eighty seconds our CEO report range go

for launch

Rach go for launch you'll see the air

you go for lunch

Roger 70 seconds SSE hydraulics internal

internal t-minus one minute and Counting

our countdown limit conditions t-minus

60 seconds to on on 100%

45 seconds clcd are 17b launch enabled

to flight flight atc 3 main power

disabled on on 35 seconds hydraulics Co

30 seconds t-minus 30 seconds and

counting

wait a second like a green board here in
the mission directors Center matters

seconds green board t-minus 10 9 8 7 6 5

4 3 2 indignance engine start one zero

and liftoff of the delta ii rocket with

Kepler on a search for planets in a subway like our own premiere engine

changes pressures are building rounded

solid motors are building and tango

pressure increasing at this time

pressures looking good 1 seconds into the flight

the flight

[Music]

a covering from the initial launch

transients guessing 34 seconds Mach 1
00:01:55,750 --> 00:02:02,890
vehicle is now going supersonic the

30
00:02:00,519 --> 00:02:06,509
motor chamber pressure is beginning to

31
00:02:02,890 --> 00:02:08,709
trail off as we're passing 45 seconds

32
00:02:06,509 --> 00:02:11,650
engine chamber pressure good steady

33
00:02:08,709 --> 00:02:15,370
state value it symmetrical burn on the

34
00:02:11,650 --> 00:02:17,950
ground with solids coming up 55 seconds

35
00:02:15,370 --> 00:02:21,670
anywhere three Qin channel one secret

36
00:02:17,949 --> 00:02:24,310
ending by for burnout you're running out

37
00:02:21,669 --> 00:02:29,379
of the solids for separation seven

38
00:02:24,310 --> 00:02:31,390
that's ball four six five see separation

39
00:02:29,379 --> 00:02:35,439
of decimal four six and we have ignition

40
00:02:31,389 --> 00:02:38,699
of the air lit solid motors let's solid

41
00:02:35,439 --> 00:02:38,699
motors building and chamber pressure

42
00:02:41,099 --> 00:02:46,150
minute 22 seconds into the flight Delta

43
00:02:44,469 --> 00:02:48,219
two vehicle now only was about one-half

44
00:02:46,150 --> 00:02:50,500
of what it did at launch minute and 28

45
00:02:48,219 --> 00:02:53,430
seconds ago losing propellant at the

46
00:02:50,500 --> 00:02:56,560
rate of about 2,200 pounds per second

47
00:02:53,430 --> 00:02:57,849
one minute 35 seconds altitude now 15

48
00:02:56,560 --> 00:03:00,549
point 4 nautical miles downrange

49
00:02:57,849 --> 00:03:05,519
distance thirty five point six nautical

50
00:03:00,549 --> 00:03:05,519
miles velocity 3,300 93 miles per hour

51
00:03:07,500 --> 00:03:19,150
minute 48 seconds and let motor chamber

52
00:03:13,000 --> 00:03:20,919
pressures beginning to drop about the

53
00:03:19,150 --> 00:03:23,670
ten seconds vulnerable we burn out those

54
00:03:20,919 --> 00:03:23,669
airless solids

55
00:03:31,490 --> 00:03:40,340
anyway first step and we have separation

56
00:03:33,949 --> 00:03:43,159
air let's except separated pins into the

57
00:03:40,340 --> 00:03:44,960
flight altitude now 31 point 3 nautical
00:03:43,159 --> 00:03:47,120
miles downrange distance seventy nine

00:03:44,960 --> 00:03:48,860
point five nautical miles velocity fifty

00:03:47,120 --> 00:03:54,069
three hundred ninety eight miles per

00:03:48,860 --> 00:03:54,070
hour minutes thirty seconds

00:03:55,120 --> 00:03:59,270
main engine chamber pressure is still

00:03:57,379 --> 00:04:00,949
very steady burning your engine chamber

00:03:59,270 --> 00:04:09,770
pressure still very steady right in the

00:04:00,949 --> 00:04:12,739
expected range engine transient settling

00:04:09,770 --> 00:04:20,660
down now as we're approaching the three

00:04:12,740 --> 00:04:22,430
minute mark mark three minutes into the

00:04:20,660 --> 00:04:23,930
flight altitude now forty three point

00:04:22,430 --> 00:04:25,490
five nautical miles downrange distance

00:04:23,930 --> 00:04:28,100
one hundred and thirty four point six

00:04:25,490 --> 00:04:31,990
nautical miles velocity is six thousand
nine hundred and eighty miles per hour
during minimal steering now on the main engine pitch and yaw and on the verniers
now passing three minutes and 27 seconds
of the flight less than one minute until
main engine cutoff which is now 53 nautical miles downrange distance 197.50
for miles
a lot