1
00:00:08,629 --> 00:00:06,389
wow everyone take a look at your screen

2
00:00:10,870 --> 00:00:08,639
right now for this magnificent view of

3
00:00:13,270 --> 00:00:10,880
spacex's falcon 9 rocket and cargo

4
00:00:16,230 --> 00:00:13,280
dragon it is stacked and ready at launch

5
00:00:18,310 --> 00:00:16,240
complex 39a to lift off in just about 20

6
00:00:21,429 --> 00:00:18,320
minutes the dragon spacecraft will fly

7
00:00:24,150 --> 00:00:21,439
about 4 800 pounds of crew supplies and

8
00:00:25,509 --> 00:00:24,160
science including an experiment that

9
00:00:28,470 --> 00:00:25,519
could change the way we treat

10
00:00:31,750 --> 00:00:28,480
osteoporosis dragon is also delivering

11
00:00:33,270 --> 00:00:31,760
some brine shrimp more on that soon

12
00:00:35,350 --> 00:00:33,280
thank you for joining us in the very

13
00:00:37,430 --> 00:00:35,360

early hours of this saturday morning i'm

14
00:00:38,869 --> 00:00:37,440
megan cruz with nasa communications live

15
00:00:41,670 --> 00:00:38,879
from kennedy space center here in

16
00:00:44,869 --> 00:00:41,680
florida today's launch at 3 37 a.m

17
00:00:46,869 --> 00:00:44,879
eastern time is spacex's 23rd cargo

18
00:00:49,029 --> 00:00:46,879
resupply mission for nasa to the

19
00:00:51,110 --> 00:00:49,039
international space station and we are

20
00:00:54,310 --> 00:00:51,120
again simulcasting this live show on

21
00:00:55,830 --> 00:00:54,320
nasa tv and on spacex's webcast let's

22
00:00:57,430 --> 00:00:55,840
bring in andy tran now live from

23
00:00:59,029 --> 00:00:57,440
spacex's headquarters in hawthorne

24
00:01:02,790 --> 00:00:59,039
california good morning andy it's great

25
00:01:07,030 --> 00:01:04,869
good morning megan it's really exciting

26
00:01:09,590 --> 00:01:07,040
to be here covering today's mission in

27
00:01:11,350 --> 00:01:09,600
partnership with nasa it's the third

28
00:01:13,670 --> 00:01:11,360
dragon flight to the space station this

29
00:01:15,990 --> 00:01:13,680
year and also the third cargo respy

30
00:01:18,070 --> 00:01:16,000
mission with our upgraded dragon this

31
00:01:20,550 --> 00:01:18,080
particular spacecraft debuted at the end

32
00:01:22,789 --> 00:01:20,560
of last year for crs 21 and it's the

33
00:01:25,030 --> 00:01:22,799
first reuse of the upgraded cargo

34
00:01:26,550 --> 00:01:25,040
vehicle now following a successful

35
00:01:29,030 --> 00:01:26,560
launch this dragon will be joining the

36
00:01:30,630 --> 00:01:29,040
crew 2 vehicle endeavor currently on

37
00:01:32,310 --> 00:01:30,640
orbit and attached to the international

38
00:01:34,710 --> 00:01:32,320

space station it's going to be cool to

39
00:01:36,630 --> 00:01:34,720
see two dragons once again docked to the

40
00:01:38,149 --> 00:01:36,640
international space station now looking

41
00:01:39,670 --> 00:01:38,159
ahead for the rest of the year we have

42
00:01:42,069 --> 00:01:39,680
two more planned missions for dragon

43
00:01:45,030 --> 00:01:42,079
before year end that's including both

44
00:01:46,789 --> 00:01:45,040
crew and cargo missions

45
00:01:49,190 --> 00:01:46,799
now let's talk a little bit about falcon

46
00:01:51,350 --> 00:01:49,200
9 it's a two-stage rocket designed and

47
00:01:53,270 --> 00:01:51,360
manufactured by spacex for the reliable

48
00:01:55,749 --> 00:01:53,280
and safe transport of people and

49
00:01:58,149 --> 00:01:55,759
payloads into earth orbit and beyond

50
00:02:00,149 --> 00:01:58,159
that is what you see on screen right now

51
00:02:01,749 --> 00:02:00,159
the vehicle stands at 70 meters tall

52
00:02:04,870 --> 00:02:01,759
that's greater than the wingspan of a

53
00:02:07,190 --> 00:02:04,880
747 aircraft just before our program

54
00:02:09,589 --> 00:02:07,200
started at the t minus 35 minute mark

55
00:02:11,510 --> 00:02:09,599
our team gave the go to begin loading

56
00:02:13,110 --> 00:02:11,520
propellants on the vehicle

57
00:02:14,949 --> 00:02:13,120
taking a closer look at the rocket the

58
00:02:17,190 --> 00:02:14,959
bottom two thirds of the vehicle is the

59
00:02:18,550 --> 00:02:17,200
first stage its objective is to

60
00:02:20,390 --> 00:02:18,560
accelerate the vehicle through the

61
00:02:22,869 --> 00:02:20,400
earth's atmospheric space and then

62
00:02:25,030 --> 00:02:22,879
separate from the rest of the rocket now

63
00:02:27,030 --> 00:02:25,040

this is the fourth flight for today's

64
00:02:29,350 --> 00:02:27,040
first stage which actually previously

65
00:02:31,030 --> 00:02:29,360
supported both the crew 1 and crew 2

66
00:02:32,949 --> 00:02:31,040
missions for nasa

67
00:02:34,390 --> 00:02:32,959
as usual we'll be attempting to recover

68
00:02:36,150 --> 00:02:34,400
our first stage and we're excited to be

69
00:02:39,030 --> 00:02:36,160
using our brand new drone ship there it

70
00:02:41,430 --> 00:02:39,040
is on screen it's named a shortfall of

71
00:02:43,589 --> 00:02:41,440
gravitas for those keeping count if we

72
00:02:45,670 --> 00:02:43,599
do successfully land a falcon 9 today

73
00:02:48,390 --> 00:02:45,680
this will be the 90th landing of an

74
00:02:50,309 --> 00:02:48,400
orbital class rocket

75
00:02:52,949 --> 00:02:50,319
above the first stage is the second

76
00:02:55,350 --> 00:02:52,959
stage it has a single merlin vacuum or

77
00:02:57,030 --> 00:02:55,360
mvac engine which ignites the first out

78
00:02:59,270 --> 00:02:57,040
which ignites after the first stage

79
00:03:00,869 --> 00:02:59,280
separates the second stage is what will

80
00:03:02,390 --> 00:03:00,879
carry dragon to its intended orbit

81
00:03:04,070 --> 00:03:02,400
allowing the spacecraft to eventually

82
00:03:05,270 --> 00:03:04,080
rendezvous with the international space

83
00:03:07,270 --> 00:03:05,280
station

84
00:03:09,670 --> 00:03:07,280
and speaking of the dragon it's sitting

85
00:03:11,750 --> 00:03:09,680
right on top of the rocket dragon was

86
00:03:13,350 --> 00:03:11,760
designed from the beginning to be reused

87
00:03:15,670 --> 00:03:13,360
and this new version of dragon is

88
00:03:16,869 --> 00:03:15,680

designed for up to five flights as

89
00:03:18,309 --> 00:03:16,879
mentioned earlier this is going to be

90
00:03:20,309 --> 00:03:18,319
the second fight for this particular

91
00:03:22,949 --> 00:03:20,319
dragon and today's mission actually

92
00:03:25,830 --> 00:03:22,959
marks the 10th reuse of a dragon on a

93
00:03:27,670 --> 00:03:25,840
crs mission to date

94
00:03:30,470 --> 00:03:27,680
as for cargo today we'll be delivering

95
00:03:32,229 --> 00:03:30,480
more than 4 800 pounds of cargo to the

96
00:03:34,070 --> 00:03:32,239
space station including critical

97
00:03:36,070 --> 00:03:34,080
materials to support dozens of science

98
00:03:38,550 --> 00:03:36,080
and research investigations that will

99
00:03:40,309 --> 00:03:38,560
occur onboard the orbiting laboratory

100
00:03:41,750 --> 00:03:40,319
to this day dragon remains the only

101
00:03:44,789 --> 00:03:41,760
spacecraft currently flying that's

102
00:03:46,789 --> 00:03:44,799
capable of transforming of transporting

103
00:03:48,550 --> 00:03:46,799
significant amounts of cargo to and from

104
00:03:49,990 --> 00:03:48,560
the earth we'll go into a little bit

105
00:03:51,750 --> 00:03:50,000
more detail on some of that research

106
00:03:53,589 --> 00:03:51,760
later in today's broadcast and we'll

107
00:03:55,110 --> 00:03:53,599
discuss how dragon is actually enhancing

108
00:03:57,030 --> 00:03:55,120
the research capabilities of the

109
00:03:58,830 --> 00:03:57,040
international space station but for now

110
00:04:01,270 --> 00:03:58,840
i'll send it back to you

111
00:04:03,110 --> 00:04:01,280
megan all right thanks andy and now i

112
00:04:05,030 --> 00:04:03,120
want to bring in joshua santora he's

113
00:04:06,710 --> 00:04:05,040

also with nasa communications joshua

114
00:04:08,309 --> 00:04:06,720
how's it looking so far

115
00:04:10,309 --> 00:04:08,319
technically things are going well

116
00:04:12,789 --> 00:04:10,319
weather is a story that just keeps

117
00:04:15,429 --> 00:04:12,799
getting worse unfortunately so we opened

118
00:04:17,590 --> 00:04:15,439
the show uh with a situation that had us

119
00:04:19,749 --> 00:04:17,600
at about 60 chance of violating

120
00:04:21,590 --> 00:04:19,759
specifically to the cumulus cloud rule

121
00:04:23,830 --> 00:04:21,600
but since our show has begun we've had a

122
00:04:25,270 --> 00:04:23,840
couple other issues pop up so we're now

123
00:04:26,469 --> 00:04:25,280
tracking concerns and if we want to pull

124
00:04:27,189 --> 00:04:26,479
up a weather graphic here this will show

125
00:04:28,629 --> 00:04:27,199
you

126
00:04:30,550 --> 00:04:28,639
what we had at the open of the show we

127
00:04:33,670 --> 00:04:30,560
also are tracking now the attached anvil

128
00:04:35,830 --> 00:04:33,680
cloud rule and surface electric field

129
00:04:38,230 --> 00:04:35,840
rule uh so we're adding things to the

130
00:04:40,070 --> 00:04:38,240
list not a great scenario to be in uh

131
00:04:42,550 --> 00:04:40,080
but we are still fueling and so we're

132
00:04:44,070 --> 00:04:42,560
still marching towards t0 hoping that

133
00:04:45,510 --> 00:04:44,080
things will clear up we've seen

134
00:04:47,749 --> 00:04:45,520
situations like this clear up in the

135
00:04:50,150 --> 00:04:47,759
past so fingers crossed going forward

136
00:04:51,909 --> 00:04:50,160
appreciate the folks over at space force

137
00:04:53,670 --> 00:04:51,919
space launch delta 45 specifically our

138
00:04:55,270 --> 00:04:53,680

launch weather officer brian sizzik

139
00:04:57,350 --> 00:04:55,280
supporting us

140
00:04:58,710 --> 00:04:57,360
again we'll continue to track that

141
00:05:00,550 --> 00:04:58,720
but that is something that we just can't

142
00:05:03,029 --> 00:05:00,560
control the things that we can control

143
00:05:04,550 --> 00:05:03,039
are going really well which started at t

144
00:05:06,310 --> 00:05:04,560
minus 35 minutes with the feeling of the

145
00:05:08,150 --> 00:05:06,320
first stage we're about to start the

146
00:05:10,469 --> 00:05:08,160
fueling of the second stage at about t

147
00:05:11,830 --> 00:05:10,479
minus 16 minutes and then jumping ahead

148
00:05:13,830 --> 00:05:11,840
we would have t minus seven minutes

149
00:05:15,830 --> 00:05:13,840
would be the falcon 9 engine pre-launch

150
00:05:17,189 --> 00:05:15,840
engine chill t-minus five minutes would

151
00:05:19,270 --> 00:05:17,199
mark the dragon transitioning to

152
00:05:20,950 --> 00:05:19,280
internal power for terminal count

153
00:05:22,790 --> 00:05:20,960
in the final minutes we'd expect to hear

154
00:05:25,029 --> 00:05:22,800
calls for propellant tanks pressurized

155
00:05:26,710 --> 00:05:25,039
for flight and the spacex launch

156
00:05:29,510 --> 00:05:26,720
director verifying the team is go for

157
00:05:33,189 --> 00:05:29,520
launch so our liftoff is still targeted

158
00:05:34,790 --> 00:05:33,199
for 3 30 7 23 eastern time the time is

159
00:05:36,150 --> 00:05:34,800
so precise because we do have a single

160
00:05:37,189 --> 00:05:36,160
second in order to rendezvous space

161
00:05:39,670 --> 00:05:37,199
station

162
00:05:41,590 --> 00:05:39,680
and that's why the weather kind of is is

163
00:05:43,110 --> 00:05:41,600

what it is situation where when we get

164
00:05:44,469 --> 00:05:43,120
to t0 if the weather is not good we

165
00:05:46,230 --> 00:05:44,479
cannot fly we'll have to try again

166
00:05:47,590 --> 00:05:46,240
another day which we do have an attempt

167
00:05:49,590 --> 00:05:47,600
available for us tomorrow morning if the

168
00:05:51,110 --> 00:05:49,600
teams can recycle in time for that

169
00:05:53,189 --> 00:05:51,120
docking would be targeted for tomorrow

170
00:05:54,950 --> 00:05:53,199
morning at 11 a.m eastern time with

171
00:05:56,950 --> 00:05:54,960
coverage picking up at 9 30 eastern time

172
00:05:58,950 --> 00:05:56,960
tomorrow morning so megan like i said

173
00:06:01,270 --> 00:05:58,960
technically it's been a smooth countdown

174
00:06:03,749 --> 00:06:01,280
nice and quiet weather-wise not so much

175
00:06:05,510 --> 00:06:03,759
but we will stay close to that those

176
00:06:06,710 --> 00:06:05,520
details as they come in and we'll hear

177
00:06:07,830 --> 00:06:06,720
more from that in just a minute megan

178
00:06:09,430 --> 00:06:07,840
back to you

179
00:06:10,550 --> 00:06:09,440
joshua thanks thank you so much i know

180
00:06:12,309 --> 00:06:10,560
you're going to stay on top of it but

181
00:06:13,749 --> 00:06:12,319
for those watching at home again he just

182
00:06:15,990 --> 00:06:13,759
said please keep your fingers crossed so

183
00:06:18,150 --> 00:06:16,000
hopefully we can have a launch in just

184
00:06:19,590 --> 00:06:18,160
about 15 minutes it looks like so with

185
00:06:21,670 --> 00:06:19,600
this time that i have left i do want to

186
00:06:28,390 --> 00:06:21,680
start talking about the science flying

187
00:06:33,430 --> 00:06:31,350
what do ants plants a remote implant and

188
00:06:35,110 --> 00:06:33,440

brine shrimp all have in common they're

189
00:06:36,629 --> 00:06:35,120
all part of investigations sponsored by

190
00:06:38,150 --> 00:06:36,639
the international space station u.s

191
00:06:40,550 --> 00:06:38,160
national laboratory launching on

192
00:06:43,350 --> 00:06:40,560
spacex's 23rd commercial resupply

193
00:06:46,469 --> 00:06:44,629
moreover these projects will be

194
00:06:48,550 --> 00:06:46,479
supporting the validation of the faraday

195
00:06:50,870 --> 00:06:48,560
research facility a new commercial

196
00:06:52,309 --> 00:06:50,880
research facility operated by proxops

197
00:06:53,749 --> 00:06:52,319
that is flying on this mission and will

198
00:06:58,710 --> 00:06:53,759
provide additional avenues of

199
00:07:02,629 --> 00:07:00,790
specifically the girl scouts of citrus

200
00:07:04,230 --> 00:07:02,639
in conjunction with space kids global

201
00:07:06,309 --> 00:07:04,240
will launch three different student-led

202
00:07:08,230 --> 00:07:06,319
investigations all evaluating the

203
00:07:10,710 --> 00:07:08,240
characteristics of living organisms in

204
00:07:12,070 --> 00:07:10,720
low-earth orbit

205
00:07:14,390 --> 00:07:12,080
one experiment will examine

206
00:07:16,070 --> 00:07:14,400
microgravity's effects on ant behavior

207
00:07:18,230 --> 00:07:16,080
another we'll look at plant growth in

208
00:07:20,469 --> 00:07:18,240
space in the last we'll explore how

209
00:07:21,500 --> 00:07:20,479
brine shrimp move and behave in the low

210
00:07:23,029 --> 00:07:21,510
earth orbit environment

211
00:07:24,629 --> 00:07:23,039
[Music]

212
00:07:26,629 --> 00:07:24,639
a team of researchers from houston

213
00:07:27,909 --> 00:07:26,639

methodist research institute is also

214
00:07:29,830 --> 00:07:27,919
launching an investigation on this

215
00:07:32,150 --> 00:07:29,840
mission that will utilize the faraday

216
00:07:33,589 --> 00:07:32,160
research facility

217
00:07:35,990 --> 00:07:33,599
this team has a long and exciting

218
00:07:37,909 --> 00:07:36,000
history of space-based r d in areas

219
00:07:39,749 --> 00:07:37,919
ranging from nanofluidics to drug

220
00:07:43,749 --> 00:07:39,759
delivery technology development rodent

221
00:07:47,029 --> 00:07:45,350
these research projects have led the

222
00:07:49,029 --> 00:07:47,039
team to its latest investigation that

223
00:07:51,350 --> 00:07:49,039
will aid in the development of a tunable

224
00:07:53,510 --> 00:07:51,360
drug delivery implant the implant can be

225
00:07:55,909 --> 00:07:53,520
remotely controlled to release specific

226
00:08:00,650 --> 00:07:55,919
amounts of drug providing individualized

227
00:08:04,950 --> 00:08:03,189
[Music]

228
00:08:07,029 --> 00:08:04,960
these are only a few of the iss national

229
00:08:09,270 --> 00:08:07,039
lab sponsor projects launching on spacex

230
00:08:10,950 --> 00:08:09,280
crs-23 research sponsored by the

231
00:08:12,869 --> 00:08:10,960
national lab aims to bring value to our

232
00:08:14,950 --> 00:08:12,879
nation and drive a robust market in

233
00:08:16,469 --> 00:08:14,960
low-earth orbit to learn more about all

234
00:08:18,070 --> 00:08:16,479
investigations sponsored by the iss

235
00:08:19,909 --> 00:08:18,080
national lab flying on this mission

236
00:08:24,830 --> 00:08:19,919
please visit our mission overview page

237
00:08:28,710 --> 00:08:26,950
issnationallab.org wow some really cool

238
00:08:30,070 --> 00:08:28,720

stuff there but let's chat more about

239
00:08:31,909 --> 00:08:30,080
one of the girl scout experiments

240
00:08:34,149 --> 00:08:31,919
because i think it's amazing that we

241
00:08:35,909 --> 00:08:34,159
have kids sending science to space i've

242
00:08:38,469 --> 00:08:35,919
got my mask on now because i'd like to

243
00:08:40,630 --> 00:08:38,479
introduce you to anna claire beaton anna

244
00:08:43,029 --> 00:08:40,640
claire can you tell everyone right now

245
00:08:45,430 --> 00:08:43,039
how old you are i'm eight years old that

246
00:08:47,590 --> 00:08:45,440
is amazing i mean how does it feel to be

247
00:08:49,590 --> 00:08:47,600
here you might watch a rocket launch

248
00:08:51,670 --> 00:08:49,600
today with your science experiment how

249
00:08:53,590 --> 00:08:51,680
do you feel amazing

250
00:08:55,509 --> 00:08:53,600
tell me why you feel so amazing

251
00:08:57,350 --> 00:08:55,519
i know you love science and you love

252
00:09:00,470 --> 00:08:57,360
space

253
00:09:03,590 --> 00:09:00,480
i just like watching rockets

254
00:09:05,430 --> 00:09:03,600
launch into space on tv but i thought it

255
00:09:06,949 --> 00:09:05,440
would be even cooler to watch it in

256
00:09:08,710 --> 00:09:06,959
person i'm telling let me tell you a

257
00:09:10,870 --> 00:09:08,720
secret it is it's so much cooler to

258
00:09:12,389 --> 00:09:10,880
watch it in person so i see you have a

259
00:09:13,509 --> 00:09:12,399
replica of your science experiment here

260
00:09:14,630 --> 00:09:13,519
can you tell everyone what you're

261
00:09:19,829 --> 00:09:14,640
studying

262
00:09:22,470 --> 00:09:19,839
if they can still tunnel

263
00:09:24,870 --> 00:09:22,480

and right now they're just

264
00:09:27,590 --> 00:09:24,880
moving along trying to get used to the

265
00:09:29,829 --> 00:09:27,600
gel before they go up to space yeah and

266
00:09:31,430 --> 00:09:29,839
that gel is kind of their food and water

267
00:09:32,870 --> 00:09:31,440
and everything they'll need to survive

268
00:09:34,310 --> 00:09:32,880
and then this is going to go up to the

269
00:09:37,190 --> 00:09:34,320
space station where you're going to see

270
00:09:38,710 --> 00:09:37,200
pictures of them every day yeah and what

271
00:09:42,070 --> 00:09:38,720
are you going to be looking for to see

272
00:09:44,630 --> 00:09:42,080
if they're still moving all right

273
00:09:46,949 --> 00:09:44,640
that's cool and then again tell me about

274
00:09:49,110 --> 00:09:46,959
you know how this ex

275
00:09:50,530 --> 00:09:49,120
opportunity even came about it's through

276
00:09:51,670 --> 00:09:50,540
your girl scout troop right

277
00:09:54,310 --> 00:09:51,680
[Music]

278
00:09:56,710 --> 00:09:54,320
so they said hey can you pitch a science

279
00:10:02,949 --> 00:09:56,720
experiment how did that happen

280
00:10:09,670 --> 00:10:05,670
project and i just wanted to do it so

281
00:10:10,790 --> 00:10:09,680
bad so my mom printed out the papers

282
00:10:14,069 --> 00:10:10,800
and

283
00:10:16,790 --> 00:10:14,079
i started doing the

284
00:10:18,790 --> 00:10:16,800
the instructions yeah and i know you

285
00:10:21,030 --> 00:10:18,800
love ants you have an ant farm at home

286
00:10:23,030 --> 00:10:21,040
so this is a perfect opportunity for you

287
00:10:24,470 --> 00:10:23,040
and i'm so happy for you thank you anna

288
00:10:26,389 --> 00:10:24,480

claire

289
00:10:28,230 --> 00:10:26,399
you're welcome thank you all right so

290
00:10:31,110 --> 00:10:28,240
anna claire's experiment was loaded onto

291
00:10:33,670 --> 00:10:31,120
dragon only 21 hours ago here's video of

292
00:10:36,230 --> 00:10:33,680
what we call that late load each person

293
00:10:38,630 --> 00:10:36,240
is carefully handling a time sensitive

294
00:10:41,030 --> 00:10:38,640
experiment that needed to be packed into

295
00:10:42,870 --> 00:10:41,040
dragon as close to launch as possible

296
00:10:45,430 --> 00:10:42,880
you see them there they're all in the

297
00:10:47,350 --> 00:10:45,440
appropriate gear to carefully move each

298
00:10:50,069 --> 00:10:47,360
of the experiments into there again this

299
00:10:53,269 --> 00:10:50,079
is a very um

300
00:10:55,269 --> 00:10:53,279
you know demanding uh

301
00:10:57,350 --> 00:10:55,279
operation that they need to do again to

302
00:10:59,269 --> 00:10:57,360
make sure that other science experiments

303
00:11:00,870 --> 00:10:59,279
are safe up there and dragon's design

304
00:11:02,630 --> 00:11:00,880
really helps us facilitate as much

305
00:11:04,310 --> 00:11:02,640
science as possible andy do you mind

306
00:11:07,670 --> 00:11:04,320
telling us about the extend the lab

307
00:11:11,509 --> 00:11:09,430
yeah sure thing

308
00:11:13,110 --> 00:11:11,519
the science and research being done in

309
00:11:14,710 --> 00:11:13,120
microgravity on the international space

310
00:11:17,350 --> 00:11:14,720
station has benefited our lives here on

311
00:11:19,350 --> 00:11:17,360
earth for decades now what's really cool

312
00:12:53,269 --> 00:11:19,360
is that our new cargo dragon vehicle is

313
00:12:57,350 --> 00:12:55,430

it's called apex 8 which is going to

314
00:12:59,430 --> 00:12:57,360
study the response to stressors at the

315
00:13:01,269 --> 00:12:59,440
genetic level of plants now they're

316
00:13:02,870 --> 00:13:01,279
going to be really small plants in petri

317
00:13:04,389 --> 00:13:02,880
dishes that we're going to eventually

318
00:13:06,230 --> 00:13:04,399
put into this facility here that's

319
00:13:08,550 --> 00:13:06,240
called veggie it's a veggie plant growth

320
00:13:09,990 --> 00:13:08,560
facility on my last flight i got to grow

321
00:13:11,590 --> 00:13:10,000
lettuce in here and we got to actually

322
00:13:12,389 --> 00:13:11,600
harvest that and eat it so that's pretty

323
00:13:13,670 --> 00:13:12,399
cool

324
00:13:15,509 --> 00:13:13,680
one of the things we're trying to do is

325
00:13:17,190 --> 00:13:15,519
learn how to engineer plants to grow

326
00:13:18,470 --> 00:13:17,200
better in microgravity and what we

327
00:13:20,389 --> 00:13:18,480
learned from that will be able to help

328
00:13:22,150 --> 00:13:20,399
us in the future in space travel but

329
00:13:24,230 --> 00:13:22,160
also help people on earth grow things

330
00:13:25,670 --> 00:13:24,240
better this isn't the only facility we

331
00:13:27,509 --> 00:13:25,680
have on the international space station

332
00:13:29,269 --> 00:13:27,519
to grow things we have an advanced plant

333
00:13:30,790 --> 00:13:29,279
habitat and currently we're growing

334
00:13:33,750 --> 00:13:30,800
chili peppers in there which we hope to

335
00:13:35,910 --> 00:13:33,760
harvest towards the end of our mission

336
00:13:38,150 --> 00:13:35,920
so now we're in the u.s laboratory which

337
00:13:40,150 --> 00:13:38,160
is called destiny and this is one of our

338
00:13:42,150 --> 00:13:40,160

main areas for conducting science on the

339
00:13:43,430 --> 00:13:42,160
international space station one of the

340
00:13:45,670 --> 00:13:43,440
things that makes the international

341
00:13:47,430 --> 00:13:45,680
space station such a versatile research

342
00:13:49,430 --> 00:13:47,440
lab are the express racks there's a

343
00:13:51,269 --> 00:13:49,440
couple of them right here over my head

344
00:13:53,189 --> 00:13:51,279
and the cool thing about these is that

345
00:13:54,949 --> 00:13:53,199
it allows different researchers from

346
00:13:57,350 --> 00:13:54,959
around the world to send up their own

347
00:13:59,110 --> 00:13:57,360
payload and the express rack provides

348
00:14:01,269 --> 00:13:59,120
the power and data

349
00:14:03,110 --> 00:14:01,279
cooling whatever that particular payload

350
00:14:05,430 --> 00:14:03,120
needs one of the new facilities that

351
00:14:07,269 --> 00:14:05,440
will be coming up on spacex 23 cargo

352
00:14:09,430 --> 00:14:07,279
mission is called the faraday research

353
00:14:11,430 --> 00:14:09,440
facility and it's able to house four

354
00:14:13,829 --> 00:14:11,440
different experiments at once three of

355
00:14:15,990 --> 00:14:13,839
them will house small organisms the

356
00:14:18,230 --> 00:14:16,000
fourth experiment will be a medical

357
00:14:20,310 --> 00:14:18,240
experiment to look at remote controlled

358
00:14:22,230 --> 00:14:20,320
delivery of medication so that would be

359
00:14:23,670 --> 00:14:22,240
an interesting technology demonstration

360
00:14:25,350 --> 00:14:23,680
as well and we'll be able to install

361
00:14:31,430 --> 00:14:25,360
that facility into one of our express

362
00:14:34,710 --> 00:14:32,710
and back here live at kennedy we

363
00:14:36,389 --> 00:14:34,720

actually just got some bad news i just

364
00:14:39,110 --> 00:14:36,399
heard from my producer that today's

365
00:14:41,189 --> 00:14:39,120
launch attempt has ended in a scrub um

366
00:14:46,710 --> 00:14:41,199
let's head on over to andy at spacex to

367
00:14:50,470 --> 00:14:48,310
yeah we did hear the launch director

368
00:14:52,310 --> 00:14:50,480
during that video package uh call hold

369
00:14:54,389 --> 00:14:52,320
hold hold to the countdown it does look

370
00:14:55,990 --> 00:14:54,399
like as joshua mentioned weather is not

371
00:14:58,310 --> 00:14:56,000
in our favor today

372
00:15:00,629 --> 00:14:58,320
the vehicle both dragon and falcon

373
00:15:04,069 --> 00:15:00,639
remain healthy we do have a backup

374
00:15:06,389 --> 00:15:04,079
opportunity tomorrow at 3 14 a.m eastern

375
00:15:09,430 --> 00:15:06,399
time so join us then i'm gonna hand it

376
00:15:12,629 --> 00:15:11,110
andy thank you so much so again you just

377
00:15:14,949 --> 00:15:12,639
heard him say that today's launch

378
00:15:16,710 --> 00:15:14,959
attempt has ended in a scrub so we have

379
00:15:20,629 --> 00:15:16,720
another attempt scheduled as andy just

380
00:15:23,509 --> 00:15:20,639
said tomorrow at uh 3 14 a.m eastern

381
00:15:26,230 --> 00:15:23,519
time again tomorrow sunday august 29th 3

382
00:15:28,230 --> 00:15:26,240
14 a.m eastern time our launch coverage

383
00:15:31,670 --> 00:15:28,240
will begin here on nasa tv and the

384
00:15:33,110 --> 00:15:31,680
spacex webcast at 2 45 a.m eastern time