



VOICE OF MARTY MALINOWSKI
ULA Flight Commentator

1
00:00:00,780 --> 00:00:01,780
Eight.

2
00:00:01,780 --> 00:00:02,780
Seven.

3
00:00:02,780 --> 00:00:03,780
Six.

4
00:00:03,780 --> 00:00:04,780
Five.

5
00:00:04,780 --> 00:00:05,780
Four.

6
00:00:05,780 --> 00:00:06,780
Three.

7
00:00:06,780 --> 00:00:07,780
Two.

8
00:00:07,780 --> 00:00:08,780
One.

9
00:00:08,780 --> 00:00:09,780
Zero.

10
00:00:09,780 --> 00:00:17,580
Liftoff of the Atlas V, launching the first
interplanetary mission from the West Coast,

11
00:00:17,580 --> 00:00:22,060
and NASA's InSight, the first outer-space
robotic explorer to study the interior of

12
00:00:22,200 --> 00:00:23,320
Mars.

13
00:00:43,040 --> 00:00:44,720
[inaudible]
RD-180 continues to look good at this point

14
00:00:44,730 --> 00:00:46,329
in the mission.

15
00:00:46,329 --> 00:00:50,210
Chamber pressures, pump speeds in expected regions.

16
00:00:50,210 --> 00:00:53,040
Ratio within expected parameters.

17
00:00:59,100 --> 00:01:05,160
The RD-180 engine providing 160,000 pounds of thrust.

18
00:01:05,160 --> 00:01:07,200
Rates continue to look good.

19
00:01:16,160 --> 00:01:19,200
All booster systems look nominal at this point.

20
00:01:27,560 --> 00:01:29,400
Mach 1.

21
00:01:29,430 --> 00:01:34,850
The rocket is now traveling faster than the speed of sound.

22
00:01:34,850 --> 00:01:40,460
Max Q. Coming up, the rocket will enter Max Q.

23
00:01:40,460 --> 00:01:43,561
This is the point when mechanical stress on the rocket reaches its peak because of the

24

00:01:43,561 --> 00:01:46,570

rocket's velocity and resistance created
by Earth's atmosphere.

25

00:01:46,570 --> 00:01:49,789

Coming up on the throttle down.

26

00:01:49,789 --> 00:01:53,420

Chamber has throttled back, right on schedule.

27

00:01:53,420 --> 00:01:54,540

Signatures look good.

28

00:01:54,540 --> 00:01:59,939

Pump speeds and chamber pressures continue
to look right within band.

29

00:01:59,939 --> 00:02:02,710

Body rates down the middle.