



1
00:00:08,810 --> 00:00:06,740
space shuttle Discovery the venerable

2
00:00:11,270 --> 00:00:08,820
veteran of America's human spaceflight

3
00:00:13,640 --> 00:00:11,280
fleet proudly resting atop launch pad

4
00:00:16,790 --> 00:00:13,650
39a here at NASA's Kennedy Space Center

5
00:00:19,760 --> 00:00:16,800
in Florida her wings outstretched and

6
00:00:24,460 --> 00:00:19,770
ready to soar into space for the 39th

7
00:00:28,850 --> 00:00:24,470
and final time and here we have the Pooh

8
00:00:30,830 --> 00:00:28,860
walking out of coupons this is a very

9
00:00:33,260 --> 00:00:30,840
historical walkway it's the same path

10
00:00:35,690 --> 00:00:33,270
that the Apollo astronauts took to go to

11
00:00:38,930 --> 00:00:35,700
the moon and over the last 30 years

12
00:00:41,330 --> 00:00:38,940
there's been a 133 our shuttle crews

13
00:00:43,550 --> 00:00:41,340

that walked out here to catch this bus

14

00:00:47,330 --> 00:00:43,560

for the exciting ride out to the launch

15

00:00:51,200 --> 00:00:47,340

pad the crew will step out of the Astro

16

00:00:54,680 --> 00:00:51,210

van and you'll probably see them step

17

00:00:58,670 --> 00:00:54,690

back and look up which is a little hard

18

00:01:01,910 --> 00:00:58,680

to do in the heavy suits that they have

19

00:01:04,429 --> 00:01:01,920

but you get an opportunity to stand

20

00:01:08,270 --> 00:01:04,439

there and see the shuttle from a very

21

00:01:09,950 --> 00:01:08,280

unique perspective the view itself is

22

00:01:11,360 --> 00:01:09,960

spectacular but your perspective is

23

00:01:12,950 --> 00:01:11,370

particularly unique because you know

24

00:01:18,800 --> 00:01:12,960

that it is the right that's going to

25

00:01:21,620 --> 00:01:18,810

take you out into orbit there you can

26

00:01:25,570 --> 00:01:21,630

see the crew having a group hug and a

27

00:01:31,260 --> 00:01:25,580

little quiet moment for themselves to

28

00:01:41,219 --> 00:01:34,859

wish each other will and then it's back

29

00:01:43,999 --> 00:01:41,229

to work 20 seconds the sound suppression

30

00:01:46,440 --> 00:01:44,009

water system has been activated

31

00:01:50,699 --> 00:01:46,450

protecting discovery and the launch pad

32

00:01:55,069 --> 00:01:50,709

from acoustical energy way go for main

33

00:01:59,789 --> 00:01:55,079

engine start we have main engine start

34

00:02:02,999 --> 00:01:59,799

to one booster ignition and the final

35

00:02:04,740 --> 00:02:03,009

liftoff of discovery a tribute to the

36

00:02:07,260 --> 00:02:04,750

dedication hard work and pride of

37

00:02:15,450 --> 00:02:07,270

America's space shuttle team the shuttle

38

00:02:19,580 --> 00:02:17,630

onto his back they

39

00:02:42,850 --> 00:02:19,590

orbit discovery now making one last

40

00:02:46,270 --> 00:02:44,590

representatives are now throttling down

41

00:02:47,920 --> 00:02:46,280

if the orbiter passes through the area

42

00:03:00,850 --> 00:02:47,930

of maximum pressure reducing the stress

43

00:03:11,990 --> 00:03:03,290

discovery Houston you are go at throttle

44

00:03:13,400 --> 00:03:12,000

up will commander Steve Lindsey

45

00:03:15,170 --> 00:03:13,410

acknowledging the call from Capcom

46

00:03:21,080 --> 00:03:15,180

Charlie ho buys discoveries three main

47

00:03:22,670 --> 00:03:21,090

engines throttle back up lindsey is

48

00:03:24,170 --> 00:03:22,680

joined on the flight deck by pilot eric

49

00:03:32,540 --> 00:03:24,180

boe and mission specialists al jarreau

50

00:03:35,930 --> 00:03:32,550

and nicole stott mission specialist mike

51
00:03:37,280 --> 00:03:35,940
barrett and steve bowen discoveries

52
00:03:38,210 --> 00:03:37,290
three main engines are burning fuel at a

53
00:03:41,780 --> 00:03:38,220
rate that would drain an average

54
00:03:43,100 --> 00:03:41,790
swimming pool in about 25 seconds the

55
00:03:44,840 --> 00:03:43,110
engines combined with the solid rocket

56
00:03:47,059 --> 00:03:44,850
boosters produce more than 7 million

57
00:03:49,250 --> 00:03:47,069
pounds of thrust

58
00:03:50,660 --> 00:03:49,260
one minute 50 seconds into the flight

59
00:03:52,610 --> 00:03:50,670
we're standing by for separation of the

60
00:03:55,610 --> 00:03:52,620
twin solid rocket boosters discovery now

61
00:03:57,920 --> 00:03:55,620
travelling 2695 miles an hour it's

62
00:04:03,760 --> 00:03:57,930
altitude 24 miles downrange in the

63
00:04:03,770 --> 00:04:12,700

you

64

00:04:16,480 --> 00:04:14,890

booster separation confirmed discoveries

65

00:04:18,370 --> 00:04:16,490

guidance is now converging as the

66

00:04:23,510 --> 00:04:18,380

shuttles onboard computers fine-tune the

67

00:04:28,309 --> 00:04:25,430

two minutes 25 seconds into the flight

68

00:04:30,860 --> 00:04:28,319

discovery traveling 3189 miles an hour

69

00:04:33,750 --> 00:04:30,870

is altitude 37 miles downrange to the