

NEWS – 18.05.2017

MTG Star Tracker Bracket Assembly fully qualified and delivered to OHB Bremen

The MTG series will comprise four imaging and two sounding satellites. The MTG-I imaging satellites will carry the Flexible Combined Imager (FCI) and the Lightning Imager. The MTG-S sounding satellites – a first for Meteosat – will carry an Infrared Sounder (IRS) and an Ultraviolet Visible Near-Infrared spectrometer. Each Satellite will be equipped with an HB-Cesic star tracker bracket.

ECM and his team has completely designed the SAB based on the MTG requirement specification, therefore ECM was fully responsible for the design, integration and testing of the subsystem.

To qualify the star tracker bracket assembly consisting out of the HB-Cesic Start tracker bracket combined with three titanium Bi-pods and the aluminum radiators to be the interface for the star tracker ECM had to perform stringent qualification test to confirm the excellent thermal stability associated with minimized weight. The Structural Thermal Model (STM) was exposed to the following test sequence:

- Thermal Vacuum Test
- Thermal Balance Test
- Thermo-Elastic Test
- Vibration Test
- Shock Test

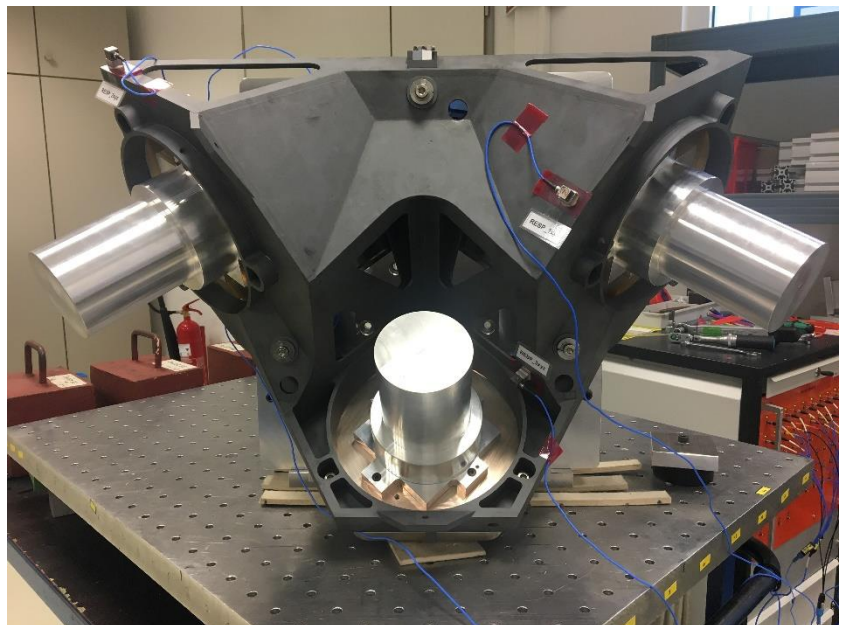


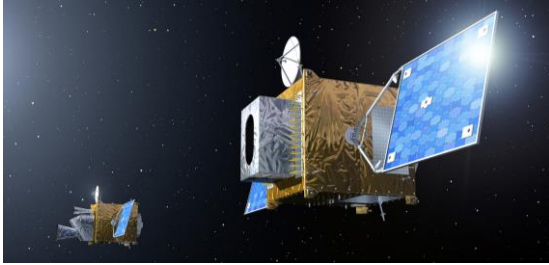
Fig.:1 STM model during final shock test at IABG

All these tests were successfully performed and finally the extremely challenging thermal elastic stability of only 0,7 $\mu\text{rad/K}$ could be verified during test as well as the mechanical and structural performance surviving the vibration and shock tests.

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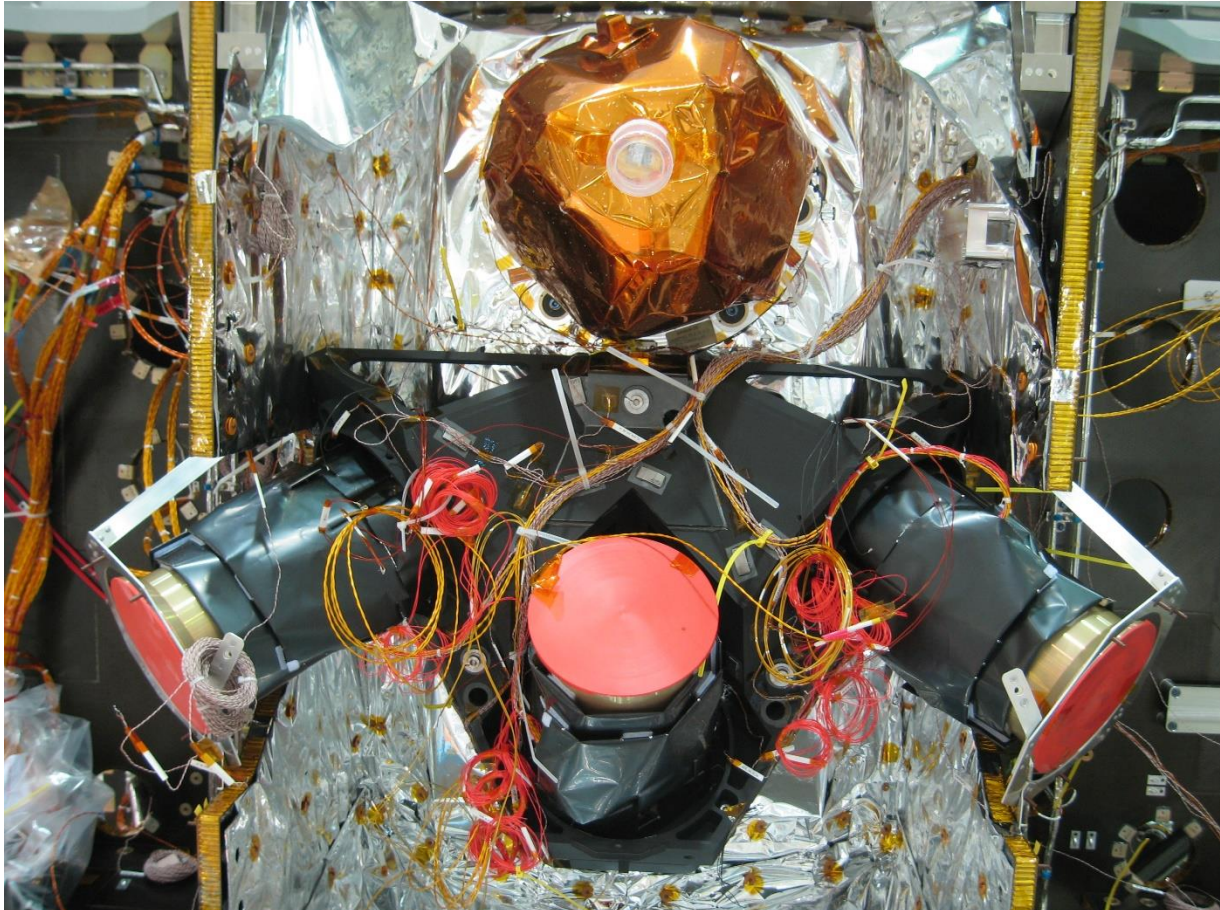
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ECM delivered on 18.05.2017 the STM model fully qualified to OHB for STM platform qualification.



Star Tracker Bracket mounted on MTG STM satellite

We are proud that the SAB qualification verified the excellent mechanical and thermal performance of our HB-Cesic Star Tracker Bracket or even exceeding some of the challenging requirements.

Now, ECM has authorization to start the production of the 7 Flight Models which will be delivered between November 2017 and September 2018 to OHB in 3 batches.

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