

**FERCHAU Aviation Group**

# Helping to protect the World in all Dimensions.

**In order to support the parties who protect the world in all areas, a reliable engineering partner who understands the needs and requirements of defence applications is required. The FERCHAU Aviation Group has many years of experience in successfully supporting military and security applications with high-end engineering know-how and a broad set of competences – not only in aerospace, but also on the ground, at sea and in cyberspace.**

**Air**

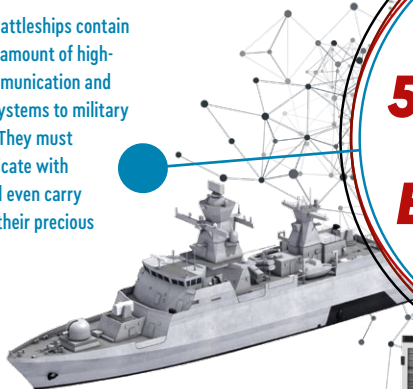
From fixed wings to rotary wings and unmanned aircraft. From fighter jets to military transport, from attack helicopters to remotely-piloted aircraft. Several programmes from the past and for the future exist for which we know every single detail.

**Space**

Protecting or observing assets on earth requires a good external view – from space. Our knowledge of satellite and launcher technology enables us to support military space programmes with the required skills.

**Sea**

Modern battleships contain a similar amount of high-tech communication and control systems to military aircraft. They must communicate with them and even carry them as their precious loads.



## The 5 Dimensions of Defence Engineering

**Land**

Robust vehicles require robust protection and robust communication. We support several ground-based vehicles and other land-based military systems with our engineering know-how, which ranges from classical structural design to secure digital communication.

**Cyberspace**

Cyberspace is the fifth dimension of warfare – and undoubtedly the most challenging and least familiar. It concerns the protection of information systems against cyber-attacks and securing data against theft and destruction.



# Competence Portfolio in Defence Engineering

*We support defence programmes in several technical domains, encompassing the entire lifecycle from requirements analysis to development via testing to maintenance and finally training. However, more than mere engineering competence is important, also methodology specialised in military processes counts.*



## **Systems Engineering**

- Requirements Management
- Traceability Analysis
- Qualification Support
- MBSE
- Standardisation



## **Command & Control Applications**

- Mission Planning & Analysis
- Ground Systems
- Tactical Displays
- C&C Modules
- Effector Interfaces
- Signal and Signature Intelligence



## **Avionic Systems**

- Design and Design-to-qualification
- Embedded SW Development for Critical Systems
- Integration and System Testing



## **Training & Simulation**

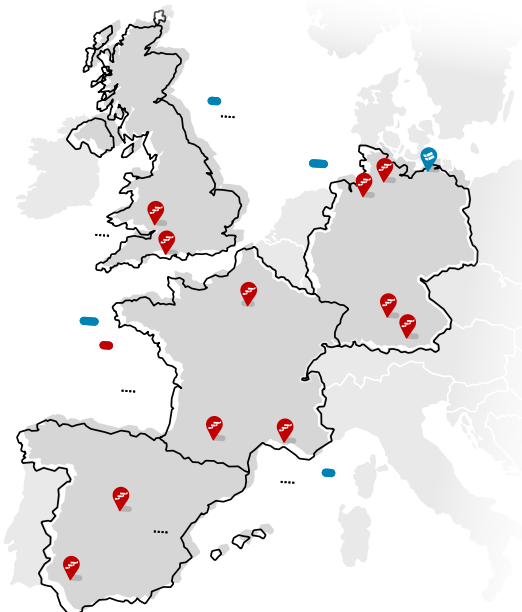
- Modelling and Simulation of Training Systems
- Virtual and Extended Training
- Maintenance Simulators
- Training Devices



## **Cyber Security**

- IT Security Concepts
- Penetration Testing
- Vulnerability Analysis
- Incident Response and Forensics
- System Hardening

## **A European Company – a local Partner**



**Defence programmes are national by nature – but at the same time almost always based on European collaboration.**

Supporting transnational collaboration requires local presence and country-specific knowledge, which we have through our national entities and partners.

As the FERCHAU Aviation Group is based in four European countries with significant defence industries, we can support national and transnational programmes with the required confidentiality and local staff necessary, in Germany, France, Spain and the UK – and beyond.

Armed with all relevant clearance levels and approved security infrastructure, the FERCHAU Aviation Group can provide flexible and scalable ex-situ as well as in-situ services for all ongoing and future development programmes. This means that we are fit, even for the latest and most challenging programmes such as FCAS and EuroMALE.

Modern development increasingly relies on modern process methodology as well the application of agile methods for steering the projects. We introduce and roll-out such methods in traditional environments very successfully.

**More information about our expertise**

**[ferchau.com/go/aviation](https://ferchau.com/go/aviation)**

**Connecting People and Technologies  
for the Next Level**

Member of the  
**FERCHAU Aviation Group**