

## **ASTROhead**

### **Multi-purpose camera with radiation hard design**

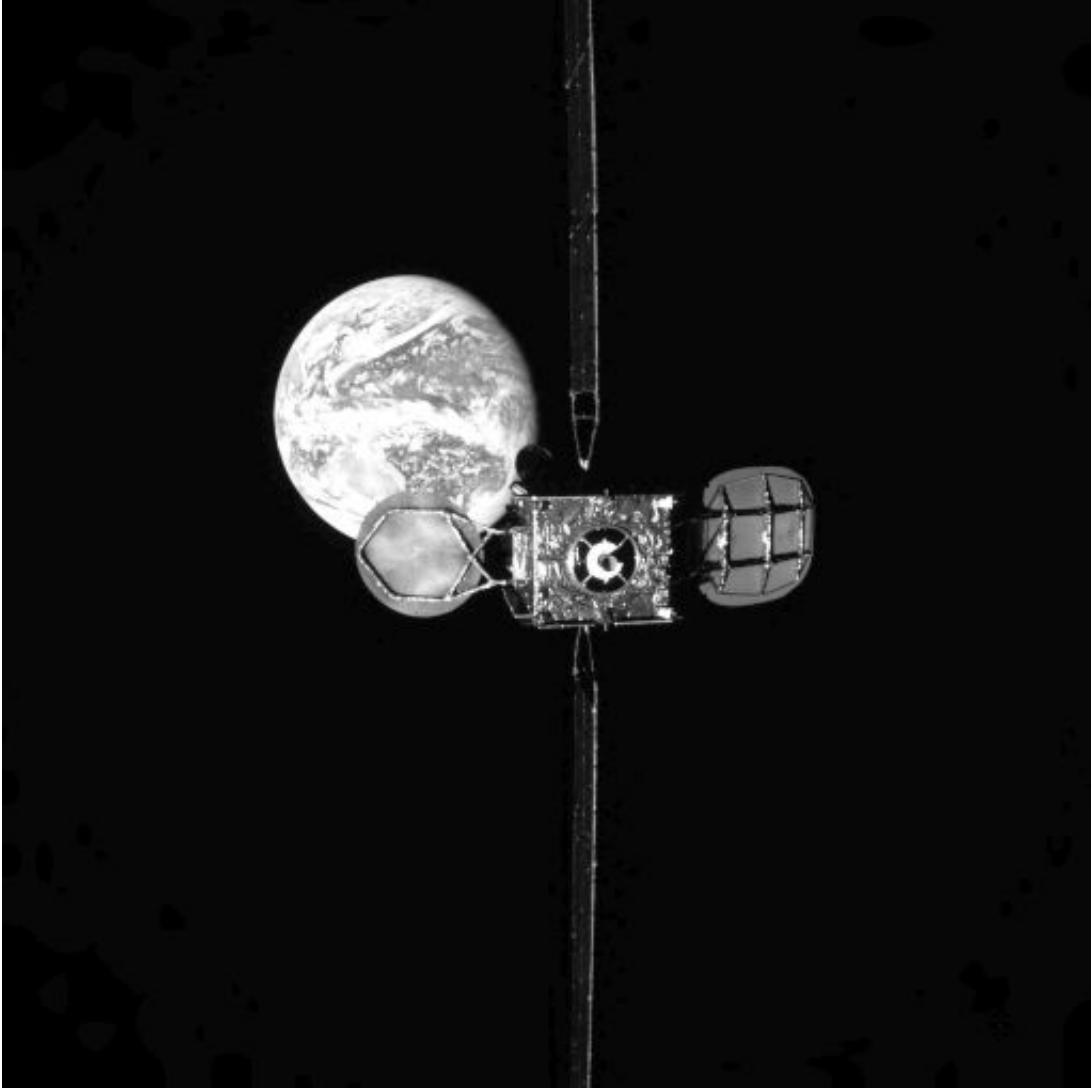
Jena-Optronik's ASTROhead is a compact and light-weight space camera for demanding environments. Typical applications are:

- Navigation
- Inspection
- Orientation
- Space situational awareness

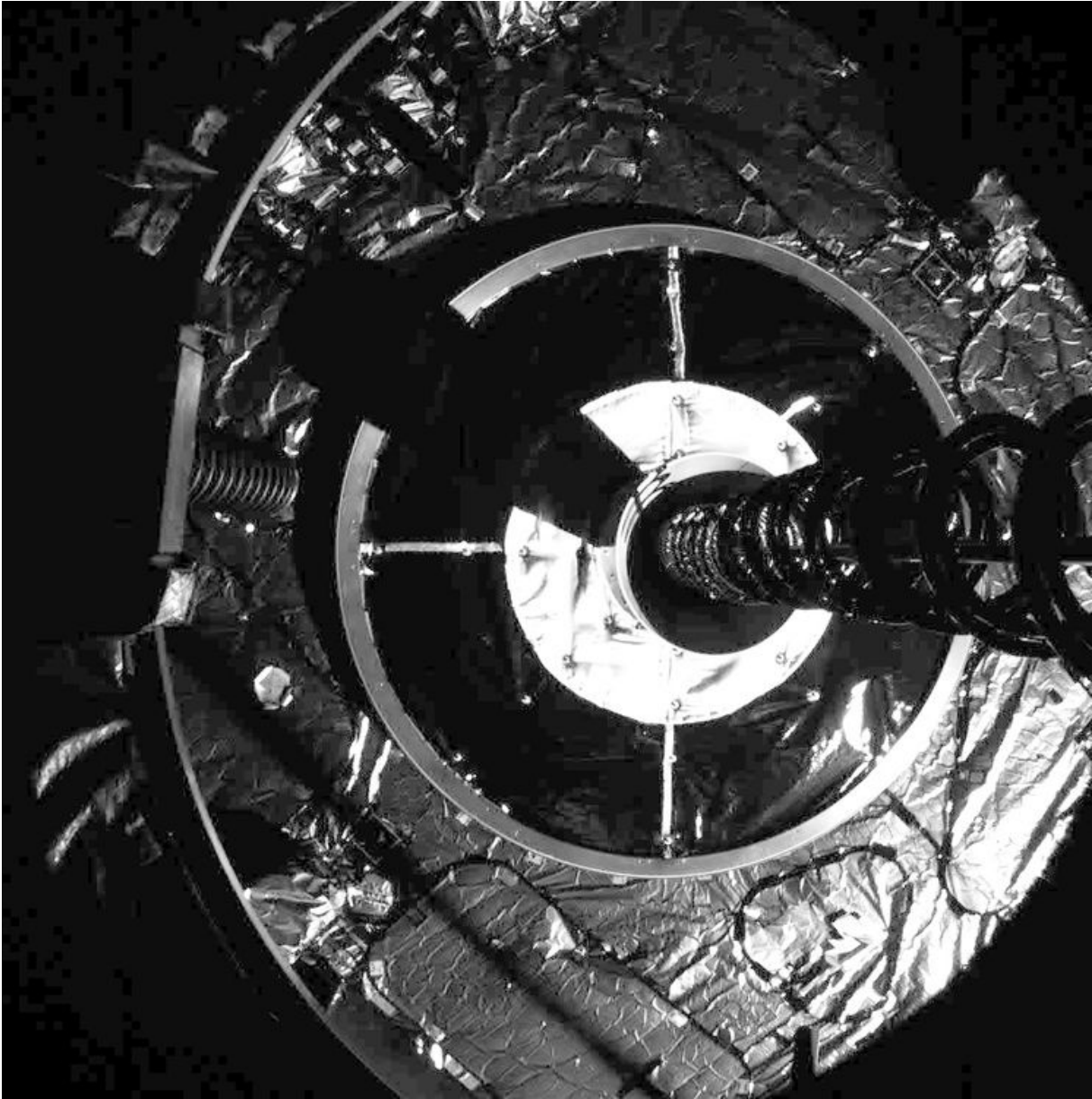
Our heritage from the successful ASTRO star sensor series led to the development of the ASTROhead. This is the first space application of the innovative FainStar sensor. Its use enabled us to set new standards for radiation hard designed space cameras in terms of both low mass and small envelope.

The ability of Jena-Optronik to design a space camera from the very first sketch to full qualification in less than two years has been demonstrated with this product. The maiden flight of the Visible Sensor Suite (VSS); which is based on the ATROhead, was on board of Northrop Grumman's Mission Extension Vehicle (MEV-1) launched on October 10th, 2019. The successful docking - a premiere in space - was achieved on February 25th, 2020.

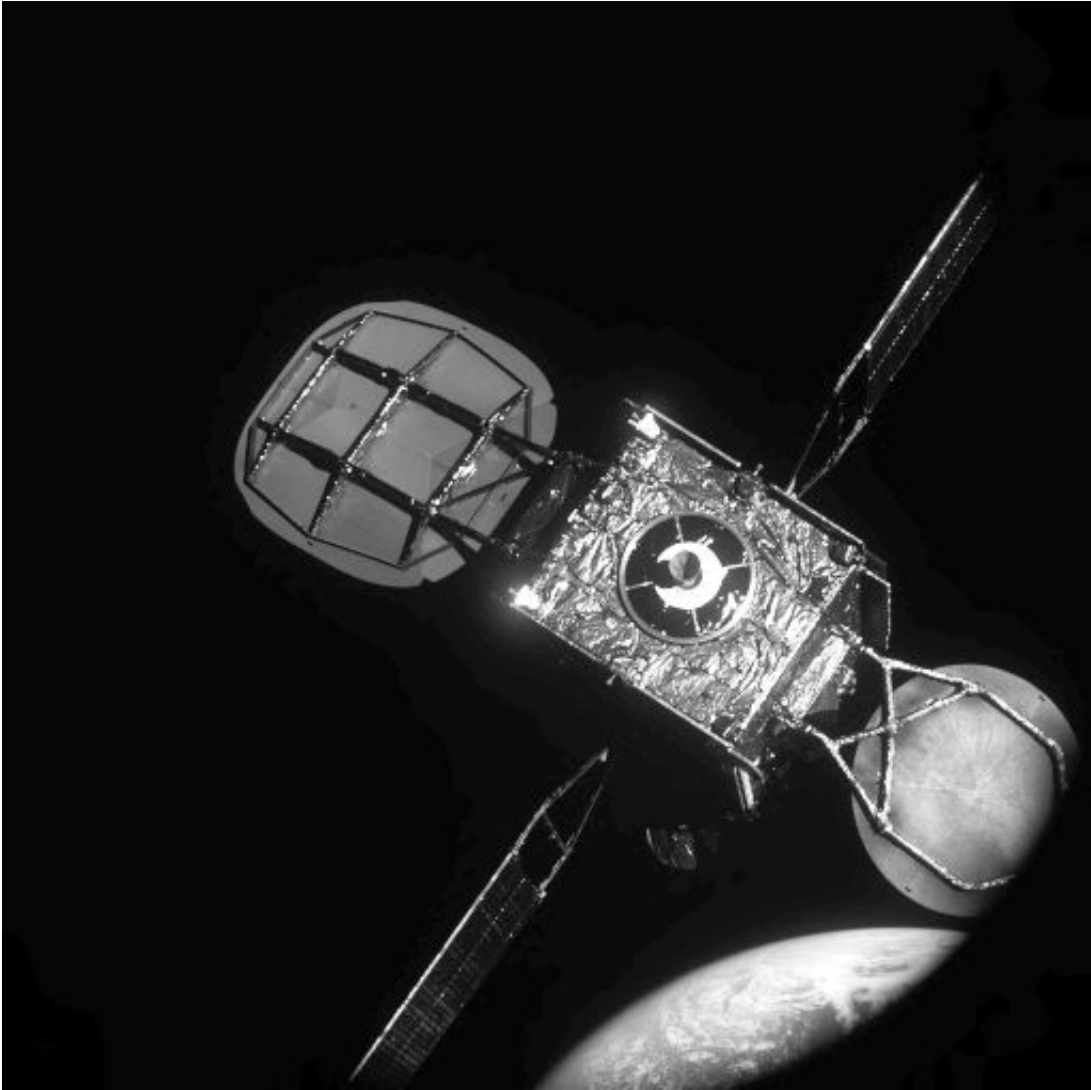
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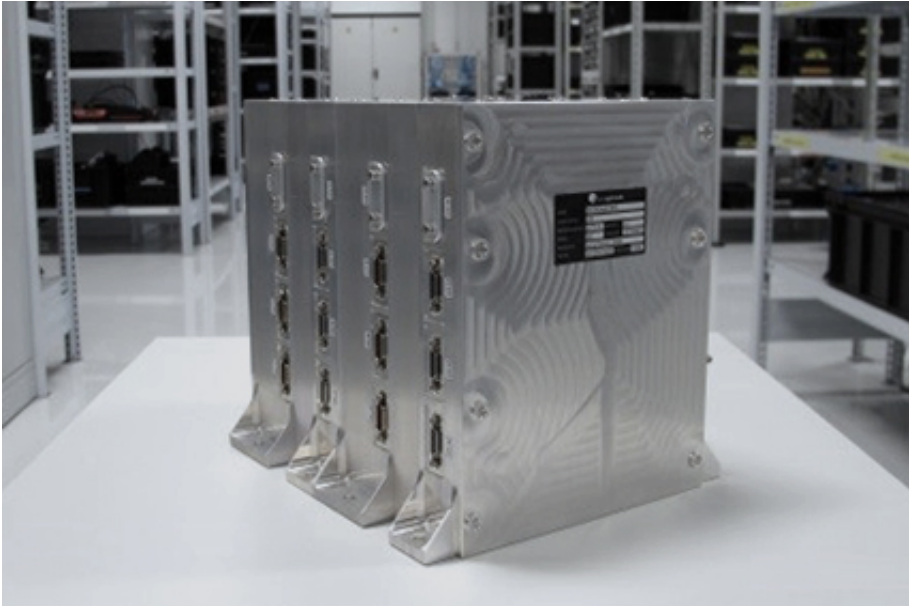
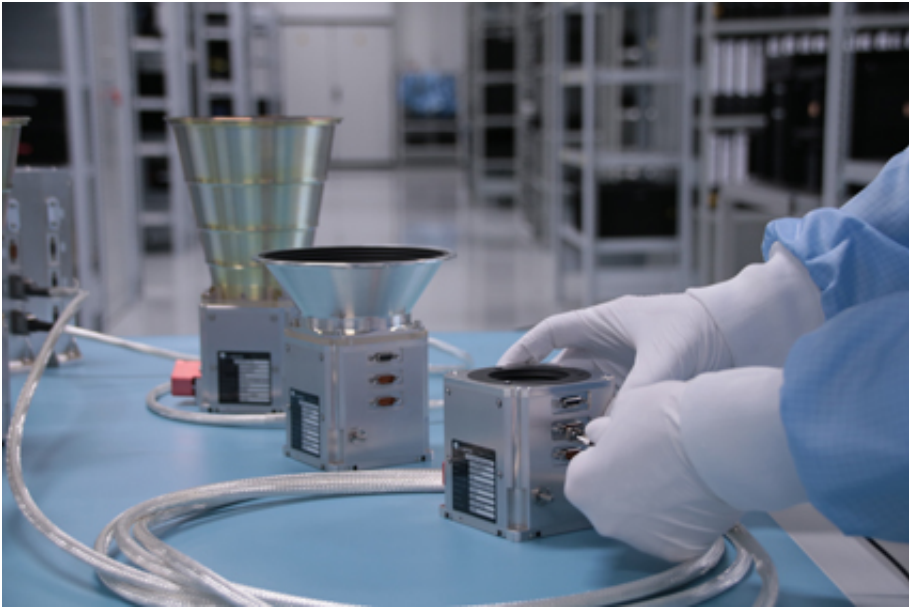




View of IS-901 satellite from Mission Extension Vehicle-1 © Northrop Grumman

The VSS incorporates two ASTROhead camera versions with different fields of view as well as a common electronic control unit (Optical Head Controller Box). If needed this unit processes the data of up to six cameras complementing the ASTROhead to a complete navigational camera system., ASTROhead can be adapted to meet different customer requirements thanks to the modular design Approach.

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