1
00:00:01,080 --> 00:00:10,490
George Diller/NASA Launch Commentator: T-minus 10, nine, eight, seven, six, five, four, three, two, main engi

2
00:00:10,490 --> 00:00:17,520
start, one, zero and liftoff of the Delta II with the NPP satellite.

3
00:00:17,520 --> 00:00:27,940
Blazing the way of new technology for climate research and weather forecast.

4
00:00:27,940 --> 00:00:29,520
Steve Agid/Flight Commentator: Good chamber pressure on the main engines.

5
00:00:29,520 --> 00:00:33,100
Good chamber pressure on the three, correction, two verniers.

6
00:00:33,100 --> 00:00:36,170
And good chamber pressure on all six ground-lit motors.

7
00:00:36,170 --> 00:00:39,360
Passing 24 seconds into the flight.

8
00:00:39,360 --> 00:00:43,150
Pressure beginning to trail off a little on the ground-lit solids as expected.

9
00:00:43,150 --> 00:00:44,840
Coming up on the 33-second mark.

10
00:00:44,840 --> 00:00:52,060
Mark, 33 seconds at Mach 1. Vehicle now going transonic.

11
00:00:52,060 --> 00:00:58,720
Approaching 40 seconds in. Good stable chamber pressure in the main engine, the verniers and the ground (in

12
00:00:58,720 --> 00:01:06,300
Coming up 48 seconds. Mark, 48 seconds.MaxQ. Maximum Dynamic Pressure in the vehicle.

13
00:01:06,300 --> 00:01:10,320

Ten seconds now remaining until burnout of the six ground-lit motors.

14
00:01:10,320 --> 00:01:19,510
And we're passing the one-minute mark.Burnout. The six ground-lit motors.

15
00:01:19,510 --> 00:01:23,800
And we have ignition on the three air-lit motors. Good ignition on the three motors,

16
00:01:23,800 --> 00:01:28,300
good chamber pressure, good symmetrical burn.Standing by for separation of the ground-lit solids.

17
00:01:28,300 --> 00:01:32,810
About 10 seconds from now to assure a good water-impact point.

18
00:01:32,810 --> 00:01:46,420
Matching one minute, 20 seconds. Standing by for ground solid jettison. And we see jettison.

19
00:01:46,420 --> 00:01:51,700
Six motors have jettisoned. Passing one minute, 36 seconds in.

20
00:01:51,700 --> 00:01:55,000
Pressure now beginning to trail off on the air-lit motors.

21
00:01:55,000 --> 00:02:05,770
One minute and 45 second mark. Altitude now 17.8 nautical miles, downrange distance 2.4 nautical miles, velo

22
00:02:05,770 --> 00:02:11,530
Coming up one minute, 55 seconds. Still looking good passing through Mach 5.

23
00:02:11,530 --> 00:02:25,180
Two-minute mark. Ten seconds remaining on the air-lit motors. Burnout of the air-lit motors.

24
00:02:25,180 --> 00:02:33,150
Standing by for jettison. We see jettison.

25
00:02:33,150 --> 00:02:36,380
Passing two minutes, 22 seconds.

26
00:02:36,380 --> 00:02:45,120
Altitude now 31.3 nautical miles, downrange distance 30.3 nautical miles, velocity 4,202 mph.

27
00:02:45,120 --> 00:02:50,880
Two minutes, 35 seconds in.

28
00:02:50,880 --> 00:03:00,730
Pressure holding very well in the main engine and in both verniers as we're passing two minutes and 45 secon

29
00:03:00,730 --> 00:03:05,090
Looking down very nicely, very smooth ride.

30
00:03:05,090 --> 00:03:12,520
Coming up on two minutes, 55 seconds passing through Mach 10.

31
00:03:12,520 --> 00:03:24,320
Three minutes in. Altitude now 42.0 nautical miles, downrange distance 72.4 nautical miles, velocity 5,794 mph

32
00:03:24,320 --> 00:03:27,070
George Diller/NASA Launch Commentator: Data coming in through Santa Ynez Peak, north of Santa Barbara.

33
00:03:27,070 --> 00:03:31,580
Steve Agid/Flight Commentator: (Inaudible) Three minutes, 15 seconds. A little over one minute remaining in fi

34
00:03:31,580 --> 00:03:37,570
Chamber pressure continuing to hold very well in the main engine and in both verniers.