



1
00:00:02,720 --> 00:00:12,709
inside 30 seconds

2
00:00:26,710 --> 00:00:14,870
first umbilical has now been retracted

3
00:00:31,830 --> 00:00:30,230
the main engine start has been initiated

4
00:00:34,310 --> 00:00:31,840
this will be a three-step fashion to

5
00:00:39,110 --> 00:00:34,320
bring the turbo pumps on the first stage

6
00:00:39,120 --> 00:00:42,830
three two

7
00:00:48,790 --> 00:00:45,670
one and liftoff

8
00:00:50,549 --> 00:00:48,800
liftoff of the 60-second progress

9
00:00:52,709 --> 00:00:50,559
resupply vehicle

10
00:00:54,549 --> 00:00:52,719
from the baikonur cosmodrome headed on a

11
00:00:56,790 --> 00:00:54,559
two-day rendezvous to test upgraded

12
00:01:04,229 --> 00:00:56,800
systems enroute to the international

13
00:01:08,310 --> 00:01:06,710

all the first stage engines uh reported

14

00:01:10,550 --> 00:01:08,320

to be functioning normally by the block

15

00:01:20,950 --> 00:01:10,560

house in baikonur 40 seconds into the

16

00:01:30,469 --> 00:01:22,789

vehicle stabilization is reported to be

17

00:01:35,190 --> 00:01:33,270

about one minute into the flight of the

18

00:01:36,630 --> 00:01:35,200

soyuz booster and the progress resupply

19

00:01:39,030 --> 00:01:36,640

vehicle will go through the area of

20

00:01:41,270 --> 00:01:39,040

maximum dynamic pressure

21

00:01:43,190 --> 00:01:41,280

pitch rolling yaw everything looking

22

00:01:45,590 --> 00:01:43,200

good on the vehicle

23

00:01:48,230 --> 00:01:45,600

passing now uh through maximum dynamic

24

00:01:59,030 --> 00:01:48,240

pressure going supersonic

25

00:02:05,830 --> 00:02:01,990

lift off time right on time at 2 4 and

26
00:02:12,309 --> 00:02:05,840
39 seconds am central time 244 and 39

27
00:02:26,790 --> 00:02:13,910
all first stage engines performing

28
00:02:31,030 --> 00:02:28,790
your pitch and roll of the vehicle all

29
00:02:34,790 --> 00:02:31,040
reported to be nominal from the block

30
00:02:39,430 --> 00:02:37,990
first stage separation is now confirmed

31
00:02:42,070 --> 00:02:39,440
the jettison of the four strap-on

32
00:02:44,550 --> 00:02:42,080
boosters on the soyuz has been completed

33
00:02:46,949 --> 00:02:44,560
the soyuz traveling at about 3 400 miles

34
00:02:53,350 --> 00:02:46,959
an hour that's the soyuz booster with

35
00:02:56,710 --> 00:02:55,350
standing by for the jettisoning of the

36
00:02:58,710 --> 00:02:56,720
escape tower

37
00:03:03,030 --> 00:02:58,720
and the launch shroud around the

38
00:03:07,110 --> 00:03:05,350

all parameters reported nominal

39

00:03:13,190 --> 00:03:07,120

good engine performance reported from

40

00:03:18,390 --> 00:03:15,509

this is a view from a balcony camera

41

00:03:20,229 --> 00:03:18,400

overlooking the large international

42

00:03:22,149 --> 00:03:20,239

space station flight control room at the

43

00:03:28,789 --> 00:03:22,159

russian mission control center in

44

00:03:32,789 --> 00:03:30,470

coming up on the three-minute mark into

45

00:03:35,430 --> 00:03:32,799

the flight this soyuz booster and the

46

00:03:50,869 --> 00:03:35,440

progress resupply craft traveling some 5

47

00:03:55,350 --> 00:03:52,630

all of the structural parameters are

48

00:04:01,429 --> 00:03:55,360

normal on the launch vehicle

49

00:04:11,509 --> 00:04:03,429

second stage thrusters operating

50

00:04:15,429 --> 00:04:13,350

about five minutes of powered flight

51
00:04:17,590 --> 00:04:15,439
remaining for the booster

52
00:04:25,909 --> 00:04:17,600
sending the progress resupply craft to

53
00:04:49,670 --> 00:04:27,510
coming up on the four minute mark into

54
00:04:54,390 --> 00:04:52,310
about 30 seconds left in second stage

55
00:05:12,629 --> 00:04:54,400
performance for the progress resupply

56
00:05:34,230 --> 00:05:14,390
good control good stability of the

57
00:05:37,909 --> 00:05:36,230
confirmation now received down in

58
00:05:46,230 --> 00:05:37,919
baikonur and by the flight control team

59
00:05:49,749 --> 00:05:47,430
about three and a half minutes of

60
00:05:52,550 --> 00:05:49,759
powered flight remaining the progress

61
00:05:55,029 --> 00:05:52,560
now flying towards its preliminary orbit

62
00:05:57,990 --> 00:05:55,039
on the singular power of the third stage

63
00:06:10,710 --> 00:05:58,000

or upper stage engine on the soyuz 2.1a

64

00:06:14,629 --> 00:06:12,629

third stage engine performance is

65

00:06:16,870 --> 00:06:14,639

reported to be nominal everything going

66

00:06:19,029 --> 00:06:16,880

extremely well so far almost six minutes

67

00:06:30,230 --> 00:06:19,039

into the flight of the progress resupply

68

00:06:33,590 --> 00:06:32,070

at the six minute mark everything going

69

00:06:35,749 --> 00:06:33,600

by the book

70

00:06:38,790 --> 00:06:35,759

good uh reports coming in from the

71

00:06:41,270 --> 00:06:38,800

launch controllers in baikonur at the

72

00:06:43,350 --> 00:06:41,280

time of orbital insertion uh the flight

73

00:06:45,110 --> 00:06:43,360

uh will be under the control of the

74

00:06:47,590 --> 00:06:45,120

flight control team in caryoff you're

75

00:06:49,350 --> 00:06:47,600

looking at a live picture from a balcony

76
00:06:55,830 --> 00:06:49,360
camera overlooking that cavernous flight

77
00:07:00,230 --> 00:06:57,350
coming up on the six and a half minute

78
00:07:02,790 --> 00:07:00,240
mark into the flight

79
00:07:06,790 --> 00:07:02,800
third stage performance continues uh to

80
00:07:10,870 --> 00:07:08,550
third stage shutdown expected at the

81
00:07:12,870 --> 00:07:10,880
eight minute 45 second mark

82
00:07:15,350 --> 00:07:12,880
followed by spacecraft separation and

83
00:07:17,510 --> 00:07:15,360
the anticipated deployment of the solar

84
00:07:30,309 --> 00:07:17,520
arrays and the navigational antennas on

85
00:07:34,309 --> 00:07:32,150
seven minutes into the flight everything

86
00:07:39,749 --> 00:07:34,319
is nominal according to the reports

87
00:07:43,830 --> 00:07:41,670
as the launch occurred our two

88
00:07:45,270 --> 00:07:43,840

spacewalkers for today scott kelly and

89

00:07:47,670 --> 00:07:45,280

tim copra

90

00:07:49,909 --> 00:07:47,680

completed their suit up procedures they

91

00:07:51,749 --> 00:07:49,919

are in the equipment lock section of the

92

00:07:53,990 --> 00:07:51,759

quest airlock

93

00:07:55,830 --> 00:07:54,000

not monitoring this activity at the

94

00:07:56,629 --> 00:07:55,840

moment they have other things on their

95

00:07:58,230 --> 00:07:56,639

mind

96

00:08:00,790 --> 00:07:58,240

they'll be informed of the progress

97

00:08:02,469 --> 00:08:00,800

launch in due course

98

00:08:04,550 --> 00:08:02,479

seven and a half minutes into the flight

99

00:08:18,150 --> 00:08:04,560

about a minute and 15 seconds left in

100

00:08:47,509 --> 00:08:20,469

all structural parameters normal one

101
00:08:51,110 --> 00:08:49,110
about 30 seconds of powered flight

102
00:08:53,430 --> 00:08:51,120
remaining so far so good for the

103
00:09:02,870 --> 00:08:53,440
progress atop the third stage of its

104
00:09:07,509 --> 00:09:05,030
we're standing by now for third stage

105
00:09:22,389 --> 00:09:07,519
shutdown in spacecraft separation about

106
00:09:22,399 --> 00:09:36,230
third stage shutdown confirmed

107
00:09:39,829 --> 00:09:38,230
we have spacecraft separation confirmed

108
00:09:54,949 --> 00:09:39,839
now standing by for solar array and

109
00:09:59,350 --> 00:09:57,030
and we have confirmation of a good

110
00:10:00,949 --> 00:09:59,360
spacecraft separation all solar arrays

111
00:10:03,350 --> 00:10:00,959
and navigational antennas have been

112
00:10:05,829 --> 00:10:03,360
deployed the television camera on the

113
00:10:07,030 --> 00:10:05,839

progress has been activated a perfect

114

00:10:09,670 --> 00:10:07,040

accent

115

00:10:24,550 --> 00:10:09,680

for the progress 62 cargo craft from the

116

00:10:28,389 --> 00:10:26,949

so to recap the launch occurred on time

117

00:10:35,350 --> 00:10:28,399

at 2 44

118

00:10:42,230 --> 00:10:38,230

244 and 39 seconds p.m at the baikonur

119

00:10:43,509 --> 00:10:42,240

cosmodrome where the soyuz 2.18 booster

120

00:10:44,829 --> 00:10:43,519

lifted off

121

00:10:48,389 --> 00:10:44,839

from site

122

00:10:51,269 --> 00:10:48,399

31. the second launch

123

00:10:53,590 --> 00:10:51,279

of international space station hardware

124

00:10:54,870 --> 00:10:53,600

and crew members in just a six day

125

00:10:56,790 --> 00:10:54,880

period

126

00:10:59,509 --> 00:10:56,800

the progress reaching its preliminary

127

00:11:00,389 --> 00:10:59,519

orbit eight minutes and 45 seconds after

128

00:11:02,389 --> 00:11:00,399

launch

129

00:11:05,030 --> 00:11:02,399

a good spacecraft separation from the

130

00:11:06,630 --> 00:11:05,040

third stage and a nominal deployment of