

Mars Cube One: MarCO
First Interplanetary CubeSat Mission
Voiceover by Andy Klesh

In March of 2016 NASA will be launching the next Mars lander, InSight, from Vandenberg Air Force Base.

InSight is a mission that will investigate the planet's interior to understand Mars' evolution.

On board this rocket two small spacecraft will be hitching a ride: the MarCO spacecraft. Each of these spacecraft will ride along on the rocket carrying InSight. InSight will separate. And, soon after, each of the MarCO spacecraft will also separate from the rocket.

First, MarCO A will separate. The rocket will turn 180 degrees and MarCO B will separate as well. Each of the spacecraft will then unfurl their solar wings, their high gain antenna, their UHF antenna in preparation for a 6½-month cruise to Mars.

When InSight gets to Mars, it will be going through the Entry, Descent and Landing sequence. And each of the MarCO spacecraft will be there to witness this landing on Mars. The MarCO spacecraft will be relaying data back from the InSight lander to NASA's Deep Space Network.

These spacecraft, **the size of a briefcase**, will be the first interplanetary cubesats paving the way for future small spacecraft exploration, and assisting and reducing risk to future landers and flybys.