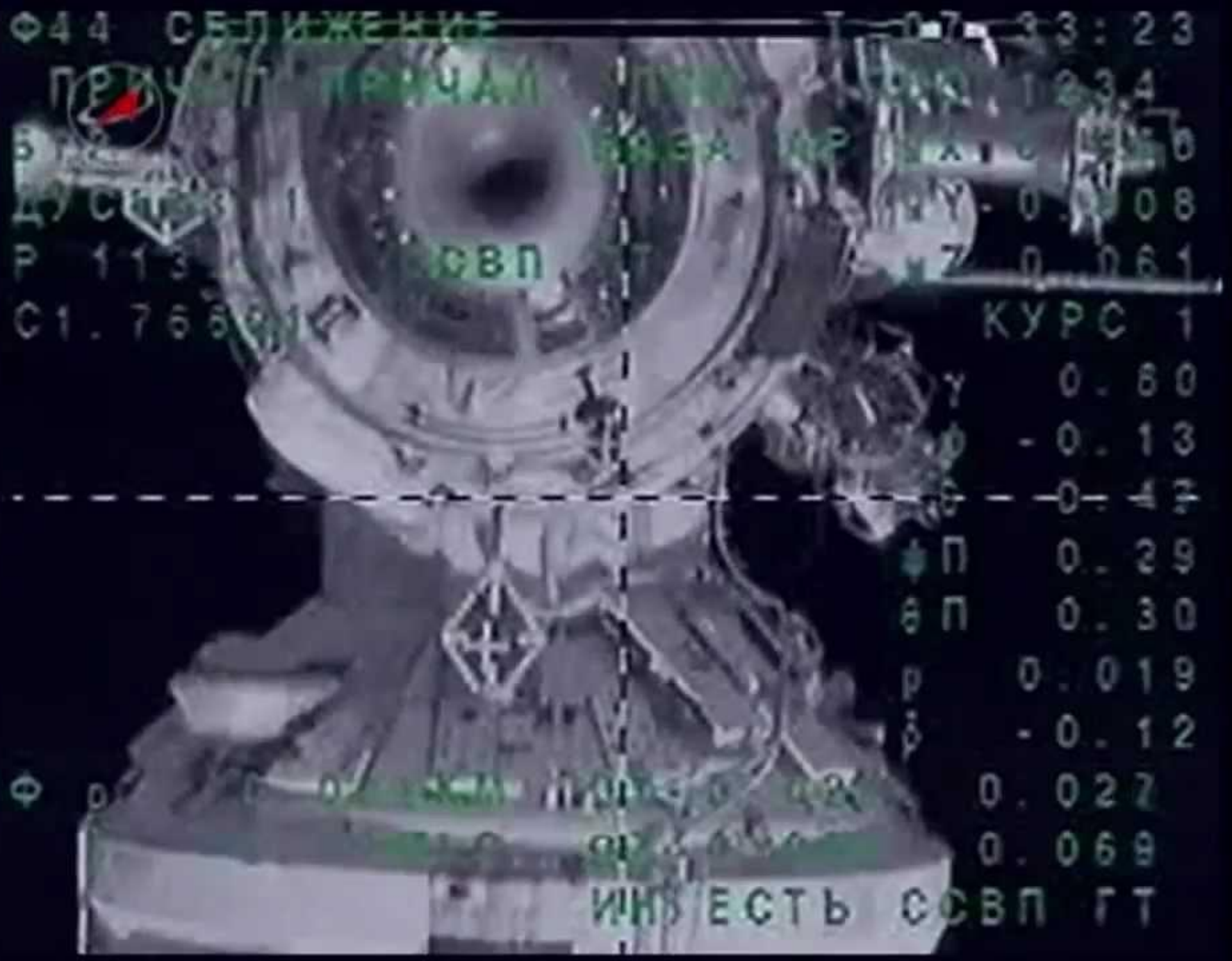
Ф44 СБЛИЖЕНИЕ
ПРИЦЕЛ
СВП
КУРС 1
ИНВЕСТЬ ССВП ГТ

1
00:00:03,510 --> 00:00:02,710
sending command

2
00:00:06,550 --> 00:00:03,520
for

3
00:00:08,070 --> 00:00:06,560
final approach from the display

4
00:00:10,629 --> 00:00:08,080
and gennady padalka has been given the

5
00:00:12,950 --> 00:00:10,639
go ahead to send the command to resume

6
00:00:13,749 --> 00:00:12,960
final approach for docking approach

7
00:00:19,670 --> 00:00:13,759
set

8
00:00:20,630 --> 00:00:19,680
away from the international space

9
00:00:21,990 --> 00:00:20,640
station

10
00:00:24,150 --> 00:00:22,000
and we're picking up our first

11
00:00:26,070 --> 00:00:24,160
television from the external cameras on

12
00:00:27,750 --> 00:00:26,080
the soyuz vehicle over russian ground

13
00:00:29,349 --> 00:00:27,760

stations

14
00:00:31,589 --> 00:00:29,359
would you like to keep

15
00:00:36,870 --> 00:00:31,599
the

16
00:00:39,270 --> 00:00:36,880
narrow angle

17
00:00:41,030 --> 00:00:39,280
copy and that's what we have selected

18
00:00:44,029 --> 00:00:41,040
you can see in the lower left hand

19
00:00:48,229 --> 00:00:45,990
175

20
00:00:50,229 --> 00:00:48,239
meters away from the international space

21
00:00:52,549 --> 00:00:50,239
station closing at a rate of eight

22
00:00:55,029 --> 00:00:52,559
tenths of a meter per second range

23
00:00:56,950 --> 00:00:55,039
zero decimal eight

24
00:00:58,630 --> 00:00:56,960
all of the soyuz system is in excellent

25
00:01:00,709 --> 00:00:58,640
shape

26
00:01:04,390 --> 00:01:00,719
currently the two spacecraft are flying

27
00:01:11,590 --> 00:01:06,310
do we need to do anything else with the

28
00:01:15,749 --> 00:01:13,510
150 meters

29
00:01:20,630 --> 00:01:15,759
zero decimal eight meters per second

30
00:01:27,030 --> 00:01:21,749
for us

31
00:01:29,749 --> 00:01:28,550
no not right now

32
00:01:31,030 --> 00:01:29,759
okay

33
00:01:32,550 --> 00:01:31,040
100

34
00:01:33,590 --> 00:01:32,560
30

35
00:01:38,230 --> 00:01:33,600
meters

36
00:01:54,870 --> 00:01:38,240
uh range range rate zero decimal 69.

37
00:01:58,950 --> 00:01:56,709
right in the middle of the crosshairs

38
00:02:01,830 --> 00:01:58,960

you can see the docking port that's the

39
00:02:03,910 --> 00:02:01,840
poisk module facing space on the russian

40
00:02:07,109 --> 00:02:03,920
segment of the international space

41
00:02:09,910 --> 00:02:07,119
station the soyuz now just 113 meters

42
00:02:11,750 --> 00:02:09,920
away from contact and capture everything

43
00:02:13,430 --> 00:02:11,760
proceeding very well in this automated

44
00:02:15,270 --> 00:02:13,440
approach that has been flawless to this

45
00:02:16,710 --> 00:02:15,280
point on the

46
00:02:18,309 --> 00:02:16,720
docking

47
00:02:25,510 --> 00:02:18,319
interface but

48
00:02:25,520 --> 00:02:36,470
just past 100 meter mark

49
00:02:39,270 --> 00:02:37,990
at the very top of your screen you're

50
00:02:41,190 --> 00:02:39,280
looking at the

51
00:02:42,390 --> 00:02:41,200
zvezda service module

52
00:02:44,630 --> 00:02:42,400
of the russian segment of the

53
00:02:46,229 --> 00:02:44,640
international space station

54
00:02:48,790 --> 00:02:46,239
at the bottom of your screen uh these

55
00:02:51,030 --> 00:02:48,800
folded according accordion-like solar

56
00:02:52,630 --> 00:02:51,040
rays belong to the zarya module the

57
00:02:54,550 --> 00:02:52,640
first segment launched to the

58
00:02:56,790 --> 00:02:54,560
international space station

59
00:02:59,670 --> 00:02:56,800
those arrays were deactivated and folded

60
00:03:00,949 --> 00:02:59,680
in some years ago no longer required

61
00:03:11,990 --> 00:03:00,959
because of the power production

62
00:03:29,350 --> 00:03:14,949
which color would you prefer green

63
00:03:37,030 --> 00:03:32,869

can you stretch out the display

64
00:03:42,149 --> 00:03:39,670
is the image good for you now

65
00:03:43,910 --> 00:03:42,159
yes it's great

66
00:03:46,309 --> 00:03:43,920
69

67
00:03:51,030 --> 00:03:46,319
meters range

68
00:03:52,470 --> 00:03:51,040
zero decimal three two meters per second

69
00:03:59,509 --> 00:03:52,480
yeah the image is much better now thank

70
00:04:03,990 --> 00:04:01,190
the soyuz in the international space

71
00:04:06,869 --> 00:04:04,000
station flying 249 statute miles over

72
00:04:09,670 --> 00:04:06,879
the border between russia and kazakhstan

73
00:04:12,149 --> 00:04:09,680
the soyuz just 60 meters away from its

74
00:04:14,550 --> 00:04:12,159
destination on this the 45th birthday

75
00:04:16,629 --> 00:04:14,560
for joe acaba who's seated in the right

76
00:04:18,789 --> 00:04:16,639
seat of the soyuz vehicle

77
00:04:20,870 --> 00:04:18,799
in the center seat the veteran soyuz

78
00:04:22,950 --> 00:04:20,880
commander gennady padalka sergey revin

79
00:04:25,870 --> 00:04:22,960
acting as board engineer seated in the

80
00:04:27,430 --> 00:04:25,880
left seat of the descent module of the

81
00:04:30,629 --> 00:04:27,440
tma-04m

82
00:04:33,030 --> 00:04:30,639
spacecraft q1 everything continuing to

83
00:04:35,590 --> 00:04:33,040
proceed on track five meters on course a

84
00:04:37,830 --> 00:04:35,600
flawless approach so far as padalka

85
00:04:39,909 --> 00:04:37,840
monitors systems on board the soyuz

86
00:04:40,870 --> 00:04:39,919
vehicle in these final few minutes

87
00:04:43,030 --> 00:04:40,880
before

88
00:05:07,909 --> 00:04:43,040

three new residents will have arrived at

89
00:05:07,919 --> 00:05:19,830
we have

90
00:05:24,950 --> 00:05:22,469
the target is basically in the center

91
00:05:25,830 --> 00:05:24,960
just a little bit to the left of the

92
00:05:35,270 --> 00:05:25,840
center

93
00:05:35,280 --> 00:05:44,550
already

94
00:05:49,110 --> 00:05:47,350
at a distance of 40 meters from

95
00:05:51,430 --> 00:05:49,120
the poisk module

96
00:05:54,790 --> 00:05:51,440
the core's automated rendezvous antenna

97
00:05:56,710 --> 00:05:54,800
has retracted as planned that confirmed

98
00:05:58,550 --> 00:05:56,720
by gennady padalka

99
00:06:00,150 --> 00:05:58,560
and by the russian flight control team

100
00:06:02,710 --> 00:06:00,160
here in korea

101
00:06:07,189 --> 00:06:02,720
you can see the uh diamond-shaped

102
00:06:09,110 --> 00:06:07,199
docking target just to the just uh below

103
00:06:10,309 --> 00:06:09,120
the actual docking port to the poisk

104
00:06:12,710 --> 00:06:10,319
module

105
00:06:15,029 --> 00:06:12,720
the automated rendezvous telemetry will

106
00:06:18,309 --> 00:06:15,039
bring the crosshairs of this overlay

107
00:06:21,909 --> 00:06:20,870
into exact alignment with that docking

108
00:06:24,390 --> 00:06:21,919
target

109
00:06:27,430 --> 00:06:24,400
that enables both padalka on board the

110
00:06:29,510 --> 00:06:27,440
station and alec kononenko in the zvezda

111
00:06:31,990 --> 00:06:29,520
service module watching the same view

112
00:06:34,790 --> 00:06:32,000
that you're watching uh to ensure that

113
00:06:36,550 --> 00:06:34,800

um 30 minutes the soyuz remains on track

114
00:06:39,110 --> 00:06:36,560
with a precise alignment of its forward

115
00:06:41,270 --> 00:06:39,120
docking probe to the poisk module for

116
00:06:42,950 --> 00:06:41,280
the final few meters before contact and

117
00:06:45,430 --> 00:06:42,960
capture

118
00:06:57,510 --> 00:06:45,440
one command has been sent

119
00:07:02,629 --> 00:06:58,710
approach

120
00:07:03,749 --> 00:07:02,639
zero decimal one one range rate just

121
00:07:07,110 --> 00:07:03,759
like

122
00:07:09,670 --> 00:07:07,120
at the simulator the control target is

123
00:07:17,909 --> 00:07:09,680
at the center

124
00:07:21,270 --> 00:07:19,749
the soyuz and the international space

125
00:07:24,469 --> 00:07:21,280
station now flying over northern

126
00:07:26,469 --> 00:07:24,479
kazakhstan several hundred kilometers

127
00:07:29,270 --> 00:07:26,479
to the north of the launch site from

128
00:07:30,950 --> 00:07:29,280
which padalka revan and acaba began

129
00:07:34,150 --> 00:07:30,960
their journey two days ago with their

130
00:07:39,189 --> 00:07:34,160
launch from the cosmodrome a little bit

131
00:07:43,749 --> 00:07:41,990
when transitioning to

132
00:07:46,469 --> 00:07:43,759
ir base

133
00:07:49,350 --> 00:07:46,479
usually that's what we get

134
00:08:09,670 --> 00:07:49,360
right so confirming target's still in

135
00:08:09,680 --> 00:08:19,510
15 meters

136
00:08:26,230 --> 00:08:22,950
and we're monitoring crosshair alignment

137
00:08:29,430 --> 00:08:26,240
everything's nominal

138
00:08:33,190 --> 00:08:29,440

range rate is safe

139
00:08:36,389 --> 00:08:33,200
there is no discrepancy on the angles or

140
00:08:38,310 --> 00:08:36,399
on the crosshair alignment

141
00:08:40,709 --> 00:08:38,320
very smooth

142
00:08:42,870 --> 00:08:40,719
approaching 10 meters now everything in

143
00:08:44,870 --> 00:08:42,880
perfect shape good alignment

144
00:08:46,630 --> 00:08:44,880
good rate of closure

145
00:08:52,630 --> 00:08:46,640
now at about one tenth of a meter per

146
00:08:57,509 --> 00:08:56,150
the vehicle is moving very very smoothly

147
00:09:02,389 --> 00:08:57,519
very

148
00:09:06,829 --> 00:09:02,399
gradually the target is basically

149
00:09:12,949 --> 00:09:11,430
center the target is very very well

150
00:09:15,509 --> 00:09:12,959
visible

151
00:09:19,750 --> 00:09:15,519
the uh control target is also at the

152
00:09:22,949 --> 00:09:21,110
and as you heard flight controllers now

153
00:09:25,750 --> 00:09:22,959
standing by for contact and capture and

154
00:09:29,030 --> 00:09:25,760
the docking of the soyuz tma-04m to the

155
00:09:41,910 --> 00:09:29,990
it's

156
00:10:01,430 --> 00:09:44,630
you have to have ice raining running

157
00:10:01,440 --> 00:10:14,550
yes

158
00:10:20,550 --> 00:10:17,430
and we're also applauding just in case

159
00:10:25,670 --> 00:10:22,630
a perfect automated approach docking

160
00:10:30,790 --> 00:10:25,680
occurring over the mongolian kazakh

161
00:10:32,350 --> 00:10:30,800
border at 8 36 a.m moscow time 11 36 pm

162
00:10:34,790 --> 00:10:32,360
central time

163
00:10:35,990 --> 00:10:34,800

249 miles over the year three new

164
00:10:38,230 --> 00:10:36,000
residents have arrived at the

165
00:10:40,790 --> 00:10:38,240
international space station on this the

166
00:10:43,670 --> 00:10:40,800
45th birthday for flight engineer joe

167
00:10:46,550 --> 00:10:44,870
excellent

168
00:10:48,470 --> 00:10:46,560
so um

169
00:10:51,750 --> 00:10:48,480
in parallel we will be