
VOICE OF STEVE AGID
Launch Vehicle Telemetry Manager

1
00:00:04,000 --> 00:00:08,870
2 minus 15

2
00:00:11,270 --> 00:00:10,230
t minus 10

3
00:00:12,150 --> 00:00:11,280
9

4
00:00:13,190 --> 00:00:12,160
8

5
00:00:14,070 --> 00:00:13,200
7

6
00:00:15,030 --> 00:00:14,080
6

7
00:00:15,910 --> 00:00:15,040
5

8
00:00:17,029 --> 00:00:15,920
four

9
00:00:17,910 --> 00:00:17,039
three

10
00:00:19,109 --> 00:00:17,920
two

11
00:00:20,710 --> 00:00:19,119
one

12
00:00:23,349 --> 00:00:20,720
we have ignition

13
00:00:24,550 --> 00:00:23,359

and liftoff of a delta ii rocket and

14
00:00:26,790 --> 00:00:24,560
wise

15
00:00:37,350 --> 00:00:26,800
searching for stars and galaxies never

16
00:00:41,510 --> 00:00:39,270
good chamber pressure in both verniers

17
00:00:43,350 --> 00:00:41,520
and good chamber pressure in all three

18
00:00:45,830 --> 00:00:43,360
solids

19
00:00:48,630 --> 00:00:45,840
25 seconds mark 25 seconds into the

20
00:00:52,310 --> 00:00:49,910
ring nicely from the

21
00:00:53,750 --> 00:00:52,320
original uh main engine pitching your

22
00:00:56,389 --> 00:00:53,760
transients

23
00:01:00,470 --> 00:00:56,399
coming up 36 seconds mark 36 seconds

24
00:01:07,510 --> 00:01:02,950
still looking good

25
00:01:11,830 --> 00:01:09,030
pressure beginning to decline on our

26
00:01:17,590 --> 00:01:11,840
solids 50 seconds in max q maximum

27
00:01:24,070 --> 00:01:19,270
on one minute into the flight standing

28
00:01:28,390 --> 00:01:26,230
and we have burnout we're not on the

29
00:01:29,830 --> 00:01:28,400
three engines the three uh ground-lit

30
00:01:32,390 --> 00:01:29,840
solids will be holding on to those

31
00:01:34,469 --> 00:01:32,400
solids for about 30 seconds to assure a

32
00:01:37,510 --> 00:01:34,479
good water impact point one minute 15

33
00:01:42,469 --> 00:01:39,749
altitude 9.4 nautical miles downrange

34
00:01:47,510 --> 00:01:42,479
distance 9 nautical miles velocity 980

35
00:02:08,389 --> 00:01:49,830
10 seconds until we jettison the three

36
00:02:15,990 --> 00:02:09,990
we have separation of the three solid

37
00:02:19,350 --> 00:02:17,670
the delta vehicle now only weighs one

38
00:02:20,470 --> 00:02:19,360

half of what it did at launch uh two

39
00:02:22,390 --> 00:02:20,480
minutes ago

40
00:02:24,309 --> 00:02:22,400
as we're burning propellant at the rate

41
00:02:26,070 --> 00:02:24,319
of 800 pounds per second now passing two

42
00:02:28,390 --> 00:02:26,080
minutes five seconds into the flight out

43
00:02:31,070 --> 00:02:28,400
to 19.1 nautical miles downrange

44
00:02:39,750 --> 00:02:31,080
distance two nautical miles velocity

45
00:02:43,670 --> 00:02:41,910
two minutes 20 seconds in

46
00:02:49,190 --> 00:02:43,680
now approximately halfway through main

47
00:02:49,200 --> 00:02:53,990
two minutes 30 seconds in

48
00:02:57,270 --> 00:02:55,750
pressure continuing to hold very well in

49
00:02:58,710 --> 00:02:57,280
the main engine

50
00:03:05,589 --> 00:02:58,720
chamber pressure is holding well on both

51
00:03:08,790 --> 00:03:07,110
main engine pitching your control

52
00:03:11,110 --> 00:03:08,800
settling out now and vernier engine

53
00:03:13,750 --> 00:03:11,120
pitching your control also settling out

54
00:03:16,229 --> 00:03:13,760
coming up on two minutes 55 seconds

55
00:03:18,630 --> 00:03:16,239
altitude now 28.6 nautical miles

56
00:03:34,149 --> 00:03:18,640
downrange distance 28.2 nautical miles

57
00:03:37,430 --> 00:03:35,990
minutes 15 seconds into the flight main

58
00:03:42,309 --> 00:03:37,440
engine pitching your control really

59
00:03:46,630 --> 00:03:43,670
pressure right where we want it to be in

60
00:03:48,309 --> 00:03:46,640
the main engine and in both verniers

61
00:03:58,789 --> 00:03:48,319
less than one minute remains now on

62
00:04:03,750 --> 00:04:00,990
three minutes 40 seconds in altitude

63
00:04:07,910 --> 00:04:03,760

39.9 nautical miles downrange distance

64
00:04:14,390 --> 00:04:07,920
79.2 nautical miles velocity 6400 miles

65
00:04:18,550 --> 00:04:16,789
minutes 55 seconds in

66
00:04:19,990 --> 00:04:18,560
chamber pressure continuing to hold very

67
00:04:21,909 --> 00:04:20,000
well on the main engine and both

68
00:04:23,749 --> 00:04:21,919
verniers

69
00:04:25,749 --> 00:04:23,759
about 20 seconds until main engine cut

70
00:04:27,990 --> 00:04:25,759
off

71
00:04:30,870 --> 00:04:28,000
but you're now passing 48 nautical miles

72
00:04:34,629 --> 00:04:30,880
downrange distance 121.5 nautical miles

73
00:04:35,749 --> 00:04:34,639
velocity 8733 miles per hour standing by

74
00:04:43,510 --> 00:04:35,759
for mikko

75
00:04:43,520 --> 00:04:50,230
and we have mikko standing by for vico

76
00:04:53,590 --> 00:04:52,070
and we have vico the bernie engines have

77
00:04:57,030 --> 00:04:53,600
cut off

78
00:04:59,189 --> 00:04:57,040
can they buy for one two step

79
00:05:01,510 --> 00:04:59,199
one two step

80
00:05:03,270 --> 00:05:01,520
and we have ignition ignition on the

81
00:05:09,990 --> 00:05:03,280
second stage second stage chamber

82
00:05:14,070 --> 00:05:11,350
stay chamber pressure on the second

83
00:05:14,080 --> 00:05:19,189
standing by for fairing step

84
00:05:28,950 --> 00:05:22,390
we have fairing step indication

85
00:05:33,029 --> 00:05:30,629
five minutes ten seconds into the flight

86
00:05:36,070 --> 00:05:33,039
altitude is 73.3 nautical miles

87
00:05:44,629 --> 00:05:36,080
downrange distance 277 nautical miles

88
00:05:48,550 --> 00:05:47,110

five minutes 25 seconds in second saints

89
00:05:54,070 --> 00:05:48,560
chamber of pressure right where we want

90
00:05:58,390 --> 00:05:55,909
second stage of pitching y'all control

91
00:06:00,710 --> 00:05:58,400
very very good very quiet ride recovered

92
00:06:03,430 --> 00:06:00,720
very nicely from the initial uh ignition

93
00:06:07,749 --> 00:06:05,510
this first burn of the second stage

94
00:06:16,230 --> 00:06:07,759
today is five minutes and 42 seconds in

95
00:06:19,110 --> 00:06:17,990
now coming up on the six minutes into

96
00:06:23,510 --> 00:06:19,120
the flight

97
00:06:26,629 --> 00:06:23,520
altitude 87.2 nautical miles downrange

98
00:06:27,550 --> 00:06:26,639
distance 405.2 nautical miles velocity

99
00:06:44,309 --> 00:06:27,560
11

100
00:06:48,390 --> 00:06:46,150
less than four minutes remaining on the

101
00:06:49,830 --> 00:06:48,400
second stage of flight with his first

102
00:06:51,749 --> 00:06:49,840
burn

103
00:06:53,830 --> 00:06:51,759
i've been its correction uh six minutes

104
00:06:56,629 --> 00:06:53,840
33 seconds in

105
00:06:58,029 --> 00:06:56,639
altitude now at 93.5 nautical miles

106
00:07:02,469 --> 00:06:58,039
downrange distance

107
00:07:07,990 --> 00:07:02,479
497.1 nautical miles velocity 11 829

108
00:07:11,670 --> 00:07:09,909
second stage chamber pressure holding

109
00:07:17,430 --> 00:07:11,680
very well second stage of pitching your

110
00:07:21,270 --> 00:07:18,870
coming up on seven minutes into the

111
00:07:23,670 --> 00:07:21,280
flight mark seven minutes in altitude

112
00:07:26,629 --> 00:07:23,680
now passing 97.2 nautical miles

113
00:07:38,870 --> 00:07:26,639

downrange distance 573 nautical miles

114
00:07:44,230 --> 00:07:40,870
command receiver decoders 102 have been

115
00:07:48,230 --> 00:07:44,240
commanded off on time

116
00:07:59,029 --> 00:07:48,240
now passing seven minutes 25 seconds

117
00:08:11,749 --> 00:08:00,550
in your control on the second stage

118
00:08:18,950 --> 00:08:13,350
two minutes 20 seconds remaining in this

119
00:08:21,270 --> 00:08:20,390
now passing eight minutes into the

120
00:08:22,270 --> 00:08:21,280
flight

121
00:08:24,869 --> 00:08:22,280
altitude

122
00:08:28,110 --> 00:08:24,879
101.4 nautical miles downrange distance

123
00:08:35,589 --> 00:08:28,120
749 nautical miles velocity 13

124
00:08:51,190 --> 00:08:37,509
we can confirm now that though we have

125
00:08:56,070 --> 00:08:54,470
minutes 32 seconds in remember pressure

126
00:08:59,910 --> 00:08:56,080
on the second stage continuing to hold

127
00:09:04,150 --> 00:09:02,230
chamber pressure our correction uh

128
00:09:05,990 --> 00:09:04,160
second stage pitching your control is

129
00:09:12,870 --> 00:09:06,000
very very good at this time passing

130
00:09:16,550 --> 00:09:14,470
a minute and a half now remains in the

131
00:09:31,190 --> 00:09:16,560
second stage of flight for this first

132
00:09:36,949 --> 00:09:33,910
minutes 12 seconds in altitude 101.5

133
00:09:40,710 --> 00:09:36,959
nautical miles downrange distance 983.6

134
00:09:44,870 --> 00:09:40,720
nautical miles velocity 15 059 miles per

135
00:10:03,910 --> 00:09:46,630
one minute now remaining

136
00:10:09,590 --> 00:10:06,949
9 minutes 45 seconds in altitude 100.7

137
00:10:14,310 --> 00:10:09,600
nautical miles downrange distance 1102

138
00:10:19,030 --> 00:10:14,320

nautical miles velocity 15 957 miles per

139
00:10:19,040 --> 00:10:27,910
20 seconds till second

140
00:10:33,030 --> 00:10:29,509
stage chamber pressure beginning to

141
00:10:34,630 --> 00:10:33,040
decline as expected

142
00:10:43,910 --> 00:10:34,640
about five seconds remaining until the

143
00:10:43,920 --> 00:10:53,910
and we have sico