



arianeGROUP

ORBITAL PROPULSION EXPERIENCE AND CAPABILITIES

HERA Mission Industry Day

ESTEC, 2019-02-04

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THE ARIANE GROUP ORBITAL PROPULSION CENTER

OVER 50 YEARS OF ORBITAL PROPULSION EXPERIENCE

Orbit Injection, Trajectory Maneuvers, Attitude and Orbit Control

Since over 50 years, ArianeGroup Lampoldshausen supplies propulsion systems, equipment and services in support of hundreds of major international satellites and spacecraft's.

Our customers worldwide benefit from the competitive portfolio of high quality propulsion system solutions for

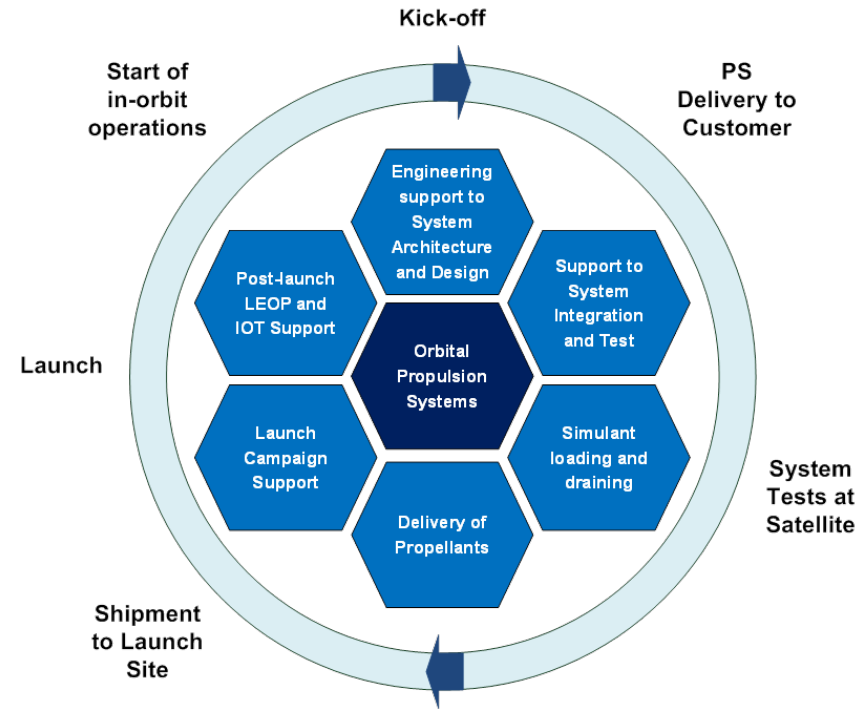
- **Telecommunication platforms**
- **Earth Observation missions**
- **Scientific missions**
- **Manned missions**

The Orbital Propulsion Center in Lampoldshausen provides standard propulsion system solutions for commercial purposes as well as customized systems according specific mission requirements

OUR CAPABILITIES – ALL ABOUT ORBITAL PROPULSION SYSTEMS

The Orbital Propulsion Center Lampoldshausen covers the complete range of products, equipment and services related to orbital propulsion, from chemical monopropellant systems for smaller satellites to chemical bipropellant systems for larger platforms and electric propulsion systems for future platforms.

- All key components of our orbital propulsion systems (thrusters, apogee engines, propellant tanks and fluidic equipment) are produced in-house ArianeGroup.
- At ArianeGroup customers find a single point of contact for the complete orbital propulsion system
- ArianeGroup provides complete customer support after the hardware delivery, including launch support and post-launch services (e.g. LEOP)



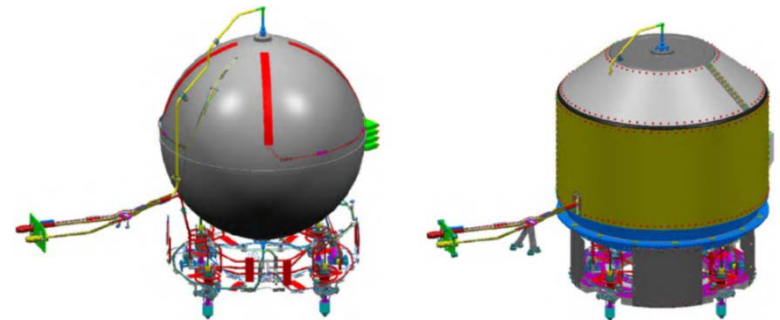
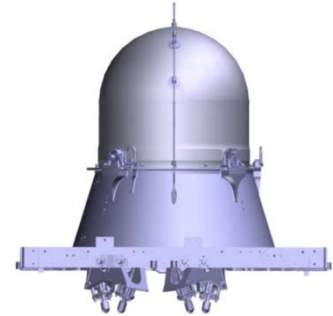
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ORBITAL PROPULSION SOLUTIONS

SENTINEL 2 AND SENTINEL 5 PRECURSOR

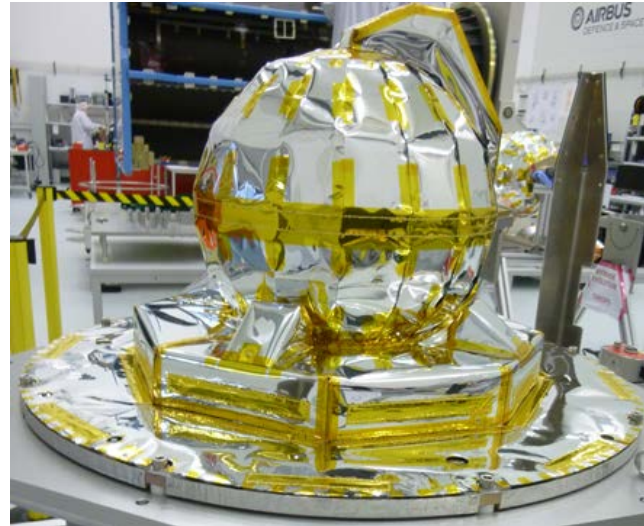
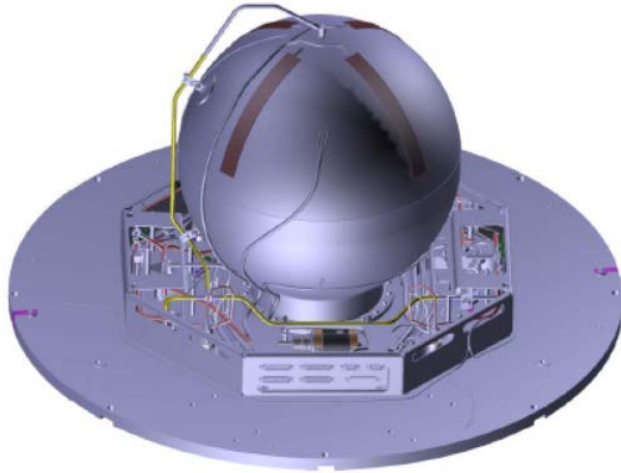
ArianeGroup Lampoldshausen has been contracted for the design, development, production and testing of the Reaction Control System of SENTINEL 2 A/B (launched 2015 / 2017) and is contracted for the production and testing of the SENTINEL 2 C/D Reaction Control System.

In the frame of the SENTINEL 5 Precursor Program (in-orbit since 2017) ArianeGroup Lampoldshausen has provided the Reaction Control System as well.



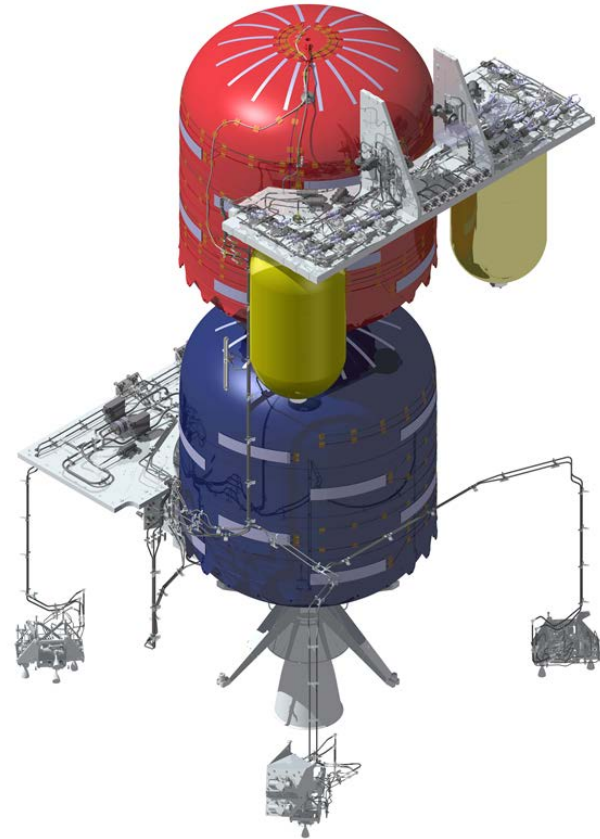
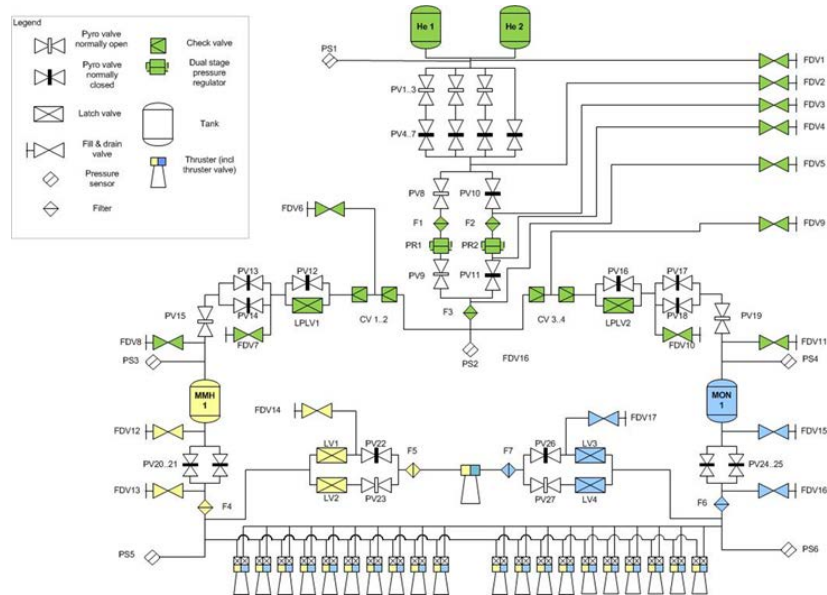
CHEOPS

ArianeGroup Lampoldshausen has delivered the Reaction Control System for the CHEOPS - CHaracterising ExOPlanet Satellite, which will be launched in 2020.



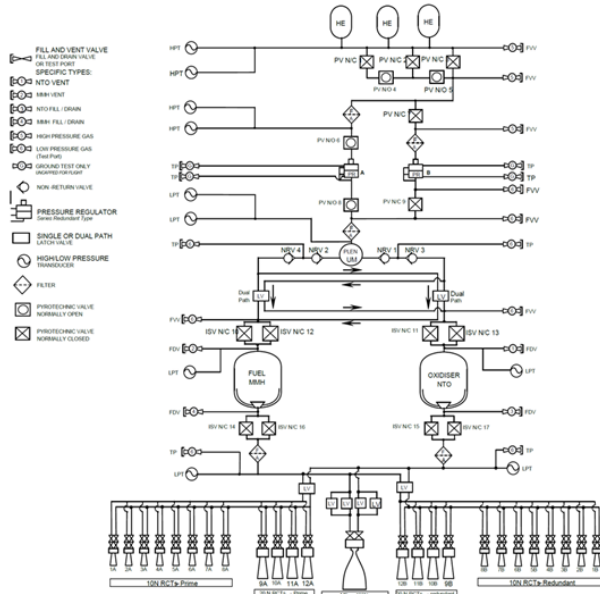
THE REACTION CONTROL SYSTEM OF THE EXOMARS ORBITER

ArianeGroup Lampoldshausen was responsible for the design, development, production and testing of the ExoMars Orbiter RCS.



PROPULSION SYSTEM OF THE JUPITER ICY MOONS EXPLORER

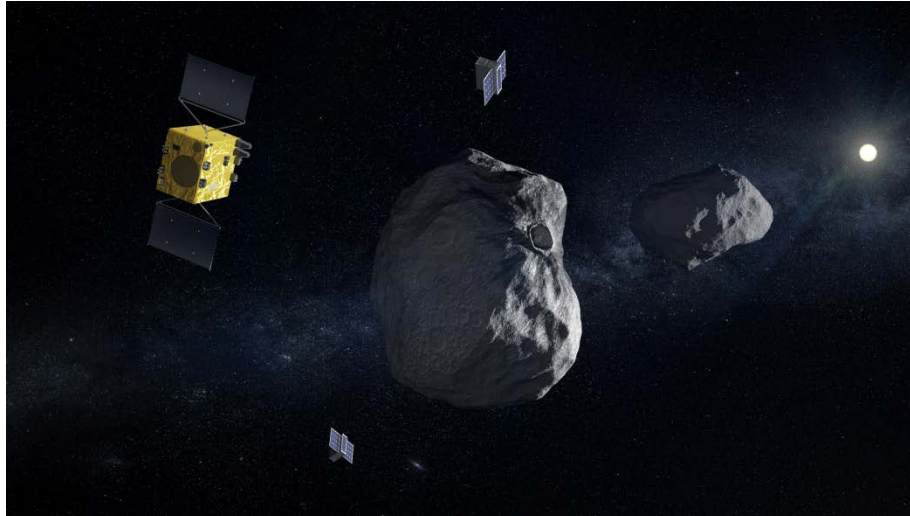
ArianeGroup Lampoldshausen has been contracted for the design, development, production and testing of the Chemical Propulsion System for the JUPITER ICy moons Explorer (JUICE) of the European Space Agency.



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HERA MISSION

**We are highly motivated to join
humankind's first probe to rendezvous with a binary asteroid system!**



More about ArianeGroup Orbital Propulsion

www.space-propulsion.com