



1  
00:00:01,050 --> 00:00:11,040  
George Diller/NASA Launch Commentator: T-minus  
10, 9, 8, 7, 6, 5, 4, 3, 2, 1, main engine

2  
00:00:11,040 --> 00:00:17,929  
start . . . ignition . . . and liftoff of  
the Atlas V with MAVEN, looking for clues

3  
00:00:17,929 --> 00:00:21,339  
about the evolution of Mars through its atmosphere.

4  
00:00:21,339 --> 00:00:26,460  
(thundering roar of the ascending rocket)  
(inaudible background)

5  
00:00:26,460 --> 00:00:30,939  
Xxxxx/ Atlas V Ascent Commentator: (Inaudible)  
. . . Mark.

6  
00:00:30,939 --> 00:00:31,939  
Everything looking good.

7  
00:00:31,939 --> 00:00:34,379  
Still at 100 percent rated thrust on the RD  
180.

8  
00:00:34,379 --> 00:00:35,739  
Vehicle rates are looking good.

9  
00:00:35,739 --> 00:00:41,340  
We do have roll program in, right as expected.

10  
00:00:41,340 --> 00:00:44,809  
We're actively controlling mix to ratio.

11  
00:00:44,809 --> 00:00:46,339  
Valve position looks good.

12

00:00:46,339 --> 00:00:50,940  
Thrust regulator valve position looks good  
Speeds are good.

13  
00:00:50,940 --> 00:00:54,460  
And vehicle is operating as expected.

14  
00:00:54,460 --> 00:00:59,100  
Down the center of the range track.

15  
00:00:59,100 --> 00:01:03,249  
Everything is looking good.

16  
00:01:03,249 --> 00:01:10,383  
We're now 1.6 nautical miles altitude . . . point  
1 miles down range, traveling at over 1,000

17  
00:01:10,383 --> 00:01:11,383  
miles per hour.

18  
00:01:11,383 --> 00:01:17,960  
And we've ended our roll programs.

19  
00:01:17,960 --> 00:01:24,040  
Everything is looking good.

20  
00:01:24,040 --> 00:01:31,630  
Continuing at 100 percent thrust.

21  
00:01:31,630 --> 00:01:34,010  
And we are now passing through the sound barrier.

22  
00:01:34,010 --> 00:01:35,440  
MAVEN is now supersonic.

23  
00:01:35,440 --> 00:01:39,340  
RD 180 continues to operate at 100 percent  
rated thrust.

24

00:01:39,340 --> 00:01:45,490

We are about to pass through Max-Q.

25

00:01:45,490 --> 00:01:50,100

And MAVEN is passing through Max-Q, rates look good.

26

00:01:50,100 --> 00:01:54,990

(Inaudible) Operate at 100 percent and we have throttled down to 95 percent, thrust

27

00:01:54,990 --> 00:01:59,770

right on time.