



1
00:00:08,390 --> 00:00:05,749
the engine start sequence now underway

2
00:00:13,350 --> 00:00:08,400
second umbilical has retracted

3
00:00:18,230 --> 00:00:17,109
turbo pumps up to flight speed three

4
00:00:19,189 --> 00:00:18,240
two

5
00:00:20,550 --> 00:00:19,199
one

6
00:00:22,390 --> 00:00:20,560
ignition

7
00:00:25,509 --> 00:00:22,400
and liftoff

8
00:00:27,429 --> 00:00:25,519
liftoff of the progress 58 cargo ship on

9
00:00:34,229 --> 00:00:27,439
a fast track flight to the international

10
00:00:48,950 --> 00:00:36,229
all parameters are normal engines up to

11
00:00:52,549 --> 00:00:51,029
the soyuz booster disappearing into a

12
00:00:54,869 --> 00:00:52,559
bank of clouds over the baikonur

13
00:00:56,389 --> 00:00:54,879

cosmodrome at the 45 second mark into

14

00:00:59,510 --> 00:00:56,399

the flight

15

00:01:02,470 --> 00:00:59,520

the fly around is uh underway uh by the

16

00:01:05,350 --> 00:01:02,480

progress as it uh maneuvers itself

17

00:01:07,990 --> 00:01:05,360

automatically uh to align its forward

18

00:01:10,950 --> 00:01:08,000

docking probe to the aft port of the

19

00:01:12,789 --> 00:01:10,960

zvezda service module

20

00:01:14,390 --> 00:01:12,799

the progress about three-quarters of the

21

00:01:15,910 --> 00:01:14,400

way around uh

22

00:01:18,149 --> 00:01:15,920

the approach corridor to the

23

00:01:20,149 --> 00:01:18,159

international space station's uh aft

24

00:01:23,109 --> 00:01:20,159

port of zvezda

25

00:01:24,630 --> 00:01:23,119

once uh the progress has aligned itself

26

00:01:27,109 --> 00:01:24,640
to zvezda

27

00:01:29,109 --> 00:01:27,119
it will put the brakes on for a few

28

00:01:30,630 --> 00:01:29,119
moments of station keeping

29

00:01:32,230 --> 00:01:30,640
to allow flight controllers at the

30

00:01:34,310 --> 00:01:32,240
russian mission control center in

31

00:01:36,789 --> 00:01:34,320
karayoff to check the data

32

00:01:50,789 --> 00:01:36,799
before the command is issued for final

33

00:01:55,830 --> 00:01:53,429
we're watching the image everything is

34

00:02:40,869 --> 00:01:55,840
going well so far so good

35

00:02:45,589 --> 00:02:42,949
good view of thruster firings on the

36

00:02:47,750 --> 00:02:45,599
progress craft as it gently makes its

37

00:02:48,869 --> 00:02:47,760
way uh toward the completion of its fly

38

00:02:52,790 --> 00:02:48,879

around

39

00:02:55,350 --> 00:02:52,800

placing itself about 150 meters directly

40

00:02:57,190 --> 00:02:55,360

behind the aft port of the zvezda

41

00:03:02,949 --> 00:02:57,200

service module for a brief period of

42

00:03:05,670 --> 00:03:04,309

and clear the progress in the

43

00:03:07,670 --> 00:03:05,680

international space station are

44

00:03:11,030 --> 00:03:07,680

currently uh moving from southwest to

45

00:03:13,270 --> 00:03:11,040

northeast in an orbit inclined 51.6

46

00:03:16,550 --> 00:03:13,280

degrees to either side of the equator at

47

00:03:19,190 --> 00:03:16,560

an altitude of 256 statute miles flying

48

00:03:20,390 --> 00:03:19,200

over the border between ecuador and

49

00:03:22,070 --> 00:03:20,400

colombia

50

00:03:23,830 --> 00:03:22,080

about to cross the northern coast of

51

00:03:25,990 --> 00:03:23,840

south america

52

00:03:27,190 --> 00:03:26,000

and uh almost directly over san juan

53

00:03:29,190 --> 00:03:27,200

puerto rico

54

00:03:32,869 --> 00:03:29,200

zero decimal 25

55

00:03:34,869 --> 00:03:32,879

stable good motion

56

00:03:49,830 --> 00:03:34,879

all is nominal

57

00:03:53,830 --> 00:03:51,990

progress about to reach the 50 meter

58

00:04:16,710 --> 00:03:53,840

mark closing at a rate of some

59

00:04:20,150 --> 00:04:18,550

the image is clear

60

00:04:23,430 --> 00:04:20,160

and crisp

61

00:04:26,710 --> 00:04:23,440

the motion is stable no issues to report

62

00:04:39,590 --> 00:04:26,720

and we have a good visual on the target

63

00:04:39,600 --> 00:04:44,870

alexander

64

00:04:48,950 --> 00:04:46,790

russian flight controllers reporting all

65

00:04:53,909 --> 00:04:48,960

of the angles the orientation of the

66

00:04:57,270 --> 00:04:55,430

the target

67

00:04:59,830 --> 00:04:57,280

and the crosshairs

68

00:05:03,110 --> 00:04:59,840

are within one degree

69

00:05:04,710 --> 00:05:03,120

of the center right now it's uh

70

00:05:05,830 --> 00:05:04,720

a little bit downward

71

00:05:13,270 --> 00:05:05,840

and

72

00:05:18,310 --> 00:05:15,909

the target is slowly moving towards the

73

00:05:22,469 --> 00:05:18,320

center of the electronic crosshairs

74

00:05:27,590 --> 00:05:25,270

copy just a few meters to go

75

00:05:29,990 --> 00:05:27,600

the international space station and the

76

00:05:31,909 --> 00:05:30,000

progress 58 cargo craft

77

00:05:36,230 --> 00:05:31,919

currently flying directly over san juan

78

00:05:38,629 --> 00:05:36,240

puerto rico target is moving upward

79

00:05:41,350 --> 00:05:38,639

within about a half a degree

80

00:06:04,309 --> 00:05:41,360

off the center

81

00:06:11,350 --> 00:06:07,590

range is about 12 meters

82

00:06:14,230 --> 00:06:11,360

range rate is zero decimal 12.

83

00:06:16,950 --> 00:06:14,240

the target is a half of a degree towards

84

00:06:18,950 --> 00:06:16,960

the right of the center

85

00:06:20,550 --> 00:06:18,960

the crosshairs are aligned

86

00:06:22,550 --> 00:06:20,560

the target is

87

00:06:24,790 --> 00:06:22,560

clearly visible

88

00:06:27,590 --> 00:06:24,800

that is the translation of alexander

89

00:06:30,309 --> 00:06:27,600

samokutyaev inside zvezda calling out

90

00:06:32,150 --> 00:06:30,319

the range to docking as well as the rate

91

00:06:34,230 --> 00:06:32,160

of closure by the progress on its

92

00:06:43,670 --> 00:06:34,240

docking target which is the aft port of

93

00:06:48,629 --> 00:06:46,309

8 meters

94

00:06:50,629 --> 00:06:48,639

approaching

95

00:06:53,029 --> 00:06:50,639

nominally

96

00:06:55,990 --> 00:06:53,039

the image is

97

00:06:59,270 --> 00:06:56,000

kind of jittery but um we're still

98

00:07:01,110 --> 00:06:59,280

watching and we see everything clearly

99

00:07:02,629 --> 00:07:01,120

copy and we're watching the same video

100

00:07:12,710 --> 00:07:02,639

here

101
00:07:18,790 --> 00:07:16,230
range 5 meters

102
00:07:20,469 --> 00:07:18,800
now inside five meters as we stand by

103
00:07:23,350 --> 00:07:20,479
for contact and capture of the

104
00:07:24,629 --> 00:07:23,360
international space station

105
00:07:27,350 --> 00:07:24,639
and uh

106
00:07:42,550 --> 00:07:27,360
range rate is zero decimal eleven

107
00:07:42,560 --> 00:07:56,830
0

108
00:08:02,550 --> 00:07:59,350
confirmed capture confirmed

109
00:08:03,830 --> 00:08:02,560
capture confirmed at 10 57 a.m central

110
00:08:05,990 --> 00:08:03,840
time

111
00:08:07,670 --> 00:08:06,000
alexander

112
00:08:11,670 --> 00:08:07,680
as the international space station in

113
00:08:13,670 --> 00:08:11,680

progress 58 flew 257 statute miles over