



1  
00:00:04,470 --> 00:00:02,310  
the harrowing scenes from the movie

2  
00:00:06,470 --> 00:00:04,480  
gravity the oscar-nominated hollywood

3  
00:00:08,549 --> 00:00:06,480  
thriller that brought the attention to

4  
00:00:10,629 --> 00:00:08,559  
the dangers for astronauts when they

5  
00:00:12,709 --> 00:00:10,639  
step outside the international space

6  
00:00:15,430 --> 00:00:12,719  
station hello everyone i'm michelle

7  
00:00:17,750 --> 00:00:15,440  
franken in new york that danger was all

8  
00:00:20,070 --> 00:00:17,760  
too real for american astronauts rick

9  
00:00:22,310 --> 00:00:20,080  
mastracchio and mike hopkins when they

10  
00:00:24,630 --> 00:00:22,320  
had to make the dangerous trip to repair

11  
00:00:27,589 --> 00:00:24,640  
the cooling system on the iss back in

12  
00:00:30,070 --> 00:00:27,599  
december but that mission was a success

13  
00:00:33,110 --> 00:00:30,080

and they are both joining us now for a

14

00:00:36,150 --> 00:00:33,120

unique look into life in space guys

15

00:00:38,389 --> 00:00:36,160

thank you for joining us

16

00:00:40,150 --> 00:00:38,399

i just wanted to get this out of the way

17

00:00:41,350 --> 00:00:40,160

right off the bat

18

00:00:42,630 --> 00:00:41,360

from what you've seen in the movie

19

00:00:44,790 --> 00:00:42,640

gravity is that something that could

20

00:00:50,950 --> 00:00:44,800

actually happen a robotic arm breaking

21

00:00:54,630 --> 00:00:52,950

well of course things can happen in

22

00:00:56,310 --> 00:00:54,640

space things go wrong there's always

23

00:00:58,630 --> 00:00:56,320

risk there is danger that's that's

24

00:01:01,110 --> 00:00:58,640

definitely true but uh you know it was a

25

00:01:02,069 --> 00:01:01,120

movie uh they over dramatize things they

26

00:01:04,390 --> 00:01:02,079

uh

27

00:01:06,070 --> 00:01:04,400

the the actors overreact to situations

28

00:01:08,310 --> 00:01:06,080

we train for a lot of off nominal

29

00:01:10,469 --> 00:01:08,320

situations and if something goes wrong

30

00:01:12,469 --> 00:01:10,479

we stay very calm and we run procedures

31

00:01:14,469 --> 00:01:12,479

and we work with the ground to

32

00:01:15,350 --> 00:01:14,479

you know to recover whatever goes wrong

33

00:01:17,190 --> 00:01:15,360

so

34

00:01:18,870 --> 00:01:17,200

the the movie gravity was a very

35

00:01:25,190 --> 00:01:18,880

exciting movie it was great to watch but

36

00:01:29,190 --> 00:01:27,350

and rick you're a spacewalk veteran but

37

00:01:31,749 --> 00:01:29,200

you had some trouble with your suit

38

00:01:37,350 --> 00:01:31,759

during one of the evas is that a drip

39

00:01:41,030 --> 00:01:38,550

well whenever you're out doing a

40

00:01:42,870 --> 00:01:41,040

spacewalk you definitely have heightened

41

00:01:44,950 --> 00:01:42,880

alertness and heightened awareness of

42

00:01:46,310 --> 00:01:44,960

where you are and what you're doing

43

00:01:47,990 --> 00:01:46,320

uh so

44

00:01:49,990 --> 00:01:48,000

but you also remain very calm because

45

00:01:51,910 --> 00:01:50,000

like i said we trained this many times

46

00:01:53,990 --> 00:01:51,920

i've done many spacewalks now i've

47

00:01:55,910 --> 00:01:54,000

trained many many times in houston in

48

00:01:57,670 --> 00:01:55,920

the large swimming pool so if something

49

00:01:59,910 --> 00:01:57,680

goes wrong we have procedures we work

50

00:02:02,230 --> 00:01:59,920

them with the ground like i said before

51  
00:02:03,590 --> 00:02:02,240  
and uh but every once in a while

52  
00:02:05,109 --> 00:02:03,600  
something does get your attention if you

53  
00:02:06,389 --> 00:02:05,119  
get an alarm on your suit or something

54  
00:02:10,869 --> 00:02:06,399  
goes wrong it definitely gets your heart

55  
00:02:15,270 --> 00:02:12,949  
and mike want to ask you a question too

56  
00:02:16,949 --> 00:02:15,280  
do you ever get a chance to sort of take

57  
00:02:22,390 --> 00:02:16,959  
in the moment when you're out there are

58  
00:02:26,630 --> 00:02:24,550  
no actually there were several times

59  
00:02:28,630 --> 00:02:26,640  
when we had uh we had time to just look

60  
00:02:29,750 --> 00:02:28,640  
around and see the earth going by and it

61  
00:02:31,509 --> 00:02:29,760  
was actually

62  
00:02:33,589 --> 00:02:31,519  
amazing truly incredible because for the

63  
00:02:35,430 --> 00:02:33,599

first time you get to see the earth

64

00:02:38,229 --> 00:02:35,440

passing by without any obstructions

65

00:02:40,070 --> 00:02:38,239

without having to look out a window

66

00:02:40,949 --> 00:02:40,080

with the frame around it and all of that

67

00:02:42,550 --> 00:02:40,959

so

68

00:02:44,229 --> 00:02:42,560

we were certainly very busy but there

69

00:02:47,190 --> 00:02:44,239

are times when you need to just slow

70

00:02:48,710 --> 00:02:47,200

down and pause and maybe there's

71

00:02:50,550 --> 00:02:48,720

you're waiting on a step that the ground

72

00:02:51,910 --> 00:02:50,560

needs to take with the system or

73

00:02:56,869 --> 00:02:51,920

something of that nature so we had a few

74

00:02:59,670 --> 00:02:58,229

very good now there's been an

75

00:03:01,670 --> 00:02:59,680

interesting video that's been making the

76  
00:03:04,070 --> 00:03:01,680  
rounds from one of your colleagues katie

77  
00:03:05,509 --> 00:03:04,080  
coleman showing us how the toilet works

78  
00:03:07,110 --> 00:03:05,519  
all that stuff you know that everyone

79  
00:03:09,509 --> 00:03:07,120  
has questions about

80  
00:03:11,830 --> 00:03:09,519  
in space using m ms that doesn't look

81  
00:03:17,509 --> 00:03:11,840  
too comfortable but it does represent

82  
00:03:21,350 --> 00:03:18,790  
is there a through

83  
00:03:23,270 --> 00:03:21,360  
well yeah so the the systems up here uh

84  
00:03:25,190 --> 00:03:23,280  
like the like the toilet and all of that

85  
00:03:27,430 --> 00:03:25,200  
uh it's certainly a little bit different

86  
00:03:29,190 --> 00:03:27,440  
than than what we use down on earth but

87  
00:03:30,789 --> 00:03:29,200  
uh it does work pretty well but it also

88  
00:03:32,710 --> 00:03:30,799

takes a lot of maintenance to keep it

89

00:03:34,070 --> 00:03:32,720

going so

90

00:03:35,990 --> 00:03:34,080

you know that's one of those things that

91

00:03:41,670 --> 00:03:36,000

if anything does go wrong with it it

92

00:03:45,110 --> 00:03:43,350

now of course you've been out there

93

00:03:47,350 --> 00:03:45,120

doing all sorts of repairs but there's

94

00:03:48,789 --> 00:03:47,360

also experiments you're doing up there

95

00:03:51,270 --> 00:03:48,799

for students on earth one of them

96

00:03:58,630 --> 00:03:51,280

involves an ant farm what happens if

97

00:04:02,470 --> 00:04:00,229

well the uh the ants were obviously

98

00:04:04,470 --> 00:04:02,480

encased in a uh in a container and

99

00:04:05,830 --> 00:04:04,480

unable to escape but uh

100

00:04:08,550 --> 00:04:05,840

you know if they got out i guess it

101  
00:04:09,429 --> 00:04:08,560  
would be our job to catch them and uh

102  
00:04:11,670 --> 00:04:09,439  
and

103  
00:04:16,870 --> 00:04:11,680  
corral them back up but luckily none of

104  
00:04:19,909 --> 00:04:18,390  
i know all those things you have to

105  
00:04:21,909 --> 00:04:19,919  
think about and all those questions we

106  
00:04:24,629 --> 00:04:21,919  
have here some of them seem very silly

107  
00:04:27,030 --> 00:04:24,639  
but i know that your space there is very

108  
00:04:34,070 --> 00:04:27,040  
limited so how are you dealing with the

109  
00:04:37,430 --> 00:04:35,270  
yeah actually that's a that's a

110  
00:04:39,590 --> 00:04:37,440  
fantastic question and very relevant to

111  
00:04:42,390 --> 00:04:39,600  
what just happened so yesterday we

112  
00:04:43,350 --> 00:04:42,400  
actually released the cygnus orbital one

113  
00:04:46,790 --> 00:04:43,360

vehicle

114

00:04:48,870 --> 00:04:46,800

about a month ago brought up a bunch of

115

00:04:51,030 --> 00:04:48,880

supplies it brought up food clothes

116

00:04:53,909 --> 00:04:51,040

experiments brought up the ants

117

00:04:56,230 --> 00:04:53,919

but when it left yesterday it took away

118

00:04:58,150 --> 00:04:56,240

all of our trash and so it's it's a

119

00:04:59,749 --> 00:04:58,160

great day here on on station because

120

00:05:02,390 --> 00:04:59,759

it's nice and clean there's hardly any

121

00:05:04,150 --> 00:05:02,400

trash around uh it smells really good

122

00:05:06,469 --> 00:05:04,160

and and actually i think as we're

123

00:05:08,390 --> 00:05:06,479

speaking right now orbital is orbital

124

00:05:13,110 --> 00:05:08,400

one is is probably getting close to

125

00:05:15,670 --> 00:05:14,469

you know mike let's stay with you it

126

00:05:18,390 --> 00:05:15,680

looks like you've been trying to bring

127

00:05:19,670 --> 00:05:18,400

some new life to the iss but it hasn't

128

00:05:24,469 --> 00:05:19,680

seemed to work out some of those

129

00:05:28,070 --> 00:05:26,390

yeah that's right i i was able to bring

130

00:05:29,990 --> 00:05:28,080

a few seeds up with me some pumpkin

131

00:05:32,230 --> 00:05:30,000

seeds some sunflower seeds and it's

132

00:05:33,909 --> 00:05:32,240

pretty amazing how easy it is to to get

133

00:05:34,710 --> 00:05:33,919

them started to get them to germinate

134

00:05:38,390 --> 00:05:34,720

and

135

00:05:40,629 --> 00:05:38,400

got the right kind of light unless

136

00:05:42,469 --> 00:05:40,639

you've got the right kind of food

137

00:05:44,070 --> 00:05:42,479

it's not very easy to keep them going

138

00:05:46,390 --> 00:05:44,080

and so that's that's been pretty tough i

139

00:05:48,870 --> 00:05:46,400

can i can make them last for about uh

140

00:05:50,710 --> 00:05:48,880

about three weeks to to six weeks or so

141

00:05:55,990 --> 00:05:50,720

but but then after that they just they'd

142

00:06:00,230 --> 00:05:58,309

pushing those hydroponics so can either

143

00:06:02,070 --> 00:06:00,240

of you describe an average day on board

144

00:06:03,830 --> 00:06:02,080

the iss of course we

145

00:06:05,510 --> 00:06:03,840

don't normally have a chance to go up

146

00:06:06,870 --> 00:06:05,520

there and see that so give us an idea of

147

00:06:10,550 --> 00:06:06,880

what you guys go through on a daily

148

00:06:14,790 --> 00:06:12,550

okay well we wake up fairly early we get

149

00:06:16,550 --> 00:06:14,800

about an hour to eat breakfast and get

150

00:06:18,070 --> 00:06:16,560

ready for work first thing in the

151  
00:06:19,590 --> 00:06:18,080  
morning after that is we have a meeting

152  
00:06:21,510 --> 00:06:19,600  
with the ground folks and they kind of

153  
00:06:23,749 --> 00:06:21,520  
give us our schedule for the day and

154  
00:06:25,590 --> 00:06:23,759  
that schedule include three basic things

155  
00:06:27,350 --> 00:06:25,600  
a lot of exercise about two and a half

156  
00:06:29,110 --> 00:06:27,360  
hours of exercise

157  
00:06:30,870 --> 00:06:29,120  
a certain amount of maintenance of the

158  
00:06:32,629 --> 00:06:30,880  
space station if we have to do some

159  
00:06:34,230 --> 00:06:32,639  
maintenance on the on the toilet or any

160  
00:06:36,629 --> 00:06:34,240  
other systems and but the biggest part

161  
00:06:38,070 --> 00:06:36,639  
of it will be science today i was

162  
00:06:40,629 --> 00:06:38,080  
working in this glove box right here

163  
00:06:43,029 --> 00:06:40,639

burning small samples to see how a fire

164

00:06:47,029 --> 00:06:43,039

and flames react in space or behave in

165

00:06:48,870 --> 00:06:47,039

space so it's uh most of our day is set

166

00:06:50,790 --> 00:06:48,880

with experiments and science but then of

167

00:06:52,390 --> 00:06:50,800

course we have maintenance and we have a

168

00:06:57,990 --> 00:06:52,400

lot of exercise so that we can walk when

169

00:07:01,589 --> 00:06:59,830

and back to mike you're about ready to

170

00:07:03,589 --> 00:07:01,599

come down in march and your schedule

171

00:07:05,430 --> 00:07:03,599

could actually be moved up a little bit

172

00:07:09,110 --> 00:07:05,440

because of too much snow what's going on

173

00:07:12,710 --> 00:07:10,550

yeah actually we were scheduled to

174

00:07:14,150 --> 00:07:12,720

return on the 12th of march but

175

00:07:16,150 --> 00:07:14,160

as of right now that's been moved to the

176

00:07:17,430 --> 00:07:16,160

11th of march and basically because of

177

00:07:18,870 --> 00:07:17,440

where we're going to land so we're

178

00:07:21,350 --> 00:07:18,880

originally going to land in the northern

179

00:07:23,510 --> 00:07:21,360

part of kazakhstan which still has a lot

180

00:07:25,189 --> 00:07:23,520

of snow there and so for the search and

181

00:07:26,710 --> 00:07:25,199

rescue folks and for all of those to be

182

00:07:28,629 --> 00:07:26,720

able to to get us out of the vehicle

183

00:07:31,029 --> 00:07:28,639

safely once we touch down we've moved to

184

00:07:33,029 --> 00:07:31,039

a southern landing zone and just due to

185

00:07:34,790 --> 00:07:33,039

the orbital mechanics and all of that

186

00:07:36,309 --> 00:07:34,800

that means we're going to we're going to

187

00:07:40,950 --> 00:07:36,319

depart the station a day earlier and

188

00:07:44,150 --> 00:07:42,629

well you know something like i don't

189

00:07:45,909 --> 00:07:44,160

know a billion people are watching the

190

00:07:48,150 --> 00:07:45,919

oscars on earth are we also going to

191

00:07:56,070 --> 00:07:48,160

have two viewers from space rooting for

192

00:08:00,710 --> 00:07:57,430

i don't think we're going to be watching

193

00:08:02,469 --> 00:08:00,720

it live but we'll probably ask houston

194

00:08:04,390 --> 00:08:02,479

maybe to uplink it for us or at least

195

00:08:06,390 --> 00:08:04,400

give us the results of all the movies

196

00:08:12,550 --> 00:08:06,400

that won the awards but uh it'll be

197

00:08:16,469 --> 00:08:14,550

well astronauts rick mastracchio and

198

00:08:18,390 --> 00:08:16,479

mike hopkins thank you so much for

199

00:08:20,550 --> 00:08:18,400

joining us and giving us a unique look

200

00:08:22,550 --> 00:08:20,560

and a link to the international space

201

00:08:25,270 --> 00:08:22,560

station you of course can get a complete

202

00:08:27,189 --> 00:08:25,280

recap right here on abcnews.com for now

203

00:08:30,230 --> 00:08:27,199

i'm michelle franzen in new york with

204

00:08:31,909 --> 00:08:30,240

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