



1
00:00:00,000 --> 00:00:07,940

\h Music.

2
00:00:07,940 --> 00:00:15,950

\h On Dec. 14, 2009, A United Launch Alliance Delta II rocket carried NASA's Wide-field Infrared Survey Explorer,

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00:00:15,950 --> 00:00:19,830

\h or WISE, space telescope into a high polar orbit.

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00:00:19,830 --> 00:00:25,210

\h WISE lifted off from Space Launch Complex-2 at Vandenberg Air Force Base in California

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00:00:25,210 --> 00:00:29,990

\h beginning its 10-month mission to map the entire sky in the infrared.

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00:00:29,990 --> 00:00:37,150

\h Preparations for launch started earlier in the year when WISE's builder, Ball Aerospace & Technologies

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00:00:37,150 --> 00:00:42,090

\h shipped the spacecraft to the Astrotech payload processing facility at Vandenberg.

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00:00:42,090 --> 00:00:47,010

\h During the months of August, September and October the spacecraft was uncanned,

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00:00:47,010 --> 00:00:52,460

\h uncovered and moved to a clean room for testing, weighing and balancing.

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00:00:52,460 --> 00:00:59,840

\h Meanwhile, at Space Launch Complex-2, build-up of the Delta II began on Oct. 19 with the hoisting of th

11
00:00:59,840 --> 00:01:04,240

\h the launcher platform, shortly followed by the interstage section.

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00:01:04,240 --> 00:01:08,980

\h Once the first and interstage sections were secured, workers attached the three solid rocket

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00:01:08,980 --> 00:01:14,350

\h boosters around the base and then lifted the second stage section into position.

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00:01:14,350 --> 00:01:21,700

\h By the end of October, the rocket was complete and testing began on its Tracking and Data Relay Satellite.

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00:01:21,700 --> 00:01:27,570

\h A demanding workload followed in November as technicians tested the rocket's propellant and guidance control systems,

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00:01:27,570 --> 00:01:31,920

\h in addition to performing first stage leak checks.

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00:01:31,920 --> 00:01:36,030

\h At Astrotech, work continued with loading of the cryogenic hydrogen that will keep the

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00:01:36,030 --> 00:01:41,740

\h spacecraft's infrared telescope super-cold during its months of observations.

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00:01:41,740 --> 00:01:49,930

\h After one final week of testing, technicians gingerly lowered a transportation canister over WISE for its mission.

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00:01:49,930 --> 00:01:56,130

\h Then, the 1,460-pound spacecraft was lifted atop the Delta II rocket.

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00:01:56,130 --> 00:02:00,530

\h By the end of the month, an integrated electrical test was conducted to ensure the

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00:02:00,530 --> 00:02:04,430

\h two crafts communicated with each other and with mission control.

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00:02:04,430 --> 00:02:10,280

\h In a clean room environment, the spacecraft was carefully encased in its protective shell, called a fairing.

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00:02:10,280 --> 00:02:17,080

\h The two-part fairing protects the spacecraft during the harsh environment of liftoff, and fell away once it

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00:02:17,080 --> 00:02:23,590

\h Technicians at the launch pad continued mechanical, electrical and avionics system checkouts of the ro

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00:02:23,590 --> 00:02:28,730

\h while cooling of the spacecraft's cryogenic systems continued until liftoff.