

News – 22.07.2012

We are proud to announce that we have reached to a next flight heritage of a Cestic® structure which is used inside the TET- 1 microsatellite. This satellite was launched together with 4 others satellite from Baikonur site on 22nd July 2012 with a Soyuz Fregat launcher. With TET-1 also space probes Kanopus-B, BKA, MKA-FKI, ADS-1 were launched.



TET-1 during integrating process

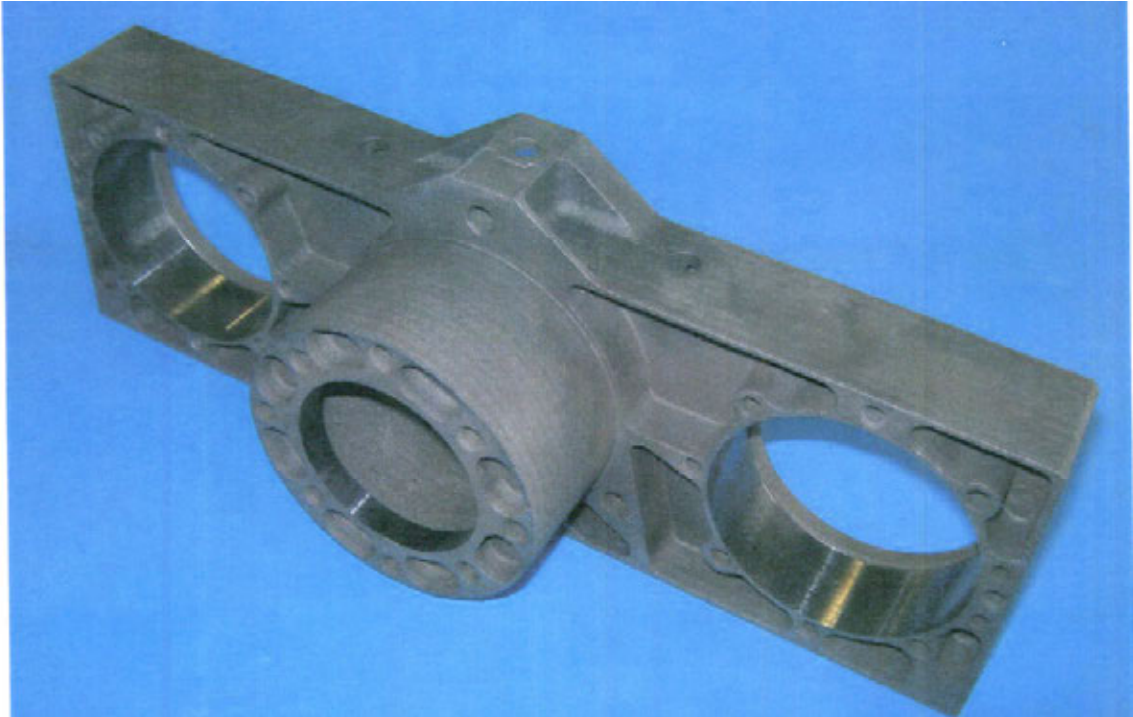


Fregat launched from Baikonur site – 22.7.2012 – 8:43 am

TET – 1 (Technologie - Erprobungs – Träger, Technology Experiment Carrier) is a micro-satellite program of the German Space Agency (DLR). It is the core element of DLR's on orbit Verification Program.(OOV), initiated to offer on orbit verification possibilities to the German industrial and scientific aerospace community.

TET -1 project has a goal to test new space technologies in orbit over a period of one year. These technologies have to be qualified for operation in a space system. Due to the high safety standards in the space sector, every new product must complete a verification process before qualifying for operation in a space system. Within the verification process, the payload undergoes a series of tests which prove that it is in accordance with mission requirements in terms of function, reliability and safety. Consequently, TET-1 is responsible to demonstrate and test a product or technology functions under spaces conditions which cannot or can only be partially simulated on ground.

ECM in collaboration with DLR developed a camera structure for TET – 1. Based on the flight heritage of the HSRS instrument aboard the microsatellite BIRD an integrated design for three instead of two previously co-aligned cameras has been established replacing the Invar material by Cestic®.



300 mm Camera Structure out of Cestic® for TET – 1

Using Cestic a substantial mass saving of about 40% in the optics structure was reached contributing to the overall payload mass reduction from 30 to about 13 Kg for the TET – 1 mission compared to the BIRD configuration.