



1
00:00:00,050 --> 00:00:04,080
tone

2
00:00:04,100 --> 00:00:08,140
[music, SFX]

3
00:00:08,160 --> 00:00:12,170
Gary Davis: Hello, I'm Gary Davis. I'm on the systems engineering team

4
00:00:12,190 --> 00:00:16,210
for the MMS Mission. MMS is going to study magnetic

5
00:00:16,230 --> 00:00:20,250
reconnection between the Earth and the sun. There's our launch

6
00:00:20,270 --> 00:00:24,280
on our Atlas VI launch vehicle from Cape Canaveral air force station.

7
00:00:24,300 --> 00:00:28,330
Now we are flying above Florida, and the first stage has separated.

8
00:00:28,350 --> 00:00:32,400
The second stage puts us into orbit.

9
00:00:32,420 --> 00:00:36,440
The fairing that protects us during launch will jettison.

10
00:00:36,460 --> 00:00:40,500
And you can see all 4 MMS space craft inside.

11
00:00:40,520 --> 00:00:44,540
Each one gets deployed sequentially

12
00:00:44,560 --> 00:00:48,580
and then you will see the deployments that we have. We have 3 different

13
00:00:48,600 --> 00:00:52,620

types of deployments. The first one is our

14

00:00:52,640 --> 00:00:56,650

magnetometer boom. It is on the underside of the spacecraft.

15

00:00:56,670 --> 00:01:00,690

You'll see the hinge locks open up and then the booms will deploy

16

00:01:00,710 --> 00:01:04,710

one at a time. They have a shoulder joint and an elbow joint, just like

17

00:01:04,730 --> 00:01:08,740

your arm. So, those are our 2 arms opening up.

18

00:01:08,760 --> 00:01:12,780

Our next deployment is the SDP booms. Those are spheres at

19

00:01:12,800 --> 00:01:16,800

the end of 60 meter-long wire cables.

20

00:01:16,820 --> 00:01:20,840

And then our third deployment is along the spin axis of the spacecraft.

21

00:01:20,860 --> 00:01:24,880

You'll see the ADP antennae and the ADP

22

00:01:24,900 --> 00:01:28,910

booms will deploy along the plus and minus Z axis.

23

00:01:28,930 --> 00:01:32,960

And those are all of our deployments.

24

00:01:32,980 --> 00:01:36,980

Each spacecraft has those three instruments that are deployed.

25

00:01:37,000 --> 00:01:41,010

And we have four spacecraft in formation that you'll see in the video.

26

00:01:41,030 --> 00:01:45,030

And we fly in a tetrahedron to get three dimensional