



1  
00:00:04,789 --> 00:00:03,429  
t minus 70 seconds ssc hydraulics

2  
00:00:10,310 --> 00:00:04,799  
internal

3  
00:00:15,190 --> 00:00:12,950  
t minus 60 minus one minute encounter

4  
00:00:25,029 --> 00:00:15,200  
t-minus 60-second limits on

5  
00:00:40,310 --> 00:00:28,390  
t minus 45 seconds lcdr launch enable to

6  
00:00:40,320 --> 00:00:49,990  
t-minus 30 seconds

7  
00:00:50,000 --> 00:00:57,189  
t-minus 20 seconds

8  
00:01:01,670 --> 00:01:00,389  
lock stopping and work t-minus 13 green

9  
00:01:02,549 --> 00:01:01,680  
board 10

10  
00:01:04,310 --> 00:01:02,559  
9

11  
00:01:05,270 --> 00:01:04,320  
8 7

12  
00:01:06,310 --> 00:01:05,280  
6

13  
00:01:07,510 --> 00:01:06,320

5

14

00:01:09,750 --> 00:01:07,520

4

15

00:01:10,710 --> 00:01:09,760

3 go for main engine start

16

00:01:14,390 --> 00:01:10,720

1

17

00:01:17,429 --> 00:01:14,400

0 and liftoff of the delta ii rocket

18

00:01:19,590 --> 00:01:17,439

with noaa n prime continuing the legacy

19

00:01:37,910 --> 00:01:19,600

of data for the weather forecasts of

20

00:01:41,270 --> 00:01:38,830

chamber

21

00:01:42,230 --> 00:01:41,280

pressures about 27 seconds into the

22

00:01:48,230 --> 00:01:42,240

flight

23

00:01:52,310 --> 00:01:50,389

coming up on 36 seconds

24

00:01:55,350 --> 00:01:52,320

mach 1 vehicle now going at the speed of

25

00:01:58,069 --> 00:01:56,709

pressure is beginning to trail off on

26  
00:02:02,389 --> 00:01:58,079  
the solids

27  
00:02:06,310 --> 00:02:03,910  
50 seconds

28  
00:02:07,990 --> 00:02:06,320  
area of max q maximum dynamic pressure

29  
00:02:14,869 --> 00:02:08,000  
chamber pressures and the one two and

30  
00:02:17,750 --> 00:02:15,910  
we have

31  
00:02:19,190 --> 00:02:17,760  
burnout of the three solids

32  
00:02:21,670 --> 00:02:19,200  
we'll be holding on to those solids for

33  
00:02:25,030 --> 00:02:21,680  
about another 15-20 seconds or so as

34  
00:02:26,710 --> 00:02:25,040  
we're looking for a good drop off point

35  
00:02:37,910 --> 00:02:26,720  
passing one minute 12 seconds into the

36  
00:02:41,910 --> 00:02:40,309  
125 about 10 seconds now before we drop

37  
00:02:44,390 --> 00:02:41,920  
off the solids

38  
00:02:46,550 --> 00:02:44,400

to 12.5 nautical miles

39

00:02:49,270 --> 00:02:46,560

downrange distance 10.9 nautical miles

40

00:02:53,750 --> 00:02:49,280

velocity a little over 1040 miles per

41

00:03:02,470 --> 00:02:55,509

and we have separation of the groundlet

42

00:03:06,390 --> 00:03:04,229

passing one minute 50 seconds into the

43

00:03:08,229 --> 00:03:06,400

flight the delta vehicle now only weighs

44

00:03:12,470 --> 00:03:08,239

about one half of what it did at launch

45

00:03:17,509 --> 00:03:14,710

now passing two minutes our altitude now

46

00:03:20,110 --> 00:03:17,519

19.9 nautical miles downrange distance

47

00:03:23,589 --> 00:03:20,120

5.8 nautical miles velocity

48

00:03:25,509 --> 00:03:23,599

1543 miles per hour

49

00:03:28,070 --> 00:03:25,519

this is the telemetry lab here at the

50

00:03:29,670 --> 00:03:28,080

mission director's center

51  
00:03:31,350 --> 00:03:29,680  
here at vandenberg engine in front of

52  
00:03:37,750 --> 00:03:31,360  
your chamber pressures continuing to

53  
00:03:40,630 --> 00:03:39,270  
engine of pitching your control and

54  
00:03:42,630 --> 00:03:40,640  
burning your engine pitch in your

55  
00:03:45,350 --> 00:03:42,640  
control well within our ability to

56  
00:03:49,910 --> 00:03:47,589  
staring

57  
00:03:52,149 --> 00:03:49,920  
coming up on two minutes 35 seconds into

58  
00:03:58,949 --> 00:03:52,159  
the flight

59  
00:03:58,959 --> 00:04:02,390  
continuing to look good

60  
00:04:06,149 --> 00:04:04,070  
we're passing two minutes 50 seconds

61  
00:04:08,470 --> 00:04:06,159  
altitude 30.6 nautical miles our

62  
00:04:09,710 --> 00:04:08,480  
downrange distance 18.8 nautical miles

63  
00:04:18,629 --> 00:04:09,720

velocity

64

00:04:18,639 --> 00:04:21,670

three minutes now

65

00:04:26,390 --> 00:04:24,310

and reviewing our solid motor burnout

66

00:04:28,870 --> 00:04:26,400

time and separations time very close to

67

00:04:30,870 --> 00:04:28,880

the anticipated times

68

00:04:33,670 --> 00:04:30,880

guessing 3 minutes 17 seconds into the

69

00:04:36,469 --> 00:04:33,680

flight altitude now 35.6 nautical miles

70

00:04:42,550 --> 00:04:36,479

downrange distance 43.4 nautical miles

71

00:04:45,909 --> 00:04:44,390

i think three minutes 30 seconds good

72

00:04:48,230 --> 00:04:45,919

main engine chamber pressures good

73

00:05:01,990 --> 00:04:48,240

vernier chamber pressures less than one

74

00:05:05,189 --> 00:05:03,670

three minutes 50 seconds of the flight

75

00:05:08,230 --> 00:05:05,199

main engine pitching you all control and

76

00:05:10,070 --> 00:05:08,240

vernier control very stable now

77

00:05:12,070 --> 00:05:10,080

engine pressure chamber pressures on the

78

00:05:13,670 --> 00:05:12,080

main and the vernier engines still rock

79

00:05:16,390 --> 00:05:13,680

solid

80

00:05:18,469 --> 00:05:16,400

pressing now through 45.4 nautical miles

81

00:05:22,469 --> 00:05:18,479

downrange distance 104 nautical miles

82

00:05:36,710 --> 00:05:22,479

velocity 7 950 miles per hour about 20

83

00:05:47,350 --> 00:05:38,629

we have mikko

84

00:05:47,360 --> 00:05:50,950

we have separation

85

00:05:54,150 --> 00:05:52,870

and we have ignition on the second stage