



1
00:00:00,000 --> 00:00:06,480
five four three two

2
00:00:10,910 --> 00:00:09,210
zero and liftoff of space shuttle

3
00:00:13,400 --> 00:00:10,920
Atlantis

4
00:00:21,750 --> 00:00:13,410
the crest of its historic achievements

5
00:00:21,760 --> 00:00:24,870
Houston is now controlling

6
00:00:28,230 --> 00:00:27,000
the roll maneuver is complete Atlantis's

7
00:00:32,760 --> 00:00:28,240
and ahead

8
00:00:43,319 --> 00:00:32,770
on course for a 51.6 degree 136 by 36

9
00:00:47,069 --> 00:00:45,240
and the three main engines on atlantis

10
00:00:49,619 --> 00:00:47,079
had now been throttled down to 72

11
00:00:51,540 --> 00:00:49,629
percent of rated thrust as the orbiter

12
00:00:53,280 --> 00:00:51,550
prepares to pass through the area of

13
00:01:02,130 --> 00:00:53,290

maximum dynamic pressure on the vehicle

14

00:01:24,570 --> 00:01:04,140

engines now beginning to throttle back

15

00:01:27,120 --> 00:01:24,580

up all three engines looking really good

16

00:01:28,919 --> 00:01:27,130

back at full throttle now at liftoff the

17

00:01:30,960 --> 00:01:28,929

fully fueled shuttle boosters an

18

00:01:34,289 --> 00:01:30,970

external tank weighed four and a half

19

00:01:38,100 --> 00:01:34,299

million pounds it now has burned half of

20

00:01:39,570 --> 00:01:38,110

that liftoff weight in propellant one

21

00:01:41,580 --> 00:01:39,580

minute thirty seconds into the flight

22

00:01:43,740 --> 00:01:41,590

all three auxiliary power units that

23

00:01:45,930 --> 00:01:43,750

provide hydraulic power to the orbiters

24

00:01:48,870 --> 00:01:45,940

systems in good shape as are the fuel

25

00:01:50,940 --> 00:01:48,880

cells providing electricity to all of

26

00:01:53,760 --> 00:01:50,950

the systems on board Atlantis is already

27

00:01:56,779 --> 00:01:53,770

19 miles an altitude down rates from the

28

00:02:02,429 --> 00:01:56,789

Kennedy Space Center 20 miles traveling

29

00:02:04,380 --> 00:02:02,439

2,500 miles per hour coming up on

30

00:02:06,300 --> 00:02:04,390

staging the point at which the twin