler on this bold adventure

93
00:04:33,270 --> 00:04:31,199
our administrator charlie bolton thanks

94
00:04:35,270 --> 00:04:33,280
very much bob and let me thank everybody

95
00:04:37,510 --> 00:04:35,280
who's uh who's here both in the room and

96
00:04:39,270 --> 00:04:37,520
people who may be on the line i know

97
00:04:40,870 --> 00:04:39,280
we're going to have a call in later for

98
00:04:43,270 --> 00:04:40,880
for some people who were not able to get

99
00:04:45,270 --> 00:04:43,280
here today's announcement

100
00:04:47,830 --> 00:04:45,280
sets the stage for what promises to be

101
00:04:49,749 --> 00:04:47,840
the most ambitious and exciting chapter

102
00:04:51,670 --> 00:04:49,759
in the history of nasa and human space

103
00:04:53,510 --> 00:04:51,680
flight from day one

104
00:04:55,590 --> 00:04:53,520
the obama administration has made it

105
00:04:57,510 --> 00:04:55,600
very clear that the greatest nation on

106
00:05:00,469 --> 00:04:57,520
earth should not be dependent on any

107
00:05:01,749 --> 00:05:00,479
other nation to get into space

108
00:05:03,270 --> 00:05:01,759
i want to thank

109
00:05:05,029 --> 00:05:03,280
and say thanks to the leadership of

110
00:05:08,230 --> 00:05:05,039
president obama the hard work of our

111
00:05:11,350 --> 00:05:08,240
nasa and industry teams and the support

112
00:05:13,110 --> 00:05:11,360
of congress today we're one step closer

113
00:05:16,070 --> 00:05:13,120

to launching our astronauts from u.s

114
00:05:18,230 --> 00:05:16,080
soil on american spacecraft and ending

115
00:05:19,830 --> 00:05:18,240
the nation's sole reliance on russia by

116
00:05:21,189 --> 00:05:19,840
2017.

117
00:05:23,350 --> 00:05:21,199
turning over low earth orbit

118
00:05:25,830 --> 00:05:23,360
transportation to private industry will

119
00:05:28,390 --> 00:05:25,840
also allow nasa to focus on an even more

120
00:05:29,670 --> 00:05:28,400
ambitious mission that of sending humans

121
00:05:31,510 --> 00:05:29,680
to mars

122
00:05:34,150 --> 00:05:31,520
we've already fulfilled part of the

123
00:05:36,550 --> 00:05:34,160
president's vision as you all know

124
00:05:39,510 --> 00:05:36,560
for the past two years two companies

125
00:05:41,430 --> 00:05:39,520
spacex and orbital sciences have been

126
00:05:43,430 --> 00:05:41,440
making regular cargo deliveries to the

127
00:05:45,590 --> 00:05:43,440
international space station

128
00:05:47,110 --> 00:05:45,600
the contracts we're announcing today are

129
00:05:48,790 --> 00:05:47,120
designed to complete the nasa

130
00:05:51,110 --> 00:05:48,800
certification for human space

131
00:05:53,430 --> 00:05:51,120
transportation systems capable of

132
00:05:55,590 --> 00:05:53,440
carrying people into orbit

133
00:05:58,070 --> 00:05:55,600
once certification is complete nasa

134
00:05:59,749 --> 00:05:58,080
plans to use these systems to ferry

135
00:06:02,629 --> 00:05:59,759
astronauts to the international space

136
00:06:03,749 --> 00:06:02,639
station and return them safely to earth

137
00:06:06,070 --> 00:06:03,759
again

138
00:06:08,070 --> 00:06:06,080

this is the fulfillment

139
00:06:10,070 --> 00:06:08,080
of the commitment president obama made

140
00:06:12,550 --> 00:06:10,080
to return human space flight launches to

141
00:06:14,070 --> 00:06:12,560
u.s soil and end our reliance on the

142
00:06:15,830 --> 00:06:14,080
russians

143
00:06:17,990 --> 00:06:15,840
like bob as a former space shuttle

144
00:06:19,590 --> 00:06:18,000
commander i know that the goal of every

145
00:06:21,990 --> 00:06:19,600
mission is to do something different

146
00:06:23,990 --> 00:06:22,000
from the flights that have gone before

147
00:06:26,710 --> 00:06:24,000
alan shepard earned the title first

148
00:06:29,270 --> 00:06:26,720
american in space john glenn the first

149
00:06:31,350 --> 00:06:29,280
american to orbit earth and with all due

150
00:06:32,790 --> 00:06:31,360
respect to the late michael jackson neil

151
00:06:34,309 --> 00:06:32,800
and buzz were actually the first

152
00:06:36,710 --> 00:06:34,319
moonwalkers

153
00:06:38,629 --> 00:06:36,720
today we don't know who's going to get

154
00:06:40,550 --> 00:06:38,639
to command the first mission to carry

155
00:06:42,870 --> 00:06:40,560
humans into low earth orbit on a

156
00:06:45,510 --> 00:06:42,880
spacecraft built by american private

157
00:06:47,430 --> 00:06:45,520
companies bob and i have been discussing

158
00:06:49,430 --> 00:06:47,440
whether or not we should return to the

159
00:06:51,990 --> 00:06:49,440
astronaut office and

160
00:06:53,749 --> 00:06:52,000
and try to do that but we don't know

161
00:06:55,029 --> 00:06:53,759
today who's going to be the first

162
00:06:57,430 --> 00:06:55,039
commander

163
00:06:59,830 --> 00:06:57,440

but we know it will be a seminal moment

164
00:07:01,430 --> 00:06:59,840
in nasa history and a major achievement

165
00:07:04,309 --> 00:07:01,440
for our nation

166
00:07:06,950 --> 00:07:04,319
we know now however who will build those

167
00:07:09,029 --> 00:07:06,960
spacecraft the boeing corporation or

168
00:07:11,430 --> 00:07:09,039
boeing as i will refer to them

169
00:07:14,309 --> 00:07:11,440
refer to them the rest of my talk and

170
00:07:16,150 --> 00:07:14,319
space exploration technologies of spacex

171
00:07:17,990 --> 00:07:16,160
have each presented to us designs that

172
00:07:19,670 --> 00:07:18,000
will allow us to fly crews to the

173
00:07:21,110 --> 00:07:19,680
international space station in just a

174
00:07:23,189 --> 00:07:21,120
few years

175
00:07:27,350 --> 00:07:23,199
respectively the vehicles are boeing

176
00:07:30,150 --> 00:07:27,360
cst-100 and dragon x and spacex's dragon

177
00:07:31,749 --> 00:07:30,160
the total potential contract value is

178
00:07:33,350 --> 00:07:31,759
6.8

179
00:07:34,790 --> 00:07:33,360
billion dollars over the initial

180
00:07:36,790 --> 00:07:34,800
contract period

181
00:07:38,710 --> 00:07:36,800
the spacecraft will launch from here at

182
00:07:40,390 --> 00:07:38,720
the kennedy space center cape canaveral

183
00:07:42,309 --> 00:07:40,400
launch complex

184
00:07:44,230 --> 00:07:42,319
our specialist teams have watched the

185
00:07:46,790 --> 00:07:44,240
development of these new spacecraft

186
00:07:48,629 --> 00:07:46,800
during earlier development phases and

187
00:07:51,029 --> 00:07:48,639
are confident they'll meet the demands

188
00:07:52,950 --> 00:07:51,039

of these important missions

189
00:07:55,270 --> 00:07:52,960
we're also confident they will be safe

190
00:07:58,390 --> 00:07:55,280
for nasa astronauts to achieve nasa

191
00:08:00,629 --> 00:07:58,400
certification in 2017 they must meet the

192
00:08:02,710 --> 00:08:00,639
same rigorous safety standards we held

193
00:08:05,110 --> 00:08:02,720
for the space shuttle program

194
00:08:08,150 --> 00:08:05,120
this wasn't an easy choice but it's the

195
00:08:09,990 --> 00:08:08,160
best choice for nasa and the nation

196
00:08:11,670 --> 00:08:10,000
we received numerous proposals from

197
00:08:12,869 --> 00:08:11,680
companies throughout the aerospace

198
00:08:14,869 --> 00:08:12,879
industry

199
00:08:17,029 --> 00:08:14,879
highly qualified american companies

200
00:08:19,749 --> 00:08:17,039
united in their desire to return human

201
00:08:22,070 --> 00:08:19,759
space flight launches to u.s soil

202
00:08:23,909 --> 00:08:22,080
competed to serve this nation and end

203
00:08:26,150 --> 00:08:23,919
our reliance on russia

204
00:08:28,309 --> 00:08:26,160
i applaud them for all their innovation

205
00:08:29,830 --> 00:08:28,319
their hard work and most of all for

206
00:08:32,149 --> 00:08:29,840
their patriotism

207
00:08:34,389 --> 00:08:32,159
the partnerships with boeing and spacex

208
00:08:36,230 --> 00:08:34,399
promise to give more people in america

209
00:08:38,070 --> 00:08:36,240
and around the world the opportunity to

210
00:08:39,430 --> 00:08:38,080
experience the wonder and exhilaration

211
00:08:41,750 --> 00:08:39,440
of space flight

212
00:08:43,990 --> 00:08:41,760
to realize the dream of leaving earth

213
00:08:46,630 --> 00:08:44,000

for even a short time to float above our

214
00:08:49,190 --> 00:08:46,640
planet earth in microgravity and to see

215
00:08:51,990 --> 00:08:49,200
the stars and majestic tapestry of the

216
00:08:54,470 --> 00:08:52,000
milky way unobstructed by the artificial

217
00:08:56,550 --> 00:08:54,480
lights and dust of our atmosphere

218
00:08:58,470 --> 00:08:56,560
space travelers will also be able to

219
00:09:01,269 --> 00:08:58,480
imagine and realize new benefits that

220
00:09:04,150 --> 00:09:01,279
can be brought back to earth

221
00:09:05,990 --> 00:09:04,160
while boeing and spacex handle the tasks

222
00:09:08,790 --> 00:09:06,000
of taking our astronauts to the space

223
00:09:11,110 --> 00:09:08,800
station the scientists on earth and

224
00:09:13,030 --> 00:09:11,120
astronauts on the orbiting iss national

225
00:09:15,110 --> 00:09:13,040
laboratory will continue the

226
00:09:17,590 --> 00:09:15,120
groundbreaking research that has been

227
00:09:19,990 --> 00:09:17,600
taking place there for almost 14 years

228
00:09:21,509 --> 00:09:20,000
now without interruption

229
00:09:23,829 --> 00:09:21,519
they will be able to add to that

230
00:09:26,070 --> 00:09:23,839
portfolio with an expanded crew made

231
00:09:27,509 --> 00:09:26,080
possible by the arrival of these new

232
00:09:29,590 --> 00:09:27,519
spacecraft

233
00:09:31,990 --> 00:09:29,600
as research takes place in low earth

234
00:09:34,790 --> 00:09:32,000
orbit and the companies refine their new

235
00:09:36,630 --> 00:09:34,800
space transportation systems we at nasa

236
00:09:38,389 --> 00:09:36,640
will be working just as diligently

237
00:09:40,790 --> 00:09:38,399
readying our new heavy lift rocket the

238
00:09:43,030 --> 00:09:40,800

space launch system or sls and our

239
00:09:45,190 --> 00:09:43,040
multi-purpose crew vehicle orion for

240
00:09:47,190 --> 00:09:45,200
missions to the next decade that will

241
00:09:48,230 --> 00:09:47,200
carry people far from our local space

242
00:09:50,550 --> 00:09:48,240
community

243
00:09:54,310 --> 00:09:50,560
um i want you to look behind me

244
00:09:57,670 --> 00:09:54,320
and uh i'm giddy today i will admit um

245
00:09:59,910 --> 00:09:57,680
i couldn't be happier um just yesterday

246
00:10:02,230 --> 00:09:59,920
off the coast of california i witnessed

247
00:10:04,630 --> 00:10:02,240
the successful recovery test of the

248
00:10:06,550 --> 00:10:04,640
orion engineering test article

249
00:10:08,150 --> 00:10:06,560
the next generation spacecraft that's

250
00:10:10,870 --> 00:10:08,160
being readied for its december test

251
00:10:13,030 --> 00:10:10,880
flight and its eventual use for journeys

252
00:10:15,269 --> 00:10:13,040
to an asteroid into mars

253
00:10:17,269 --> 00:10:15,279
with help from the u.s navy orion the

254
00:10:19,750 --> 00:10:17,279
orion mock-up was put through a full

255
00:10:21,350 --> 00:10:19,760
ocean recovery dress rehearsal and and i

256
00:10:23,590 --> 00:10:21,360
want to single out some people i know

257
00:10:25,190 --> 00:10:23,600
this is kind of unusual but but and i

258
00:10:28,230 --> 00:10:25,200
know this is a a

259
00:10:30,069 --> 00:10:28,240
conference on commercial crew but

260
00:10:32,470 --> 00:10:30,079
you need to take in the totality what

261
00:10:34,790 --> 00:10:32,480
nasa has been doing over the just the

262
00:10:36,630 --> 00:10:34,800
last two weeks

263
00:10:38,630 --> 00:10:36,640

it has been incredible but i want to

264
00:10:40,389 --> 00:10:38,640
salute our navy

265
00:10:42,630 --> 00:10:40,399
the navy marine corps team that

266
00:10:44,949 --> 00:10:42,640
supported us out in san diego

267
00:10:46,470 --> 00:10:44,959
particularly rear admiral frank pons who

268
00:10:48,949 --> 00:10:46,480
is the commander of expedition

269
00:10:51,670 --> 00:10:48,959
expeditionary strike group three

270
00:10:53,910 --> 00:10:51,680
you talk about patriotism and dedication

271
00:10:56,230 --> 00:10:53,920
rear admiral ponds had

272
00:10:58,710 --> 00:10:56,240
had been sailing from the east coast

273
00:11:01,110 --> 00:10:58,720
around through the streets of magellan

274
00:11:03,509 --> 00:11:01,120
and then up the west coast of mexico and

275
00:11:04,949 --> 00:11:03,519
the united states he's been at sea for

276
00:11:08,150 --> 00:11:04,959
12 weeks

277
00:11:09,430 --> 00:11:08,160
and he was heloed off the uss america

278
00:11:10,470 --> 00:11:09,440
yesterday

279
00:11:13,509 --> 00:11:10,480
morning

280
00:11:15,750 --> 00:11:13,519
to come join us on the deck of the uss

281
00:11:17,829 --> 00:11:15,760
anchorage and spent the entire day i

282
00:11:20,470 --> 00:11:17,839
mean 12 days at sea

283
00:11:22,310 --> 00:11:20,480
uh trying to get home and and admiral

284
00:11:24,949 --> 00:11:22,320
pons came and spent the day with the

285
00:11:28,069 --> 00:11:24,959
navy nasa team watching us recover uh

286
00:11:31,269 --> 00:11:28,079
the orion mock-up commodore clint

287
00:11:33,190 --> 00:11:31,279
carroll the the amphibious squadron 3

288
00:11:35,269 --> 00:11:33,200

commander who was also out there with us

289
00:11:37,269 --> 00:11:35,279
and most importantly captain mike

290
00:11:40,069 --> 00:11:37,279
mckenna and his command master chief

291
00:11:43,509 --> 00:11:40,079
pedro and santos uh leading the crew of

292
00:11:45,269 --> 00:11:43,519
the uss anchorage lha-23

293
00:11:47,110 --> 00:11:45,279
following its first flight orion will

294
00:11:49,829 --> 00:11:47,120
splash down in the pacific ocean and

295
00:11:51,670 --> 00:11:49,839
it's the uss anchorage and her crew

296
00:11:53,190 --> 00:11:51,680
that will duplicate what they did over

297
00:11:55,430 --> 00:11:53,200
the last few days and are practicing

298
00:11:56,790 --> 00:11:55,440
this week to recover orion and get it

299
00:11:58,389 --> 00:11:56,800
back to us

300
00:12:01,509 --> 00:11:58,399
this will be the first time in more than

301
00:12:04,870 --> 00:12:01,519
40 years and i cannot i cannot

302
00:12:06,150 --> 00:12:04,880
overemphasize this um you know i i think

303
00:12:07,590 --> 00:12:06,160
most of you sitting in here are

304
00:12:09,430 --> 00:12:07,600
americans or

305
00:12:12,710 --> 00:12:09,440
or at least pretend to be

306
00:12:15,190 --> 00:12:12,720
um you know if you don't feel good over

307
00:12:17,269 --> 00:12:15,200
the coming weeks and months

308
00:12:19,509 --> 00:12:17,279
because for the first time in more than

309
00:12:21,190 --> 00:12:19,519
40 years this nation is going to launch

310
00:12:23,030 --> 00:12:21,200
a vehicle intended to carry humans

311
00:12:25,030 --> 00:12:23,040
beyond low earth orbit more than 40

312
00:12:27,910 --> 00:12:25,040
years so we're really excited about

313
00:12:30,069 --> 00:12:27,920

what's going to happen here in december

314
00:12:33,190 --> 00:12:30,079
last week again right here at ksc we

315
00:12:35,190 --> 00:12:33,200
rolled the orion crew module for eft-1

316
00:12:37,190 --> 00:12:35,200
out of the neil armstrong onc building

317
00:12:39,430 --> 00:12:37,200
to its hypergolic processing facility

318
00:12:41,430 --> 00:12:39,440
where it's being fueled right now in

319
00:12:43,509 --> 00:12:41,440
preparations for in preparation for its

320
00:12:45,829 --> 00:12:43,519
maiden test flight in december

321
00:12:48,230 --> 00:12:45,839
just two days later at nasa's michoud

322
00:12:50,389 --> 00:12:48,240
assembly facility in new orleans we cut

323
00:12:52,230 --> 00:12:50,399
the ribbon on the new 170-foot high

324
00:12:53,990 --> 00:12:52,240
vertical assembly center the

325
00:12:55,910 --> 00:12:54,000
state-of-the-art tooling facility that

326
00:12:58,310 --> 00:12:55,920
will weld together the massive core

327
00:13:00,230 --> 00:12:58,320
stage of the sls the rocket that will

328
00:13:02,790 --> 00:13:00,240
launch orion and our astronauts farther

329
00:13:03,750 --> 00:13:02,800
into space than any human has ever gone

330
00:13:05,590 --> 00:13:03,760
before

331
00:13:07,110 --> 00:13:05,600
from michoud i traveled to the stennis

332
00:13:09,590 --> 00:13:07,120
space center to view progress on the

333
00:13:12,150 --> 00:13:09,600
historic b2 test stand that is being

334
00:13:15,430 --> 00:13:12,160
prepared to test the core stage of sls

335
00:13:17,590 --> 00:13:15,440
and its configuration of four rs-25 what

336
00:13:19,590 --> 00:13:17,600
used to be the shuttle main engines

337
00:13:21,910 --> 00:13:19,600
we'll launch sls and orion about a mile

338
00:13:24,150 --> 00:13:21,920

from here where we sit over the over on

339
00:13:25,990 --> 00:13:24,160
launch complex 39b

340
00:13:28,230 --> 00:13:26,000
it will test the systems needed to get

341
00:13:30,230 --> 00:13:28,240
to mars with missions to an asteroid and

342
00:13:32,790 --> 00:13:30,240
areas beyond the moon such as lagrange

343
00:13:36,310 --> 00:13:32,800
points where space observatories will be

344
00:13:38,230 --> 00:13:36,320
operating within our reach in the 2020s

345
00:13:39,829 --> 00:13:38,240
as we conduct the first deep space

346
00:13:41,750 --> 00:13:39,839
missions with astronauts since the

347
00:13:43,750 --> 00:13:41,760
apollo moon landings

348
00:13:45,509 --> 00:13:43,760
we'll conduct missions that will each

349
00:13:46,470 --> 00:13:45,519
set their own impressive roster of

350
00:13:48,310 --> 00:13:46,480
firsts

351
00:13:49,670 --> 00:13:48,320
first crew to visit and take samples

352
00:13:51,750 --> 00:13:49,680
from an asteroid

353
00:13:52,790 --> 00:13:51,760
first crew to fly beyond the orbit of

354
00:13:54,949 --> 00:13:52,800
the moon

355
00:13:57,670 --> 00:13:54,959
perhaps the first crew to grow its own

356
00:13:59,269 --> 00:13:57,680
food and eat it in space

357
00:14:01,430 --> 00:13:59,279
all of which will set us up for

358
00:14:03,430 --> 00:14:01,440
humanity's next giant leap the first

359
00:14:05,430 --> 00:14:03,440
crew to touch down on and take steps on

360
00:14:07,509 --> 00:14:05,440
the surface of mars

361
00:14:09,350 --> 00:14:07,519
the partner i said all that because i

362
00:14:10,870 --> 00:14:09,360
want you to take everything in totality

363
00:14:12,790 --> 00:14:10,880

because the partnerships that we're

364
00:14:14,550 --> 00:14:12,800
announcing today for development of our

365
00:14:16,550 --> 00:14:14,560
commercial crew vehicles

366
00:14:18,790 --> 00:14:16,560
would not be possible

367
00:14:21,110 --> 00:14:18,800
without the hard work of hundreds of

368
00:14:23,509 --> 00:14:21,120
individuals dedicated to america's

369
00:14:25,269 --> 00:14:23,519
spirit of exploration and innovation

370
00:14:27,110 --> 00:14:25,279
i especially want to commend president

371
00:14:29,509 --> 00:14:27,120
obama and the congress provide for

372
00:14:31,110 --> 00:14:29,519
providing us support for this new way of

373
00:14:32,550 --> 00:14:31,120
doing business and it is a new way of

374
00:14:34,069 --> 00:14:32,560
doing business and kathy's going to talk

375
00:14:36,150 --> 00:14:34,079
a little bit about that

376
00:14:38,550 --> 00:14:36,160
by combining private sector ingenuity

377
00:14:41,030 --> 00:14:38,560
with bipartisan national commitment and

378
00:14:42,790 --> 00:14:41,040
the unmatched expertise of nasa we're

379
00:14:44,870 --> 00:14:42,800
not only better able to stretch the

380
00:14:46,949 --> 00:14:44,880
boundaries of the possible we're

381
00:14:48,710 --> 00:14:46,959
strengthening our economy and creating

382
00:14:50,470 --> 00:14:48,720
good jobs for our people

383
00:14:52,870 --> 00:14:50,480
as president obama has said himself and

384
00:14:55,269 --> 00:14:52,880
i quote we will not only extend

385
00:14:57,110 --> 00:14:55,279
humanity's reach into space we will

386
00:15:00,389 --> 00:14:57,120
strengthen america's leadership here on

387
00:15:01,990 --> 00:15:00,399
earth our destiny is set and our course

388
00:15:03,110 --> 00:15:02,000

is laid out before us and we're

389
00:15:05,269 --> 00:15:03,120
following it

390
00:15:07,670 --> 00:15:05,279
we hope all of you will be inspired to

391
00:15:09,910 --> 00:15:07,680
join us on this next great ambitious leg

392
00:15:13,030 --> 00:15:09,920
of humanity's journey farther into the

393
00:15:14,790 --> 00:15:13,040
solar system than ever before and for us

394
00:15:16,230 --> 00:15:14,800
it starts right here in low earth orbit

395
00:15:18,550 --> 00:15:16,240
and it starts with what we're announcing

396
00:15:20,150 --> 00:15:18,560
today and i could not be more proud

397
00:15:23,590 --> 00:15:20,160
thank you

398
00:15:25,110 --> 00:15:23,600
cathy leaders nasa's commercial crew

399
00:15:26,949 --> 00:15:25,120
program manager will share some more

400
00:15:29,189 --> 00:15:26,959
details with us in addition she'll be

401
00:15:30,550 --> 00:15:29,199
sharing some details on a teleconference

402
00:15:32,710 --> 00:15:30,560
following this

403
00:15:34,150 --> 00:15:32,720
in addition to her engineering prowess

404
00:15:36,790 --> 00:15:34,160
earned during the shuttle and space

405
00:15:38,790 --> 00:15:36,800
station programs she has worked closely

406
00:15:40,870 --> 00:15:38,800
with aerospace companies i'll turn it

407
00:15:42,790 --> 00:15:40,880
over to you kathy for more details

408
00:15:44,710 --> 00:15:42,800
thank you stephanie

409
00:15:47,030 --> 00:15:44,720
sitting here today it is humbling to

410
00:15:49,269 --> 00:15:47,040
recall how often nasa's kennedy space

411
00:15:51,749 --> 00:15:49,279
center has been the stepping off point

412
00:15:55,350 --> 00:15:51,759
for americans who left the boundaries of

413
00:15:57,670 --> 00:15:55,360

earth to look forward toward the future

414
00:16:00,230 --> 00:15:57,680
once again with these amazing structures

415
00:16:01,749 --> 00:16:00,240
as our backdrop we are one step closer

416
00:16:04,230 --> 00:16:01,759
to that future

417
00:16:07,269 --> 00:16:04,240
the nation is entrusting us with the

418
00:16:10,310 --> 00:16:07,279
opportunity to establish a u.s

419
00:16:12,790 --> 00:16:10,320
commercial capability to share the job

420
00:16:15,189 --> 00:16:12,800
of flying nasa crew members to the

421
00:16:18,150 --> 00:16:15,199
international space station

422
00:16:20,710 --> 00:16:18,160
and we know going to space is hard

423
00:16:23,430 --> 00:16:20,720
nasa and aerospace industry have

424
00:16:24,949 --> 00:16:23,440
accomplished hard things in the past

425
00:16:27,749 --> 00:16:24,959
collectively we have a deep

426
00:16:29,749 --> 00:16:27,759
understanding of the momentous challenge

427
00:16:32,230 --> 00:16:29,759
that is laid before us and the

428
00:16:35,189 --> 00:16:32,240
relatively short time that we have to

429
00:16:36,550 --> 00:16:35,199
accomplish this difficult yet exciting

430
00:16:38,470 --> 00:16:36,560
task

431
00:16:40,629 --> 00:16:38,480
once nasa determines

432
00:16:41,829 --> 00:16:40,639
spacex and boeing have met our

433
00:16:44,069 --> 00:16:41,839
requirements

434
00:16:46,310 --> 00:16:44,079
the systems will be certified for nasa

435
00:16:48,870 --> 00:16:46,320
human space flight missions

436
00:16:51,189 --> 00:16:48,880
they will then conduct at least two

437
00:16:54,150 --> 00:16:51,199
and up to six missions under these

438
00:16:56,629 --> 00:16:54,160

contracts to deliver a crew of four to

439
00:16:58,629 --> 00:16:56,639
the international space station

440
00:16:59,670 --> 00:16:58,639
these missions will also carry powered

441
00:17:01,749 --> 00:16:59,680
cargo

442
00:17:02,710 --> 00:17:01,759
and vital science experiments to the

443
00:17:06,390 --> 00:17:02,720
station

444
00:17:08,949 --> 00:17:06,400
and safely return them to u.s soil

445
00:17:11,669 --> 00:17:08,959
these missions will enable nasa and our

446
00:17:14,630 --> 00:17:11,679
international partners to be perform

447
00:17:16,949 --> 00:17:14,640
more research on the orbiting laboratory

448
00:17:19,429 --> 00:17:16,959
nearly doubling today's scientific

449
00:17:22,069 --> 00:17:19,439
research potential

450
00:17:24,710 --> 00:17:22,079
they also offer the unique capability of

451
00:17:27,750 --> 00:17:24,720
serving as a space station life boat for

452
00:17:31,190 --> 00:17:27,760
up to 210 days keeping our crew members

453
00:17:33,029 --> 00:17:31,200
safe in the event of an emergency

454
00:17:35,110 --> 00:17:33,039
we'll get to that certification level

455
00:17:36,630 --> 00:17:35,120
through an incremental stepping stone

456
00:17:39,190 --> 00:17:36,640
approach

457
00:17:41,029 --> 00:17:39,200
boeing and spacex are responsible for

458
00:17:43,510 --> 00:17:41,039
completing the design

459
00:17:45,909 --> 00:17:43,520
the development the testing the

460
00:17:47,350 --> 00:17:45,919
evaluation and certification of their

461
00:17:49,990 --> 00:17:47,360
system

462
00:17:52,789 --> 00:17:50,000
under these contracts nasa will assess

463
00:17:54,549 --> 00:17:52,799

and evaluate how those systems meet

464
00:17:56,230 --> 00:17:54,559
nasa's safety and performance

465
00:17:58,630 --> 00:17:56,240
requirements

466
00:18:00,950 --> 00:17:58,640
the two contracts give us the necessary

467
00:18:01,990 --> 00:18:00,960
mechanisms to ensure we're on the right

468
00:18:04,230 --> 00:18:02,000
track

469
00:18:07,190 --> 00:18:04,240
boeing and spacex are each required to

470
00:18:09,669 --> 00:18:07,200
conduct five certification milestones

471
00:18:11,990 --> 00:18:09,679
the certification baseline review the

472
00:18:14,470 --> 00:18:12,000
design certification review

473
00:18:17,029 --> 00:18:14,480
the flight test readiness review the

474
00:18:19,590 --> 00:18:17,039
operational readiness review and the

475
00:18:21,909 --> 00:18:19,600
certification review in addition to

476
00:18:23,909 --> 00:18:21,919
others they have proposed

477
00:18:26,830 --> 00:18:23,919
boeing and spacex will be paid based on

478
00:18:28,950 --> 00:18:26,840
the performance of these and other key

479
00:18:31,909 --> 00:18:28,960
milestones through approval of these

480
00:18:33,669 --> 00:18:31,919
reviews and with regular nasa insight

481
00:18:35,830 --> 00:18:33,679
into their activities

482
00:18:39,110 --> 00:18:35,840
nasa will be able to determine or what

483
00:18:41,590 --> 00:18:39,120
we call certify when boeing and spacex's

484
00:18:44,310 --> 00:18:41,600
systems have met nasa's safety

485
00:18:47,110 --> 00:18:44,320
requirements for transporting nasa crews

486
00:18:49,430 --> 00:18:47,120
to the international space station

487
00:18:51,909 --> 00:18:49,440
before regular missions begin

488
00:18:54,230 --> 00:18:51,919

boeing and spacex will run their systems

489
00:18:55,990 --> 00:18:54,240
through rigorous ground tests

490
00:18:58,310 --> 00:18:56,000
they also will perform at least one

491
00:19:01,029 --> 00:18:58,320
crewed flight test to the station

492
00:19:02,789 --> 00:19:01,039
with a nasa crew member on board

493
00:19:05,110 --> 00:19:02,799
during that flight test they will

494
00:19:07,110 --> 00:19:05,120
demonstrate the ability to safely

495
00:19:09,590 --> 00:19:07,120
deliver crew and cargo

496
00:19:11,990 --> 00:19:09,600
dock to the station and then return the

497
00:19:14,230 --> 00:19:12,000
crew safely home

498
00:19:16,789 --> 00:19:14,240
nasa is committed to ensuring these

499
00:19:19,590 --> 00:19:16,799
systems are held to the same rigorous

500
00:19:22,150 --> 00:19:19,600
safety standards as previous government

501
00:19:24,549 --> 00:19:22,160
human space flight programs

502
00:19:26,870 --> 00:19:24,559
we have worked carefully and diligently

503
00:19:29,190 --> 00:19:26,880
to assure our safety requirements span

504
00:19:30,630 --> 00:19:29,200
all mission phases and

505
00:19:32,390 --> 00:19:30,640
adequately

506
00:19:35,190 --> 00:19:32,400
address hazards including pad

507
00:19:37,270 --> 00:19:35,200
emergencies in-flight aborts and

508
00:19:38,950 --> 00:19:37,280
emergency landings

509
00:19:41,029 --> 00:19:38,960
boeing and spacex

510
00:19:43,830 --> 00:19:41,039
and the commercial crew program

511
00:19:45,029 --> 00:19:43,840
recognize the extraordinary work we have

512
00:19:47,990 --> 00:19:45,039
ahead of us

513
00:19:50,830 --> 00:19:48,000

to reach our goal of certifying a crew

514
00:19:53,830 --> 00:19:50,840
transportation capability in

515
00:19:56,070 --> 00:19:53,840
2017 we are grateful to have worked with

516
00:19:58,150 --> 00:19:56,080
eight industry partners throughout the

517
00:20:00,150 --> 00:19:58,160
past four and a half years

518
00:20:02,070 --> 00:20:00,160
and we know industry is up to the

519
00:20:04,310 --> 00:20:02,080
challenges ahead

520
00:20:07,190 --> 00:20:04,320
these contracts highlight

521
00:20:09,190 --> 00:20:07,200
what commercial companies can accomplish

522
00:20:11,270 --> 00:20:09,200
and we are counting on them to deliver

523
00:20:13,430 --> 00:20:11,280
our most precious cargo

524
00:20:14,470 --> 00:20:13,440
the crew who will perform vital science

525
00:20:18,070 --> 00:20:14,480
research

526
00:20:19,590 --> 00:20:18,080
on the international space station

527
00:20:21,830 --> 00:20:19,600
and i think here's our

528
00:20:23,350 --> 00:20:21,840
example of some of that precious cargo

529
00:20:25,510 --> 00:20:23,360
so i'm going to let mike

530
00:20:27,110 --> 00:20:25,520
mike get started

531
00:20:29,590 --> 00:20:27,120
all right well thank you kathy indeed

532
00:20:31,510 --> 00:20:29,600
this is uh this is an exciting day and

533
00:20:34,630 --> 00:20:31,520
i'm honored uh today to be representing

534
00:20:36,310 --> 00:20:34,640
the american astronaut corps and it's a

535
00:20:37,750 --> 00:20:36,320
great chance to look into the future and

536
00:20:39,350 --> 00:20:37,760
think of what we can do with these new

537
00:20:41,110 --> 00:20:39,360
spacecraft

538
00:20:43,430 --> 00:20:41,120

i kind of look at keys when i look at

539
00:20:45,590 --> 00:20:43,440
these spacecraft keys to the

540
00:20:47,830 --> 00:20:45,600
doorway of these

541
00:20:48,870 --> 00:20:47,840
to space right where we can uh

542
00:20:51,990 --> 00:20:48,880
we're the

543
00:20:54,149 --> 00:20:52,000
we've really are trying to open up uh

544
00:20:56,470 --> 00:20:54,159
the door to more and more people getting

545
00:20:58,710 --> 00:20:56,480
to see what what we've seen from space

546
00:21:01,029 --> 00:20:58,720
beautiful planet earth and and and then

547
00:21:02,630 --> 00:21:01,039
like charlie was saying and beyond uh

548
00:21:04,870 --> 00:21:02,640
think about it for a minute uh you know

549
00:21:07,029 --> 00:21:04,880
nasa has availed as unveiled five

550
00:21:09,750 --> 00:21:07,039
spacecraft built for humans to take us

551
00:21:11,110 --> 00:21:09,760
to space and safely return during the 50

552
00:21:13,510 --> 00:21:11,120
years you know as long as we've been

553
00:21:15,669 --> 00:21:13,520
around at nasa we have mercury gemini

554
00:21:17,110 --> 00:21:15,679
apollo space shuttle and orion and of

555
00:21:19,190 --> 00:21:17,120
course we built our me

556
00:21:21,270 --> 00:21:19,200
our amazing orbiting laboratory the

557
00:21:23,190 --> 00:21:21,280
beautiful international space station

558
00:21:24,870 --> 00:21:23,200
and each of these programs you'll leave

559
00:21:27,270 --> 00:21:24,880
impressive marks on american history and

560
00:21:29,590 --> 00:21:27,280
show how far we can reach

561
00:21:32,710 --> 00:21:29,600
as humans when we try

562
00:21:34,070 --> 00:21:32,720
and the debut of each one of those uh

563
00:21:36,230 --> 00:21:34,080

those programs

564
00:21:38,630 --> 00:21:36,240
left that indelible mark in history

565
00:21:42,310 --> 00:21:38,640
imagine today we're unveiling

566
00:21:44,310 --> 00:21:42,320
two new spacecraft and uh and it's

567
00:21:46,630 --> 00:21:44,320
imagines boggles the mind to think of

568
00:21:48,070 --> 00:21:46,640
the possibilities of what we're going to

569
00:21:51,029 --> 00:21:48,080
accomplish

570
00:21:52,870 --> 00:21:51,039
so uh when i see you know the cst 100

571
00:21:54,710 --> 00:21:52,880
and the and the crew dragon i can't help

572
00:21:57,190 --> 00:21:54,720
but think of how it might affect all of

573
00:21:59,830 --> 00:21:57,200
us not just astronauts and engineers but

574
00:22:01,510 --> 00:21:59,840
and space workers but but all americans

575
00:22:03,669 --> 00:22:01,520
and these transportation systems will

576
00:22:05,909 --> 00:22:03,679
carry all the hall marks of nasa's

577
00:22:07,909 --> 00:22:05,919
legendary spacecraft that i mentioned it

578
00:22:10,070 --> 00:22:07,919
will be carefully designed with safety

579
00:22:12,549 --> 00:22:10,080
and forefront of in the forefront of

580
00:22:14,070 --> 00:22:12,559
requirements and a feature which we

581
00:22:17,029 --> 00:22:14,080
astronauts

582
00:22:17,909 --> 00:22:17,039
truly value safety first and carry the

583
00:22:20,950 --> 00:22:17,919
most

584
00:22:23,510 --> 00:22:20,960
technolo technologically advanced

585
00:22:24,789 --> 00:22:23,520
systems and operate

586
00:22:26,630 --> 00:22:24,799
at the hands of the most skilled

587
00:22:28,789 --> 00:22:26,640
professionals that the world has to

588
00:22:30,549 --> 00:22:28,799

offer so i'd like to compliment kathy

589
00:22:32,870 --> 00:22:30,559
leaders and her commercial crew program

590
00:22:34,470 --> 00:22:32,880
team they've included us astronauts

591
00:22:36,470 --> 00:22:34,480
since the beginning of this innovative

592
00:22:38,710 --> 00:22:36,480
program and have brought out the best of

593
00:22:40,310 --> 00:22:38,720
our unique skills and experience to the

594
00:22:43,190 --> 00:22:40,320
entire team and we look forward to this

595
00:22:45,110 --> 00:22:43,200
next phase of development flight testing

596
00:22:46,710 --> 00:22:45,120
and being part of this industry and

597
00:22:48,950 --> 00:22:46,720
government team

598
00:22:50,630 --> 00:22:48,960
and for us astronauts the cst-100 and

599
00:22:53,110 --> 00:22:50,640
crew dragon are going to be terrific

600
00:22:54,310 --> 00:22:53,120
machines outstanding to get into orbit

601
00:22:56,070 --> 00:22:54,320
when you think about all the things that

602
00:22:57,909 --> 00:22:56,080
go into a successful mission aboard our

603
00:23:00,390 --> 00:22:57,919
beautiful international space station

604
00:23:01,830 --> 00:23:00,400
it's always the first 250 miles getting

605
00:23:04,549 --> 00:23:01,840
into orbit that can be the most

606
00:23:08,310 --> 00:23:06,470
and these these spacecraft are going to

607
00:23:10,549 --> 00:23:08,320
make the trip a bit easier and we all

608
00:23:13,270 --> 00:23:10,559
know that it will never be easy

609
00:23:14,870 --> 00:23:13,280
and uh once arriving at the station

610
00:23:15,990 --> 00:23:14,880
like kathy said they'll stay docked in

611
00:23:18,230 --> 00:23:16,000
case we

612
00:23:20,710 --> 00:23:18,240
have to call on them to get us home

613
00:23:23,430 --> 00:23:20,720

like a lifeboat and then they'll get us

614
00:23:24,789 --> 00:23:23,440
home when we do need to go home safely

615
00:23:26,710 --> 00:23:24,799
and quickly

616
00:23:28,149 --> 00:23:26,720
and uh

617
00:23:29,350 --> 00:23:28,159
the biggest thing i think is going to

618
00:23:31,909 --> 00:23:29,360
that's going to really help us with the

619
00:23:33,669 --> 00:23:31,919
commercial program crew program is that

620
00:23:35,110 --> 00:23:33,679
it's we have more people working aboard

621
00:23:37,190 --> 00:23:35,120
the international space station

622
00:23:39,270 --> 00:23:37,200
conducting even more scientific research

623
00:23:41,029 --> 00:23:39,280
than we've been able to do so far and

624
00:23:43,350 --> 00:23:41,039
think about that and it gives us a

625
00:23:46,149 --> 00:23:43,360
capability of seven people

626
00:23:47,590 --> 00:23:46,159
on an iss mission instead of uh just six

627
00:23:49,190 --> 00:23:47,600
and we're talking about the ability to

628
00:23:50,870 --> 00:23:49,200
conduct a full-on studies that we're

629
00:23:52,950 --> 00:23:50,880
counting on that's going to help fill in

630
00:23:55,190 --> 00:23:52,960
the gaps about long-duration space

631
00:23:57,909 --> 00:23:55,200
flight so we can survive the years-long

632
00:23:59,269 --> 00:23:57,919
trip to mars and back

633
00:24:00,950 --> 00:23:59,279
and we have to get when we're up there

634
00:24:02,710 --> 00:24:00,960
aboard the space station believe me i i

635
00:24:05,110 --> 00:24:02,720
know sometimes i didn't do it but we got

636
00:24:06,789 --> 00:24:05,120
to get it we've got to do things right

637
00:24:08,549 --> 00:24:06,799
and these new spacecraft are going to

638
00:24:10,710 --> 00:24:08,559

help us get it right by giving us more

639
00:24:12,149 --> 00:24:10,720
time in orbit more people to perform the

640
00:24:15,110 --> 00:24:12,159
work and offering a way to get the

641
00:24:17,350 --> 00:24:15,120
experiment results which include us

642
00:24:19,269 --> 00:24:17,360
astronauts too and hardware used up

643
00:24:22,070 --> 00:24:19,279
there and back down here on earth so

644
00:24:24,310 --> 00:24:22,080
that we can be studied up close

645
00:24:26,870 --> 00:24:24,320
later on these two spacecraft the

646
00:24:28,630 --> 00:24:26,880
cst-100 and and crew dragon could

647
00:24:30,470 --> 00:24:28,640
provide a comfortable lift and orbit for

648
00:24:32,470 --> 00:24:30,480
those who are not astronauts but are

649
00:24:34,549 --> 00:24:32,480
like all of us intrigued by space flight

650
00:24:36,470 --> 00:24:34,559
and expanding american industry much

651
00:24:37,590 --> 00:24:36,480
like our successful history with the

652
00:24:39,110 --> 00:24:37,600
airplane

653
00:24:40,710 --> 00:24:39,120
so i've watched from the windows of our

654
00:24:43,750 --> 00:24:40,720
beautiful international space station

655
00:24:46,710 --> 00:24:43,760
and during wonderful space walks as the

656
00:24:48,950 --> 00:24:46,720
earth moved below and from 250 miles up

657
00:24:49,990 --> 00:24:48,960
a glance can reveal one way you can see

658
00:24:51,750 --> 00:24:50,000
paris

659
00:24:53,669 --> 00:24:51,760
look over there there's california or

660
00:24:55,590 --> 00:24:53,679
brazil and uh

661
00:24:57,750 --> 00:24:55,600
and looking up you can see the entire

662
00:24:59,269 --> 00:24:57,760
universe before us and and with the

663
00:25:01,350 --> 00:24:59,279

addition of these new systems the

664
00:25:03,430 --> 00:25:01,360
international space station orion and

665
00:25:05,990 --> 00:25:03,440
the space launch system nasa like

666
00:25:07,830 --> 00:25:06,000
charlie said is poised to explore this

667
00:25:09,830 --> 00:25:07,840
beckoning universe

668
00:25:11,110 --> 00:25:09,840
and the view from orbit around beautiful

669
00:25:13,590 --> 00:25:11,120
planet earth affects everyone

670
00:25:15,510 --> 00:25:13,600
differently i know it affected me quite

671
00:25:17,510 --> 00:25:15,520
profoundly it changes how we think of

672
00:25:19,510 --> 00:25:17,520
our planet how we think of our neighbors

673
00:25:21,669 --> 00:25:19,520
and perhaps more profoundly there's that

674
00:25:22,789 --> 00:25:21,679
word again but it is how we think of

675
00:25:25,029 --> 00:25:22,799
ourselves

676
00:25:26,549 --> 00:25:25,039
these new ships give us the hope that

677
00:25:29,190 --> 00:25:26,559
more and more people will get to see

678
00:25:31,110 --> 00:25:29,200
that view and take that and take the in

679
00:25:33,190 --> 00:25:31,120
that inspiration and these two

680
00:25:34,470 --> 00:25:33,200
spacecraft might be pretty small to

681
00:25:36,789 --> 00:25:34,480
carry so many big dreams and

682
00:25:39,029 --> 00:25:36,799
expectations but i think and i know they

683
00:25:40,470 --> 00:25:39,039
will do extremely well we astronauts

684
00:25:42,230 --> 00:25:40,480
look forward to the next several years

685
00:25:43,590 --> 00:25:42,240
as we develop build and test and fly

686
00:25:44,950 --> 00:25:43,600
these new ships

687
00:25:48,470 --> 00:25:44,960
thank you

688
00:25:50,630 --> 00:25:48,480

we will take some questions we do have a

689
00:25:52,310 --> 00:25:50,640
little bit limited amount of time as the

690
00:25:54,630 --> 00:25:52,320
administrator has a plan to catch here

691
00:25:57,430 --> 00:25:54,640
pretty quickly and i'll let mr weaver

692
00:25:59,110 --> 00:25:57,440
let us know when when that needs to be

693
00:26:01,190 --> 00:25:59,120
please keep in mind that as with any

694
00:26:03,350 --> 00:26:01,200
procurement nasa's selection rationale

695
00:26:05,110 --> 00:26:03,360
and additional details will be provided

696
00:26:07,269 --> 00:26:05,120
at the appropriate time but that is not

697
00:26:09,510 --> 00:26:07,279
today i encourage you to ask questions

698
00:26:11,350 --> 00:26:09,520
our experts will be able to answer today

699
00:26:13,750 --> 00:26:11,360
please raise your hand identify yourself

700
00:26:16,070 --> 00:26:13,760
by name and affiliation one question

701
00:26:17,029 --> 00:26:16,080
each please

702
00:26:20,230 --> 00:26:17,039
um

703
00:26:24,230 --> 00:26:21,830
thanks very much general baldwin could

704
00:26:26,390 --> 00:26:24,240
what's the breakdown of the the contract

705
00:26:28,470 --> 00:26:26,400
amounts between the two companies and

706
00:26:29,990 --> 00:26:28,480
do you feel like these um

707
00:26:32,950 --> 00:26:30,000
give you kind of the best of both worlds

708
00:26:35,029 --> 00:26:32,960
with the uh old space new space

709
00:26:36,230 --> 00:26:35,039
kind of mix that you might be looking

710
00:26:37,909 --> 00:26:36,240
for

711
00:26:39,669 --> 00:26:37,919
uh i'm gonna let kathy answer the

712
00:26:41,510 --> 00:26:39,679
question about the exact amount in the

713
00:26:44,549 --> 00:26:41,520

contracts um

714
00:26:46,870 --> 00:26:44,559
the old space news space uh

715
00:26:49,029 --> 00:26:46,880
we're learning a lot we started learning

716
00:26:50,070 --> 00:26:49,039
with the commercial cargo program

717
00:26:52,149 --> 00:26:50,080
one of the things that's really

718
00:26:53,269 --> 00:26:52,159
encouraged me is to watch kathy leaders

719
00:26:58,710 --> 00:26:53,279
and

720
00:27:00,070 --> 00:26:58,720
become partners in the in the

721
00:27:02,149 --> 00:27:00,080
development of their respective

722
00:27:02,950 --> 00:27:02,159
spacecraft and when i i listen to them

723
00:27:05,430 --> 00:27:02,960
talk

724
00:27:07,510 --> 00:27:05,440
how they're playing off each other she's

725
00:27:09,510 --> 00:27:07,520
learning uh from the development of

726
00:27:11,750 --> 00:27:09,520
orion and mark is learning quite a bit

727
00:27:14,470 --> 00:27:11,760
about uh what she's going through with

728
00:27:16,789 --> 00:27:14,480
the development of commercial crew so uh

729
00:27:18,549 --> 00:27:16,799
that's what i call old space new space

730
00:27:20,710 --> 00:27:18,559
and and it's working very well from for

731
00:27:21,830 --> 00:27:20,720
us as demonstrated by commercial cargo

732
00:27:23,590 --> 00:27:21,840
so i'm gonna let kathy answer the

733
00:27:26,630 --> 00:27:23,600
question about specific amounts in the

734
00:27:30,149 --> 00:27:26,640
cargo in the contract so the uh the

735
00:27:34,310 --> 00:27:30,159
boeing contract award was uh 4.2 billion

736
00:27:36,149 --> 00:27:34,320
and the spacex award was 2.6 billion now

737
00:27:39,669 --> 00:27:36,159
i want to make sure people understand

738
00:27:42,149 --> 00:27:39,679

that that contract value is for

739
00:27:44,070 --> 00:27:42,159
certification so full up certification

740
00:27:45,269 --> 00:27:44,080
development certification efforts

741
00:27:48,070 --> 00:27:45,279
including

742
00:27:50,070 --> 00:27:48,080
the within the rfp we had a requirement

743
00:27:51,430 --> 00:27:50,080
for at least one

744
00:27:54,230 --> 00:27:51,440
crude demo

745
00:27:57,750 --> 00:27:54,240
like a demonstration flight to the iss

746
00:28:00,870 --> 00:27:57,760
with nasa crew members on it

747
00:28:02,870 --> 00:28:00,880
the there's a maximum of six missions

748
00:28:03,750 --> 00:28:02,880
under that contract value

749
00:28:06,149 --> 00:28:03,760
and

750
00:28:08,470 --> 00:28:06,159
a certain contract value amount for

751
00:28:10,389 --> 00:28:08,480
special studies so those three

752
00:28:11,269 --> 00:28:10,399
components are all in

753
00:28:13,350 --> 00:28:11,279
those

754
00:28:15,990 --> 00:28:13,360
totals that i gave you for boeing and

755
00:28:17,510 --> 00:28:16,000
spacex

756
00:28:19,269 --> 00:28:17,520
marcia dunn

757
00:28:22,070 --> 00:28:19,279
martian associated press with for

758
00:28:24,630 --> 00:28:22,080
general bulletin um just how hard was it

759
00:28:27,029 --> 00:28:24,640
narrowing it down to these two companies

760
00:28:28,630 --> 00:28:27,039
and what put them over the top if you

761
00:28:30,950 --> 00:28:28,640
could just speak in

762
00:28:33,029 --> 00:28:30,960
broad terms i was not a part of the

763
00:28:35,430 --> 00:28:33,039

selection process i'm proud to say it

764
00:28:38,149 --> 00:28:35,440
was really hard i know that but again i

765
00:28:40,630 --> 00:28:38,159
guess i'd defer to kathy to let her tell

766
00:28:41,990 --> 00:28:40,640
you what what she went through

767
00:28:44,789 --> 00:28:42,000
well i wasn't part of the selection

768
00:28:45,830 --> 00:28:44,799
processes either what i can say is that

769
00:28:50,549 --> 00:28:45,840
the

770
00:28:53,590 --> 00:28:50,559
evaluation board

771
00:28:57,190 --> 00:28:53,600
that supported him was made up of a team

772
00:28:59,830 --> 00:28:57,200
of experienced and very seasoned nasa

773
00:29:02,789 --> 00:28:59,840
career civil servants

774
00:29:04,630 --> 00:29:02,799
and you know they conducted a very

775
00:29:06,630 --> 00:29:04,640
rigorous process

776
00:29:13,190 --> 00:29:06,640
and

777
00:29:16,549 --> 00:29:13,200
very confident in their these awards

778
00:29:21,269 --> 00:29:18,710
hi thanks very much um irene klotz with

779
00:29:23,350 --> 00:29:21,279
reuters um kathy on the

780
00:29:25,590 --> 00:29:23,360
award the discrepancy between the two

781
00:29:27,430 --> 00:29:25,600
amounts is that what the companies had

782
00:29:29,750 --> 00:29:27,440
asked for in other words is spacex going

783
00:29:32,070 --> 00:29:29,760
to be able to get to the same end point

784
00:29:34,310 --> 00:29:32,080
as boeing with that uh less amount of

785
00:29:36,230 --> 00:29:34,320
money and for charlie is are these

786
00:29:38,710 --> 00:29:36,240
awards at all depending on

787
00:29:40,549 --> 00:29:38,720
nasa um having more than a continuing

788
00:29:43,430 --> 00:29:40,559

resolution for

789
00:29:46,789 --> 00:29:43,440
the um for this year's budget thanks

790
00:29:49,510 --> 00:29:46,799
so for my part of it

791
00:29:50,789 --> 00:29:49,520
both of the both both of both boeing and

792
00:29:53,430 --> 00:29:50,799
spacex

793
00:29:56,789 --> 00:29:53,440
propose to the same set of requirements

794
00:29:58,789 --> 00:29:56,799
and so nasa awarded the contracts based

795
00:30:00,070 --> 00:29:58,799
on their proposals

796
00:30:04,070 --> 00:30:00,080
so it's two

797
00:30:07,269 --> 00:30:04,080
contracts to the same requirements

798
00:30:09,750 --> 00:30:07,279
and to come on the second part irene you

799
00:30:12,549 --> 00:30:09,760
know as we have said in order for us to

800
00:30:14,310 --> 00:30:12,559
get to 2017 what we really need is for

801
00:30:15,350 --> 00:30:14,320
the congress to support the president's

802
00:30:18,549 --> 00:30:15,360
request

803
00:30:21,510 --> 00:30:18,559
uh we are confident that given where we

804
00:30:24,710 --> 00:30:21,520
are right now with the 2014 budget that

805
00:30:29,430 --> 00:30:24,720
you know and and it's outrun um

806
00:30:31,029 --> 00:30:29,440
we can mate the 2014 uh the 2017 launch

807
00:30:33,430 --> 00:30:31,039
date but that again

808
00:30:36,470 --> 00:30:33,440
depends on congress fully funding the

809
00:30:37,830 --> 00:30:36,480
the budget as requested by the president

810
00:30:42,149 --> 00:30:37,840
bill harwood

811
00:30:43,669 --> 00:30:42,159
for anyone really um

812
00:30:45,830 --> 00:30:43,679
is the long-range goal here is to have

813
00:30:47,590 --> 00:30:45,840

two operational crude vehicles that will

814
00:30:50,149 --> 00:30:47,600
be routinely servicing the space station

815
00:30:51,990 --> 00:30:50,159
either alternating or whatever or is the

816
00:30:53,990 --> 00:30:52,000
expectation that one of these companies

817
00:30:55,350 --> 00:30:54,000
will emerge at the end of this road and

818
00:30:57,110 --> 00:30:55,360
be the one you use now i'm trying to

819
00:30:58,310 --> 00:30:57,120
understand how this plays out

820
00:31:00,549 --> 00:30:58,320
i'm going to answer that bill because

821
00:31:03,350 --> 00:31:00,559
i'm going to tell you about the vision

822
00:31:05,509 --> 00:31:03,360
and i the reason i went out to mars

823
00:31:07,430 --> 00:31:05,519
and started theirs because that that is

824
00:31:09,269 --> 00:31:07,440
where we're going the the nation is

825
00:31:10,389 --> 00:31:09,279
going to mars and we're leading other

826
00:31:13,350 --> 00:31:10,399
nations and

827
00:31:16,070 --> 00:31:13,360
of the world who really want to explore

828
00:31:18,549 --> 00:31:16,080
uh but everybody realizes you can't get

829
00:31:21,029 --> 00:31:18,559
there if you don't have a robust viable

830
00:31:22,710 --> 00:31:21,039
low-earth orbit infrastructure and in

831
00:31:24,470 --> 00:31:22,720
order to put that infrastructure in

832
00:31:28,149 --> 00:31:24,480
place as we have said at least for the

833
00:31:31,029 --> 00:31:28,159
last five years we've got to have

834
00:31:32,710 --> 00:31:31,039
sustainable commercial capability to

835
00:31:35,269 --> 00:31:32,720
service that lower

836
00:31:36,950 --> 00:31:35,279
infrastructure we need more destinations

837
00:31:39,190 --> 00:31:36,960
than the international space station to

838
00:31:40,950 --> 00:31:39,200

be quite honest uh and in order to

839
00:31:42,870 --> 00:31:40,960
service those additional destinations

840
00:31:45,269 --> 00:31:42,880
we're going to need as many providers as

841
00:31:48,070 --> 00:31:45,279
we can so our intent

842
00:31:50,630 --> 00:31:48,080
is as long as the providers

843
00:31:51,430 --> 00:31:50,640
meet our requirements we want to use

844
00:31:54,470 --> 00:31:51,440
them

845
00:31:56,630 --> 00:31:54,480
you know ideally several years from now

846
00:31:58,830 --> 00:31:56,640
there will not just be the international

847
00:32:01,590 --> 00:31:58,840
space station but there will be other

848
00:32:03,509 --> 00:32:01,600
laboratories uh single modules and the

849
00:32:04,789 --> 00:32:03,519
like where people can be going and some

850
00:32:06,950 --> 00:32:04,799
of them won't have anything to do with

851
00:32:09,590 --> 00:32:06,960
the government at all that's that's the

852
00:32:12,470 --> 00:32:09,600
vision of a commercial space industry

853
00:32:15,110 --> 00:32:12,480
and you know when you talk to boeing and

854
00:32:17,029 --> 00:32:15,120
spacex over the next few days

855
00:32:19,509 --> 00:32:17,039
i'd invite you all to ask them what you

856
00:32:21,669 --> 00:32:19,519
know what do they what do they envision

857
00:32:23,669 --> 00:32:21,679
as the market since they stayed in this

858
00:32:24,549 --> 00:32:23,679
thing

859
00:32:25,990 --> 00:32:24,559
uh

860
00:32:27,750 --> 00:32:26,000
we i think we have time for two more

861
00:32:31,190 --> 00:32:27,760
questions i know scott powers had his

862
00:32:34,389 --> 00:32:33,269
scott powers from the orlando sentinel

863
00:32:36,149 --> 00:32:34,399

um

864
00:32:37,830 --> 00:32:36,159
based on the progress they've made so

865
00:32:39,430 --> 00:32:37,840
far on the timetables that they project

866
00:32:41,430 --> 00:32:39,440
out do you expect that one company the

867
00:32:44,470 --> 00:32:41,440
other will be finished and ready to be

868
00:32:47,669 --> 00:32:44,480
certified first and in action first and

869
00:32:51,110 --> 00:32:49,269
so i would say

870
00:32:52,950 --> 00:32:51,120
right now we're not going to comment on

871
00:32:54,549 --> 00:32:52,960
a particular proposal i think you know

872
00:32:56,950 --> 00:32:54,559
you got a couple companies out there

873
00:33:00,389 --> 00:32:56,960
that are willing to talk about their

874
00:33:02,950 --> 00:33:00,399
plans i will tell you that the goal on

875
00:33:05,590 --> 00:33:02,960
under the rfp was for us to have

876
00:33:07,909 --> 00:33:05,600
certification by 2017

877
00:33:10,070 --> 00:33:07,919
and we have credible plans for both

878
00:33:10,870 --> 00:33:10,080
companies to get there by that period of

879
00:33:12,870 --> 00:33:10,880
time

880
00:33:14,789 --> 00:33:12,880
certification includes like i talked

881
00:33:17,430 --> 00:33:14,799
about before at least one crude

882
00:33:20,070 --> 00:33:17,440
demonstration flight

883
00:33:22,310 --> 00:33:20,080
and so we're very committed to that goal

884
00:33:24,470 --> 00:33:22,320
our providers are committed to that goal

885
00:33:26,950 --> 00:33:24,480
but we will not sacrifice crew safety

886
00:33:28,710 --> 00:33:26,960
for that goal

887
00:33:32,310 --> 00:33:28,720
eric i think it is yes

888
00:33:33,509 --> 00:33:32,320

uh yeah eric von aiken wkmg local 6 cbs

889
00:33:35,590 --> 00:33:33,519
here in orlando of course we're

890
00:33:37,350 --> 00:33:35,600
concerned about and very interested in

891
00:33:39,110 --> 00:33:37,360
the local impact i hope this is a

892
00:33:41,590 --> 00:33:39,120
question you can answer and if not maybe

893
00:33:43,590 --> 00:33:41,600
you can get close here we've heard from

894
00:33:47,269 --> 00:33:43,600
boeing that if they awarded the contract

895
00:33:49,029 --> 00:33:47,279
we'd see up to 550 local jobs here is

896
00:33:51,110 --> 00:33:49,039
that number correct

897
00:33:53,750 --> 00:33:51,120
and how many of those jobs will be from

898
00:33:59,830 --> 00:33:53,760
workers here on the space coast and same

899
00:34:02,950 --> 00:34:01,029
yeah i don't

900
00:34:04,549 --> 00:34:02,960
you know we we are really not going to

901
00:34:06,950 --> 00:34:04,559
comment on the particular provider's

902
00:34:09,270 --> 00:34:06,960
capability i suggest now that you know

903
00:34:10,790 --> 00:34:09,280
who the offers are or who the awardees

904
00:34:12,149 --> 00:34:10,800
are that you know you're going to have a

905
00:34:14,069 --> 00:34:12,159
couple of folks out there that are going

906
00:34:16,790 --> 00:34:14,079
to be chomping at the bit to be able to

907
00:34:18,790 --> 00:34:16,800
share their strategy and their impact on

908
00:34:20,950 --> 00:34:18,800
the local economy

909
00:34:22,069 --> 00:34:20,960
really today we're celebrating the

910
00:34:23,750 --> 00:34:22,079
awards

911
00:34:26,629 --> 00:34:23,760
and um

912
00:34:29,589 --> 00:34:26,639
and making sure that you understand what

913
00:34:31,030 --> 00:34:29,599

the requirements were in within the rfp

914
00:34:32,869 --> 00:34:31,040
and making sure you understand what

915
00:34:34,310 --> 00:34:32,879
nasa's role is going to be here

916
00:34:36,149 --> 00:34:34,320
industries out there and i'm sure

917
00:34:37,430 --> 00:34:36,159
they're ready to share with you their

918
00:34:38,470 --> 00:34:37,440
impact

919
00:34:40,389 --> 00:34:38,480
thank you

920
00:34:42,629 --> 00:34:40,399
you know this really validates our plans

921
00:34:45,030 --> 00:34:42,639
at ksc of having a true commercial

922
00:34:47,510 --> 00:34:45,040
spaceport we're moving ahead what we

923
00:34:49,750 --> 00:34:47,520
laid in place years back and the vision

924
00:34:51,990 --> 00:34:49,760
that we had is coming to fruition now

925
00:34:53,829 --> 00:34:52,000
having this happen so i think we've made

926
00:34:56,790 --> 00:34:53,839
tremendous progress and i think we're

927
00:34:58,630 --> 00:34:56,800
going to continue to down that path so

928
00:34:59,990 --> 00:34:58,640
this validates everything that we've

929
00:35:01,589 --> 00:35:00,000
been doing

930
00:35:03,750 --> 00:35:01,599
thank you all for your time today it's

931
00:35:05,510 --> 00:35:03,760
an exciting day at nasa for human space

932
00:35:08,310 --> 00:35:05,520
flight we will have a follow-on

933
00:35:10,550 --> 00:35:08,320
teleconference with kathy leaders you

934
00:35:14,710 --> 00:35:10,560
are welcome to call in or to listen to

935
00:35:17,670 --> 00:35:15,829
news

936
00:35:21,430 --> 00:35:17,680
and of course you can find all the nasa