

Ф44 СБЛ... Т=19:32:50
 ВРМУАЛ ЛСК ГСО 2
 В1 ВРАМЕН ОХ 0,035%
 ДУСМ ОД РЕЖ ОУ 0,000%
 Р 171,1 ОZ 0,000%
 СВ 01050 КУРС 1
 γ 0,00°
 φ -24,75°
 ϑ -4,93°
 ψ -21,08°
 ϑ -22,54°
 ρ 8,208
 ρ -455,77
 РЧД РЧО
 φ ρ 0,18100 - ОУ -0,055 -0,055
 ρ 0,57Н/С ОZ -0,022 -0,022

1
00:00:04,150 --> 00:00:02,550
poppy moscow

2
00:00:07,110 --> 00:00:04,160
alexander kaleri one of the most

3
00:00:09,190 --> 00:00:07,120
experienced space travelers in history

4
00:00:12,150 --> 00:00:09,200
at the controls of the tele-robotically

5
00:00:13,910 --> 00:00:12,160
operated rendezvous system in the zvezda

6
00:00:16,310 --> 00:00:13,920
service module in the russian segment of

7
00:00:19,029 --> 00:00:16,320
the international space station guiding

8
00:00:20,870 --> 00:00:19,039
in the progress 40 for its docking a

9
00:00:23,109 --> 00:00:20,880
short time from now a good view of the

10
00:00:24,150 --> 00:00:23,119
progress yes the flood light and now the

11
00:00:26,150 --> 00:00:24,160
view

12
00:00:27,990 --> 00:00:26,160
it turned on as we toggle back and forth

13
00:00:33,590 --> 00:00:28,000

between cameras uh this view of the

14

00:00:39,430 --> 00:00:36,069

breaking a little bit and

15

00:00:40,869 --> 00:00:39,440

range is about 50 meters i'd say

16

00:00:46,869 --> 00:00:40,879

copy

17

00:00:52,310 --> 00:00:48,470

the international space station and the

18

00:00:55,670 --> 00:00:52,320

progress flying 225 statute miles over

19

00:00:57,189 --> 00:00:55,680

the ukraine stocking interface is

20

00:01:01,029 --> 00:00:57,199

a square and a half

21

00:01:03,110 --> 00:01:01,039

copy and we're entering eclipse how are

22

00:01:05,509 --> 00:01:03,120

you seeing the station

23

00:01:07,670 --> 00:01:05,519

very well

24

00:01:11,270 --> 00:01:07,680

and i'm going to break a little bit i

25

00:01:13,990 --> 00:01:11,280

see the target and i'm going to

26

00:01:17,190 --> 00:01:14,000

align the crosshairs

27

00:01:19,510 --> 00:01:17,200

caleri is in control of a joystick on

28

00:01:23,830 --> 00:01:19,520

the toru system in the zvezda service

29

00:01:28,870 --> 00:01:27,270

116 meter separating progress from piers

30

00:01:31,030 --> 00:01:28,880

closing at a rate of less than a tenth

31

00:01:33,990 --> 00:01:31,040

of a meter per second how many squares

32

00:01:52,469 --> 00:01:35,590

for a range

33

00:01:52,479 --> 00:01:58,389

copy

34

00:02:02,230 --> 00:02:00,709

you can see the docking target just to

35

00:02:04,789 --> 00:02:02,240

the bottom of the

36

00:02:07,749 --> 00:02:04,799

circular docking port that is the piers

37

00:02:09,190 --> 00:02:07,759

docking compartment

38

00:02:11,110 --> 00:02:09,200

let's

39

00:02:14,390 --> 00:02:11,120

break just a little bit

40

00:02:17,110 --> 00:02:14,400

and station keep

41

00:02:19,589 --> 00:02:17,120

across from the docking interface

42

00:02:21,990 --> 00:02:19,599

uh once we align the crosshairs that

43

00:02:22,949 --> 00:02:22,000

will reinitiate

44

00:02:37,110 --> 00:02:22,959

a

45

00:02:40,229 --> 00:02:39,030

i'm going to switch

46

00:02:44,550 --> 00:02:40,239

to

47

00:02:48,390 --> 00:02:47,030

mode and the range currently is about 20

48

00:03:04,949 --> 00:02:48,400

meters

49

00:03:04,959 --> 00:03:09,990

how do you read me

50

00:03:10,000 --> 00:03:30,229

iss moscow how do you read us

51
00:03:30,239 --> 00:03:35,910
loud and clear

52
00:03:40,309 --> 00:03:38,550
we have a pretty bad quality video if

53
00:03:41,589 --> 00:03:40,319
you could provide continuous commentary

54
00:03:59,270 --> 00:03:41,599
that'd be

55
00:03:59,280 --> 00:04:02,710
i see the line site

56
00:04:11,670 --> 00:04:04,789
and the crosshairs are aligned

57
00:04:16,150 --> 00:04:13,830
alexander caleri in manual control of

58
00:04:17,229 --> 00:04:16,160
the flying of the progress 40 cargo ship

59
00:04:20,870 --> 00:04:17,239
loaded with

60
00:04:21,990 --> 00:04:20,880
1918 pounds of propellant 110 pounds of

61
00:04:24,390 --> 00:04:22,000
oxygen

62
00:04:27,590 --> 00:04:24,400
498 pounds of water

63
00:04:30,230 --> 00:04:27,600

and 2 804 pounds of dry cargo including

64

00:04:32,070 --> 00:04:30,240

spare parts experiment equipment and

65

00:04:36,790 --> 00:04:32,080

maintenance equipment for the expedition

66

00:04:41,670 --> 00:04:38,469

here's the break

67

00:04:44,629 --> 00:04:41,680

copy and if you must you can station

68

00:04:46,150 --> 00:04:44,639

keep at three meters

69

00:04:47,189 --> 00:04:46,160

let's just get a metro

70

00:04:49,749 --> 00:04:47,199

right now

71

00:04:51,590 --> 00:04:49,759

we have about five meters between us so

72

00:04:53,590 --> 00:04:51,600

the target is uh practically at the

73

00:04:57,110 --> 00:04:53,600

center

74

00:04:58,230 --> 00:04:57,120

for all purposes and um the crosshairs

75

00:05:00,390 --> 00:04:58,240

are aligned

76

00:05:06,310 --> 00:05:00,400

copy

77

00:05:06,320 --> 00:05:22,550

very little put in your thumb

78

00:05:26,710 --> 00:05:24,870

uh let me actually uh bring it up a

79

00:05:30,550 --> 00:05:26,720

little closer

80

00:05:35,590 --> 00:05:33,189

the core's automated rendezvous antenna

81

00:05:38,870 --> 00:05:35,600

on the progress has retracted as planned

82

00:05:40,629 --> 00:05:38,880

uh caleri was directed to to take over

83

00:05:43,510 --> 00:05:40,639

manual control of the flying of the

84

00:05:45,909 --> 00:05:43,520

progress about nine minutes ago by chief

85

00:05:48,070 --> 00:05:45,919

flight director vladimir soloviev it is

86

00:05:50,150 --> 00:05:48,080

not clear as to why that uh direction

87

00:05:53,430 --> 00:05:50,160

was given at this point but as you can

88

00:05:56,230 --> 00:05:53,440

see uh caleri with a deft touch has

89

00:05:58,070 --> 00:05:56,240
manually aligned the progress as forward

90

00:06:02,629 --> 00:05:58,080
docking probe with the docking target as

91

00:06:02,639 --> 00:06:16,309
standing by for contact

92

00:06:16,319 --> 00:06:32,230
about half a meter

93

00:06:32,240 --> 00:06:35,909
and we actually felt that

94

00:06:39,990 --> 00:06:38,230
and capture confirmed on the sudan

95

00:06:41,430 --> 00:06:40,000
display

96

00:06:44,390 --> 00:06:41,440
has been

97

00:07:01,430 --> 00:06:44,400
received docking occurring at 11 36 a.m

98

00:07:05,909 --> 00:07:03,589
alexander kaleri

99

00:07:09,110 --> 00:07:05,919
manually uh bringing in the progress 40

100

00:07:12,150 --> 00:07:09,120
for a smooth docking

101
00:07:14,230 --> 00:07:12,160
11 36 a.m central time was docking time

102
00:07:16,710 --> 00:07:14,240
over western kazakhstan

103
00:07:19,510 --> 00:07:16,720
the progress is forward docking probe is

104
00:07:22,230 --> 00:07:19,520
now retracting as planned to initiate

105
00:07:23,909 --> 00:07:22,240
the latch up of the hooks and latches on

106
00:07:25,350 --> 00:07:23,919
both sides of the docking interface to

107
00:07:32,070 --> 00:07:25,360
form a hard mate between the two

108
00:07:36,230 --> 00:07:34,070
we would like to congratulate all of you

109
00:07:38,150 --> 00:07:36,240
with an excellent

110
00:07:41,830 --> 00:07:38,160
manual docking

111
00:07:45,749 --> 00:07:43,510
and we're going to start deactivating

112
00:07:48,710 --> 00:07:45,759
things but um

113
00:07:51,350 --> 00:07:48,720

let me forewarn you that um

114

00:07:53,430 --> 00:07:51,360

oh there on command does not need to be

115

00:07:56,629 --> 00:07:53,440

sent

116

00:08:02,309 --> 00:07:58,390

on command

117

00:08:05,110 --> 00:08:02,319

do not sand that's uh line two

118

00:08:06,150 --> 00:08:05,120

yes uh that's a good read back uh sasha

119

00:08:09,430 --> 00:08:06,160

do not

120

00:08:10,469 --> 00:08:09,440

send command as written in line two

121

00:08:17,990 --> 00:08:10,479

copy

122

00:08:22,309 --> 00:08:18,000

yes and we concur please proceed per

123

00:08:26,670 --> 00:08:25,110

step 4.5 is complete

124

00:08:28,390 --> 00:08:26,680

happy

125

00:08:33,190 --> 00:08:28,400

congratulations

126
00:08:37,509 --> 00:08:35,190
milestone completion

127
00:08:44,870 --> 00:08:37,519
yes and uh congratulations to you with a

128
00:08:44,880 --> 00:08:48,949
with a successful docking the

129
00:08:53,190 --> 00:08:51,350
range rate at the time of contact based

130
00:08:55,910 --> 00:08:53,200
on our calculations was

131
00:08:58,230 --> 00:08:55,920
zero decimal zero six seven so

132
00:09:00,230 --> 00:08:58,240
you get an a today

133
00:09:02,150 --> 00:09:00,240
thank you very much arthur

134
00:09:05,030 --> 00:09:02,160
this was just like one of our training

135
00:09:08,630 --> 00:09:06,870
congratulations you guys i will sign off

136
00:09:10,630 --> 00:09:08,640
at this time

137
00:09:12,230 --> 00:09:10,640
sasha while you're still on vhf how do

138
00:09:16,230 --> 00:09:12,240

you read

139

00:09:20,710 --> 00:09:17,990

sasha i would like to

140

00:09:22,990 --> 00:09:20,720

remind you that at 1845

141

00:09:25,590 --> 00:09:23,000

we'd like you to

142

00:09:26,630 --> 00:09:25,600

1745 i would like you to monitor

143

00:09:28,710 --> 00:09:26,640

temperature on the secondary

144

00:09:29,829 --> 00:09:28,720

purification unit after electron

145

00:09:31,110 --> 00:09:29,839

activation

146

00:09:32,310 --> 00:09:31,120

okay copy

147

00:09:34,550 --> 00:09:32,320

russian flight controllers

148

00:09:36,870 --> 00:09:34,560

congratulating sasha who is alexander

149

00:09:38,310 --> 00:09:36,880

kaleri the veteran cosmonaut in the

150

00:09:40,790 --> 00:09:38,320

russian segment of the international

151
00:09:43,190 --> 00:09:40,800
space station who manually guided the

152
00:09:47,670 --> 00:09:43,200
iss progress 40 cargo ship to its

153
00:09:49,509 --> 00:09:47,680
docking at 11 36 a.m central time

154
00:09:51,509 --> 00:09:49,519
as the progress in the international

155
00:09:56,070 --> 00:09:51,519
space station

156
00:09:57,750 --> 00:09:56,080
sailed 225 miles over western kazakhstan

157
00:09:59,750 --> 00:09:57,760
the visiting vehicle officer here in

158
00:10:02,230 --> 00:09:59,760
mission control now confirms that hooks

159
00:10:04,470 --> 00:10:02,240
and latches are engaged so we do have a

160
00:10:07,990 --> 00:10:04,480
hard mate between the progress and the

161
00:10:10,790 --> 00:10:08,949
with that

162
00:10:13,030 --> 00:10:10,800
the crew on board the international

163
00:10:15,269 --> 00:10:13,040

space station will begin a series of

164

00:10:16,949 --> 00:10:15,279

leak checks to make sure we have a tight

165

00:10:19,190 --> 00:10:16,959

seal between the progress and its

166

00:10:21,590 --> 00:10:19,200

docking port that will take about three

167

00:10:24,069 --> 00:10:21,600

hours to complete hatches will then be

168

00:10:26,630 --> 00:10:24,079

open and the unloading of cargo can

169

00:10:28,550 --> 00:10:26,640

begin about two and a half tons of cargo