



1  
00:00:03,980 --> 00:00:02,720  
do you - 15 seconds and the sound

2  
00:00:07,430 --> 00:00:03,990  
suppression water system has been

3  
00:00:16,939 --> 00:00:07,440  
activated we have a go for main can

4  
00:00:20,470 --> 00:00:16,949  
start three two one zero booster

5  
00:00:22,910 --> 00:00:20,480  
ignition and liftoff of discovery

6  
00:00:33,670 --> 00:00:22,920  
blazing a trail to scientific

7  
00:00:33,680 --> 00:00:39,200  
roll discovery

8  
00:00:45,459 --> 00:00:40,850  
down position putting it on course for

9  
00:00:57,200 --> 00:00:47,200  
and eventually the International Space

10  
00:01:01,950 --> 00:01:00,210  
Discovery's 3 main engines are now

11  
00:01:03,510 --> 00:01:01,960  
throttling down to reduce stress on the

12  
00:01:06,570 --> 00:01:03,520  
shuttle as it travels through the area

13  
00:01:09,540 --> 00:01:06,580

of maximum dynamic pressure discovery is

14

00:01:15,990 --> 00:01:09,550

already at an altitude of 4.7 miles or

15

00:01:24,540 --> 00:01:16,000

20 6,500 feet traveling discovery go at

16

00:01:26,100 --> 00:01:24,550

throttle up traveling 1,000 miles per

17

00:01:27,690 --> 00:01:26,110

hour Discovery's engines are now

18

00:01:41,100 --> 00:01:27,700

throttled back up and performing at full

19

00:01:42,719 --> 00:01:41,110

capability at the top shuttle weighed

20

00:01:46,410 --> 00:01:42,729

more than four and a half million pounds

21

00:01:47,969 --> 00:01:46,420

and now one minute and 27 seconds into

22

00:01:49,380 --> 00:01:47,979

the flight the main engines and solid

23

00:01:51,900 --> 00:01:49,390

rocket boosters have reduced that weight

24

00:01:54,300 --> 00:01:51,910

by about half solid rocket rocket

25

00:01:56,340 --> 00:01:54,310

boosters alone or burning burning 11,000

26  
00:01:58,350 --> 00:01:56,350  
pounds of propellant per second and the

27  
00:02:04,080 --> 00:01:58,360  
external tank is now 3,000 pounds

28  
00:02:06,960 --> 00:02:04,090  
lighter than when it began Discovery's

29  
00:02:11,070 --> 00:02:06,970  
now 21 miles away from its launch pad

30  
00:02:13,050 --> 00:02:11,080  
and 22 miles in altitude traveling 2,700

31  
00:02:15,330 --> 00:02:13,060  
miles per hour all three main engines

32  
00:02:16,830 --> 00:02:15,340  
are working just as expected the three

33  
00:02:19,020 --> 00:02:16,840  
fuel cells are generating power and

34  
00:02:21,000 --> 00:02:19,030  
three auxiliary power units are all

35  
00:02:24,900 --> 00:02:21,010  
producing pressure in short everything

36  
00:02:32,550 --> 00:02:24,910  
performing well two minutes and seven

37  
00:02:33,870 --> 00:02:32,560  
seconds into the sts-131 mission the

38  
00:02:35,460 --> 00:02:33,880

booster officer in the Mission Control

39

00:02:36,750 --> 00:02:35,470

Center has confirmed solid rocket

40

00:02:39,180 --> 00:02:36,760

booster separation