

ОС
00


A07
3
X - 0.008

VT
0.00
Y 0.000

ФИЛЬТР
Z - 0.069

РАЗВОРОТ
КУРС

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1
00:00:05,590 --> 00:00:03,669
and this is mission control houston

2
00:00:07,349 --> 00:00:05,600
we're now able to bring you a replay of

3
00:00:10,629 --> 00:00:07,359
that hatch closure from inside the

4
00:00:13,509 --> 00:00:10,639
station while the crews said farewell to

5
00:00:15,589 --> 00:00:13,519
each other uh for the last time in space

6
00:00:18,550 --> 00:00:15,599
saw kotav verzanski and hopkins loaded

7
00:00:19,990 --> 00:00:18,560
into their soyuz tma-10m spacecraft why

8
00:00:49,190 --> 00:00:20,000
don't we take a quick look at that right

9
00:00:52,389 --> 00:00:50,869
so right here you can see uh in the

10
00:00:54,069 --> 00:00:52,399
foreground the three departing crew

11
00:00:56,470 --> 00:00:54,079
members sergey ryzansky on the left

12
00:00:58,470 --> 00:00:56,480
there i like kotov in the middle and

13
00:01:00,630 --> 00:00:58,480

just floating to the back in the gray

14

00:01:02,310 --> 00:01:00,640

jump suit is mike hopkins

15

00:01:05,509 --> 00:01:02,320

the three were loading into their soyuz

16

00:01:07,590 --> 00:01:05,519

tma-10m spacecraft see mike hopkins nasa

17

00:01:10,710 --> 00:01:07,600

astronaut giving a quick wave farewell

18

00:01:15,590 --> 00:01:13,350

the astronauts loading into the craft

19

00:01:17,910 --> 00:01:15,600

this view from inside the poisk module

20

00:01:19,749 --> 00:01:17,920

in the russian segment their net russian

21

00:01:22,870 --> 00:01:19,759

cosmonaut sergey ryazanskiy giving a

22

00:01:25,670 --> 00:01:22,880

quick smile before he loads in

23

00:01:27,910 --> 00:01:25,680

rozanski will be in the

24

00:01:28,950 --> 00:01:27,920

left seat of the craft hopkins in the

25

00:01:30,789 --> 00:01:28,960

right seat

26

00:01:33,350 --> 00:01:30,799

and the center will be departing

27

00:01:35,990 --> 00:01:33,360

expedition 38 commander ole kotov giving

28

00:01:37,830 --> 00:01:36,000

a quick hug there to koichi wakata the

29

00:01:39,510 --> 00:01:37,840

now commander of the international space

30

00:01:41,830 --> 00:01:39,520

station will remain on board for

31

00:01:44,069 --> 00:01:41,840

expedition 39

32

00:01:49,350 --> 00:01:44,079

kotov now they're moving into the

33

00:01:53,270 --> 00:01:51,510

as the russian cosmonaut on board and

34

00:01:54,630 --> 00:01:53,280

the commander of the soyuz he'll be in

35

00:01:56,630 --> 00:01:54,640

charge

36

00:01:58,389 --> 00:01:56,640

of the craft during its descent you can

37

00:02:00,630 --> 00:01:58,399

see some of the soka launch and entry

38

00:02:01,910 --> 00:02:00,640

suits tucked just to the lower left of

39

00:02:04,149 --> 00:02:01,920

the craft

40

00:02:05,510 --> 00:02:04,159

there kotov fromzanski giving the final

41

00:02:07,429 --> 00:02:05,520

wave goodbye

42

00:02:09,270 --> 00:02:07,439

before kotov

43

00:02:11,270 --> 00:02:09,280

will now reach up and

44

00:02:25,030 --> 00:02:11,280

prepare that hatchway for its final

45

00:02:29,910 --> 00:02:26,949

again this happening earlier this

46

00:02:31,990 --> 00:02:29,920

afternoon at 3 58 p.m central time you

47

00:02:33,830 --> 00:02:32,000

see kotov on the left mike hopkins in

48

00:02:36,150 --> 00:02:33,840

the middle a little towards the back and

49

00:02:38,630 --> 00:02:36,160

sergey ryazanskiy on the right waving

50

00:02:41,509 --> 00:02:38,640

goodbye to michael turn rick mastracchio

51
00:02:43,110 --> 00:02:41,519
and karisha akata will remain on board

52
00:02:45,509 --> 00:02:43,120
right here the hatch

53
00:02:48,630 --> 00:02:45,519
of the soyuz craft closed officially

54
00:02:51,350 --> 00:02:48,640
again at 3 58 p.m central

55
00:02:54,150 --> 00:02:51,360
that hatchway connecting the craft right

56
00:02:56,550 --> 00:02:54,160
now to poisk in the russian segment

57
00:02:57,670 --> 00:02:56,560
here you can see mikhail taran closing

58
00:03:01,190 --> 00:02:57,680
the

59
00:03:03,270 --> 00:03:01,200
and

60
00:03:05,589 --> 00:03:03,280
now the craft conducting a series of

61
00:03:07,670 --> 00:03:05,599
leak checks the crews on board ensuring

62
00:03:09,509 --> 00:03:07,680
the integrity of their spacecraft as

63
00:03:11,589 --> 00:03:09,519

they continue to move towards the next

64

00:03:13,110 --> 00:03:11,599

major milestone of tonight's events

65

00:03:14,949 --> 00:03:13,120

which will be the undocking of that

66

00:03:20,229 --> 00:03:14,959

soyuz tma-10

67

00:03:20,239 --> 00:03:25,750

so the command on dock has been given

68

00:03:44,390 --> 00:03:27,589

thank you we can see you with

69

00:03:49,350 --> 00:03:45,350

no

70

00:03:52,229 --> 00:03:50,710

thank you

71

00:03:56,550 --> 00:03:52,239

right now the hooks holding the vehicle

72

00:04:04,229 --> 00:03:58,149

should have physical separation in just

73

00:04:08,630 --> 00:04:05,990

this view again a camera on board the

74

00:04:39,270 --> 00:04:08,640

soyuz craft pointing at the poisk module

75

00:04:45,670 --> 00:04:42,710

and physical separation confirmed

76
00:04:47,510 --> 00:04:45,680
confirmed at 702 pm central time held

77
00:04:49,110 --> 00:04:47,520
the station in the cross soyuz craft

78
00:04:51,590 --> 00:04:49,120
which is now no longer attached we're

79
00:05:00,150 --> 00:04:51,600
flying about 261 statute miles over

80
00:05:00,160 --> 00:05:28,790
looking good

81
00:05:32,870 --> 00:05:31,029
again separation confirmed on this

82
00:05:34,150 --> 00:05:32,880
camera view if you look in the lower

83
00:05:36,830 --> 00:05:34,160
left corner

84
00:05:38,550 --> 00:05:36,840
that bottom number is the rate of

85
00:05:39,749 --> 00:05:38,560
departure

86
00:05:50,550 --> 00:05:39,759
as you can see just a little over a

87
00:05:55,189 --> 00:05:53,990
voice module coming into view

88
00:05:57,189 --> 00:05:55,199

along with much of the rest of the

89

00:05:59,189 --> 00:05:57,199

russian segment

90

00:06:02,150 --> 00:05:59,199

and physical separation confirmed just

91

00:06:12,230 --> 00:06:02,160

uh about two minutes ago at 7 02 pm

92

00:06:15,510 --> 00:06:14,150

now just about a minute or so away from

93

00:06:17,110 --> 00:06:15,520

the next step which will be the

94

00:06:19,029 --> 00:06:17,120

separation burn

95

00:06:21,270 --> 00:06:19,039

in which thrusters on board the soyuz

96

00:06:23,590 --> 00:06:21,280

will fire for about 15 seconds to

97

00:06:25,830 --> 00:06:23,600

increase the rate of departure from the

98

00:06:41,510 --> 00:06:25,840

station for the craft by a little over

99

00:06:59,510 --> 00:06:44,390

don't forget to remove it later

100

00:06:59,520 --> 00:07:10,390

is

101
00:07:10,400 --> 00:07:26,230
unintelligible

102
00:07:26,240 --> 00:07:40,550
activation yes copy

103
00:07:45,909 --> 00:07:42,309
the same vehicle officer here in houston

104
00:07:48,550 --> 00:07:45,919
confirming the separation burn has begun

105
00:07:50,390 --> 00:07:48,560
thrusters on the soyuz now firing

106
00:08:01,830 --> 00:07:50,400
to increase its rate of departure from

107
00:08:11,510 --> 00:08:03,350
reports confirming the thrusters

108
00:08:11,520 --> 00:08:17,510
we expected see the station

109
00:08:17,520 --> 00:08:37,190
bye bye station

110
00:08:37,200 --> 00:08:51,030
the activation of operations

111
00:09:01,350 --> 00:08:53,110
and just now as you can see we're

112
00:09:06,870 --> 00:09:02,870
pretty well on its way away from the

113
00:09:11,910 --> 00:09:09,110

the craft uh successfully undocked a

114

00:09:14,550 --> 00:09:11,920

little over 20 minutes ago from the

115

00:09:16,790 --> 00:09:14,560

poisk module

116

00:09:26,150 --> 00:09:16,800

we'll stick with it as long as we have a

117

00:09:29,910 --> 00:09:27,990

inside there right now i like kotov

118

00:09:32,630 --> 00:09:29,920

sergey ryazanskiy and mike hopkins on

119

00:09:35,670 --> 00:09:32,640

their way back down to planet earth

120

00:09:42,710 --> 00:09:35,680

after spending 166 days in space and on

121

00:09:46,790 --> 00:09:44,790

this view right now coming from you

122

00:09:50,230 --> 00:09:46,800

right as the international space station

123

00:10:16,230 --> 00:09:50,240

and the soyuz just passed over hawaii

124

00:10:20,069 --> 00:10:18,630

and there we have it the visiting

125

00:10:22,310 --> 00:10:20,079

vehicle officer here in houston

126
00:10:23,829 --> 00:10:22,320
reporting the search and recovery

127
00:10:25,910 --> 00:10:23,839
forces have

128
00:10:28,710 --> 00:10:25,920
reported touchdown there you see the

129
00:10:30,949 --> 00:10:28,720
central screen in kazakhstan

130
00:10:34,310 --> 00:10:30,959
or in the russian mission control center

131
00:10:36,470 --> 00:10:34,320
uh reporting they have landed

132
00:10:39,030 --> 00:10:36,480
hopefully we'll get some video soon uh

133
00:10:40,710 --> 00:10:39,040
from the russian forces uh down there on

134
00:10:42,870 --> 00:10:40,720
the ground

135
00:10:47,190 --> 00:10:42,880
we're gonna landing time

136
00:10:49,110 --> 00:10:47,200
uh right at around 10 25 pm central

137
00:11:02,790 --> 00:10:49,120
being confirmed by search and recovery

138
00:11:06,550 --> 00:11:04,470

at this point the search and recovery

139

00:11:08,310 --> 00:11:06,560

forces were still preparing to extract

140

00:11:09,829 --> 00:11:08,320

the crew you can see them off to the

141

00:11:12,150 --> 00:11:09,839

right there building the extraction

142

00:11:14,949 --> 00:11:12,160

stand that gets fitted over the top of

143

00:11:16,710 --> 00:11:14,959

the soyuz craft which this time happened

144

00:11:18,630 --> 00:11:16,720

to land upright

145

00:11:20,150 --> 00:11:18,640

not uncommon for the craft to also land

146

00:11:22,230 --> 00:11:20,160

on its side

147

00:11:33,190 --> 00:11:22,240

but in this case it did land upright

148

00:11:37,110 --> 00:11:35,670

rotate it please

149

00:11:54,069 --> 00:11:37,120

a little more

150

00:12:00,150 --> 00:11:57,670

where do we put it to

151
00:12:07,750 --> 00:12:00,160
attention

152
00:12:11,670 --> 00:12:09,269
central seat

153
00:12:13,590 --> 00:12:11,680
now you see ola kotov being removed from

154
00:12:14,949 --> 00:12:13,600
the central seat of the soyuz craft the

155
00:12:18,069 --> 00:12:14,959
first one out

156
00:12:21,190 --> 00:12:18,079
carried over to his chair waiting

157
00:12:31,269 --> 00:12:21,200
by the search and recovery forces back

158
00:12:35,430 --> 00:12:33,350
and kotov was in the center seat of the

159
00:12:37,509 --> 00:12:35,440
descent module the commander of the

160
00:12:39,190 --> 00:12:37,519
soyuz craft during its uh

161
00:12:41,110 --> 00:12:39,200
descent

162
00:12:44,550 --> 00:12:41,120
for all of stages from undocking all the

163
00:12:48,629 --> 00:12:47,190

next out was sergey ryazanskiy another

164

00:12:50,230 --> 00:12:48,639

russian cosmonaut

165

00:12:51,350 --> 00:12:50,240

going down the uh

166

00:12:54,310 --> 00:12:51,360

retrieval

167

00:13:19,190 --> 00:12:54,320

slide there into the waiting arms of the

168

00:13:22,949 --> 00:13:21,990

uh was the board engineer on the soyuz

169

00:13:26,150 --> 00:13:22,959

craft

170

00:13:28,230 --> 00:13:26,160

and he was seated in the left seat

171

00:13:30,389 --> 00:13:28,240

to uh kotav's left

172

00:13:31,910 --> 00:13:30,399

inside of the soyuz he was responsible

173

00:13:34,150 --> 00:13:31,920

for backing up

174

00:13:35,990 --> 00:13:34,160

kotov throughout all of the operations

175

00:13:38,389 --> 00:13:36,000

for tonight's landing

176

00:13:40,790 --> 00:13:38,399

118 over 77.

177

00:13:43,189 --> 00:13:40,800

wrapping up his first space flight

178

00:13:44,629 --> 00:13:43,199

it was a rookie back in september but a

179

00:14:04,870 --> 00:13:44,639

rookie no more

180

00:14:08,710 --> 00:14:06,629

and then last but not least getting out

181

00:14:10,629 --> 00:14:08,720

of the soyuz craft nasa astronaut mike

182

00:14:11,910 --> 00:14:10,639

hopkins

183

00:14:15,269 --> 00:14:11,920

he's

184

00:14:16,790 --> 00:14:15,279

you can see him uh coming down off the

185

00:14:18,629 --> 00:14:16,800

soyuz craft

186

00:14:25,590 --> 00:14:18,639

being carried out over to his waiting

187

00:14:33,750 --> 00:14:27,829

mike hopkins also completing his first

188

00:14:33,760 --> 00:14:39,350

move over here

189

00:14:44,550 --> 00:14:41,350

but again as you can see all the crew in

190

00:14:46,470 --> 00:14:44,560

good spirits despite landing in

191

00:14:47,990 --> 00:14:46,480

pretty frozen conditions out there in

192

00:14:49,189 --> 00:14:48,000

kazakhstan

193

00:14:50,870 --> 00:14:49,199

the temperature

194

00:14:51,829 --> 00:14:50,880

in the single digits are right around

195

00:14:53,110 --> 00:14:51,839

zero

196

00:14:55,189 --> 00:14:53,120

fahrenheit

197

00:14:57,269 --> 00:14:55,199

for these recovery forces

198

00:14:58,790 --> 00:14:57,279

as much as six inches of snow on the

199

00:15:01,269 --> 00:14:58,800

ground you can see

200

00:15:05,110 --> 00:15:03,030

making getting around a little bit more

201
00:15:05,990 --> 00:15:05,120
difficult than usual but

202
00:15:07,910 --> 00:15:06,000
this

203
00:15:09,829 --> 00:15:07,920
has kind of been the norm for uh quite a

204
00:15:13,990 --> 00:15:09,839
few landings in the march time frame in

205
00:15:16,790 --> 00:15:14,000
kazakhstan i think cruise well

206
00:15:18,870 --> 00:15:16,800
exercise well able to adapt to these

207
00:15:20,710 --> 00:15:18,880
conditions to safely retrieve the crew

208
00:15:23,750 --> 00:15:20,720
from their soyuz vehicle

209
00:15:26,150 --> 00:15:23,760
so he's itself able to land a very

210
00:15:27,509 --> 00:15:26,160
rugged spacecraft launching and landing

211
00:15:29,670 --> 00:15:27,519
in

212
00:15:31,269 --> 00:15:29,680
fairly

213
00:15:33,670 --> 00:15:31,279

unusual conditions

214

00:15:43,590 --> 00:15:33,680

high wind precipitation snow and low

215

00:15:47,509 --> 00:15:45,269

right now continuing to bring you live

216

00:15:50,870 --> 00:15:47,519

video from the landing site of the soyuz

217

00:15:52,870 --> 00:15:50,880

tma-10m vehicle i'll let kotov on screen

218

00:15:55,590 --> 00:15:52,880

now commander of that soyuz craft and

219

00:15:57,670 --> 00:15:55,600

commander of expedition 38 safely out of

220

00:15:59,670 --> 00:15:57,680

the capsule along with mike hopkins and

221

00:16:01,590 --> 00:15:59,680

sergey ryazanskiy

222

00:16:04,790 --> 00:16:01,600

the three completing their descent in

223

00:16:08,870 --> 00:16:06,870

throughout this evening not a vehicle

224

00:16:10,870 --> 00:16:08,880

not having any issues

225

00:16:12,949 --> 00:16:10,880

search and recovery forces overcoming

226

00:16:48,949 --> 00:16:12,959

some weather issues to get there and get

227

00:16:53,030 --> 00:16:51,030

so the flight surgeon is continuing to

228

00:16:55,430 --> 00:16:53,040

take some vital signs uh quickly from

229

00:16:57,350 --> 00:16:55,440

the crew members after they've been

230

00:17:00,790 --> 00:16:57,360

successfully extracted from their soyuz

231

00:17:04,789 --> 00:17:02,870

crew should only be remaining here at

232

00:17:07,189 --> 00:17:04,799

the landing site for a brief amount of

233

00:17:09,990 --> 00:17:07,199

time before they're loaded back up to

234

00:17:12,470 --> 00:17:10,000

head to the forward staging point of

235

00:17:14,309 --> 00:17:12,480

carraganda where the rest of the

236

00:17:16,230 --> 00:17:14,319

search and recovery forces and nasa

237

00:17:43,669 --> 00:17:16,240

personnel along with roast cosmos

238

00:17:46,710 --> 00:17:45,350

before moving on to their respective

239

00:17:48,549 --> 00:17:46,720

home bases

240

00:17:50,870 --> 00:17:48,559

kotov and rozanski heading back to the

241

00:17:53,270 --> 00:17:50,880

guerin cosmonaut training center in star

242

00:17:54,950 --> 00:17:53,280

city russia mike hopkins bound for the

243

00:18:07,190 --> 00:17:54,960

jonathan space center here in houston

244

00:18:11,350 --> 00:18:08,230

as you can tell just from the

245

00:18:12,870 --> 00:18:11,360

helicopters taking off visibility and

246

00:18:15,669 --> 00:18:12,880

snow conditions

247

00:18:17,350 --> 00:18:15,679

pretty pretty rough out there in central

248

00:18:20,230 --> 00:18:17,360

kazakhstan right now in the month of

249

00:18:24,549 --> 00:18:22,310

recovery forces combating temperatures

250

00:18:25,909 --> 00:18:24,559

in the single digits fahrenheit

251

00:18:27,909 --> 00:18:25,919

which

252

00:18:30,870 --> 00:18:27,919

earlier this morning central time or

253

00:18:33,270 --> 00:18:30,880

late yesterday evening kazakh time

254

00:18:34,870 --> 00:18:33,280

caused many of the recovery forces to

255

00:18:36,630 --> 00:18:34,880

turn back from their forward staging