



1
00:00:14,160 --> 00:00:27,589

what is

2
00:00:32,150 --> 00:00:29,750

we have your go to

3
00:00:34,950 --> 00:00:32,160

send command to initiate final approach

4
00:00:38,630 --> 00:00:34,960

at twenty three zero three

5
00:00:52,630 --> 00:00:40,869

and as you can hear the uh soyuz flight

6
00:00:55,510 --> 00:00:54,069

and final approach now has been

7
00:00:57,750 --> 00:00:55,520

initiated

8
00:01:00,709 --> 00:00:57,760

this should take about nine minutes

9
00:01:03,029 --> 00:01:00,719

perhaps a minute or so less we'll see

10
00:01:05,109 --> 00:01:03,039

as you can clearly see against the

11
00:01:07,190 --> 00:01:05,119

approaching orbital sunset the thruster

12
00:01:09,350 --> 00:01:07,200

firings on the soyuz vehicle from

13
00:01:11,270 --> 00:01:09,360

multiple thrusters on the various axes

14

00:01:13,190 --> 00:01:11,280

of the spacecraft from the

15

00:01:15,670 --> 00:01:13,200

instrumentation and propulsion module at

16

00:01:19,109 --> 00:01:15,680

the base of the soyuz spacecraft

17

00:01:21,350 --> 00:01:19,119

as congratula monitors fuel consumption

18

00:01:23,590 --> 00:01:21,360

and all of his systems

19

00:01:26,469 --> 00:01:23,600

the soyuz now 140 meters away from

20

00:01:29,429 --> 00:01:26,479

contact and capture range and

21

00:01:45,510 --> 00:01:31,670

from time to time

22

00:01:45,520 --> 00:02:06,069

so

23

00:02:11,990 --> 00:02:08,949

the range based on visual assessment is

24

00:02:14,630 --> 00:02:12,000

110 100

25

00:02:24,949 --> 00:02:15,750

nominal

26
00:02:29,910 --> 00:02:27,270
and the soyuz has just crossed the 100

27
00:02:32,470 --> 00:02:29,920
meter mark approaching at

28
00:02:35,350 --> 00:02:32,480
about half a meter per second

29
00:02:45,350 --> 00:02:35,360
perfect parameters and all soyuz systems

30
00:02:48,470 --> 00:02:46,790
let's go to that one

31
00:02:50,390 --> 00:02:48,480
visually the

32
00:02:53,270 --> 00:02:50,400
range is 80

33
00:02:54,550 --> 00:02:53,280
and nominal range rate copy

34
00:03:16,149 --> 00:02:54,560
based on your visual assessment the

35
00:03:16,159 --> 00:03:19,350
nominal range

36
00:03:24,550 --> 00:03:22,309
crappy 70 visually and

37
00:03:25,990 --> 00:03:24,560
we have a little over two minutes

38
00:03:39,830 --> 00:03:26,000

before sunset

39

00:03:57,030 --> 00:03:43,110

the crosshairs are aligned and

40

00:04:00,869 --> 00:03:59,350

so i use less than 60 meters away

41

00:04:02,630 --> 00:04:00,879

closing at a rate of three tenths of a

42

00:04:03,670 --> 00:04:02,640

meter per second having just crossed the

43

00:04:05,350 --> 00:04:03,680

equator

44

00:04:07,990 --> 00:04:05,360

we are just minutes away from the

45

00:04:09,589 --> 00:04:08,000

arrival of dimitri kondrathi of katie

46

00:04:11,350 --> 00:04:09,599

coleman and paulo nespoli of the

47

00:04:13,470 --> 00:04:11,360

international space station

48

00:04:29,350 --> 00:04:13,480

which will be their home for the next

49

00:04:31,990 --> 00:04:30,390

visual

50

00:04:33,909 --> 00:04:32,000

assessment of

51
00:04:36,150 --> 00:04:33,919
range is 45.

52
00:05:07,990 --> 00:04:36,160
and range rate is nominal

53
00:05:08,000 --> 00:05:16,870
it's not

54
00:05:20,390 --> 00:05:19,029
uh what's your visual on the station and

55
00:05:21,990 --> 00:05:20,400
the target

56
00:05:25,350 --> 00:05:22,000
we have a good visual

57
00:05:29,590 --> 00:05:25,360
uh on the target and the station

58
00:05:34,629 --> 00:05:31,749
respectively dimitri congrats confirming

59
00:05:37,029 --> 00:05:34,639
uh that he has good visibility on the

60
00:05:39,270 --> 00:05:37,039
docking target on the rassvet module

61
00:05:41,270 --> 00:05:39,280
you saw just a moment ago the

62
00:05:43,590 --> 00:05:41,280
basically the headlight on the soyuz

63
00:05:44,870 --> 00:05:43,600

vehicle to provide additional

64

00:05:47,430 --> 00:05:44,880

illumination

65

00:05:50,230 --> 00:05:47,440

of that docking target on the rossviet

66

00:05:55,670 --> 00:05:53,029

less than 40 meters separating the soyuz

67

00:05:58,070 --> 00:05:55,680

from uh rashfia

68

00:06:07,189 --> 00:05:58,080

the coors antenna should be retracting

69

00:06:10,870 --> 00:06:08,950

and the visiting vehicle officer in

70

00:06:13,830 --> 00:06:10,880

mission control houston confirms of the

71

00:06:15,029 --> 00:06:13,840

retraction of the soyuz cores antenna as

72

00:06:17,830 --> 00:06:15,039

planned

73

00:06:19,510 --> 00:06:17,840

at a distance of 34 meters

74

00:06:23,189 --> 00:06:19,520

a good view of the docking port on the

75

00:06:36,710 --> 00:06:25,830

and moscow ranges 30.

76

00:06:40,150 --> 00:06:38,070

the soyuz

77

00:06:42,070 --> 00:06:40,160

and the international space station just

78

00:07:00,629 --> 00:06:42,080

30 meters apart crossing the west coast

79

00:07:22,950 --> 00:07:04,150

nominal range rate pressures are aligned

80

00:07:26,629 --> 00:07:25,430

and uh you may be performing a role

81

00:07:29,909 --> 00:07:26,639

maneuver

82

00:07:31,110 --> 00:07:29,919

of course copyright 18 moscow range rate

83

00:07:51,270 --> 00:07:31,120

nominal

84

00:07:55,189 --> 00:07:53,430

18 meters away the coors automated

85

00:07:59,029 --> 00:07:55,199

rendezvous system providing the auto

86

00:08:00,869 --> 00:07:59,039

correction for the crosshair triangular

87

00:08:02,790 --> 00:08:00,879

shaped docking target just underneath

88

00:08:35,829 --> 00:08:02,800

the docking port

89

00:08:40,870 --> 00:08:39,269

actually eight meters range now seven

90

00:08:49,590 --> 00:08:40,880

seven meters away standing by for

91

00:09:03,590 --> 00:08:50,790

range

92

00:09:03,600 --> 00:09:20,150

now

93

00:09:20,160 --> 00:09:23,350

44.

94

00:09:28,710 --> 00:09:24,630

confirmed

95

00:09:31,190 --> 00:09:28,720

at 11 11 pm moscow time 2 11 pm central

96

00:09:33,670 --> 00:09:31,200

time over the southwest corner of the

97

00:09:36,389 --> 00:09:33,680

republic of mali in western africa

98

00:09:38,150 --> 00:09:36,399

docking occurring at an altitude of 224

99

00:09:40,070 --> 00:09:38,160

statute miles

100

00:09:42,230 --> 00:09:40,080

a multinational crew has arrived at the

