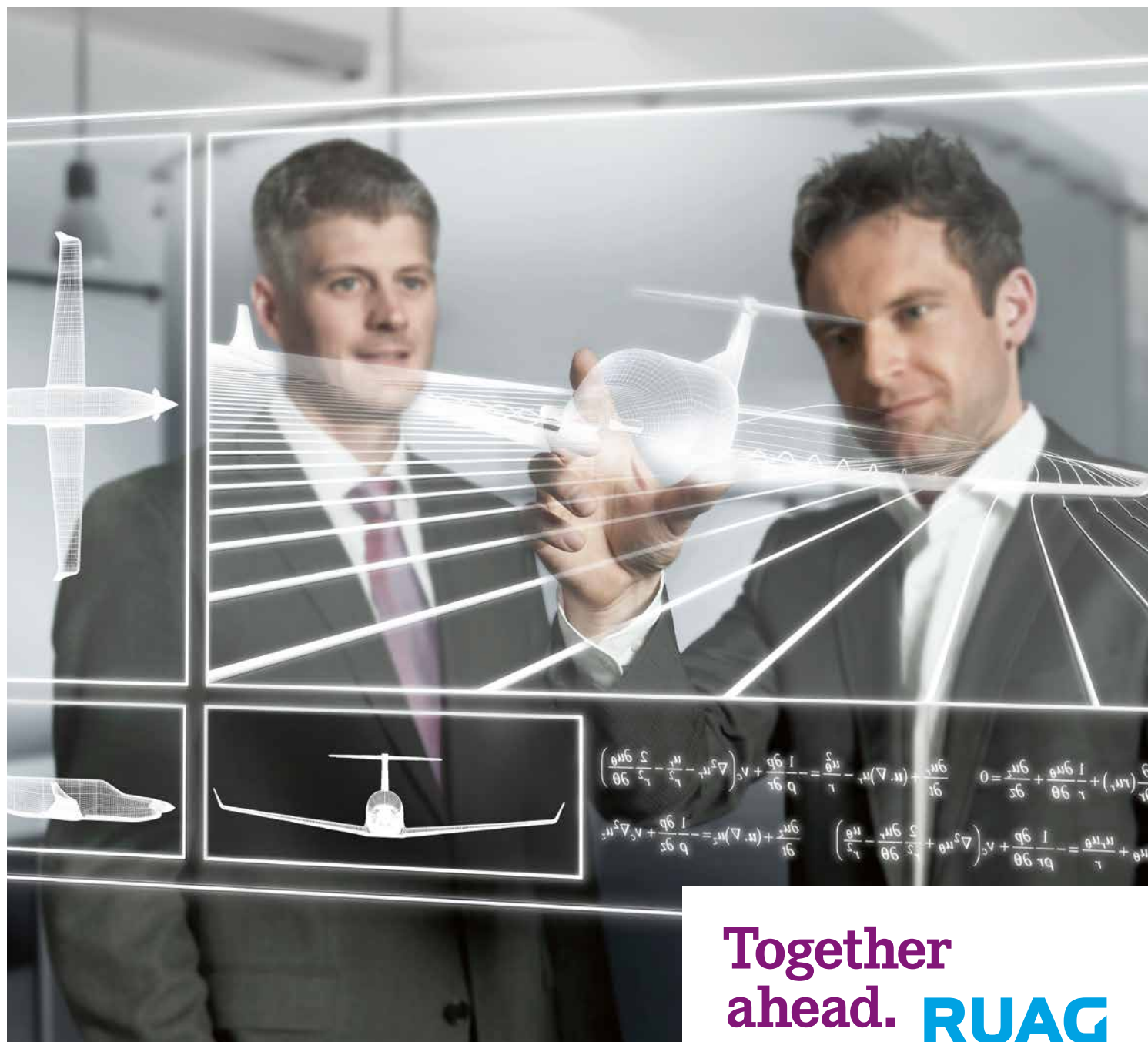


**Your success is our goal. Rely on our engineering.**



**Together  
ahead. [RUAG](#)**



“When it comes to aircraft engineering solutions, we are renowned for our vast expertise, outstanding experience and high quality performance. What our customers appreciate just as much is the cooperative approach that shapes our business relations.”

Philipp M. Berner, CEO RUAG Aviation

# Your partner for engineering solutions



RUAG Aviation Engineering is your partner of choice for all development, modification, upgrades and repairs. We support you from initial requirement-definition, through design, manufacturing, integration and verification, to certification. As an EASA-approved design organisation, you can rely on us as your efficient and professional partner whose focus is your success.

We serve airliner, business, military and executive jets, turboprops, the Do-228NG and helicopters. RUAG's engineering skills cover a wide range of disciplines. Our aerodynamic, structural, electrical, avionics and software engineers with broad technical experience are, along with our cutting edge technology and processes, the foundation of your success. We integrate and install complete avionics suites and special mission systems, design the necessary airframe modifications and ensure their certification.

For you we develop, manufacture and test primary and secondary metallic and composite aircraft structures, components and assemblies as well as specific electro-mechanical test and control equipment. We support your aerodynamic development process through the use of our wind tunnels and numerical simulation capabilities. Our work is based on established and proven standards, processes and materials; it is systematically documented and verified by our office of airworthiness.

# Your individual needs – our customised solutions

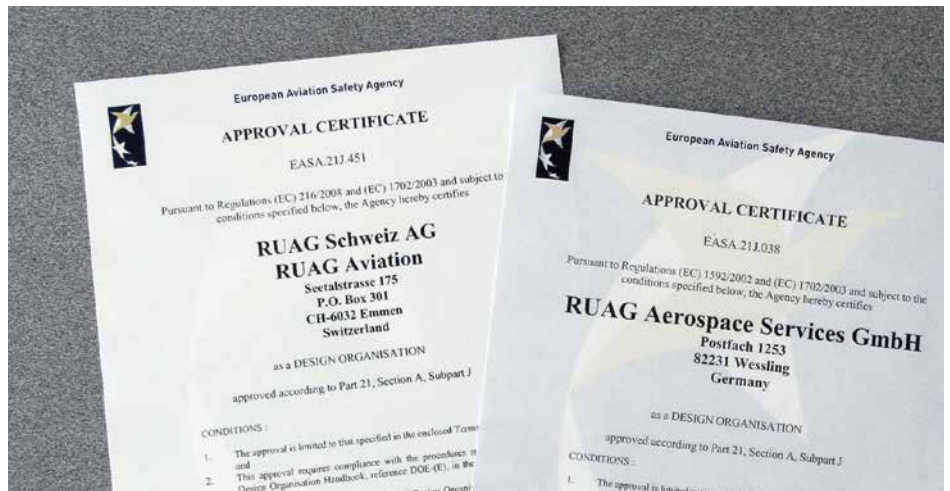
## Customer solutions

We place a strong emphasis on customer satisfaction. By focusing on your needs we ensure outstanding services and solutions. Short communication and decision paths and specialised engineering expertise enable a highly efficient work environment, thus boosting your work performance.



## Authorised expertise

As an EASA-approved design organisation our certification staff ensures full compliance with the applicable regulations and supervises a safe and reliable design, integration and installation. Our highly experienced staff always strive to achieve operational excellence.



## State-of-the-art infrastructure

RUAG Aviation Engineering serves you with innovative and reliable design solutions that are thoroughly analysed and tested to sustain the harshest and most demanding requirements. We understand your goals and work together with you to make sure they are met on time and on cost.



# Engineering services at a glance

## Special mission solutions

No matter how demanding your individual requirements, we will provide you with the best possible customised solution.

- Special systems and equipment integration
- Airframe modifications
- Electronic warfare systems integration
- Mission sensors and consoles
- Data-link, -recording and -fusion solutions
- Cockpit interfaces
- Airborne self protection systems



## Cockpit upgrades and avionics

Design, integration, production, installation and certification of glass cockpits, avionics equipment and retrofits – all from a single provider. Based on requirement analyses together with you, we implement turn-key solutions for fixed and rotary wing aircraft.

- Glass cockpits and retrofits
- Avionics systems, COM, NAV, FMS
- Head-up and helmet mounted displays
- Cockpit voice recorder/flight data recorder
- Flight management systems
- Satcom, EFB and anti-collision system

## Aerodynamic development

Your aerospace or automotive product shall be best in class. Our modern and unique infrastructure for aerodynamic development, in combination with our research engineers, will help you reach that goal. Supreme correlation between model and reality, an efficient work environment and detailed knowledge are the basis of our philosophy for the following services:

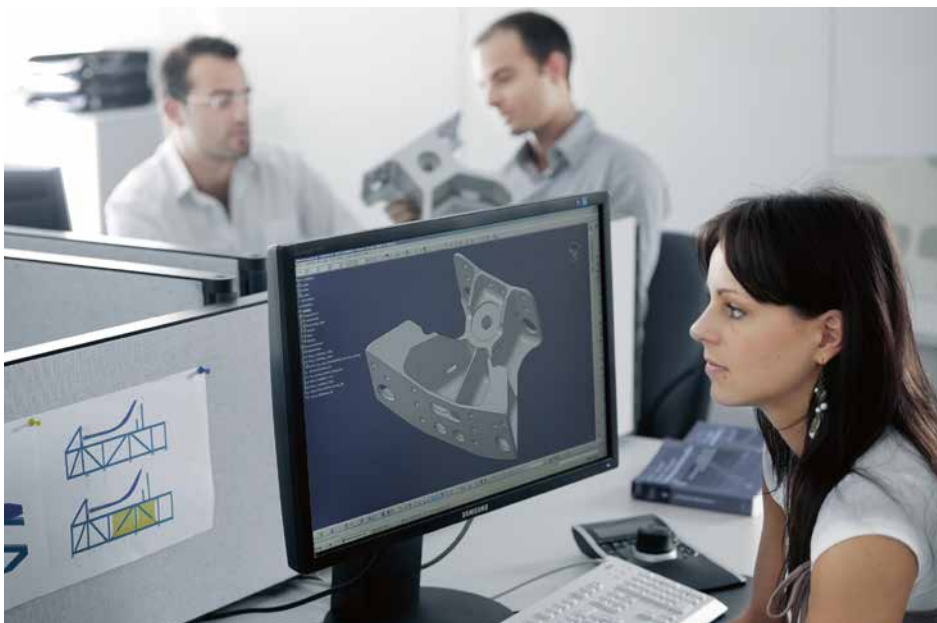
- High- and low-speed wind tunnel tests
- Complex fluid dynamic simulations
- Flight mechanic analysis
- Aircraft performance calculations



## Aircraft structures/ mechanical systems

Whatever your requirements, our experienced engineers will fulfil them. We analyse, design, manufacture, integrate and test aircraft, airframe structures and aircraft systems. By systematic training programs we maintain the technical readiness for tomorrow's engineering projects.

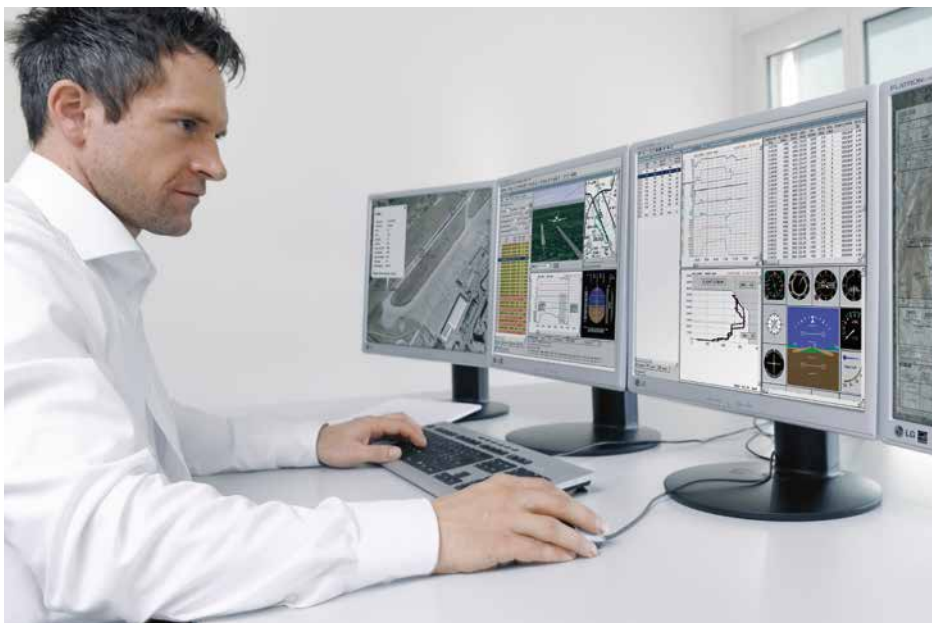
- Airframe structures
- Harnesses
- Structural modifications and repairs
- Stores and pylons
- Hardware developments
- Complex electronic hardware
- Aircraft manufacturing support



## Qualification and test competences

Are your systems fit for flight? Have their reliability confirmed by RUAG's test competences. With the use of dedicated test and simulation equipment and our precise and calibrated test rigs, we verify the functionality of your equipment in flight and on ground.

- Flight test instrumentation
- Structural and fatigue tests
- Mechanical Systems and Ground Vibration Tests
- Environmental testing
- System test equipment
- EW flight line tester
- Simulators and test software



## Flight data solutions

Our highly developed analysis software applications have proven to be valuable tools in improving flight safety and efficiency. The Flight Data Monitoring Software FDM fulfils ICAO standards and is suited to military and civil aircraft.

- Flight data monitoring
- Flight data analysis
- Fleet monitoring
- Debriefing systems
- Health and usage monitoring



## Documentation

RUAG offers comprehensive and cost-effective solutions with standardised and customer-specific "Interactive Electronic Technical Documentation". This is done in cooperation with national and international civil and military aviation customers.

- Operational documentation
- MRO documentation
- Spare parts documentation
- Documentation project management
- Graphic design solutions
- Technical illustrations
- Publication and IT services



## Approved changes

As an EASA-Part 21J approved design organisation, RUAG Aviation is entitled to classify changes to type design and repairs as "major" or "minor" and to approve minor changes to type design and minor repairs. We may already have an appropriate modification package for you in place.

Check out our website [www.ruag.com/STC](http://www.ruag.com/STC) or call us at +41 41 268 42 22 for a complete and comprehensive listing of already approved modifications.

# A powerful combination of benefits

Customers of RUAG Aviation can take advantage of an outstanding and powerful combination of benefits. Below are just three of the many reasons why making us your partner of choice makes sense:

## Available

To accomplish your mission, RUAG Aviation is ready to support you with a full team of engineering and manufacturing experts. Based on the EASA-approved design organisation (DOA), we are able to guarantee a fast and efficient path to certification.

## Reliable

We strive for the very best engineering support and attain the highest quality based on national and international agency certified standards. Our commitment and pursuit of the very best means that all our customers rely on us as their long-term partner of choice.

## Affordable

The extra value created by RUAG Engineering gives you an advantage on the market. We support you with standard or customised engineering services under fair terms.

## Profit from our wide range of services



MRO



Engineering



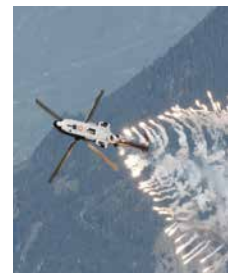
System Upgrades



Supply Chain Management



Fleet Management



Aviation Products & Services



# Experience excellence. Welcome to our engineering.

Customers worldwide have experienced our reliability, our expertise and the quality of our services. Why not discover them for yourself? Please feel free to get in touch with us.



## **RUAG Aviation**

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