
CITA 2 LAUNCH DK

1
00:00:00,000 --> 00:00:06,090
\h Music

2
00:00:06,090 --> 00:00:10,330
\h Zero and lift off the delta rocket with Mars Pathfinder

3
00:00:10,330 --> 00:00:14,870
\h and the vehicle has cleared the tower.

4
00:00:14,870 --> 00:00:16,790
\h It wasn't always this easy.

5
00:00:16,790 --> 00:00:20,890
\h The Delta II has become a workhorse of NASA's Launch Services Program.

6
00:00:20,890 --> 00:00:24,640
\h Thanks to a history of reliability and efficiency,

7
00:00:24,640 --> 00:00:26,890
\h it has proven itself dozens of times.

8
00:00:26,890 --> 00:00:29,780
\h Delta began as an improved version of the Thor,

9
00:00:29,780 --> 00:00:34,180
\h and recorded its first successful mission August 12, 1960.

10
00:00:34,180 --> 00:00:38,130
\h The payload then was the Echo I communications satellite,

11
00:00:38,130 --> 00:00:41,460
\h which weighed about the same as an average adult male.

12
00:00:41,460 --> 00:00:45,200
\h A gradual list of improvements gave the Delta I models better engines

13
00:00:45,200 --> 00:00:47,240

\h and bigger fuel tanks.

14
00:00:47,240 --> 00:00:51,500
\h With each change came a greater load the rocket could place into orbit.

15
00:00:51,500 --> 00:00:55,020
\h That meant launching communications satellites that were more capable of

16
00:00:55,020 --> 00:00:59,440
\h transmitting signals around the world, and a chance to launch probes

17
00:00:59,440 --> 00:01:01,110
\h to nearby planets.

18
00:01:01,110 --> 00:01:04,970
\h It didn't take long before engineers started attaching small booster rockets

19
00:01:04,970 --> 00:01:08,870
\h to the side of the first stage to give an extra kick at liftoff.

20
00:01:08,870 --> 00:01:13,100
\h It's a practice we still use today, although the booster rockets are considerably

21
00:01:13,100 --> 00:01:16,710
\h stronger and somewhat larger than those early models.

22
00:01:16,710 --> 00:01:22,560
\h By 1975, the Delta rocket could shoot a ton of cargo into high earth orbit.

23
00:01:22,560 --> 00:01:26,490
\h That was about 11 times more than the first Delta could carry.

24
00:01:26,490 --> 00:01:30,570
\h Delta production was temporarily halted when the space shuttle program began

25
00:01:30,570 --> 00:01:33,000
\h in the early 1980s.

26
00:01:33,000 --> 00:01:38,110
\h Manufacturing returned after 1986 as part of NASA’s mixed fleet manifest

27
00:01:38,110 --> 00:01:40,710
\h and the changes began again.

28
00:01:40,710 --> 00:01:45,710
\h Improved several times in recent years, the Delta II is still a reliable element

29
00:01:45,710 --> 00:01:47,680
\h in NASA's launch fleet.