
NASA
NASA
NASA

1
00:00:04,340 --> 00:00:15,030
[Music]

2
00:00:19,349 --> 00:00:16,630
can't be on the um

3
00:00:28,950 --> 00:00:19,359
new possibilities are opening up for

4
00:00:28,960 --> 00:00:42,830
discovery countries the tower

5
00:00:59,750 --> 00:00:44,690
discovery

6
00:01:03,910 --> 00:01:01,670
hello and welcome to this morning's post

7
00:01:05,270 --> 00:01:03,920
splashdown briefing for nasa's spacex

8
00:01:07,510 --> 00:01:05,280
crew 1 mission

9
00:01:09,190 --> 00:01:07,520
nasa astronauts mike hopkins victor

10
00:01:11,350 --> 00:01:09,200
glover shannon walker

11
00:01:13,190 --> 00:01:11,360
and jaxa astronaut soichi naguchi

12
00:01:14,870 --> 00:01:13,200
splashed down off the coast of panama

13
00:01:17,749 --> 00:01:14,880

city florida this morning

14
00:01:19,590 --> 00:01:17,759
at 1 56 a.m central time and will make

15
00:01:20,710 --> 00:01:19,600
their way back to houston a little later

16
00:01:22,630 --> 00:01:20,720
this morning

17
00:01:26,149 --> 00:01:22,640
the crew which launched in november of

18
00:01:27,670 --> 00:01:26,159
last year spent 168 days in space

19
00:01:29,590 --> 00:01:27,680
members of the resilience crew were

20
00:01:30,710 --> 00:01:29,600
involved in five spacewalks during their

21
00:01:32,710 --> 00:01:30,720
time on orbit

22
00:01:35,190 --> 00:01:32,720
saw the arrival and departure of several

23
00:01:36,630 --> 00:01:35,200
visiting crew and cargo spacecraft

24
00:01:38,870 --> 00:01:36,640
and contributed to hundreds of

25
00:01:40,310 --> 00:01:38,880
scientific investigations and technology

26
00:01:41,990 --> 00:01:40,320
demonstrations while aboard the

27
00:01:43,830 --> 00:01:42,000
international space station

28
00:01:45,990 --> 00:01:43,840
we have a few folks here to talk about

29
00:01:48,469 --> 00:01:46,000
the mission and the crew's return

30
00:01:50,069 --> 00:01:48,479
they are kathy leaders associate

31
00:01:50,950 --> 00:01:50,079
administrator for nasa's human

32
00:01:54,870 --> 00:01:50,960
exploration

33
00:01:58,069 --> 00:01:54,880
and operations mission steve stitch

34
00:02:00,469 --> 00:01:58,079
nasa's commercial crew program manager

35
00:02:03,030 --> 00:02:00,479
joel montelbano nasa's international

36
00:02:05,109 --> 00:02:03,040
space station program manager

37
00:02:06,789 --> 00:02:05,119
holly ridings chief flight director at

38
00:02:09,990 --> 00:02:06,799

johnson space center

39
00:02:12,869 --> 00:02:10,000
hans kunigsman spacex senior advisor

40
00:02:14,630 --> 00:02:12,879
for flight reliability and hiroshi

41
00:02:16,630 --> 00:02:14,640
sasaki vice president

42
00:02:19,030 --> 00:02:16,640
and director general for jax's human

43
00:02:20,949 --> 00:02:19,040
space flight technology directorate

44
00:02:22,150 --> 00:02:20,959
we'll start with some overview remarks

45
00:02:23,750 --> 00:02:22,160
and then move to questions from

46
00:02:25,750 --> 00:02:23,760
reporters on the phone

47
00:02:27,589 --> 00:02:25,760
for those asking questions please press

48
00:02:29,270 --> 00:02:27,599
star one to ask a question

49
00:02:30,869 --> 00:02:29,280
and we'll also be taking some questions

50
00:02:31,589 --> 00:02:30,879
from those on social media using the

51
00:02:35,030 --> 00:02:31,599
hashtag

52
00:02:36,790 --> 00:02:35,040
ask nasa okay we'll uh start with you

53
00:02:38,790 --> 00:02:36,800
kathy

54
00:02:41,030 --> 00:02:38,800
well first thanks well for all of you

55
00:02:46,309 --> 00:02:41,040
being here so early in the morning

56
00:02:50,470 --> 00:02:48,710
first of all beautiful beautiful evening

57
00:02:53,270 --> 00:02:50,480
you could see how like

58
00:02:54,150 --> 00:02:53,280
nice the weather was once again i think

59
00:02:56,390 --> 00:02:54,160
uh we're

60
00:02:57,509 --> 00:02:56,400
you know we've been extremely lucky that

61
00:03:00,390 --> 00:02:57,519
we got

62
00:03:01,190 --> 00:03:00,400
two landing days both for demo two and

63
00:03:03,990 --> 00:03:01,200

crew one

64
00:03:05,910 --> 00:03:04,000
and um these are really nice days to be

65
00:03:09,270 --> 00:03:05,920
able to rescue the crew

66
00:03:11,030 --> 00:03:09,280
you always reentry is hard and the

67
00:03:13,509 --> 00:03:11,040
spacecraft was

68
00:03:15,670 --> 00:03:13,519
in beautiful condition but you just

69
00:03:16,229 --> 00:03:15,680
worry as you go through the six minutes

70
00:03:20,470 --> 00:03:16,239
of

71
00:03:23,350 --> 00:03:20,480
hear mike's voice and then see

72
00:03:24,149 --> 00:03:23,360
those drogues and the mains deploy so

73
00:03:27,350 --> 00:03:24,159
wonderfully

74
00:03:28,710 --> 00:03:27,360
and the vehicle just come softly down

75
00:03:31,110 --> 00:03:28,720
and back to earth and

76
00:03:34,229 --> 00:03:31,120
see the boats going out to pick up the

77
00:03:37,190 --> 00:03:34,239
cruise and bring them home

78
00:03:38,869 --> 00:03:37,200
you know uh it's amazing we've already

79
00:03:42,309 --> 00:03:38,879
got pictures of the crew

80
00:03:44,949 --> 00:03:42,319
out there and you can see you know

81
00:03:46,149 --> 00:03:44,959
mike and shannon and victor and soichi

82
00:03:48,070 --> 00:03:46,159
they look like

83
00:03:49,509 --> 00:03:48,080
they did on the day they launched and

84
00:03:51,350 --> 00:03:49,519
it's kind of hard to think about that

85
00:03:52,470 --> 00:03:51,360
that's a picture of them inside the crew

86
00:03:55,750 --> 00:03:52,480
capsule now

87
00:03:56,550 --> 00:03:55,760
on the recovery boat but they're doing

88
00:04:00,149 --> 00:03:56,560

great

89
00:04:01,750 --> 00:04:00,159
um and we're very very happy

90
00:04:03,990 --> 00:04:01,760
that we'll be bringing them home to

91
00:04:07,429 --> 00:04:04,000
their families it's i got to

92
00:04:09,910 --> 00:04:07,439
talk to soichi and

93
00:04:11,350 --> 00:04:09,920
victor's families and they're very

94
00:04:14,550 --> 00:04:11,360
excited to see them

95
00:04:16,469 --> 00:04:14,560
again and we'll be planning on

96
00:04:18,229 --> 00:04:16,479
having a late birthday party for victor

97
00:04:20,550 --> 00:04:18,239
soon coming up

98
00:04:21,990 --> 00:04:20,560
uh you know this is our first full up

99
00:04:25,430 --> 00:04:22,000
crew rotation mission

100
00:04:28,230 --> 00:04:25,440
and we on the nasa side and i know on

101
00:04:29,749 --> 00:04:28,240
the spacex side we've learned a lot

102
00:04:31,430 --> 00:04:29,759
on the nasa side we're going to take

103
00:04:34,629 --> 00:04:31,440
this learning into

104
00:04:36,790 --> 00:04:34,639
you know our future crew missions with

105
00:04:38,870 --> 00:04:36,800
boeing and most importantly the artemis

106
00:04:39,510 --> 00:04:38,880
missions and i know the spacex folks are

107
00:04:41,510 --> 00:04:39,520
just going to

108
00:04:42,870 --> 00:04:41,520
keep doing these missions i don't know

109
00:04:43,590 --> 00:04:42,880
how you could have done this one much

110
00:04:45,990 --> 00:04:43,600
better

111
00:04:48,150 --> 00:04:46,000
but we are hoping that they're going to

112
00:04:49,749 --> 00:04:48,160
be continuing to do the great job that

113
00:04:51,990 --> 00:04:49,759

they've been doing

114
00:04:52,950 --> 00:04:52,000
i personally want to thank the spacex

115
00:04:58,230 --> 00:04:52,960
team

116
00:04:59,510 --> 00:04:58,240
several other federal agencies that have

117
00:05:02,950 --> 00:04:59,520
jumped in and helped us

118
00:05:05,029 --> 00:05:02,960
along the way and uh i really want to

119
00:05:06,150 --> 00:05:05,039
thank everybody for all the hard work

120
00:05:08,629 --> 00:05:06,160
that they've done

121
00:05:09,430 --> 00:05:08,639
and doing such an amazing job for our

122
00:05:13,270 --> 00:05:09,440
nation

123
00:05:15,990 --> 00:05:13,280
thank you okay next we'll hear from

124
00:05:18,950 --> 00:05:16,000
steve stitch

125
00:05:19,830 --> 00:05:18,960
well good morning everybody uh it was a

126
00:05:23,110 --> 00:05:19,840
incredible

127
00:05:26,390 --> 00:05:23,120
day today uh recovering

128
00:05:29,270 --> 00:05:26,400
uh mike hopkins victor glover

129
00:05:32,070 --> 00:05:29,280
suicinaguchi and shannon walker after

130
00:05:35,830 --> 00:05:32,080
168 days in space it really has been an

131
00:05:38,070 --> 00:05:35,840
incredible 27 days i would say for

132
00:05:39,270 --> 00:05:38,080
the nasa and spacex teams in the

133
00:05:41,350 --> 00:05:39,280
commercial crew program this has

134
00:05:43,110 --> 00:05:41,360
probably been our busiest month

135
00:05:45,590 --> 00:05:43,120
we started on april 5th with the port

136
00:05:47,029 --> 00:05:45,600
relocation to set us up for the landing

137
00:05:50,230 --> 00:05:47,039
that we did today

138
00:05:52,790 --> 00:05:50,240

on april 23rd we launched the the crew 2

139
00:05:55,590 --> 00:05:52,800
mission and they docked to one day later

140
00:05:57,029 --> 00:05:55,600
and then today on on may 2nd we

141
00:06:00,390 --> 00:05:57,039
deorbited in

142
00:06:02,230 --> 00:06:00,400
and landed the crew one vehicle today

143
00:06:04,629 --> 00:06:02,240
went very well overall i would say

144
00:06:05,430 --> 00:06:04,639
almost flawlessly uh dragon did great

145
00:06:08,629 --> 00:06:05,440
you know it was

146
00:06:09,189 --> 00:06:08,639
great to hear uh the crew when they woke

147
00:06:11,189 --> 00:06:09,199
up

148
00:06:12,550 --> 00:06:11,199
the first thing mike hopkins did is ask

149
00:06:14,150 --> 00:06:12,560
you know what's the weather going to be

150
00:06:15,830 --> 00:06:14,160
like when we told him hey

151
00:06:17,270 --> 00:06:15,840
maybe two knots of wind and one foot

152
00:06:18,469 --> 00:06:17,280
waves and he was very excited from the

153
00:06:20,629 --> 00:06:18,479
very beginning

154
00:06:22,629 --> 00:06:20,639
you know we undocked at 7 30 central

155
00:06:25,590 --> 00:06:22,639
time just as we planned did the

156
00:06:27,430 --> 00:06:25,600
separation sequence to get uh about 10

157
00:06:29,749 --> 00:06:27,440
kilometers below the station

158
00:06:30,790 --> 00:06:29,759
uh and that's where we uh executed the

159
00:06:32,870 --> 00:06:30,800
maneuvers to

160
00:06:33,990 --> 00:06:32,880
to jettison the trunk and we leave it in

161
00:06:36,150 --> 00:06:34,000
that orbit it's a very safe

162
00:06:37,110 --> 00:06:36,160
orbit for a long time executed the

163
00:06:40,230 --> 00:06:37,120

deorbit burn

164
00:06:40,629 --> 00:06:40,240
uh right around 103 central it's a long

165
00:06:42,790 --> 00:06:40,639
burn

166
00:06:44,150 --> 00:06:42,800
you know it took about 16 or 17 minutes

167
00:06:45,830 --> 00:06:44,160
to execute that burn

168
00:06:47,430 --> 00:06:45,840
to start the entry sequence and then of

169
00:06:50,390 --> 00:06:47,440
course we landed

170
00:06:51,510 --> 00:06:50,400
right around 1 56 a.m as i said the

171
00:06:54,230 --> 00:06:51,520
vehicle did great

172
00:06:55,270 --> 00:06:54,240
flew flawlessly as we undock from

173
00:06:57,350 --> 00:06:55,280
station

174
00:06:58,870 --> 00:06:57,360
doing the sequence of maneuvers the

175
00:07:01,749 --> 00:06:58,880
trunk jettison went

176
00:07:03,350 --> 00:07:01,759
great just as we would expect and the

177
00:07:05,749 --> 00:07:03,360
deorbit burn and the entry

178
00:07:07,589 --> 00:07:05,759
went phenomenally well as did the

179
00:07:10,629 --> 00:07:07,599
parachute deploy

180
00:07:12,309 --> 00:07:10,639
my hats off to the spacex team for

181
00:07:15,189 --> 00:07:12,319
building such a great vehicle

182
00:07:16,070 --> 00:07:15,199
and also the recovery operations tonight

183
00:07:17,749 --> 00:07:16,080
uh was was

184
00:07:19,270 --> 00:07:17,759
phenomenal the first time they've done

185
00:07:21,110 --> 00:07:19,280
the crude vehicle at night

186
00:07:22,870 --> 00:07:21,120
we had a lot of confidence uh in this

187
00:07:25,430 --> 00:07:22,880
night recovery based on the cargo

188
00:07:26,950 --> 00:07:25,440

mission uh that we flew and landed in

189
00:07:29,510 --> 00:07:26,960
january with spacex and

190
00:07:30,230 --> 00:07:29,520
and they recovered that vehicle as well

191
00:07:32,629 --> 00:07:30,240
um

192
00:07:35,189 --> 00:07:32,639
you know we had a couple lessons learned

193
00:07:38,870 --> 00:07:35,199
from uh the demo 2 mission

194
00:07:41,830 --> 00:07:38,880
if if people remember we had some uh

195
00:07:43,430 --> 00:07:41,840
slightly high hypergol readings today we

196
00:07:46,230 --> 00:07:43,440
had none of that with the vehicle was

197
00:07:46,550 --> 00:07:46,240
it was performed flawlessly and last

198
00:07:48,710 --> 00:07:46,560
time

199
00:07:49,749 --> 00:07:48,720
you may remember we had some some boats

200
00:07:52,390 --> 00:07:49,759
in the area

201
00:07:53,510 --> 00:07:52,400
today the united states coast guard had

202
00:07:56,070 --> 00:07:53,520
several assets

203
00:07:57,110 --> 00:07:56,080
on scene and patrolled that area we had

204
00:07:58,950 --> 00:07:57,120
no leisure boats

205
00:08:00,629 --> 00:07:58,960
within the ellipse that we cleared for

206
00:08:02,309 --> 00:08:00,639
landing so that was much much better

207
00:08:04,790 --> 00:08:02,319
than last time

208
00:08:05,749 --> 00:08:04,800
overall just a great great flight we

209
00:08:07,430 --> 00:08:05,759
recovered

210
00:08:09,670 --> 00:08:07,440
the two drogue parachutes and the four

211
00:08:11,110 --> 00:08:09,680
main parachutes were very interested in

212
00:08:13,350 --> 00:08:11,120
looking at those parachutes for

213
00:08:15,029 --> 00:08:13,360

future missions to make sure that their

214
00:08:16,710 --> 00:08:15,039
system's performing well so those were

215
00:08:19,830 --> 00:08:16,720
recovered as well

216
00:08:21,270 --> 00:08:19,840
so uh my hat's off to the entire nasa

217
00:08:23,990 --> 00:08:21,280
and spacex team

218
00:08:25,510 --> 00:08:24,000
not only for tonight's operation but for

219
00:08:27,749 --> 00:08:25,520
all the work they did

220
00:08:29,350 --> 00:08:27,759
to get this mission ready to go and to

221
00:08:32,070 --> 00:08:29,360
bring it back

222
00:08:33,909 --> 00:08:32,080
we'll move on after this flight we'll do

223
00:08:35,750 --> 00:08:33,919
a post slide review

224
00:08:38,389 --> 00:08:35,760
of the data for this flight and we also

225
00:08:41,430 --> 00:08:38,399
have post flight reviews coming up

226
00:08:43,430 --> 00:08:41,440
jointly between nasa and spacex for uh

227
00:08:44,630 --> 00:08:43,440
the crew 2 mission for the the launch

228
00:08:47,269 --> 00:08:44,640
phase and also the

229
00:08:49,269 --> 00:08:47,279
orbit phase with dragon during the

230
00:08:51,269 --> 00:08:49,279
rendezvous talking with iss

231
00:08:52,550 --> 00:08:51,279
so it's an incredibly neat time in

232
00:08:54,630 --> 00:08:52,560
commercial crew

233
00:08:56,790 --> 00:08:54,640
and after this we'll move on to uh the

234
00:08:59,190 --> 00:08:56,800
boeing mission the oft-2 mission

235
00:09:00,550 --> 00:08:59,200
which will be in the uh august september

236
00:09:02,150 --> 00:09:00,560
time frame and then

237
00:09:03,910 --> 00:09:02,160
of course we have another crew rotation

238
00:09:06,389 --> 00:09:03,920

coming up uh

239
00:09:09,030 --> 00:09:06,399
in the october time frame where we'll

240
00:09:10,550 --> 00:09:09,040
launch crew 3 and and bring crew 2 home

241
00:09:12,150 --> 00:09:10,560
so it's an exciting time

242
00:09:14,150 --> 00:09:12,160
my hat's off to the entire team thank

243
00:09:17,269 --> 00:09:14,160
you

244
00:09:20,630 --> 00:09:17,279
okay thanks steve next up is joel

245
00:09:24,710 --> 00:09:23,350
thank you and welcome again to the post

246
00:09:27,430 --> 00:09:24,720
landing press briefing

247
00:09:29,269 --> 00:09:27,440
truly just an outstanding mission you

248
00:09:32,070 --> 00:09:29,279
know an international effort

249
00:09:33,430 --> 00:09:32,080
that has um participating countries

250
00:09:36,230 --> 00:09:33,440
across the globe

251
00:09:37,030 --> 00:09:36,240
working to make this mission successful

252
00:09:41,030 --> 00:09:37,040
as you heard

253
00:09:43,030 --> 00:09:41,040
160 plus days on orbit 160 plus days

254
00:09:44,870 --> 00:09:43,040
doing utilization and research

255
00:09:45,670 --> 00:09:44,880
technology development from the moon

256
00:09:47,030 --> 00:09:45,680
program

257
00:09:49,110 --> 00:09:47,040
as well as low earth orbit

258
00:09:51,350 --> 00:09:49,120
commercialization activities

259
00:09:53,910 --> 00:09:51,360
and now with the crew one team safely on

260
00:09:55,750 --> 00:09:53,920
home crew 2 and the soyuz crew on orbit

261
00:09:58,310 --> 00:09:55,760
will continue those activities

262
00:10:00,630 --> 00:09:58,320
for the next six months advancing what

263
00:10:01,750 --> 00:10:00,640

was started with crew one and the soyuz

264
00:10:04,069 --> 00:10:01,760
crew that was there

265
00:10:06,150 --> 00:10:04,079
during the crew one works so just again

266
00:10:07,910 --> 00:10:06,160
an outstanding mission

267
00:10:10,550 --> 00:10:07,920
we look forward to seeing the smiling

268
00:10:12,389 --> 00:10:10,560
faces of the crew one team back on earth

269
00:10:14,389 --> 00:10:12,399
talking to them about lessons learned

270
00:10:16,230 --> 00:10:14,399
and using those to advance

271
00:10:17,990 --> 00:10:16,240
our mission to advance and make these

272
00:10:20,790 --> 00:10:18,000
missions even better

273
00:10:22,790 --> 00:10:20,800
and stronger in the future so with that

274
00:10:26,310 --> 00:10:22,800
huge thanks to everyone involved

275
00:10:28,470 --> 00:10:26,320
and rachel i'll hand it back over to you

276
00:10:31,590 --> 00:10:28,480
thanks joel and we'll go over to holly

277
00:10:35,430 --> 00:10:34,630
well good morning everyone and uh again

278
00:10:38,550 --> 00:10:35,440
thanks for

279
00:10:40,389 --> 00:10:38,560
uh being at the the post splashdown

280
00:10:42,790 --> 00:10:40,399
press conference it's an exciting

281
00:10:44,550 --> 00:10:42,800
uh time to be here talking to you it's

282
00:10:47,030 --> 00:10:44,560
been a really great day for

283
00:10:48,150 --> 00:10:47,040
the operations that were conducted you

284
00:10:50,949 --> 00:10:48,160
know first with the

285
00:10:52,949 --> 00:10:50,959
undock and then our entry descent and

286
00:10:54,630 --> 00:10:52,959
the very successful landing

287
00:10:56,470 --> 00:10:54,640
you know really i should i should back

288
00:10:58,870 --> 00:10:56,480

up and say it's been an amazing

289
00:11:01,430 --> 00:10:58,880
six months with resilience stocked to

290
00:11:04,230 --> 00:11:01,440
the space station and the crew on board

291
00:11:05,430 --> 00:11:04,240
uh international crew of course a

292
00:11:08,949 --> 00:11:05,440
jackson crew member

293
00:11:11,590 --> 00:11:08,959
uh suici first time an international uh

294
00:11:13,430 --> 00:11:11,600
member of of a crew on the dragon which

295
00:11:15,030 --> 00:11:13,440
we were all very excited about

296
00:11:16,790 --> 00:11:15,040
and and shannon walker had an

297
00:11:18,069 --> 00:11:16,800
opportunity while on board to be the

298
00:11:20,470 --> 00:11:18,079
commander

299
00:11:22,310 --> 00:11:20,480
for a period of time and so that was

300
00:11:23,509 --> 00:11:22,320
exciting as well in fact earlier today

301
00:11:27,110 --> 00:11:23,519
when they left

302
00:11:29,910 --> 00:11:27,120
uh aki who took over the commander

303
00:11:31,269 --> 00:11:29,920
he's a crew 2 crew member from shannon

304
00:11:33,269 --> 00:11:31,279
was able to

305
00:11:34,710 --> 00:11:33,279
ring the mail as resilience was

306
00:11:36,870 --> 00:11:34,720
departing

307
00:11:38,630 --> 00:11:36,880
and say all those happy words as they

308
00:11:39,430 --> 00:11:38,640
were able to send them home they'd been

309
00:11:41,829 --> 00:11:39,440
doing a

310
00:11:42,550 --> 00:11:41,839
direct handover with all of the crews on

311
00:11:45,829 --> 00:11:42,560
board

312
00:11:47,590 --> 00:11:45,839
crew 2 our soyuz crew crew won 11 crew

313
00:11:49,110 --> 00:11:47,600

members on board the space station for a

314
00:11:52,550 --> 00:11:49,120
little bit more

315
00:11:53,990 --> 00:11:52,560
than a week was an exciting time lots of

316
00:11:56,389 --> 00:11:54,000
work that was done

317
00:11:57,990 --> 00:11:56,399
of course the landing itself required

318
00:12:01,030 --> 00:11:58,000
the crew on board to do

319
00:12:02,949 --> 00:12:01,040
a sleep shift right so we changed their

320
00:12:04,870 --> 00:12:02,959
sleep and wait times on board the space

321
00:12:06,069 --> 00:12:04,880
station have not affected the teams on

322
00:12:09,190 --> 00:12:06,079
the ground here and so

323
00:12:11,590 --> 00:12:09,200
in order to make this really a very good

324
00:12:12,230 --> 00:12:11,600
deorbit and landing opportunity work out

325
00:12:13,990 --> 00:12:12,240
for

326
00:12:16,550 --> 00:12:14,000
the operations teams and really all of

327
00:12:16,870 --> 00:12:16,560
the teams there was a tremendous amount

328
00:12:20,310 --> 00:12:16,880
of

329
00:12:21,190 --> 00:12:20,320
effort by nasa and spacex working

330
00:12:24,310 --> 00:12:21,200
together

331
00:12:26,790 --> 00:12:24,320
and and many other teams as well

332
00:12:28,069 --> 00:12:26,800
to ensure that we could safely land our

333
00:12:30,389 --> 00:12:28,079
crew today during

334
00:12:32,870 --> 00:12:30,399
during this night landing all four crew

335
00:12:35,190 --> 00:12:32,880
members are doing really well

336
00:12:36,069 --> 00:12:35,200
got the capsule on board resilience on

337
00:12:38,710 --> 00:12:36,079
board

338
00:12:39,509 --> 00:12:38,720

spacex's recovery ship without any

339
00:12:42,629 --> 00:12:39,519
trouble

340
00:12:44,150 --> 00:12:42,639
out out of resilience and as i was uh

341
00:12:46,629 --> 00:12:44,160
walking over here

342
00:12:49,670 --> 00:12:46,639
the helicopters were were there ready to

343
00:12:51,509 --> 00:12:49,680
uh to ferry them on to land and so

344
00:12:53,910 --> 00:12:51,519
the reports are all four crew members

345
00:12:55,269 --> 00:12:53,920
are in great shape and great spirits and

346
00:12:58,470 --> 00:12:55,279
doing really well

347
00:12:59,269 --> 00:12:58,480
and so again just an incredible uh six

348
00:13:02,310 --> 00:12:59,279
months

349
00:13:04,389 --> 00:13:02,320
of this resilience vehicle and the crew

350
00:13:07,110 --> 00:13:04,399
onboard the international space station

351
00:13:08,389 --> 00:13:07,120
and then really just a great day it's

352
00:13:10,470 --> 00:13:08,399
not very often you get to

353
00:13:11,990 --> 00:13:10,480
wake up on the space station and go to

354
00:13:13,190 --> 00:13:12,000
sleep in houston and so we've been

355
00:13:14,629 --> 00:13:13,200
talking about that

356
00:13:16,230 --> 00:13:14,639
in the control center you know the

357
00:13:17,990 --> 00:13:16,240
orbital mechanics and the weather don't

358
00:13:18,550 --> 00:13:18,000
always work out but today they did and

359
00:13:25,190 --> 00:13:18,560
so

360
00:13:28,550 --> 00:13:25,200
thanks holly next we'll hear from hans

361
00:13:31,910 --> 00:13:30,949
yeah good morning uh from from all of us

362
00:13:34,069 --> 00:13:31,920
here at spacex

363
00:13:36,230 --> 00:13:34,079

i i want to thank nasa and jaxa for

364
00:13:37,990 --> 00:13:36,240
trusting us to fly the astronauts

365
00:13:39,269 --> 00:13:38,000
i was watching the the mission from the

366
00:13:42,790 --> 00:13:39,279
departure

367
00:13:44,710 --> 00:13:42,800
station and i must say this

368
00:13:46,829 --> 00:13:44,720
was an amazing mission and the entire

369
00:13:49,509 --> 00:13:46,839
spacex team is so proud to support the

370
00:13:52,069 --> 00:13:49,519
station

371
00:13:52,629 --> 00:13:52,079
the the overall mission went very smooth

372
00:13:57,189 --> 00:13:52,639
the

373
00:13:59,350 --> 00:13:57,199
term docking over six months

374
00:14:01,030 --> 00:13:59,360
the port relocation a few weeks ago and

375
00:14:02,230 --> 00:14:01,040
now the departure re-entry and

376
00:14:04,550 --> 00:14:02,240
splashdown

377
00:14:06,310 --> 00:14:04,560
it's great to have mike victor shannon

378
00:14:07,750 --> 00:14:06,320
and suici back home again

379
00:14:09,670 --> 00:14:07,760
you know that the team here is looking

380
00:14:12,230 --> 00:14:09,680
forward to meeting them again in person

381
00:14:15,509 --> 00:14:13,990
we will look at data now and inspect the

382
00:14:18,790 --> 00:14:15,519
spacecraft

383
00:14:21,110 --> 00:14:18,800
and and uh

384
00:14:23,030 --> 00:14:21,120
and then get the capsule ready for the

385
00:14:25,269 --> 00:14:23,040
uh for the next flight

386
00:14:27,350 --> 00:14:25,279
nasa and spacex worked hard to certify

387
00:14:28,230 --> 00:14:27,360
both falcon 9 and dragon for multiple

388
00:14:30,150 --> 00:14:28,240

flights

389
00:14:31,590 --> 00:14:30,160
which is critical for reliability and

390
00:14:34,230 --> 00:14:31,600
affordability

391
00:14:36,870 --> 00:14:34,240
as you heard before this was the first

392
00:14:38,870 --> 00:14:36,880
nighttime landing since apollo 8.

393
00:14:40,710 --> 00:14:38,880
and i think it worked great the lighting

394
00:14:43,829 --> 00:14:40,720
was good there was no

395
00:14:44,389 --> 00:14:43,839
no additional traffic the the weather

396
00:14:46,949 --> 00:14:44,399
was just

397
00:14:48,710 --> 00:14:46,959
super and and the wind conditions were

398
00:14:52,310 --> 00:14:48,720
just uh perfect

399
00:14:54,069 --> 00:14:52,320
um the spacex and nasa teams returned

400
00:14:55,829 --> 00:14:54,079
human space flight back to the united

401
00:14:57,269 --> 00:14:55,839
states and i think this is a remarkable

402
00:14:59,829 --> 00:14:57,279
achievement

403
00:15:00,310 --> 00:14:59,839
the opportunity of a lifetime for many

404
00:15:02,710 --> 00:15:00,320
of us

405
00:15:03,910 --> 00:15:02,720
and something to be proud of thank you

406
00:15:06,069 --> 00:15:03,920
nasa

407
00:15:08,069 --> 00:15:06,079
and we are looking forward to many more

408
00:15:11,829 --> 00:15:08,079
flights to the space station and beyond

409
00:15:16,629 --> 00:15:14,230
okay thank you hans and next we'll hear

410
00:15:19,750 --> 00:15:16,639
from hiroshi sasaki

411
00:15:22,710 --> 00:15:19,760
good morning uh

412
00:15:23,269 --> 00:15:22,720
first of all we are really pleased to

413
00:15:27,350 --> 00:15:23,279

hear

414
00:15:31,990 --> 00:15:27,360
all crew members came back home safely

415
00:15:34,389 --> 00:15:32,000
congratulations and welcome back

416
00:15:35,590 --> 00:15:34,399
i would like to express the sincere

417
00:15:38,710 --> 00:15:35,600
appreciation

418
00:15:41,990 --> 00:15:38,720
to nasa spacex and

419
00:15:42,870 --> 00:15:42,000
all members who have devoted to the this

420
00:15:46,949 --> 00:15:42,880
mission

421
00:15:49,990 --> 00:15:46,959
under severe copyrighting situations

422
00:15:53,189 --> 00:15:50,000
is great pleasure for us their tech

423
00:15:57,350 --> 00:15:53,199
soichinogi japanese astronaut

424
00:15:59,749 --> 00:15:57,360
has completed this important missions

425
00:16:02,150 --> 00:15:59,759
together with international partners and

426
00:16:05,990 --> 00:16:02,160
with spacex

427
00:16:10,230 --> 00:16:06,000
this mission opened the new era for

428
00:16:15,749 --> 00:16:13,350
asoji is a pioneer

429
00:16:17,110 --> 00:16:15,759
he was on nintendo flight of space

430
00:16:20,150 --> 00:16:17,120
shuttle

431
00:16:23,590 --> 00:16:20,160
and he was first japanese

432
00:16:27,189 --> 00:16:23,600
jackson astronaut launched on

433
00:16:30,550 --> 00:16:27,199
russian soyuz and he

434
00:16:34,870 --> 00:16:30,560
boarded this mission the first operation

435
00:16:38,550 --> 00:16:37,670
i believe that his experience

436
00:16:42,069 --> 00:16:38,560
contributed

437
00:16:45,829 --> 00:16:44,230
during the long stay at international

438
00:16:48,829 --> 00:16:45,839

space station

439
00:16:51,590 --> 00:16:48,839
he challenged the new research and

440
00:16:55,829 --> 00:16:51,600
development to benefit

441
00:17:03,749 --> 00:16:55,839
our lives on earth and toward

442
00:17:11,110 --> 00:17:07,909
and i be uh and

443
00:17:14,230 --> 00:17:11,120
and across today uh will take over

444
00:17:18,309 --> 00:17:16,470
i will believe that the international

445
00:17:21,750 --> 00:17:18,319
space station is an

446
00:17:23,829 --> 00:17:21,760
important facility for humankind

447
00:17:25,590 --> 00:17:23,839
i would like to utilize the

448
00:17:29,990 --> 00:17:25,600
international space station

449
00:17:37,190 --> 00:17:33,270
and i think this mission proved

450
00:17:40,390 --> 00:17:37,200
uh the crude dragon provided more

451
00:17:42,470 --> 00:17:40,400
robustness and more capability to the

452
00:17:45,190 --> 00:17:42,480
international space station

453
00:17:46,310 --> 00:17:45,200
and also proved that the international

454
00:17:49,110 --> 00:17:46,320
international

455
00:17:51,830 --> 00:17:49,120
and commercial partnership accomplish

456
00:17:59,590 --> 00:17:54,870
represent our partnership is also true

457
00:18:01,430 --> 00:17:59,600
for our endeavor in space exploration

458
00:18:04,710 --> 00:18:01,440
we want to continue international

459
00:18:08,630 --> 00:18:04,720
partnership and commercial engagement

460
00:18:14,470 --> 00:18:08,640
not only the iss but also the gateway

461
00:18:17,190 --> 00:18:14,480
lunar surface and even mars

462
00:18:18,630 --> 00:18:17,200
we must go together towards these

463
00:18:21,990 --> 00:18:18,640

challenges

464
00:18:25,190 --> 00:18:22,000
and of course jaxa will be joining

465
00:18:28,470 --> 00:18:25,200
this endeavor once again

466
00:18:32,310 --> 00:18:28,480
congratulations on return

467
00:18:33,909 --> 00:18:32,320
thank you all right thanks for

468
00:18:35,750 --> 00:18:33,919
everyone's remarks

469
00:18:37,350 --> 00:18:35,760
we'll start taking some questions from

470
00:18:39,830 --> 00:18:37,360
media dialed in

471
00:18:42,310 --> 00:18:39,840
as a reminder you can press star one to

472
00:18:44,630 --> 00:18:42,320
get in the queue to ask your question

473
00:18:45,510 --> 00:18:44,640
and we'll also take questions via the

474
00:18:48,630 --> 00:18:45,520
hashtag

475
00:18:50,390 --> 00:18:48,640
ask nasa on social media so with that

476
00:18:54,070 --> 00:18:50,400
we'll start with marcia dunn

477
00:18:57,270 --> 00:18:54,080
of the associ associated press

478
00:18:59,270 --> 00:18:57,280
hi good morning um another spacex crew

479
00:19:01,669 --> 00:18:59,280
mission is in the books just in time for

480
00:19:03,190 --> 00:19:01,679
the 60th anniversary of alan shepard's

481
00:19:04,870 --> 00:19:03,200
mercury flight

482
00:19:07,270 --> 00:19:04,880
and the next crew flight coming up for

483
00:19:08,950 --> 00:19:07,280
spacex is privately purchased and i'm

484
00:19:11,909 --> 00:19:08,960
hoping kathy and hans

485
00:19:13,830 --> 00:19:11,919
if you could both comment on spacex

486
00:19:15,830 --> 00:19:13,840
leading the way not just for nasa and

487
00:19:18,870 --> 00:19:15,840
commercial crew but also for space

488
00:19:21,430 --> 00:19:18,880

tourism coming up thank you

489
00:19:23,190 --> 00:19:21,440
well i'll just make a short remark and

490
00:19:26,150 --> 00:19:23,200
then i'll let hans jump in but

491
00:19:28,390 --> 00:19:26,160
i do think that this was really our goal

492
00:19:31,029 --> 00:19:28,400
when we set up commercial crew

493
00:19:31,909 --> 00:19:31,039
and honestly um you know we're very

494
00:19:33,669 --> 00:19:31,919
excited to see

495
00:19:35,029 --> 00:19:33,679
it kind of taking off you know one of

496
00:19:37,350 --> 00:19:35,039
the reasons why we

497
00:19:39,190 --> 00:19:37,360
we did the contract the way we did was

498
00:19:40,870 --> 00:19:39,200
so that

499
00:19:44,390 --> 00:19:40,880
the commercial companies had the

500
00:19:47,590 --> 00:19:44,400
opportunity to be able to

501
00:19:48,390 --> 00:19:47,600
you know sell the capabilities that they

502
00:19:51,430 --> 00:19:48,400
developed

503
00:19:53,830 --> 00:19:51,440
to give us services to other folks

504
00:19:55,909 --> 00:19:53,840
and so that the capabilities that we

505
00:20:00,630 --> 00:19:55,919
work so hard together on

506
00:20:06,230 --> 00:20:03,990
you know u.s citizens or

507
00:20:07,350 --> 00:20:06,240
international citizens out there to be

508
00:20:11,110 --> 00:20:07,360
able to

509
00:20:13,909 --> 00:20:11,120
experience uh and be a space person too

510
00:20:14,950 --> 00:20:13,919
you know and so our goal is one day that

511
00:20:17,830 --> 00:20:14,960
everyone's a space

512
00:20:18,710 --> 00:20:17,840
person and so um this is just an

513
00:20:21,990 --> 00:20:18,720

exciting

514
00:20:24,789 --> 00:20:22,000
first step for that and we're very

515
00:20:27,990 --> 00:20:24,799
excited to see it starting to take off

516
00:20:32,310 --> 00:20:31,990
yeah um thank you for that question and

517
00:20:36,149 --> 00:20:32,320
the

518
00:20:38,390 --> 00:20:36,159
um this this obviously is a big step uh

519
00:20:40,070 --> 00:20:38,400
going forward uh we showed in the in the

520
00:20:42,549 --> 00:20:40,080
last missions that we can

521
00:20:43,590 --> 00:20:42,559
safely transport astronauts up and down

522
00:20:47,190 --> 00:20:43,600
with dragon

523
00:20:50,070 --> 00:20:47,200
um we had we had a chance to learn learn

524
00:20:51,110 --> 00:20:50,080
important lessons and to improve

525
00:20:53,830 --> 00:20:51,120
reliability

526
00:20:55,750 --> 00:20:53,840
and and make the operations very smooth

527
00:20:58,710 --> 00:20:55,760
and today was a testament to

528
00:20:59,110 --> 00:20:58,720
um to you know the whole dragon design

529
00:21:02,310 --> 00:20:59,120
team

530
00:21:04,950 --> 00:21:02,320
uh

531
00:21:06,549 --> 00:21:04,960
the the recovery team um and the the

532
00:21:09,270 --> 00:21:06,559
execution was was just

533
00:21:10,230 --> 00:21:09,280
just perfect in my in my eyes so i think

534
00:21:12,070 --> 00:21:10,240
going forward we

535
00:21:13,669 --> 00:21:12,080
we're ready for for this important step

536
00:21:14,310 --> 00:21:13,679
we're ready for the private astronaut

537
00:21:17,430 --> 00:21:14,320
mission

538
00:21:20,390 --> 00:21:17,440

particular is uh

539
00:21:21,350 --> 00:21:20,400
it's a very special mission um the um

540
00:21:25,270 --> 00:21:21,360
that they're trained

541
00:21:28,149 --> 00:21:25,280
trained accordingly and um and they um

542
00:21:29,350 --> 00:21:28,159
the the the oval mission is uh is very

543
00:21:31,669 --> 00:21:29,360
important has the

544
00:21:34,070 --> 00:21:31,679
combination with the saint jude's

545
00:21:36,630 --> 00:21:34,080
donation so i think all of these things

546
00:21:38,390 --> 00:21:36,640
come together into a an upcoming great

547
00:21:42,070 --> 00:21:38,400
private astronaut mission i'm very much

548
00:21:47,830 --> 00:21:44,230
the next question comes from eric berger

549
00:21:52,310 --> 00:21:50,070
uh congratulations all around uh you

550
00:21:55,430 --> 00:21:52,320
made what's hard look quite easy

551
00:21:57,270 --> 00:21:55,440
this morning um question for kathy uh

552
00:21:58,549 --> 00:21:57,280
nasa has been focused on transportation

553
00:22:00,710 --> 00:21:58,559
for a long time

554
00:22:02,470 --> 00:22:00,720
you know getting cargo and crew to leo

555
00:22:04,390 --> 00:22:02,480
and the moon

556
00:22:06,470 --> 00:22:04,400
but now you know you've you've kind of

557
00:22:08,470 --> 00:22:06,480
got transportation to leo in hand and

558
00:22:10,070 --> 00:22:08,480
with sls orion and starship

559
00:22:11,669 --> 00:22:10,080
you're starting to work on the moon it

560
00:22:12,390 --> 00:22:11,679
seems like to me you can think more

561
00:22:15,190 --> 00:22:12,400
about

562
00:22:16,789 --> 00:22:15,200
operations so what's it like you know

563
00:22:18,870 --> 00:22:16,799

playing not just for this station

564
00:22:20,149 --> 00:22:18,880
but the moon with sls and starship you

565
00:22:21,750 --> 00:22:20,159
know you could potentially

566
00:22:23,909 --> 00:22:21,760
send hundreds of tons of cargo to the

567
00:22:26,950 --> 00:22:23,919
moon a year um

568
00:22:28,710 --> 00:22:26,960
so i'm wondering kathy you know as you

569
00:22:31,750 --> 00:22:28,720
look beyond transportation

570
00:22:32,789 --> 00:22:31,760
to operations you know is that exciting

571
00:22:34,630 --> 00:22:32,799
to you i mean what

572
00:22:36,470 --> 00:22:34,640
you know what do you think about that

573
00:22:37,990 --> 00:22:36,480
the fact that it's not so much

574
00:22:39,190 --> 00:22:38,000
transportation anymore you have to worry

575
00:22:42,310 --> 00:22:39,200
about but actually

576
00:22:44,230 --> 00:22:42,320
capabilities operations thanks

577
00:22:45,430 --> 00:22:44,240
yeah i'd say we're still at the

578
00:22:47,510 --> 00:22:45,440
beginning steps of

579
00:22:48,549 --> 00:22:47,520
you know continuing to make this look

580
00:22:50,630 --> 00:22:48,559
easy but

581
00:22:51,990 --> 00:22:50,640
joel and steve have been doing a good a

582
00:22:55,350 --> 00:22:52,000
great job of that

583
00:22:56,310 --> 00:22:55,360
along with spacex right um but this is

584
00:22:58,470 --> 00:22:56,320
only our first

585
00:22:59,909 --> 00:22:58,480
you know full up operational mission so

586
00:23:02,390 --> 00:22:59,919
we need to keep

587
00:23:03,830 --> 00:23:02,400
having the missions look like this but

588
00:23:05,669 --> 00:23:03,840

but you're right eric it's

589
00:23:07,909 --> 00:23:05,679
it's very exciting that we're starting

590
00:23:09,430 --> 00:23:07,919
to lay in the foundations for these key

591
00:23:13,190 --> 00:23:09,440
capabilities

592
00:23:14,789 --> 00:23:13,200
and hopefully with artemis one mission

593
00:23:17,430 --> 00:23:14,799
and the uncrew demonstration mission

594
00:23:20,549 --> 00:23:17,440
getting behind us and then the crude

595
00:23:21,750 --> 00:23:20,559
demonstration mission occurring soon

596
00:23:25,270 --> 00:23:21,760
after that

597
00:23:28,470 --> 00:23:25,280
you know we are laying in the key

598
00:23:31,110 --> 00:23:28,480
foundational aspects with gateway

599
00:23:32,789 --> 00:23:31,120
and beginning to lay in the

600
00:23:33,990 --> 00:23:32,799
demonstration for the human landing

601
00:23:36,549 --> 00:23:34,000
system

602
00:23:38,310 --> 00:23:36,559
to really lay the foundation for us

603
00:23:41,750 --> 00:23:38,320
going back to the moon

604
00:23:45,350 --> 00:23:41,760
and sustainably you know

605
00:23:47,190 --> 00:23:45,360
operating on the moon and um

606
00:23:50,149 --> 00:23:47,200
this isn't a dream anymore we've got

607
00:23:52,789 --> 00:23:50,159
very very concrete steps to go do that

608
00:23:54,070 --> 00:23:52,799
and you know sasaki-san talked about

609
00:23:57,190 --> 00:23:54,080
that that you know

610
00:23:59,830 --> 00:23:57,200
we this is an international endeavor and

611
00:24:02,149 --> 00:23:59,840
we have very solid plans

612
00:24:03,510 --> 00:24:02,159
and agreements and contracts out there

613
00:24:06,470 --> 00:24:03,520

to go make this happen

614
00:24:09,669 --> 00:24:06,480
so it's a i'll tell you eric it's a

615
00:24:11,590 --> 00:24:09,679
great time to be the hero aaa

616
00:24:13,350 --> 00:24:11,600
a lot of exciting things going on in

617
00:24:17,029 --> 00:24:13,360
hilo and uh

618
00:24:21,190 --> 00:24:17,039
obviously um you know the landing today

619
00:24:38,630 --> 00:24:23,350
our next question comes from chris

620
00:24:46,630 --> 00:24:42,710
chris are you able to ask your question

621
00:24:48,390 --> 00:24:46,640
can you hear me we can yes okay sorry i

622
00:24:49,750 --> 00:24:48,400
was just saying congrats i i was

623
00:24:51,190 --> 00:24:49,760
mentioning how you guys got the

624
00:24:52,870 --> 00:24:51,200
spacecraft

625
00:24:54,549 --> 00:24:52,880
on the recovery boat in less than 30

626
00:24:57,110 --> 00:24:54,559
minutes and the

627
00:24:57,669 --> 00:24:57,120
the crew out in less than an hour and i

628
00:24:59,830 --> 00:24:57,679
was hoping

629
00:25:01,110 --> 00:24:59,840
someone maybe steve or hans can talk

630
00:25:03,510 --> 00:25:01,120
about the training

631
00:25:05,430 --> 00:25:03,520
that went into that and what your goals

632
00:25:07,110 --> 00:25:05,440
were going into the mission in terms of

633
00:25:09,110 --> 00:25:07,120
speeding up that timeline

634
00:25:12,830 --> 00:25:09,120
and then also what the benefits are of

635
00:25:15,110 --> 00:25:12,840
getting the crew out so quickly

636
00:25:17,669 --> 00:25:15,120
thanks

637
00:25:19,029 --> 00:25:17,679
yeah i i can start and then we'll let uh

638
00:25:22,149 --> 00:25:19,039

we'll let hans follow uh

639
00:25:24,470 --> 00:25:22,159
obviously you know i think um one of the

640
00:25:26,149 --> 00:25:24,480
things today

641
00:25:27,990 --> 00:25:26,159
first of all congratulations to the

642
00:25:30,470 --> 00:25:28,000
spacex recovery team they did a

643
00:25:32,630 --> 00:25:30,480
phenomenal job getting the crew

644
00:25:33,510 --> 00:25:32,640
out of the water very quickly and

645
00:25:35,269 --> 00:25:33,520
capsule on the

646
00:25:37,669 --> 00:25:35,279
on the ship you know i think one of the

647
00:25:41,110 --> 00:25:37,679
things uh that has enabled that is

648
00:25:43,350 --> 00:25:41,120
the they have done many practices of

649
00:25:47,269 --> 00:25:43,360
this operation in fact uh

650
00:25:49,909 --> 00:25:47,279
just before uh just after the launch uh

651
00:25:51,510 --> 00:25:49,919
last a couple fridays ago they actually

652
00:25:52,950 --> 00:25:51,520
went out and did a practice

653
00:25:54,549 --> 00:25:52,960
and they were really ready to go and

654
00:25:56,070 --> 00:25:54,559
then today you know the weather

655
00:25:58,549 --> 00:25:56,080
one of the considerations when we

656
00:26:00,310 --> 00:25:58,559
evaluated this night landing was

657
00:26:02,310 --> 00:26:00,320
was the weather and the sea states and

658
00:26:04,310 --> 00:26:02,320
the fact that it would be very benign

659
00:26:05,990 --> 00:26:04,320
uh conditions for recovery for the crew

660
00:26:06,789 --> 00:26:06,000
and i think that also helped the team

661
00:26:09,750 --> 00:26:06,799
and

662
00:26:10,310 --> 00:26:09,760
i i know the spacex goal is to to get

663
00:26:19,190 --> 00:26:10,320

the

664
00:26:21,350 --> 00:26:19,200
ship is a medical evaluation and we

665
00:26:23,190 --> 00:26:21,360
start doing actually research

666
00:26:25,110 --> 00:26:23,200
as part of the space station program to

667
00:26:27,669 --> 00:26:25,120
see how the crew

668
00:26:29,350 --> 00:26:27,679
react adapts to the earth gravity and

669
00:26:30,870 --> 00:26:29,360
that's important to us as well and

670
00:26:34,390 --> 00:26:30,880
i'll turn it over to you hans and see

671
00:26:38,149 --> 00:26:36,549
yeah yeah steve like like you said it's

672
00:26:39,029 --> 00:26:38,159
uh it's basically practice practice

673
00:26:41,750 --> 00:26:39,039
practice and

674
00:26:43,590 --> 00:26:41,760
uh and you know uh congratulations to

675
00:26:45,190 --> 00:26:43,600
the recovery team this was an awesome

676
00:26:46,789 --> 00:26:45,200
operation that uh

677
00:26:48,549 --> 00:26:46,799
i i was commenting on this earlier

678
00:26:51,510 --> 00:26:48,559
actually inside mission control and

679
00:26:51,990 --> 00:26:51,520
i noticed the uh the professionalism and

680
00:26:53,990 --> 00:26:52,000
how how

681
00:26:55,029 --> 00:26:54,000
smooth everything was and it looked more

682
00:26:58,230 --> 00:26:55,039
like a racecar

683
00:26:58,710 --> 00:26:58,240
pit stop than anything else um

684
00:27:00,630 --> 00:26:58,720
everything

685
00:27:02,630 --> 00:27:00,640
everybody was at the right spot and then

686
00:27:04,310 --> 00:27:02,640
did the right uh the right things

687
00:27:06,870 --> 00:27:04,320
and then um you know obviously the

688
00:27:07,909 --> 00:27:06,880

weather was was great we picked a great

689
00:27:10,310 --> 00:27:07,919
night for this

690
00:27:11,750 --> 00:27:10,320
operation so everything came together

691
00:27:13,990 --> 00:27:11,760
and resulted in

692
00:27:15,510 --> 00:27:14,000
in these record-breaking times for

693
00:27:18,549 --> 00:27:15,520
getting the uh

694
00:27:20,149 --> 00:27:18,559
the dragon out of the water and the crew

695
00:27:24,789 --> 00:27:20,159
out of dragon then so

696
00:27:28,149 --> 00:27:24,799
great great operation congratulations

697
00:27:32,149 --> 00:27:28,159
the next question is from camden hall

698
00:27:36,070 --> 00:27:33,909
thanks for taking my question my

699
00:27:37,750 --> 00:27:36,080
question is for kathy or anyone who

700
00:27:40,310 --> 00:27:37,760
feels that they can take it

701
00:27:41,990 --> 00:27:40,320
i know that dragon has a life life span

702
00:27:43,909 --> 00:27:42,000
for human space flight

703
00:27:45,909 --> 00:27:43,919
do you see that lifespan for human

704
00:27:47,909 --> 00:27:45,919
rights space flight increasing

705
00:27:49,990 --> 00:27:47,919
if dragon can show that it is safe and

706
00:27:53,510 --> 00:27:50,000
reusable over the next few flights

707
00:27:53,909 --> 00:27:53,520
thanks hey steve you want to take that

708
00:27:56,950 --> 00:27:53,919
one

709
00:27:58,149 --> 00:27:56,960
i mean i think this is in here yeah i

710
00:28:01,909 --> 00:27:58,159
can talk about the

711
00:28:04,310 --> 00:28:01,919
the dragon uh we uh um

712
00:28:05,110 --> 00:28:04,320
you know hans talked earlier that we

713
00:28:07,510 --> 00:28:05,120

have uh

714
00:28:08,389 --> 00:28:07,520
embarked upon reuse of these vehicles

715
00:28:11,190 --> 00:28:08,399
and and of course

716
00:28:11,990 --> 00:28:11,200
uh crew 2 is our first reused dragon

717
00:28:13,830 --> 00:28:12,000
capsule

718
00:28:15,590 --> 00:28:13,840
it flew on the demo 2 mission with bob

719
00:28:19,269 --> 00:28:15,600
and doug

720
00:28:21,350 --> 00:28:19,279
it can be reused uh up to five times

721
00:28:22,470 --> 00:28:21,360
based on our our assessments uh right

722
00:28:24,149 --> 00:28:22,480
now we've got

723
00:28:26,389 --> 00:28:24,159
our assessment is for the one flight but

724
00:28:28,230 --> 00:28:26,399
we can extend that up to five

725
00:28:30,710 --> 00:28:28,240
uh and really what that means is five

726
00:28:33,110 --> 00:28:30,720
flights uh for up to 210 days

727
00:28:34,789 --> 00:28:33,120
on orbit and so we'll look at that we'll

728
00:28:36,870 --> 00:28:34,799
continue to look at the vehicles when

729
00:28:39,110 --> 00:28:36,880
they come back one of the neat things

730
00:28:40,870 --> 00:28:39,120
that we'll do once we get resilience

731
00:28:43,110 --> 00:28:40,880
back to the dragonland

732
00:28:44,950 --> 00:28:43,120
area is we'll go through hans and the

733
00:28:48,310 --> 00:28:44,960
spacex team will go through

734
00:28:50,710 --> 00:28:48,320
and start the refurbishment and uh

735
00:28:51,430 --> 00:28:50,720
kudos to spacex for allowing nasa to

736
00:28:55,590 --> 00:28:51,440
have a

737
00:28:58,470 --> 00:28:55,600
there and so we'll

738
00:29:00,389 --> 00:28:58,480

go hand in hand with them as they go

739
00:29:00,630 --> 00:29:00,399
refurbish the spacecraft and what we do

740
00:29:03,110 --> 00:29:00,640
is

741
00:29:04,549 --> 00:29:03,120
as we take the components off and and

742
00:29:06,470 --> 00:29:04,559
look at reuse as we

743
00:29:08,549 --> 00:29:06,480
we learn from that and so i think

744
00:29:10,310 --> 00:29:08,559
there's a potential over time to really

745
00:29:11,990 --> 00:29:10,320
potentially extend that life and so we

746
00:29:15,350 --> 00:29:12,000
just do it kind of methodically step by

747
00:29:18,789 --> 00:29:17,029
okay we'll take a few questions from

748
00:29:20,870 --> 00:29:18,799
social media now

749
00:29:22,950 --> 00:29:20,880
dominic on twitter asks are there

750
00:29:23,750 --> 00:29:22,960
differences or modifications between the

751
00:29:30,389 --> 00:29:23,760
crew 1

752
00:29:34,310 --> 00:29:33,110
i can take that there are a few

753
00:29:37,190 --> 00:29:34,320
modifications between

754
00:29:38,870 --> 00:29:37,200
crew 1 and crew 2 capsules mostly it's

755
00:29:41,990 --> 00:29:38,880
the same vehicle

756
00:29:43,110 --> 00:29:42,000
uh the there's some upgrades to the

757
00:29:46,230 --> 00:29:43,120
propulsion systems

758
00:29:49,430 --> 00:29:46,240
uh on crew 2. uh for example

759
00:29:50,470 --> 00:29:49,440
uh some of those uh upgrades actually

760
00:29:53,430 --> 00:29:50,480
allowed us to

761
00:29:55,110 --> 00:29:53,440
utilize a little more propellant and

762
00:29:57,750 --> 00:29:55,120
flying a little bit higher wind

763
00:29:59,269 --> 00:29:57,760

on ascent and so before we've had an

764
00:30:01,750 --> 00:29:59,279
onshore wind component that

765
00:30:03,830 --> 00:30:01,760
we've ma had to manage around so one of

766
00:30:06,630 --> 00:30:03,840
the modifications improved that

767
00:30:07,430 --> 00:30:06,640
some of the software on on the crew tube

768
00:30:09,750 --> 00:30:07,440
vehicle

769
00:30:10,870 --> 00:30:09,760
has been upgraded to improve a board

770
00:30:13,750 --> 00:30:10,880
capability

771
00:30:15,110 --> 00:30:13,760
and escapes downrange for absent weather

772
00:30:18,230 --> 00:30:15,120
there's a battery upgrade

773
00:30:19,029 --> 00:30:18,240
on that crew 2 vehicle with a little bit

774
00:30:23,510 --> 00:30:19,039
improved

775
00:30:25,909 --> 00:30:23,520
energy storage

776
00:30:27,909 --> 00:30:25,919
and then of course we have a fly around

777
00:30:30,710 --> 00:30:27,919
capability on the crew 2 vehicle

778
00:30:32,310 --> 00:30:30,720
so at the end of the mission today we uh

779
00:30:36,310 --> 00:30:32,320
we undocked from the zenith

780
00:30:38,870 --> 00:30:36,320
port and did three maneuvers to go

781
00:30:40,710 --> 00:30:38,880
up and around station and below that

782
00:30:43,510 --> 00:30:40,720
vehicle has the capability to go

783
00:30:45,510 --> 00:30:43,520
360 degrees around the space station and

784
00:30:47,590 --> 00:30:45,520
then get good photography of all

785
00:30:48,549 --> 00:30:47,600
parts of the space station so those are

786
00:30:52,310 --> 00:30:48,559
just some of the

787
00:30:55,830 --> 00:30:55,190
another twitter question here maybe for

788
00:30:58,950 --> 00:30:55,840

holly

789
00:31:00,950 --> 00:30:58,960
or steve brandon on twitter asks if the

790
00:31:03,430 --> 00:31:00,960
crew will get to sleep at home

791
00:31:04,789 --> 00:31:03,440
or have to sleep at a nasa facility

792
00:31:07,350 --> 00:31:04,799
tonight

793
00:31:09,830 --> 00:31:07,360
yeah so so i can certainly answer that

794
00:31:12,710 --> 00:31:09,840
they'll actually sleep at our uh

795
00:31:14,470 --> 00:31:12,720
astronaut quarantine facility here at

796
00:31:16,470 --> 00:31:14,480
the johnson space center

797
00:31:18,389 --> 00:31:16,480
it's really important when they've been

798
00:31:18,870 --> 00:31:18,399
up on the space station for six months

799
00:31:20,549 --> 00:31:18,880
and

800
00:31:22,070 --> 00:31:20,559
you know not exposed to the same things

801
00:31:24,470 --> 00:31:22,080
down here on earth that they

802
00:31:26,950 --> 00:31:24,480
stay in quarantine a little bit longer

803
00:31:29,830 --> 00:31:26,960
you know while they're monitored by

804
00:31:30,549 --> 00:31:29,840
our our flight docs after their return

805
00:31:33,590 --> 00:31:30,559
and so

806
00:31:35,590 --> 00:31:33,600
they go straight into um an exercise

807
00:31:37,669 --> 00:31:35,600
protocol that helps them

808
00:31:39,909 --> 00:31:37,679
uh recover quickly and and they'll be

809
00:31:42,310 --> 00:31:39,919
out in about not too long but they

810
00:31:47,509 --> 00:31:42,320
they do stay at a quarantine facility uh

811
00:31:49,750 --> 00:31:47,519
for a little bit after their return

812
00:31:51,110 --> 00:31:49,760
okay thanks and one more also from

813
00:31:54,149 --> 00:31:51,120

twitter

814
00:31:58,470 --> 00:31:54,159
will dragon resilience be crew three's

815
00:32:05,669 --> 00:32:02,230
um i i could take that question uh

816
00:32:08,710 --> 00:32:05,679
resilience uh will not fly in the crew 3

817
00:32:10,389 --> 00:32:08,720
mission uh spacex is in the process of

818
00:32:14,710 --> 00:32:10,399
building a new dragon

819
00:32:17,750 --> 00:32:14,720
for crew 3 and uh it's well underway

820
00:32:18,950 --> 00:32:17,760
propulsion systems very far along um

821
00:32:20,549 --> 00:32:18,960
there's two parts of the vehicle that

822
00:32:21,190 --> 00:32:20,559
have been already made together and then

823
00:32:26,870 --> 00:32:21,200
the

824
00:32:29,750 --> 00:32:26,880
is being built up so it'll be a new

825
00:32:33,509 --> 00:32:29,760
vehicle for the crew 3 flight

826
00:32:37,830 --> 00:32:36,070
okay thanks all right we'll go ahead and

827
00:32:39,909 --> 00:32:37,840
wrap up here and let our participants

828
00:32:42,389 --> 00:32:39,919
get some much deserved rest

829
00:32:44,389 --> 00:32:42,399
thanks to everyone for joining today to

830
00:32:45,350 --> 00:32:44,399
stay tuned to nasa.gov for more

831
00:32:47,909 --> 00:32:45,360
information

832
00:32:50,070 --> 00:32:47,919
about the first opportunity to talk to

833
00:32:57,830 --> 00:32:50,080
the crew one crew later this week

834
00:33:08,830 --> 00:32:57,840
thank you

835
00:33:10,270 --> 00:33:08,840
[Music]

836
00:33:19,750 --> 00:33:10,280
so

837
00:33:21,669 --> 00:33:19,760
[Music]

838
00:33:24,149 --> 00:33:21,679

did you know that if you were born after

839
00:33:26,149 --> 00:33:24,159
2000 during your entire life there has

840
00:33:27,990 --> 00:33:26,159
been someone living in space

841
00:33:30,070 --> 00:33:28,000
that's thanks to the international space

842
00:33:31,990 --> 00:33:30,080
station which celebrated its 20th

843
00:33:34,149 --> 00:33:32,000
anniversary of continuous human

844
00:33:35,750 --> 00:33:34,159
habitation in 2020.

845
00:33:37,750 --> 00:33:35,760
you've probably heard a lot about the

846
00:33:38,710 --> 00:33:37,760
incredible science that happens onboard