

## Press release

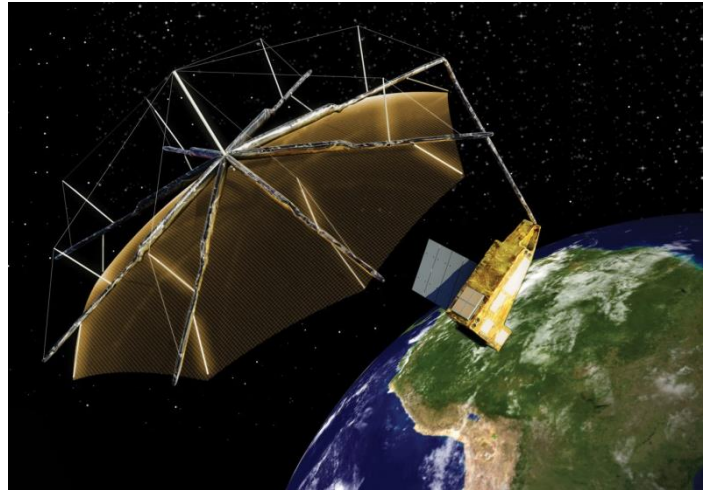
### **Space Structures GmbH performs ESA BIOMASS satellite structure analysis & verification**

*Consortium including a Berlin space company wins public tender for the main structure of the BIOMASS satellite.*

Berlin, January 17<sup>th</sup>, 2018. A consortium of the space companies OHB Italia SpA, APCO Technologies SA, **Space Structures GmbH**, OHB-System AG and SENER Poland has won the public competitive tender for the provision of the satellite structure for the BIOMASS “Earth Explorer” forest monitoring mission of the European Space Agency (ESA) to AIRBUS Defence & Space Ltd.

The **ESA BIOMASS satellite structure** is a complex assembly of structural elements with composite

materials to be designed for extreme loads during rocket launch and operations in Earth Orbit. The satellite has a mass of about 1.2 tons and is about 10x12x20m large in deployed configuration.



*Artist's rendition of the BIOMASS satellite. Photo: Airbus Defence & Space*

Space Structures GmbH contribution to the project is the analysis and verification of the primary and secondary structure during all phases of the development including:

- ◆ NASTRAN Finite Element Modelling (FEM) of the satellite structure in line with stringent AIRBUS requirements
- ◆ Simulation of all relevant configurations, environments and loadcases
- ◆ Verification of compliance to all analysis related requirements, stiffness, buckling, stress, strength, deformation, fluxes, fatigue, crack growth
- ◆ Thermo-elastic test prediction and correlation of FEM with test results



Company founder and CEO Florian Ruess proudly comments the contract signature as being “a major milestone in the company history: the first bid for a public tender for a satellite structure where **Space Structures GmbH core competences** were included upfront in the bidding consortium and proved to be **a major winning factor.**”

## Press contacts

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