



1
00:00:18,260 --> 00:00:15,740
this is Mission Control Houston we are

2
00:00:21,490 --> 00:00:18,270
now receiving live video of the soyuz

3
00:00:25,550 --> 00:00:21,500
tma-03m spacecraft it is descending

4
00:00:28,249 --> 00:00:25,560
elegantly under its chute everything is

5
00:00:31,370 --> 00:00:28,259
on track the weather down at the landing

6
00:00:33,889 --> 00:00:31,380
site mostly sunny skies temperatures in

7
00:00:36,280 --> 00:00:33,899
the low 80s light winds out of the north

8
00:00:40,190 --> 00:00:36,290
now descending into a cloudbank

9
00:00:42,619 --> 00:00:40,200
at the time that the final series of

10
00:00:45,229 --> 00:00:42,629
helicopters left karaganda about two

11
00:00:48,500 --> 00:00:45,239
hours ago to begin moving toward the

12
00:00:50,720 --> 00:00:48,510
landing site there was some light rain

13
00:00:52,910 --> 00:00:50,730

in the kerrigan de area but that's well

14

00:00:55,459 --> 00:00:52,920

to the north east of the landing site

15

00:00:56,779 --> 00:00:55,469

you can see that the weather at the

16

00:00:59,750 --> 00:00:56,789

landing site or in the close proximity

17

00:01:02,149 --> 00:00:59,760

of the landing site is good landing is

18

00:01:04,070 --> 00:01:02,159

scheduled just 10 minutes from now we

19

00:01:05,870 --> 00:01:04,080

now of course are watching live video

20

00:01:08,090 --> 00:01:05,880

courtesy of Rose cosmos the Russian

21

00:01:11,140 --> 00:01:08,100

Federal Space Agency of the final

22

00:01:35,050 --> 00:01:11,150

minutes of the descent of the soyuz tma

23

00:01:39,710 --> 00:01:37,940

station Houston on one no response

24

00:01:41,900 --> 00:01:39,720

required we know you don't have K you

25

00:01:43,700 --> 00:01:41,910

just wanted to give you an update 29 s

26
00:02:06,160 --> 00:01:43,710
is under shoot now and we're watching

27
00:02:12,130 --> 00:02:09,050
drifting down to its landing site

28
00:02:18,650 --> 00:02:12,140
Oleg Kononenko Don Pettit Andre Kuiper's

29
00:02:22,820 --> 00:02:18,660
under a fully deployed main shoot time

30
00:02:26,000 --> 00:02:22,830
to touchdown about nine minutes a dozen

31
00:02:28,550 --> 00:02:26,010
Russian mi-8 helicopters with Russian

32
00:02:30,590 --> 00:02:28,560
search and recovery Force personnel are

33
00:02:33,560 --> 00:02:30,600
Essie and Nagi a technical specialists

34
00:02:35,900 --> 00:02:33,570
NASA support personnel and European

35
00:02:38,240 --> 00:02:35,910
Space Agency's support personnel now

36
00:02:40,370 --> 00:02:38,250
flying in that race track pattern that

37
00:02:43,070 --> 00:02:40,380
we talked about earlier around the prime

38
00:02:44,960 --> 00:02:43,080

landing site so far so good

39

00:02:46,970 --> 00:02:44,970

it looks like the Soyuz vehicle is

40

00:03:49,100 --> 00:02:46,980

headed for an on target bull's eye

41

00:03:55,650 --> 00:03:53,250

everything continuing to look in great

42

00:03:57,270 --> 00:03:55,660

shape with the Soyuz vehicle once again

43

00:03:59,760 --> 00:03:57,280

now you're watching its descent under

44

00:04:01,830 --> 00:03:59,770

its main parachute toward its landing

45

00:04:04,170 --> 00:04:01,840

target - just to the southeast of the

46

00:04:09,810 --> 00:04:04,180

town of Jessica's gone in southeast

47

00:04:11,640 --> 00:04:09,820

Kazakhstan the undocking of the soyuz

48

00:04:14,130 --> 00:04:11,650

from the international space station's

49

00:04:16,349 --> 00:04:14,140

Rassvet module occurred on time just

50

00:04:20,580 --> 00:04:16,359

before 11:48 p.m. Central time on

51
00:04:22,560 --> 00:04:20,590
Saturday night the Soyuz conducted to

52
00:04:24,600 --> 00:04:22,570
separation burns to move to a distance

53
00:04:29,190 --> 00:04:24,610
of 12 kilometers away from the station

54
00:04:30,060 --> 00:04:29,200
at which point at 219 a.m. just under an

55
00:04:32,520 --> 00:04:30,070
hour ago

56
00:04:34,890 --> 00:04:32,530
the Soyuz engines fired for four minutes

57
00:04:37,890 --> 00:04:34,900
and 15 seconds and a deorbit burn a

58
00:04:39,330 --> 00:04:37,900
deceleration retrograde maneuver to

59
00:04:42,120 --> 00:04:39,340
begin the trip back home into the

60
00:04:44,760 --> 00:04:42,130
Earth's atmosphere the three sections of

61
00:04:47,640 --> 00:04:44,770
the Soyuz vehicle separated perfectly at

62
00:04:49,800 --> 00:04:47,650
2:47 a.m. Central time followed by the

63
00:04:52,800 --> 00:04:49,810

deployment of the chutes 15 minutes

64

00:04:55,920 --> 00:04:52,810

later setting the stage for what you're

65

00:04:58,640 --> 00:04:55,930

watching as of the Soyuz descends under

66

00:05:01,290 --> 00:04:58,650

mostly clear skies to a landing site in

67

00:05:05,250 --> 00:05:01,300

a very desolate area southeast

68

00:05:07,920 --> 00:05:05,260

Kazakhstan search and recovery forces

69

00:05:11,010 --> 00:05:07,930

are flying overhead accompanied by two

70

00:05:13,680 --> 00:05:11,020

Antonov fixed-wing aircraft that are

71

00:05:15,900 --> 00:05:13,690

relaying data and telemetry from the

72

00:05:17,340 --> 00:05:15,910

Soyuz spacecraft back to the flight

73

00:07:01,429 --> 00:05:17,350

control team at the Russian Mission

74

00:07:06,889 --> 00:07:04,009

on a Sunday afternoon in Southeast

75

00:07:10,040 --> 00:07:06,899

Kazakhstan the view of the soyuz tma-03m

76

00:07:13,219 --> 00:07:10,050

spacecraft continuing to drift gently

77

00:07:15,679 --> 00:07:13,229

back toward earth now just four minutes

78

00:07:18,769 --> 00:07:15,689

away from its scheduled touchdown its

79

00:07:21,169 --> 00:07:18,779

main chute having been deployed on time

80

00:07:22,820 --> 00:07:21,179

a few minutes ago all of the Soyuz

81

00:07:25,279 --> 00:07:22,830

system is in good shape we are not

82

00:07:26,989 --> 00:07:25,289

hearing communications at the moment

83

00:07:30,619 --> 00:07:26,999

from the crew but the search and

84

00:07:34,189 --> 00:07:30,629

recovery forces will be in contact with

85

00:07:36,290 --> 00:07:34,199

the crew momentarily and are continuing

86

00:07:37,639 --> 00:07:36,300

to relay updates to the Russian flight

87

00:07:44,640 --> 00:07:37,649

control team of the Russian Mission

88

00:07:44,650 --> 00:08:07,189

so Fusco pavilion piazza maggiore murder

89

00:08:41,030 --> 00:08:12,960

cumulative already hopeful for an ugly

90

00:08:46,980 --> 00:08:43,530

continuing to receive stunning views of

91

00:08:49,590 --> 00:08:46,990

the final minutes of the the flight of

92

00:08:52,230 --> 00:08:49,600

the soyuz tma-03m and the expedition 31

93

00:08:56,610 --> 00:08:52,240

crew oleg kononenko Don Pettit Andre

94

00:08:59,040 --> 00:08:56,620

Kuiper's as they gently descend this

95

00:09:02,670 --> 00:08:59,050

last couple of minutes or so back to

96

00:09:04,920 --> 00:09:02,680

their landing site search and recovery

97

00:09:06,630 --> 00:09:04,930

personnel are all in place hovering

98

00:09:08,550 --> 00:09:06,640

around the prime landing site flying in

99

00:09:11,160 --> 00:09:08,560

a circular pattern just waiting for that

100

00:09:13,410 --> 00:09:11,170

capsule to touchdown at which point the

101
00:09:15,210 --> 00:09:13,420
Russian mi-8 helicopters will begin to

102
00:10:00,720 --> 00:09:15,220
land in sequential fashion near the

103
00:10:06,400 --> 00:10:02,830
we're about a minute and a half away

104
00:10:10,630 --> 00:10:06,410
from touchdown everything continuing to

105
00:10:12,610 --> 00:10:10,640
look good radio beacon signals from the

106
00:10:16,270 --> 00:10:12,620
Soyuz being picked up by the Antonov a

107
00:10:17,980 --> 00:10:16,280
fixed-wing aircraft we haven't had any

108
00:10:22,260 --> 00:10:17,990
voice communication from the crew

109
00:10:25,240 --> 00:10:22,270
recently but all reports prior to that

110
00:10:28,270 --> 00:10:25,250
showed an excellent descent everything

111
00:10:53,130 --> 00:10:28,280
nominal also use vehicle functions in

112
00:10:58,170 --> 00:10:56,430
should be approaching touchdown with any

113
00:11:00,600 --> 00:10:58,180

luck at all we may be able to see the

114

00:11:23,060 --> 00:11:00,610

soft landing engines fire just a second

115

00:11:27,660 --> 00:11:25,340

and you can see one of those

116

00:11:30,780 --> 00:11:27,670

search-and-recovery helicopters once

117

00:11:37,610 --> 00:11:30,790

again that helicopter part of a dozen

118

00:11:42,510 --> 00:11:37,620

such Russian mi-8 helicopters touchdown

119

00:11:44,640 --> 00:11:42,520

314 and 48 seconds a.m. Central time you

120

00:11:47,250 --> 00:11:44,650

saw the soft landing engines fire just a

121

00:11:49,020 --> 00:11:47,260

split second before the Soyuz hit the

122

00:11:50,690 --> 00:11:49,030

ground southeast of Jessica's gone a

123

00:11:53,730 --> 00:11:50,700

bull's-eye touchdown

124

00:11:55,500 --> 00:11:53,740

landing once again at 3:14 and 48

125

00:11:58,770 --> 00:11:55,510

seconds Central Time

126
00:12:02,070 --> 00:11:58,780
2:14 and 48 seconds p.m. at the landing

127
00:12:04,560 --> 00:12:02,080
site in Kazakhstan the expedition 31

128
00:12:27,980 --> 00:12:04,570
crew Oleg Kononenko Don Pettit Andre

129
00:12:33,230 --> 00:12:30,500
and as you can see from this video

130
00:12:35,150 --> 00:12:33,240
courtesy of Ross cosmos some of the

131
00:12:39,140 --> 00:12:35,160
initial vehicles part of the search and

132
00:12:41,330 --> 00:12:39,150
recovery forces are already making their

133
00:12:45,280 --> 00:12:41,340
way toward the spacecraft they will

134
00:12:48,680 --> 00:12:45,290
secure the chute so the vehicle is not

135
00:12:57,590 --> 00:12:48,690
dragged along due to any wind conditions

136
00:13:00,470 --> 00:12:57,600
at the surface the the helicopters will

137
00:13:01,850 --> 00:13:00,480
begin landing in sequential fashion to

138
00:13:04,790 --> 00:13:01,860

begin to make their way towards the

139

00:13:19,450 --> 00:13:04,800

spacecraft and begin the process of

140

00:13:29,750 --> 00:13:23,030

Sophia's Moscow station speak to

141

00:13:31,760 --> 00:13:29,760

everyone a future go ahead that very

142

00:13:34,490 --> 00:13:31,770

first helicopter that you see landing

143

00:13:36,530 --> 00:13:34,500

contains rse and nergi a personnel

144

00:13:39,260 --> 00:13:36,540

technical specialists who will tend to

145

00:13:41,330 --> 00:13:39,270

the safing of the soyuz vehicle and will

146

00:13:43,940 --> 00:13:41,340

begin the process of erecting an

147

00:13:47,300 --> 00:13:43,950

inflatable medical tent nearby which the

148

00:13:49,550 --> 00:13:47,310

crew members will be brought into in

149

00:13:52,040 --> 00:13:49,560

reclining chairs after they've had an

150

00:13:54,770 --> 00:13:52,050

opportunity to adapt to Earth's gravity

151
00:13:58,480 --> 00:13:54,780
for a few minutes cover one mode

152
00:14:02,530 --> 00:13:58,490
activation info

153
00:14:50,250 --> 00:14:02,540
cover one is on the impo o excellent

154
00:14:55,269 --> 00:14:52,960
you're looking at the front screen of

155
00:14:57,579 --> 00:14:55,279
the Russian Mission Control Center in

156
00:15:00,790 --> 00:14:57,589
the center screen the Russian words for

157
00:15:06,250 --> 00:15:00,800
they've landed the landing of the Soyuz

158
00:15:09,579 --> 00:15:06,260
TMA o 3m spacecraft occurring right on

159
00:15:12,819 --> 00:15:09,589
schedule and right on the mark at 3:14

160
00:15:16,050 --> 00:15:12,829
and 48 seconds a.m. Central Time 2:14

161
00:15:20,410 --> 00:15:16,060
and 48 seconds p.m. at the landing site

162
00:15:22,930 --> 00:15:20,420
you saw the descent almost from the time

163
00:15:26,650 --> 00:15:22,940

of chute opening all the way through

164

00:15:28,810 --> 00:15:26,660

cloud layers onto a sunbathed

165

00:15:31,569 --> 00:15:28,820

landing site in southeast Kazakhstan

166

00:15:34,360 --> 00:15:31,579

search and recovery forces now moving

167

00:15:36,759 --> 00:15:34,370

toward the vehicle itself to begin the

168

00:17:57,310 --> 00:15:36,769

process of saving the Soyuz and the

169

00:18:04,970 --> 00:18:00,370

this is Mission Control Houston to recap

170

00:18:08,540 --> 00:18:04,980

we were a captive audience to live

171

00:18:11,030 --> 00:18:08,550

television of the Soyuz TMA 3 M vehicle

172

00:18:14,990 --> 00:18:11,040

descending under its main parachute for

173

00:18:18,620 --> 00:18:15,000

a touchdown that occurred on time and on

174

00:18:21,410 --> 00:18:18,630

target at 3:14 and 48 seconds a.m.

175

00:18:25,490 --> 00:18:21,420

Central time about seven minutes ago

176

00:18:27,620 --> 00:18:25,500

that capped off a flawless night of

177

00:18:29,990 --> 00:18:27,630

activities that began with the farewells

178

00:18:35,360 --> 00:18:30,000

and the hatch closure in the mid evening

179

00:18:37,460 --> 00:18:35,370

on Saturday night all of the leak checks

180

00:18:38,780 --> 00:18:37,470

and preparations for undocking went

181

00:18:41,060 --> 00:18:38,790

without a hitch

182

00:18:45,080 --> 00:18:41,070

the undocking itself occurring over

183

00:18:47,660 --> 00:18:45,090

China at 11:47 and 50 seconds p.m.

184

00:18:50,120 --> 00:18:47,670

Central time on Saturday night just

185

00:18:55,900 --> 00:18:50,130

before 1:00 a.m. Central time Eastern

186

00:19:00,620 --> 00:18:58,610

unlatched itself from the Rassvet module

187

00:19:04,360 --> 00:19:00,630

that it had been attached to since

188

00:19:07,850 --> 00:19:04,370

December 23rd following the launch of

189

00:19:09,290 --> 00:19:07,860

the petit kononenko and kuipers crew

190

00:19:12,020 --> 00:19:09,300

from the Baikonur cosmodrome in

191

00:19:14,270 --> 00:19:12,030

Kazakhstan two days earlier the

192

00:19:18,560 --> 00:19:14,280

undocking was followed by a quick test

193

00:19:20,870 --> 00:19:18,570

of the soyuz digital autopilot system an

194

00:19:24,710 --> 00:19:20,880

engineering analysis test that had been

195

00:19:26,600 --> 00:19:24,720

scheduled and pre-plan that enabled the

196

00:19:27,710 --> 00:19:26,610

Soyuz to begin backing away and phasing

197

00:19:30,100 --> 00:19:27,720

away from the international space

198

00:19:32,450 --> 00:19:30,110

station over a period of two orbits

199

00:19:35,540 --> 00:19:32,460

before the deorbit burn of the Soyuz

200

00:19:37,400 --> 00:19:35,550

engines at 219 a.m. Central time that

201
00:19:39,650 --> 00:19:37,410
enabled the Soyuz to drop out of orbit

202
00:19:41,900 --> 00:19:39,660
for its descent back into the Earth's

203
00:19:44,480 --> 00:19:41,910
atmosphere the three sections of the

204
00:19:47,090 --> 00:19:44,490
Soyuz separated pirate technically from

205
00:19:48,980 --> 00:19:47,100
one another 28 minutes after the deorbit

206
00:19:50,270 --> 00:19:48,990
burn that was followed a few minutes

207
00:19:52,910 --> 00:19:50,280
later by the deployment of the

208
00:19:54,980 --> 00:19:52,920
parachutes and a flawless descent on a

209
00:19:58,580 --> 00:19:54,990
Sunday afternoon for a landing in

210
00:20:00,590 --> 00:19:58,590
southeast Kazakhstan about 145

211
00:20:44,640 --> 00:20:00,600
kilometers just to the southeast of the

212
00:20:51,060 --> 00:20:48,870
so at this point as the Ross Aviance

213
00:20:53,340 --> 00:20:51,070

search and recovery forces make their

214

00:20:56,460 --> 00:20:53,350

way in there helicopters and all-terrain

215

00:20:58,830 --> 00:20:56,470

vehicles to the spacecraft again the

216

00:21:00,690 --> 00:20:58,840

helicopters several of them already on

217

00:21:03,480 --> 00:21:00,700

the ground others in the process of

218

00:21:07,799 --> 00:21:03,490

descending for a landing in a circular

219

00:21:09,510 --> 00:21:07,809

pattern around the spacecraft itself we

220

00:21:11,100 --> 00:21:09,520

will be standing by for additional

221

00:21:13,110 --> 00:21:11,110

television from the landing site

222

00:21:15,000 --> 00:21:13,120

hopefully with the extraction of the

223

00:21:17,310 --> 00:21:15,010

crew from the spacecraft they will be

224

00:21:19,620 --> 00:21:17,320

placed in individual reclining

225

00:21:22,650 --> 00:21:19,630

comfortable chaise lounge type chairs

226
00:21:24,570 --> 00:21:22,660
that to have an opportunity to begin to

227
00:21:26,700 --> 00:21:24,580
readapt Earth's gravity for the first

228
00:21:28,530 --> 00:21:26,710
time in six and a half months before

229
00:21:31,669 --> 00:21:28,540
they are carried in those chairs into

230
00:21:34,140 --> 00:21:31,679
that inflatable medical tent nearby to

231
00:21:37,290 --> 00:21:34,150
get out of there Russian sokol launch

232
00:21:40,380 --> 00:21:37,300
and entry suits and there we have now

233
00:21:43,290 --> 00:21:40,390
television from the landing site and you

234
00:21:49,399 --> 00:21:43,300
can see that the Soyuz vehicle landed in

235
00:21:54,419 --> 00:21:52,080
depending on the conditions out at the

236
00:21:58,080 --> 00:21:54,429
landing site and the wind sometimes the

237
00:22:00,600 --> 00:21:58,090
spacecraft will land and bounce or be

238
00:22:02,789 --> 00:22:00,610

dragged off onto its side in this case

239

00:22:05,899 --> 00:22:02,799

you can see that the Soyuz landed

240

00:22:08,490 --> 00:22:05,909

upright what this means is the

241

00:22:11,159 --> 00:22:08,500

extraction hatches at the top of the

242

00:22:13,649 --> 00:22:11,169

spacecraft a small ladder will be

243

00:22:16,110 --> 00:22:13,659

erected alongside of the spacecraft and

244

00:22:20,430 --> 00:22:16,120

the crew then will be pulled out of that

245

00:22:21,870 --> 00:22:20,440

top hatch one by one in order to make

246

00:22:23,820 --> 00:22:21,880

their way down the ladder and into the

247

00:22:58,390 --> 00:22:23,830

chairs that will be set up a short time

248

00:23:03,160 --> 00:22:59,980

you can see on the right side of your

249

00:23:06,790 --> 00:23:03,170

screen RSC Energia personnel beginning

250

00:23:09,250 --> 00:23:06,800

to bring that extraction ladder to the

251
00:23:11,950 --> 00:23:09,260
side of the soyuz spacecraft which

252
00:23:15,040 --> 00:23:11,960
landed upright with touchdown occurring

253
00:23:16,660 --> 00:23:15,050
just 12 minutes ago you can see the

254
00:23:18,880 --> 00:23:16,670
rapidity with which the search and

255
00:23:21,780 --> 00:23:18,890
recovery forces attend to the spacecraft

256
00:23:24,520 --> 00:23:21,790
that of course aided by what was a

257
00:23:27,760 --> 00:23:24,530
bull's-eye landing for the Soyuz vehicle

258
00:23:31,030 --> 00:23:27,770
bringing Alek kononenko Don Pettit and

259
00:23:34,120 --> 00:23:31,040
Andre Kuiper's back to Earth after 193

260
00:23:37,390 --> 00:23:34,130
days in space 191 days onboard the

261
00:23:40,900 --> 00:23:37,400
International Space Station back up on

262
00:23:44,530 --> 00:23:40,910
the station 250 miles overhead the newly

263
00:23:46,360 --> 00:23:44,540

comprised expedition 32 crew the new

264

00:23:49,300 --> 00:23:46,370

commander gennady padalka the first

265

00:23:51,190 --> 00:23:49,310

three time station commander along with

266

00:23:53,610 --> 00:23:51,200

nasa flight engineer joe acaba and

267

00:23:57,070 --> 00:23:53,620

russian flight engineer sergei revin

268

00:23:59,230 --> 00:23:57,080

will be going to bed a short time from

269

00:24:01,720 --> 00:23:59,240

now for an extended sleep period Sunday

270

00:24:05,470 --> 00:24:01,730

and Monday we'll both be off-duty days

271

00:24:07,060 --> 00:24:05,480

for the crew onboard the International

272

00:24:09,100 --> 00:24:07,070

Space Station before they resume their

273

00:24:39,130 --> 00:24:09,110

normal complement of activities

274

00:24:48,529 --> 00:24:45,529

once again this latter device is placed

275

00:24:50,240 --> 00:24:48,539

around the Soyuz capsule for landings

276

00:24:55,700 --> 00:24:50,250

that occur when the vehicle lands

277

00:25:01,700 --> 00:24:55,710

upright it facilitates the extraction of

278

00:25:03,260 --> 00:25:01,710

the crew out of the top hatch first out

279

00:25:06,370 --> 00:25:03,270

of the vehicle will be the commander

280

00:25:12,470 --> 00:25:10,460

if form holds Don Pettit would be second

281

00:25:14,690 --> 00:25:12,480

to be extracted out of the right seat

282

00:25:17,720 --> 00:25:14,700

and the board engineer Andre Kuiper's

283

00:25:20,590 --> 00:25:17,730

from the European Space Agency and the

284

00:25:34,799 --> 00:25:20,600

left seat for today's entry and landing

285

00:25:42,039 --> 00:25:39,010

and once again in stark contrast to the

286

00:25:44,140 --> 00:25:42,049

weather conditions that Kononenko

287

00:25:47,380 --> 00:25:44,150

Kuiper's and Pettit left the planet on

288

00:25:48,640 --> 00:25:47,390

back on December 21st minus 22 degrees

289

00:25:51,909 --> 00:25:48,650

Fahrenheit from the Baikonur cosmodrome

290

00:25:55,240 --> 00:25:51,919

in Kazakhstan which is to the south west

291

00:25:59,440 --> 00:25:55,250

of where this spacecraft currently is

292

00:26:02,049 --> 00:25:59,450

sitting it is in the low 80s a short

293

00:27:41,880 --> 00:26:02,059

sleeve short sleeve environment for the

294

00:27:48,340 --> 00:27:46,150

the personnel in the blue suits are NASA

295

00:27:49,780 --> 00:27:48,350

support personnel you just saw dan

296

00:27:53,320 --> 00:27:49,790

Hartman from the International Space

297

00:27:59,050 --> 00:27:53,330

Station program office representing the

298

00:28:01,030 --> 00:27:59,060

ISS program at the landing site and RSC

299

00:28:04,540 --> 00:28:01,040

energy a personnel now at the top of the

300

00:28:06,280 --> 00:28:04,550

extraction table with the ladders to

301
00:28:09,400 --> 00:28:06,290
begin the process of opening up the

302
00:29:19,630 --> 00:28:09,410
hatch the precursor to the extraction of

303
00:29:26,160 --> 00:29:22,270
just after 2:30 p.m. at the landing site

304
00:29:28,600 --> 00:29:26,170
on a Sunday afternoon in Kazakhstan as

305
00:29:32,560 --> 00:29:28,610
search and recovery personnel and

306
00:29:36,730 --> 00:29:32,570
Russian technicians begin to work toward

307
00:29:41,350 --> 00:29:36,740
the extraction of the crew the Soyuz

308
00:29:46,600 --> 00:29:41,360
landing just about 18 minutes ago within

309
00:29:48,190 --> 00:29:46,610
seconds after touchdown Russian mi-8

310
00:29:50,050 --> 00:29:48,200
helicopters carrying the support

311
00:29:53,880 --> 00:29:50,060
personnel began to land in sequential

312
00:29:56,460 --> 00:29:53,890
fashion near the spacecraft to expedite

313
00:30:00,070 --> 00:29:56,470

their extraction they'll be placed in

314

00:30:02,980 --> 00:30:00,080

comfortable chairs reclining chairs to

315

00:30:05,140 --> 00:30:02,990

have an opportunity to get their sea

316

00:30:05,980 --> 00:30:05,150

legs or land legs back as the case may

317

00:30:13,240 --> 00:30:05,990

be

318

00:30:15,910 --> 00:30:13,250

they're brought in to a medical tent

319

00:30:18,550 --> 00:30:15,920

nearby that has been inflated and

320

00:30:19,990 --> 00:30:18,560

erected that medical tent is where the

321

00:30:22,270 --> 00:30:20,000

crew will get out of there Russian

322

00:30:24,190 --> 00:30:22,280

ahsoka launch and entry suits and get

323

00:30:28,180 --> 00:30:24,200

into more comfortable clothing before

324

00:30:30,340 --> 00:30:28,190

they are flown back by helicopter each

325

00:30:33,190 --> 00:30:30,350

crew member has its own his own

326

00:30:35,500 --> 00:30:33,200

helicopter to fly back two hours to the

327

00:30:40,930 --> 00:30:35,510

city of karaganda which was the staging

328

00:30:43,420 --> 00:30:40,940

city for this landing today there they

329

00:30:48,750 --> 00:30:43,430

will be greeted by a traditional Kazakh

330

00:30:52,210 --> 00:30:48,760

welcoming ceremony Pettit and Kuiper's

331

00:30:54,730 --> 00:30:52,220

will board a NASA plane to begin the

332

00:30:56,980 --> 00:30:54,740

long flight back to Houston while Alek

333

00:30:58,660 --> 00:30:56,990

Kononenko boards a Gagarin cosmonaut

334

00:31:00,760 --> 00:30:58,670

training center plane to fly back to

335

00:31:36,590 --> 00:31:00,770

Tchaikovsky airfield outside of star

336

00:31:42,899 --> 00:31:40,049

and you can see although somewhat

337

00:31:46,200 --> 00:31:42,909

obscured by the hoard of people around

338

00:31:49,010 --> 00:31:46,210

the spacecraft oleg kononenko the soyuz

339

00:31:54,120 --> 00:31:49,020

commander is now out of the top hatch

340

00:31:59,639 --> 00:31:54,130

his extraction coming in very very Swift

341

00:32:01,769 --> 00:31:59,649

fashion just about 20 minutes after the

342

00:32:04,680 --> 00:32:01,779

touchdown there was Kononenko placed in

343

00:32:06,750 --> 00:32:04,690

the center seat he will be flanked by

344

00:32:10,320 --> 00:32:06,760

Pettit and Kuiper's as soon as they are

345

00:32:12,990 --> 00:32:10,330

extracted the removal of the crew

346

00:32:15,210 --> 00:32:13,000

members from the Soyuz vehicle is always

347

00:32:21,049 --> 00:32:15,220

expedited if the vehicle lands upright

348

00:32:21,059 --> 00:32:24,710

the ground one

349

00:32:33,690 --> 00:32:30,480

go ahead of the crew doing have they

350

00:32:36,330 --> 00:32:33,700

extracted them from the capsule are you

351
00:32:47,750 --> 00:32:36,340
getting the imagery so far they only got

352
00:32:53,600 --> 00:32:49,860
what's the schedule gonna be like for us

353
00:32:58,590 --> 00:32:56,639
Robocop well as soon as they've

354
00:33:00,810 --> 00:32:58,600
extracted everybody from the descent

355
00:33:10,169 --> 00:33:00,820
module I'll give you a call and then

356
00:33:12,930 --> 00:33:10,179
we'll revisit our timeline okay but I

357
00:33:15,960 --> 00:33:12,940
think we won't be able to really go to

358
00:33:17,490 --> 00:33:15,970
sleep until morning then so I'll call

359
00:33:19,409 --> 00:33:17,500
you later in the day and I'll get you

360
00:33:21,960 --> 00:33:19,419
all the data on pressure gauge readings

361
00:33:23,630 --> 00:33:21,970
and so on and so forth correct all right

362
00:33:28,370 --> 00:33:23,640
so I used commander Oleg Kononenko

363
00:33:31,030 --> 00:33:28,380

waving as he's being attended to by his

364

00:33:34,020 --> 00:33:31,040

complement of Russian

365

00:33:36,909 --> 00:33:34,030

flight surgeon and nurse personnel

366

00:33:39,760 --> 00:33:36,919

everything continuing to proceed on

367

00:33:41,860 --> 00:33:39,770

track the next crew member who should be

368

00:33:43,870 --> 00:33:41,870

extracted should be done headed out of

369

00:33:45,669 --> 00:33:43,880

the right seat of the Soyuz vehicle and

370

00:33:47,650 --> 00:33:45,679

as you heard in that space-to-ground

371

00:33:50,500 --> 00:33:47,660

communication with the Russian Mission

372

00:33:53,010 --> 00:33:50,510

Control Center the new station commander

373

00:33:55,870 --> 00:33:53,020

expedition 32 commander gennady padalka

374

00:33:58,330 --> 00:33:55,880

inquiring about how the crew is doing

375

00:34:00,130 --> 00:33:58,340

and was informed that kononenko is out

376

00:35:08,160 --> 00:34:00,140

and that the rest of the extraction

377

00:35:12,670 --> 00:35:10,810

continuing to receive live television

378

00:35:15,760 --> 00:35:12,680

from the landing site in southeast

379

00:35:18,430 --> 00:35:15,770

Kazakhstan Alec Kononenko the Soyuz

380

00:35:20,560 --> 00:35:18,440

commander was extracted from the center

381

00:35:25,770 --> 00:35:20,570

seat of the Soyuz which landed upright

382

00:35:37,800 --> 00:35:25,780

at 3:14 a.m. Central Time 2:14 p.m.

383

00:35:41,890 --> 00:35:37,810

Kazakhstan time about 24 minutes ago the

384

00:35:44,349 --> 00:35:41,900

recovery process continues in good order

385

00:35:47,980 --> 00:35:44,359

the Soyuz space crafts systems have been

386

00:35:50,440 --> 00:35:47,990

saved by RSC energy of personnel once

387

00:35:52,090 --> 00:35:50,450

all three crew members are out they'll

388

00:35:55,240 --> 00:35:52,100

have a few minutes for a photo

389

00:35:58,150 --> 00:35:55,250

opportunity and once again to get their

390

00:36:00,640 --> 00:35:58,160

land legs back a bit as they adapt to

391

00:36:02,940 --> 00:36:00,650

the sensation of Earth's gravity for the

392

00:36:05,080 --> 00:36:02,950

first time in six and a half months

393

00:36:08,320 --> 00:36:05,090

they'll be brought into a nearby

394

00:36:10,240 --> 00:36:08,330

inflated medical tent to have their

395

00:36:13,210 --> 00:36:10,250

sokol launch and entry suits removed

396

00:36:17,170 --> 00:36:13,220

they'll slip into more comfortable

397

00:36:19,300 --> 00:36:17,180

clothing and if the time line goes as it

398

00:36:21,040 --> 00:36:19,310

usually does at the landing site about

399

00:36:23,849 --> 00:36:21,050

an hour and a half from now they should

400

00:36:26,980 --> 00:36:23,859

be wheels up in their respective

401
00:36:30,040 --> 00:36:26,990
helicopters for a two-hour flight back

402
00:36:33,820 --> 00:36:30,050
to the staging city of karaganda which

403
00:36:35,830 --> 00:36:33,830
is about 450 kilometres to the north

404
00:37:52,220 --> 00:36:35,840
east of the landing site that you're

405
00:37:57,900 --> 00:37:54,510
this view at the landing site and the

406
00:38:01,020 --> 00:37:57,910
white shirt is Alexy Krasnov who was the

407
00:38:02,490 --> 00:38:01,030
head of piloted programs basically the

408
00:38:08,340 --> 00:38:02,500
head of human spaceflight for the

409
00:38:10,530 --> 00:38:08,350
Russian Federal Space Agency on hand to

410
00:38:12,450 --> 00:38:10,540
witness firsthand the landing of the

411
00:38:14,730 --> 00:38:12,460
Soyuz vehicle the extraction of the crew

412
00:38:17,130 --> 00:38:14,740
and the whole process of the search and

413
00:39:05,620 --> 00:38:17,140

recovery of returning crewmembers from

414

00:39:12,650 --> 00:39:09,320

and European Space Agency flight

415

00:39:14,930 --> 00:39:12,660

engineer andre kuipers now out of the

416

00:39:16,490 --> 00:39:14,940

Soyuz vehicle so they reversed order of

417

00:39:19,160 --> 00:39:16,500

what is normally the extraction process

418

00:39:21,320 --> 00:39:19,170

of the crew wipers being helped down

419

00:39:25,490 --> 00:39:21,330

that a slide and will be carried now to

420

00:39:28,460 --> 00:39:25,500

that reclining chair wipers back on

421

00:39:31,190 --> 00:39:28,470

earth the second flight in the books 204

422

00:39:34,970 --> 00:39:31,200

days in space on to missions for Andre

423

00:39:37,100 --> 00:39:34,980

Kuiper's Kononenko that you see on the

424

00:39:41,210 --> 00:39:37,110

left-hand side of your screen now has

425

00:39:44,960 --> 00:39:41,220

completed 392 days in space on his two

426
00:39:47,870 --> 00:39:44,970
flights Kononenko flew four years ago as

427
00:39:50,960 --> 00:39:47,880
part of expedition 17 and now is tied

428
00:39:53,060 --> 00:39:50,970
for 14th place on the all-time list for

429
00:39:54,590 --> 00:39:53,070
space endurance and there at the landing

430
00:39:57,380 --> 00:39:54,600
site is the head of the Russian Federal

431
00:40:00,590 --> 00:39:57,390
Space Agency vladimir popov c'n who flew

432
00:40:04,190 --> 00:40:00,600
on one of the Russian mi-8 helicopters

433
00:40:06,530 --> 00:40:04,200
to the landing site to see how the

434
00:40:45,880 --> 00:40:06,540
landing operations occur up close and

435
00:40:53,120 --> 00:40:49,460
and last but not least Don Pettit NASA

436
00:40:55,220 --> 00:40:53,130
flight engineer who has just completed

437
00:40:59,559 --> 00:40:55,230
his second landing in a Soyuz vehicle

438
00:41:02,390 --> 00:40:59,569

and his third flight headed wrapping up

439

00:41:08,599 --> 00:41:02,400

370 days in space now fourth on the

440

00:41:55,350 --> 00:41:08,609

all-time list of US astronauts behind

441

00:41:55,360 --> 00:42:26,560

she's making you park bag

442

00:42:26,570 --> 00:44:37,160

Andrea and their babies

443

00:44:42,920 --> 00:44:40,190

once again you're watching video from

444

00:44:46,150 --> 00:44:42,930

the landing site in Southeast Kazakhstan

445

00:44:50,809 --> 00:44:46,160

where the soyuz tma-03m spacecraft

446

00:44:54,200 --> 00:44:50,819

touched down about 34 minutes ago

447

00:44:56,599 --> 00:44:54,210

right on time and right on target 3:14

448

00:45:00,950 --> 00:44:56,609

a.m. Central Time 2:14 p.m. at the

449

00:45:02,690 --> 00:45:00,960

landing site in Kazakhstan all three

450

00:45:04,849 --> 00:45:02,700

crew members have been extracted from

451
00:45:07,819 --> 00:45:04,859
the spacecraft they are in respective

452
00:45:11,599 --> 00:45:07,829
chairs to have a few minutes to relax

453
00:45:14,930 --> 00:45:11,609
and begin the adaptation back to a

454
00:45:15,940 --> 00:45:14,940
gravity environment andre kuipers there

455
00:45:19,009 --> 00:45:15,950
on the right

456
00:45:35,570 --> 00:45:19,019
Oleg Kononenko in the centre of your

457
00:45:49,320 --> 00:45:39,990
I'm Paris Thomas Connolly ladies patient

458
00:45:55,810 --> 00:45:53,790
Moscoe give a loose gennadi well

459
00:45:58,630 --> 00:45:55,820
everybody's been extracted from the

460
00:46:02,530 --> 00:45:58,640
descent module everybody's down on the

461
00:46:06,100 --> 00:46:02,540
ground everything is normal the works

462
00:46:11,109 --> 00:46:06,110
won then good to hear another mission

463
00:46:16,660 --> 00:46:11,119

completed well in that case we're gonna

464

00:46:21,850 --> 00:46:16,670

go off and get some rest all right you

465

00:46:27,640 --> 00:46:25,120

it's up to you really you know it's your

466

00:46:28,990 --> 00:46:27,650

discretion whenever you want to whenever

467

00:46:30,250 --> 00:46:29,000

you want to give us a call towards the

468

00:46:32,140 --> 00:46:30,260

evening yeah we're gonna give you Colt

469

00:46:33,609 --> 00:46:32,150

or towards the evening gets you the

470

00:46:36,970 --> 00:46:33,619

pressure gauge reading and so on and so

471

00:46:42,160 --> 00:46:36,980

forth well we'll do sounds good talk to

472

00:46:47,240 --> 00:46:45,350

with the landing of this Soyuz crew life

473

00:46:53,330 --> 00:46:47,250

continues onboard the International

474

00:46:56,180 --> 00:46:53,340

Space Station you just saw the as you're

475

00:46:58,610 --> 00:46:56,190

watching Andre Kuiper's at the landing

476

00:47:01,430 --> 00:46:58,620

site Oleg Kononenko next to him Don

477

00:47:03,590 --> 00:47:01,440

Pettit also has been extracted he is in

478

00:47:06,950 --> 00:47:03,600

the reclining chair next to Kononenko on

479

00:47:08,480 --> 00:47:06,960

the other side the new commander of the

480

00:47:14,090 --> 00:47:08,490

International Space Station gennady

481

00:47:17,780 --> 00:47:14,100

padalka padalka calling down to russian

482

00:47:20,180 --> 00:47:17,790

Mission Control and asking how the crew

483

00:47:23,180 --> 00:47:20,190

is doing flight controllers say they're

484

00:47:25,010 --> 00:47:23,190

doing just fine and padalka is saying

485

00:47:27,920 --> 00:47:25,020

we're going to go about our business now

486

00:47:29,360 --> 00:47:27,930

that business being an extended sleep

487

00:47:32,720 --> 00:47:29,370

period onboard the International Space

488

00:47:43,420 --> 00:47:32,730

Station and an off-duty day on Sunday

489

00:47:43,430 --> 00:50:01,590

you

490

00:50:07,930 --> 00:50:04,960

part of the post-landing operations

491

00:50:09,880 --> 00:50:07,940

include an opportunity for some photos

492

00:50:12,250 --> 00:50:09,890

to be taken around the crew members

493

00:50:15,940 --> 00:50:12,260

before they are lifted and there we go

494

00:50:19,660 --> 00:50:15,950

the first crew member soyuz commander

495

00:50:22,840 --> 00:50:19,670

oleg kononenko lifted now andre kuipers

496

00:50:26,650 --> 00:50:22,850

as they are being brought now into the

497

00:50:29,890 --> 00:50:26,660

inflatable medical tent nearby where

498

00:50:31,750 --> 00:50:29,900

they will have their Russian sokol

499

00:50:33,310 --> 00:50:31,760

launch and entry suits removed they'll

500

00:50:36,070 --> 00:50:33,320

be placed into more comfortable clothing

501
00:50:38,380 --> 00:50:36,080
as well Don Pettit of course and be

502
00:50:40,540 --> 00:50:38,390
prepared for a two hour helicopter

503
00:50:43,180 --> 00:50:40,550
flight back to the staging city of

504
00:50:46,140 --> 00:50:43,190
karaganda where the Russian mi-8

505
00:50:49,150 --> 00:50:46,150
helicopters departed from earlier today

506
00:50:51,820 --> 00:50:49,160
to begin to fan out and sequential

507
00:50:53,470 --> 00:50:51,830
fashion in and around the landing zone

508
00:51:02,440 --> 00:50:53,480
awaiting for the arrival of the Soyuz

509
00:51:02,450 --> 00:51:38,019
you

510
00:51:45,339 --> 00:51:43,149
and Don Pettit also being attended to as

511
00:51:48,339 --> 00:51:45,349
he is being carried into that medical

512
00:51:52,119 --> 00:51:48,349
tent all three crew members back on

513
00:51:55,259 --> 00:51:52,129

earth after 193 days in space 191 days

514

00:51:58,449 --> 00:51:55,269

onboard the International Space Station

515

00:52:01,149 --> 00:51:58,459

meanwhile attending to the removal of

516

00:52:03,489 --> 00:52:01,159

some cargo and samples brought back in

517

00:52:05,469 --> 00:52:03,499

the Soyuz vehicle RR SC and nerdier

518

00:52:07,959 --> 00:52:05,479

personnel and other members of the

519

00:52:11,679 --> 00:52:07,969

search and recovery forces the Soyuz

520

00:52:16,779 --> 00:52:11,689

landing at 3:14 a.m. Central Time 2:14

521

00:52:19,779 --> 00:52:16,789

p.m. Kazakhstan time a bull's-eye on