



1
00:00:00,020 --> 00:00:05,240
Soyuz booster now on internal power
coming up on the 30-second mark.

2
00:00:06,960 --> 00:00:11,500
And the first umbilical now beginning to retract from the side of the vehicle.

3
00:00:20,480 --> 00:00:24,800
Standing by for engine sequence start
t-minus 10 seconds.

4
00:00:28,680 --> 00:00:32,700
The launch command has now been issued, engines start underway.

5
00:00:34,000 --> 00:00:36,700
Turbo pumps coming up to flight speed.

6
00:00:44,200 --> 00:00:48,900
And liftoff! Liftoff of the 67th progress resupply

7
00:00:48,900 --> 00:00:53,600
vehicle bound on a two-day journey to
the International Space Station.

8
00:00:57,630 --> 00:01:02,200
Roll pitch and yaw program in. Booster
parameters are all normal.

9
00:01:07,200 --> 00:01:10,000
First stage engine functioning normally.

10
00:01:11,000 --> 00:01:17,360
The Soyuz booster arcing out to the northeast from the Baikonur Cosmodrome.

11
00:01:25,300 --> 00:01:28,380
Engineers at the blockhouse in Baikonur report that the

12
00:01:28,380 --> 00:01:33,000

vehicle is stable all engine parameters are normal.

13

00:01:35,520 --> 00:01:41,280

One minute into the flight. Now receiving animation generated by

14

00:01:41,280 --> 00:01:44,100

telemetry from the vehicle.

15

00:01:50,100 --> 00:01:57,300

One minute 15 seconds into the flight. All parameters are normal. Good first stage

16

00:01:57,300 --> 00:02:02,849

engine. First stage engine shutdown and separation of the first stage coming at

17

00:02:02,849 --> 00:02:06,800

1 minute 57 seconds into the flight.

18

00:02:15,140 --> 00:02:17,260

1 minutes 40 seconds in to the flight.

19

00:02:27,780 --> 00:02:30,260

Booster parameters are normal standing by for

20

00:02:30,260 --> 00:02:33,800

first stage engine shutdown and first stage separation.

21

00:02:37,500 --> 00:02:40,000

Strap-on boosters have separated.

22

00:02:51,580 --> 00:02:55,140

Vehicle stable on its second stage engine now.

23

00:02:57,120 --> 00:03:02,020

Good engine performance on the second stage. Two minutes 25 seconds into the flight.

24
00:03:06,660 --> 00:03:07,680
All control system while control systems are

25
00:03:07,680 --> 00:03:11,400
reported to be normal from the
blockhouse in Baikonur. Once the Progress

26
00:03:11,400 --> 00:03:15,710
reaches orbit and separates from the
third stage of the Soyuz booster

27
00:03:15,710 --> 00:03:21,580
operation and oversight will be
controlled from the Russian Mission

28
00:03:21,720 --> 00:03:25,340
Control Center in Korolyov, outside Moscow.

29
00:03:27,120 --> 00:03:29,560
Flight proceeding normally. Coming up on the 3-minute mark.

30
00:03:38,540 --> 00:03:41,300
Everything reported right down the pike everything

31
00:03:41,300 --> 00:03:47,540
is normal. All parameters are normal.
Vehicle stabilization is normal.

32
00:04:01,340 --> 00:04:04,860
Just over a minute left in second stage
performance.

33
00:04:06,680 --> 00:04:12,600
Engine performance is nominal. Good reports from the blockhouse at Baikonur.

34
00:04:13,520 --> 00:04:17,880
Progress carving a path towards its preliminary orbit.

35

00:04:23,000 --> 00:04:27,900

Three minutes 48 seconds into the flight. Less than five minutes of powered flight remaining.

36

00:04:34,480 --> 00:04:39,460

Vehicle stabilization is normal. Engine performance as normal.

37

00:04:54,400 --> 00:04:56,880

Yaw pitch and roll all reported to be

38

00:04:56,889 --> 00:05:02,229

normal. The Progress and atop the Soyuz booster traveling a true course so far

39

00:05:02,229 --> 00:05:06,849

to its preliminary orbit. At the 4 and a half minute mark, we're standing by for

40

00:05:06,849 --> 00:05:10,120

second stage shutdown and second stage separation.

41

00:05:34,120 --> 00:05:35,620

And we have confirmation of second stage

42

00:05:35,620 --> 00:05:40,749

separation and we have launch shroud jettison as you can see from this

43

00:05:40,749 --> 00:05:46,300

telemetry generated animation. Just over five minutes into the flight. Everything

44

00:05:46,300 --> 00:05:51,699

proceeding normally. The Soyuz booster on its third stage now sending the Progress

45

00:05:51,699 --> 00:05:57,520

toward its preliminary orbit. We're about three and a half minutes away from the

46

00:05:57,520 --> 00:05:59,780

end of powered flight.

47

00:06:02,340 --> 00:06:07,500

The Soyuz booster and the Progress more than a hundred miles in altitude more than two hundred miles

48

00:06:07,500 --> 00:06:13,140

downrange from the Baikonur Cosmodrome
traveling almost 10,000 miles an hour.

49

00:06:24,220 --> 00:06:26,780

All vehicle parameters are reported to be normal.

50

00:06:35,080 --> 00:06:36,080

Six minutes into

51

00:06:36,100 --> 00:06:40,480

the flight about two minutes and 45
seconds of powered flight remaining.

52

00:06:55,640 --> 00:06:58,200

All booster parameters are reported to be normal.

53

00:07:00,340 --> 00:07:05,420

The Soyuz booster on the singular power of
its third stage engine

54

00:07:05,420 --> 00:07:10,040

with Progress as you can see in this
animation now exposed to the environment

55

00:07:10,040 --> 00:07:16,580

of space as it heads to its preliminary
orbit. Six minutes 40 seconds into the

56

00:07:16,580 --> 00:07:19,820

flight two more minutes of powered
flight remaining.

57

00:07:34,460 --> 00:07:35,760

The flight is reported to be normal.

58

00:07:36,340 --> 00:07:40,200

Seven minutes into the flight one minute
45 seconds left in powered flight.

59

00:07:57,680 --> 00:07:59,180

Third stage engine reported to be

60

00:07:59,189 --> 00:08:05,129

operating normally. Everything in good
shape, so far. Launch time was right on

61

00:08:05,129 --> 00:08:08,740

time at 4:20 and 13 seconds a.m. Central
Time.

62

00:08:17,020 --> 00:08:21,600

Seven minutes 45 seconds into the flight.
One more minute of powered flight.

63

00:08:38,960 --> 00:08:40,480

Just over eight minutes into the flight.

64

00:08:41,100 --> 00:08:44,840

So far so good. Third stage engine
performing normally.

65

00:08:59,880 --> 00:09:04,680

The vehicle very stable. About 20 seconds
of powered flight remaining.

66

00:09:11,840 --> 00:09:16,280

Standing by just a few seconds from now for a third stage shutdown and third stage

67

00:09:16,280 --> 00:09:17,340

separation.

68
00:09:34,420 --> 00:09:37,060
We have confirmation of third stage shutdown and

69
00:09:37,060 --> 00:09:41,830
spacecraft separation standing by now
for the deployment of the solar arrays

70
00:09:41,830 --> 00:09:43,500
and navigational antennas.

71
00:10:08,200 --> 00:10:12,060
And you're looking at a view of the Russian flight control room in Korolyov Russia just

72
00:10:12,070 --> 00:10:16,180
outside of Moscow we now have
confirmation of the nominal deployment