
And we have liftoff of TDRS-M on an Atlas V rocket from Space Launch Complex 41.

TDRS-M, securing space-to-ground communication for NASA's low-Earth orbit operations, including the International Space Station.

The Atlas is (performing) its yaw maneuvers in its planned path at an inclination of
26.2 degrees.

You're hearing the voice of Patrick Moore providing launch vehicle ascent data.

Patrick is the United Launch Alliance Denver Network Operations Center.

Speed and injector pressure all looking good.

The Atlas rocket carrying TDRS-M reaches supersonic speed at one minute, 20 seconds into flight.

Now passing one minute into flight.

Vehicle is now three miles in altitude and traveling at 1,100 miles per hour.

Standing by for Max Q.

Now passing one minute, 15 seconds into flight.

Mach 1.

Atlas V is now supersonic.
One minute, 30 seconds into flight.

Now passing through Max Q.

Maximum dynamic pressure.

This is the point when mechanical stress on the rocket reaches its peak because of the rocket's velocity and resistance created by the Atlas.

The RD-180 is throttled down to 95 percent thrust as expected.

Engine response looks good.

This engine thrust profile will continue until the vehicle reaches a programmed 5G acceleration limit.

About two minutes into the flight of Atlas.

Now passing two minutes into flight.

Approximately two minutes remaining in the first stage of flight.
MEO trajectory traveling right down the middle of the range track looking good.

RD-180 engine operating parameters also looking good.

Booster engine cutoff slated for four minutes, two seconds after launch.

The Atlas V rocket now weighs one-half of what it did at launch, burning propellant at a rate of almost 2,600 pounds per second.

And vehicle has gone to closed-loop guidance.

Now passing two minutes, 30 seconds into flight.