



1
00:00:06,019 --> 00:00:04,039
we are transferring to orbiter internal

2
00:00:08,410 --> 00:00:06,029
power at this time discovery is now

3
00:00:11,000 --> 00:00:08,420
running off its three onboard fuel cells

4
00:00:22,640 --> 00:00:11,010
coming up on a go for all the sequence

5
00:00:24,740 --> 00:00:22,650
start go for autosequence apart and we

6
00:00:26,750 --> 00:00:24,750
have a go for autosequence start scart

7
00:00:29,210 --> 00:00:26,760
discoveries onboard computers have

8
00:00:33,170 --> 00:00:29,220
primary control of all the vehicles

9
00:00:48,940 --> 00:00:33,180
critical functions t-minus 17 seconds

10
00:00:52,880 --> 00:00:48,950
and counting 15 12 11 10 9 8 7 6 start

11
00:00:55,459 --> 00:00:52,890
21 booster ignition and liftoff of the

12
00:00:57,260 --> 00:00:55,469
space shuttle Discovery returning to the

13
00:01:01,030 --> 00:00:57,270

space station paving the way for future

14

00:01:01,040 --> 00:01:09,930

the government program

15

00:01:20,310 --> 00:01:11,360

which is roll

16

00:01:20,320 --> 00:01:23,480

new discoveries

17

00:01:23,490 --> 00:01:28,200

start to discover his mission

18

00:01:31,980 --> 00:01:30,390

discovery's 3 liquid fuel main engines

19

00:01:33,690 --> 00:01:31,990

now throttling back to sixty-seven

20

00:01:35,010 --> 00:01:33,700

percent of rated performance reducing

21

00:01:37,920 --> 00:01:35,020

the stress on the shuttle as it breaks

22

00:01:39,450 --> 00:01:37,930

through the sound barrier discovery

23

00:01:41,249 --> 00:01:39,460

already three and a half miles in

24

00:01:44,420 --> 00:01:41,259

altitude one and a half miles downrange

25

00:01:49,889 --> 00:01:44,430

traveling almost 750 miles an hour

26
00:01:51,870 --> 00:01:49,899
everything looking good on the bird 57

27
00:01:57,270 --> 00:01:51,880
seconds into the flight engines

28
00:02:06,030 --> 00:01:59,370
standing by for the throttle up call

29
00:02:09,510 --> 00:02:06,040
from Capcom Steve Frank every you can go

30
00:02:12,480 --> 00:02:09,520
and throttle up the proprietor going

31
00:02:14,100 --> 00:02:12,490
problem here at have only the throttle

32
00:02:16,320 --> 00:02:14,110
up call acknowledged by Commander Steve

33
00:02:24,059 --> 00:02:16,330
Lindsey every youth in its expected data

34
00:02:25,740 --> 00:02:24,069
hits it'll clear shortly Lindsay joined

35
00:02:27,540 --> 00:02:25,750
on the flight deck by pilot mark kelly

36
00:02:29,190 --> 00:02:27,550
flight engineer Lisa Nowak and mission

37
00:02:30,930 --> 00:02:29,200
specialist Mike Fossum mission

38
00:02:32,729 --> 00:02:30,940

specialists piers sellers Stephanie

39

00:02:35,100 --> 00:02:32,739

Wilson and Tomas writer of the European

40

00:02:36,449 --> 00:02:35,110

Space Agency down on the mid-deck Ryder

41

00:02:40,259 --> 00:02:36,459

headed for six months on the

42

00:02:42,780 --> 00:02:40,269

International Space Station one minute

43

00:02:44,850 --> 00:02:42,790

47 seconds into the flight 22 miles in

44

00:02:47,699 --> 00:02:44,860

altitude 18 miles downrange traveling

45

00:03:02,300 --> 00:02:47,709

2,600 miles an hour standing by for

46

00:03:06,440 --> 00:03:04,500

solid rocket boosters separation

47

00:03:08,970 --> 00:03:06,450

confirmed guidance now converging

48

00:03:11,009 --> 00:03:08,980

discoveries onboard computers commanding

49

00:03:12,780 --> 00:03:11,019

the main engine nozzles to swivel aiming

50

00:03:14,399 --> 00:03:12,790

the shuttle for its precise target in

