



THINKING SAFETY

SINCE 1919.

A PIONEER WITH VISION AND WITH GREAT DEDICATION — GERHARD SEDLMAYR

There are people who, after a certain experience, arrive at the realization that something has to change to set things in motion, people who do great things. For Gerhard Sedlmayr, this was the loss of pilot friends, both fleeting acquaintances and close friends – a painful loss that inspired his pursuit for rescue and safety in the early stages of aviation.

In a time where people associated human rescue with the lifebuoys of sea travel, it was obvious that Gerhard Sedlmayr was out in search for the “lifebuoy” of the air. Early on, with AUTOFLUG, the company he founded in 1919, he worked on the first parachute plans which were initially known from the USA. Contact with Leslie Leroy Irvin inspired a prosperous collaboration and his vision soon became reality – Gerhard Sedlmayr produced the rescue parachute in Germany whilst sceptics still believed that a real “flyer” would never need such a device.



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And it was always my goal to make sure pilots could always fly safely ... and in a time of need have the possibility to save themselves.

GERHARD SEDLMAYR, COMPANY FOUNDER

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WE SAVE THOSE WHO LIVE TO SAVE

WE SAVE THOSE WHO LIVE TO SAVE — THINKING SAFETY



We can only guess how many people have been saved by a parachute in Germany and across the world but one thing is for sure – it is a large number of aeronauts who owe their life to this rescue device. Our company has continued to develop and now, almost 100 years later, the small Berlin-based AUTOFLUG has grown into a medium-sized company with about 250 dedicated employees, still owner-managed and still devoted to human

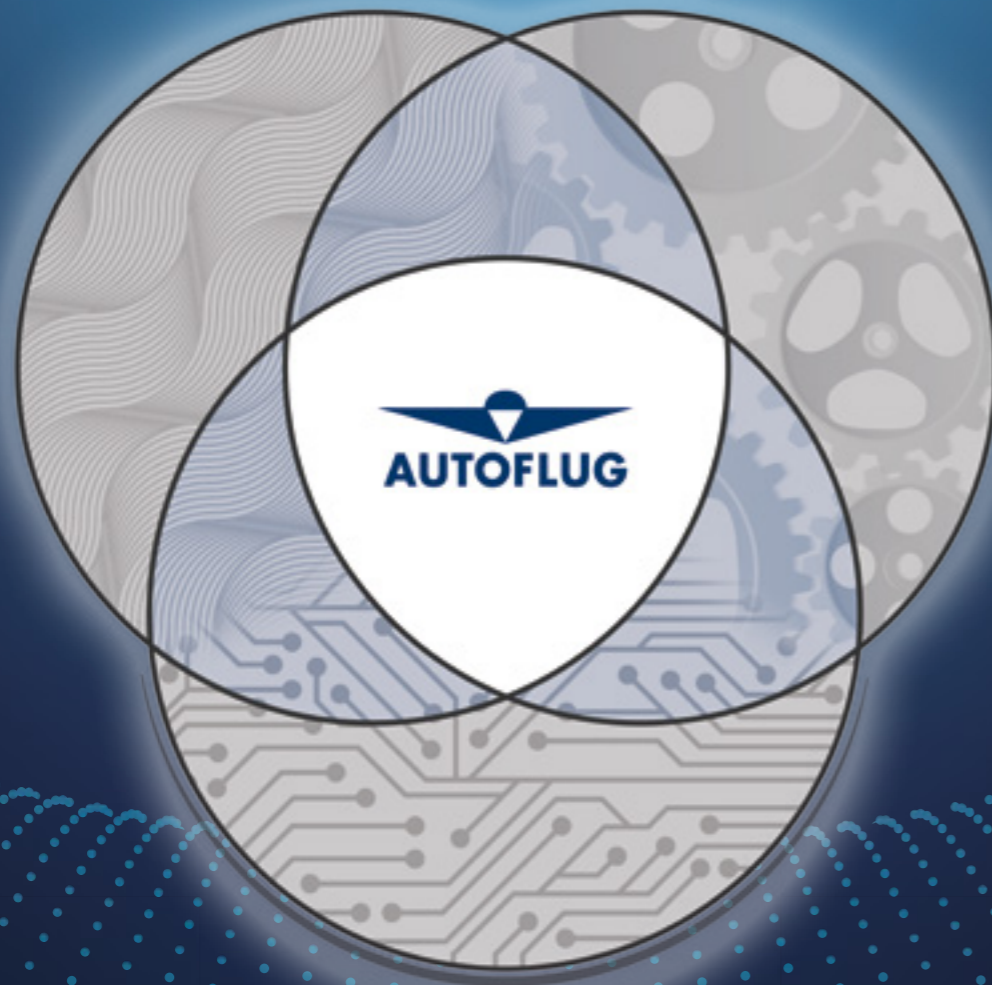
rescue and safety. THINKING SAFETY – bound by this motto, today a variety of rescue devices and products are designed, developed, produced and delivered with the best service in-house. And we take nothing for granted – THINKING SAFETY also means questioning everything and striving for the best because, for us, one thing is clear: when it comes to rescue and safety for those who risk their own lives for others, no expense is too high.

Andreas Sedlmayr, Managing Director and Proprietor

Martin Kroell, Managing Director

TEXTILES

MECHANICS



ELECTRONICS

COMPETENCIES

THESE ARE THE SKILLS THAT MAKE US A PRESTIGIOUS PARTNER

TEXTILES – MECHANICS – ELECTRONICS

We started working with textile materials early on, testing them, cutting them, processing them and making parachutes out of them. The developments of the past 100 years, from real parachute silk to the modern, highly-developed synthetic fibre textile, have shaped us into the company we are and today AUTOFLUG offers you the possibility to use textile materials in areas that you would never expect.



The first mechanical components were also developed early on as a parachute without metal hardware was soon unthinkable. That's why AUTOFLUG developed a central lock, a milestone which was reproduced for centuries to come and contributed significantly to the safety of the rescue device. Today, we are challenged with customer requests and original product ideas which, thanks to our extensive experience, we can respond to with well-balanced solutions that are robust, lightweight and well thought-out.



Our most recent area of expertise is also one of the most specialised – from the idea of creating components and circuit boards to the development of complex electronic modules and the related software applications, AUTOFLUG is driving innovation in the industry. We are a competent partner in the international aviation industry for the field of measurement and control technology for high-precision fuel management systems.





WE THINK AND DEAL IN TEXTILES

ALMOST 100 YEARS OF TEXTILES EXPERIENCE

AUTOFLUG has focused intensively on textiles in various sectors right from the beginning. Today, applications stretch from the production and maintenance of various parachute system, including their harness systems, to the unique textile damping systems for mine-protected applications – our knowledge of textile materials and their processing procedures is always key and it is only through our extensive experience with textiles that AUTOFLUG is now the market leader for the development and productions of textile safety seats for use in numerous air and land vehicles.

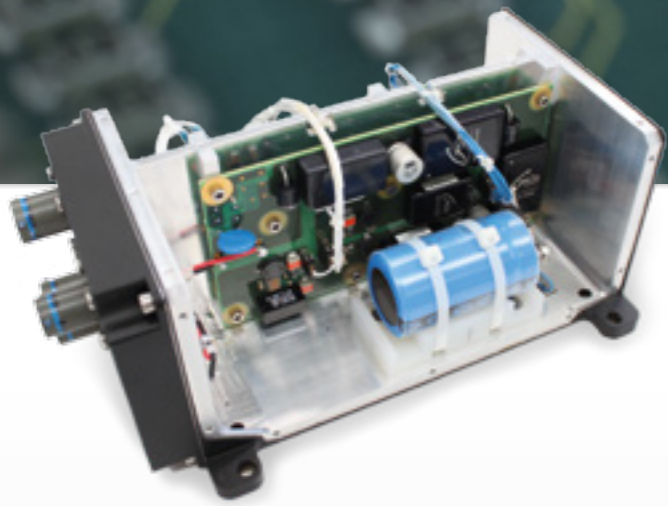
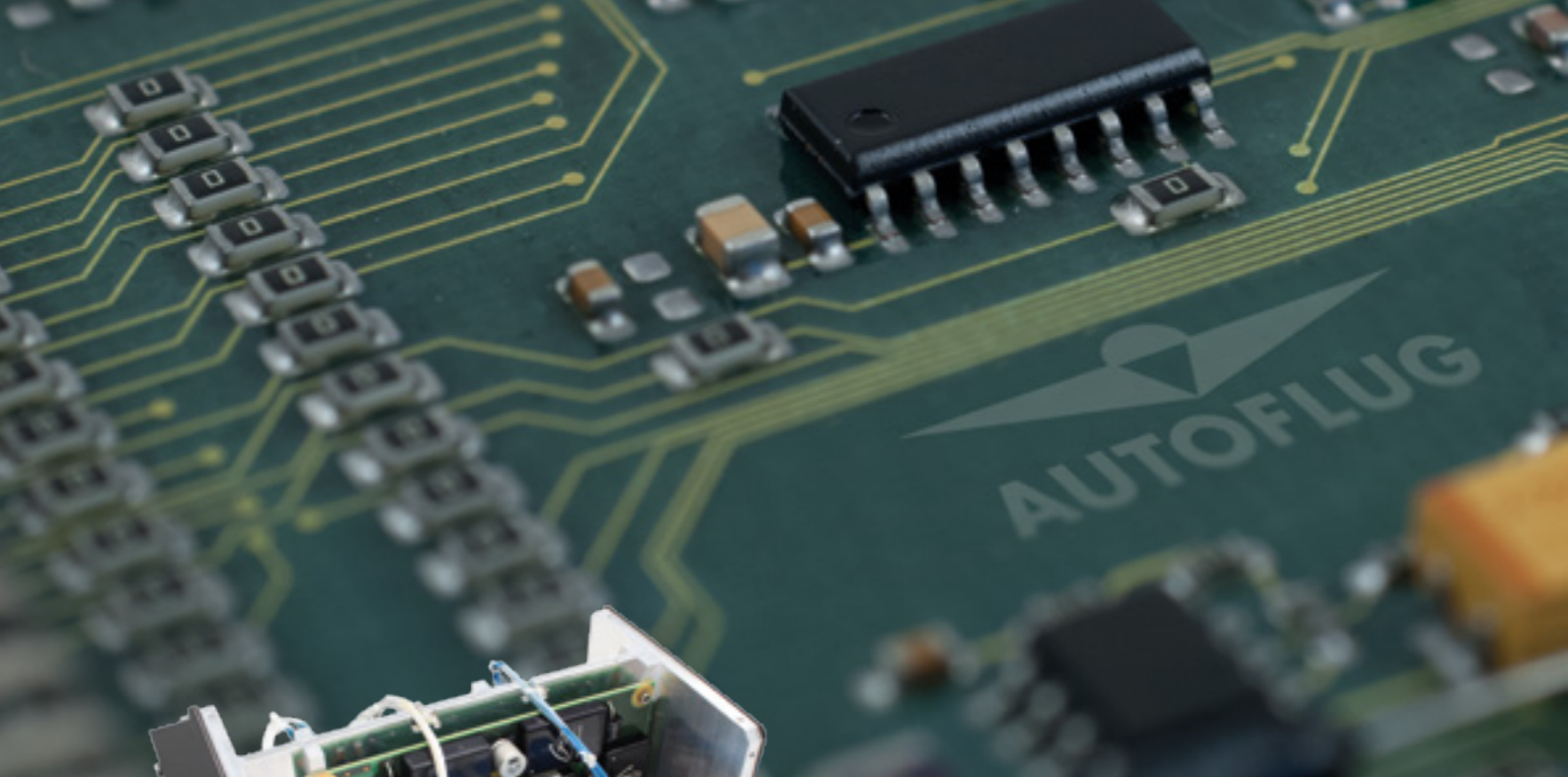


WE UNDERSTAND COMPLEX MECHANICS

ROBUST YET LIGHTWEIGHT

The mechanical and precision mechanic components that AUTOFLUG has been developing and producing for decades play a very specific role in many systems. This means that our components must not only be robust, they must also often comply with the low weight requirements of aviation. Our extensive expertise in the area of materials and their possible processing techniques, as well as our knowledge of possible joining techniques and other production procedures, means that we are highly regarded for everything from harness buckles and in-plane structures to large-capacity containers for air travel.





WE MASTER HIGH-TECH ELECTRONICS

THE FUTURE IS DIGITAL

High-precision, high reliability and the ability to function in most extreme conditions – these are all attributes that highlight AUTOFLUG's skills in the field of electronic development and production. As in other areas of expertise, quality assurance is always very important to us. This is why our electronics undergo a number of lab tests until they are shipped – these range from climate chamber tests and vibration tests to burn-in tests in extreme conditions. This is the only way to ensure long-lasting quality products that will last without the need for constant maintenance.



TOGETHER IS STRONGER THAN APART



HIGH-PRECISION INTERFACES – TEXTILE & MECHANIC

Our highly-developed textile components required high-quality mechanical structures on many interfaces. We conducted countless tests and we learnt a lot. However, these tests helped us to understand one thing in particular: from material and joining techniques to end processing, every combination of textile and metal or composite compounds must be defined and produced with the utmost precision. Only then, AUTOFLUG products can meet the high demands of e.g. air travel.



THE ESSENTIAL PARTNERS – ELECTRONICS & MECHANICS

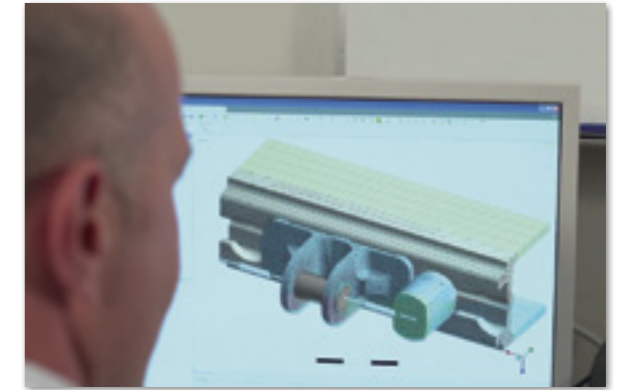
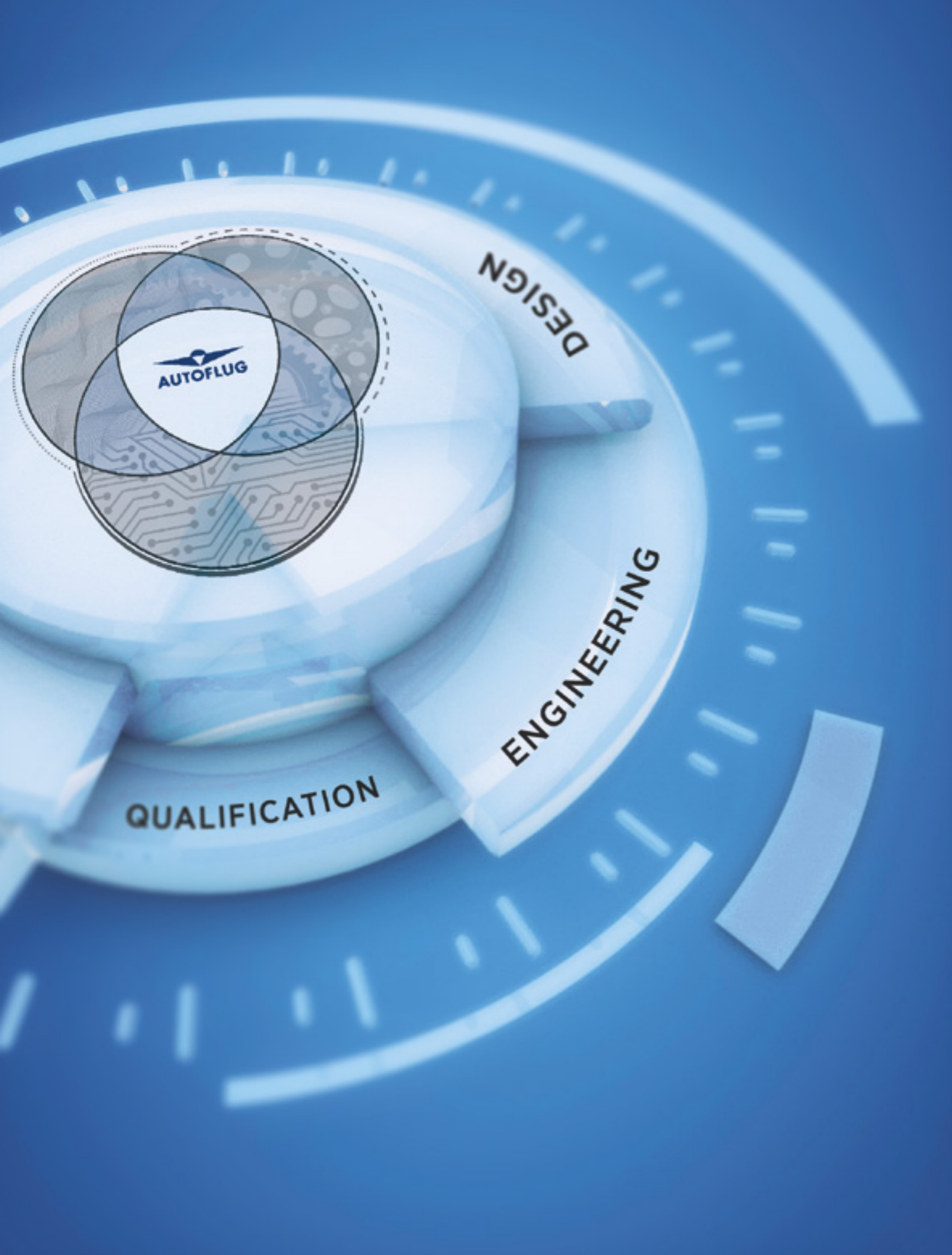
It is clear to see that AUTOFLUG fully-electronic fuel management systems can be a challenge for our engineers and their knowledge of electronics. The required breaking and buckling loads that prevent penetration of the fuel tank in case of emergency also challenge our mechanics experts to come up with something new – this makes our interdisciplinary expertise indispensable.



DIVERSE APPLICATIONS – TEXTILE & ELECTRONIC

We have specialists in our development and production teams working on relevant high-end solutions for protective clothing of the future. As well as protection against various threats, we must also consider the visibility of the wearer who finds themselves in the toughest conditions. AUTOFLUG is working on designs based on so called SmartTextiles – textiles for the demands of tomorrow.





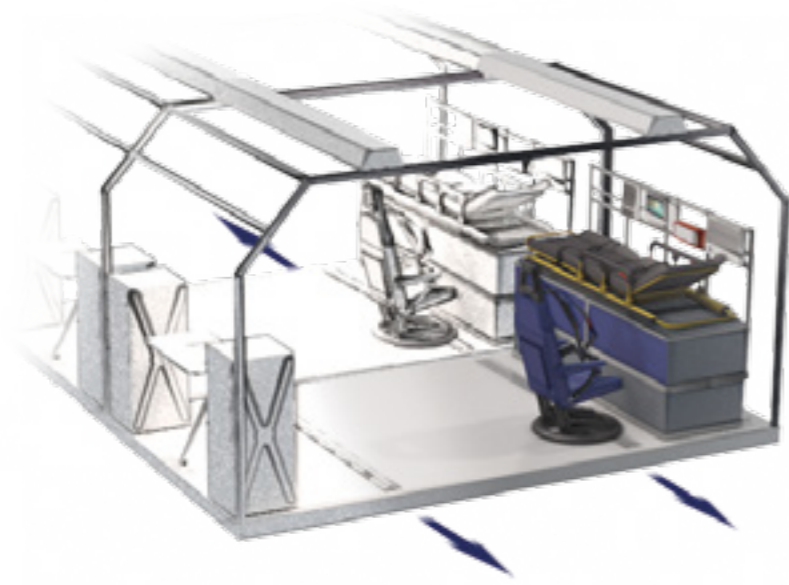
ADDITIONAL SKILLS ROUND OFF OUR EXPERTISE

THINKING SAFETY — FROM IDEA TO PRODUCT

People trust AUTOFLUG products with their lives on a daily basis. The highest quality and responsible conduct are thus absolutely essential for us – from the qualification and motivation of our staff to the collaborative involvement of subcontractors and suppliers. This allows us to put our expertise to good use and perform in all stages of both national and international projects. Even in the design phase, a lot of consideration is given to the manufacturing process – Design-to-Production is crucial for us to be able to sustain cost-efficient production. In-house engineering lies at the centre of all developments and significantly helps to ensure that everything from construction to quality control runs smoothly. That's why we like to put emphasis on development – over 20% of staff is involved in various phases of development.

Our quality management system is ISO 9001 and EN 9100 certified. AUTOFLUG is also recognised by the Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr (BAAINBw) as an aviation operator for military aviation devices, as well as by the Luftfahrt-Bundesamt (LBA) as an EASA Part 21/G manufacturer and an EASA Part 145 maintenance service provider.

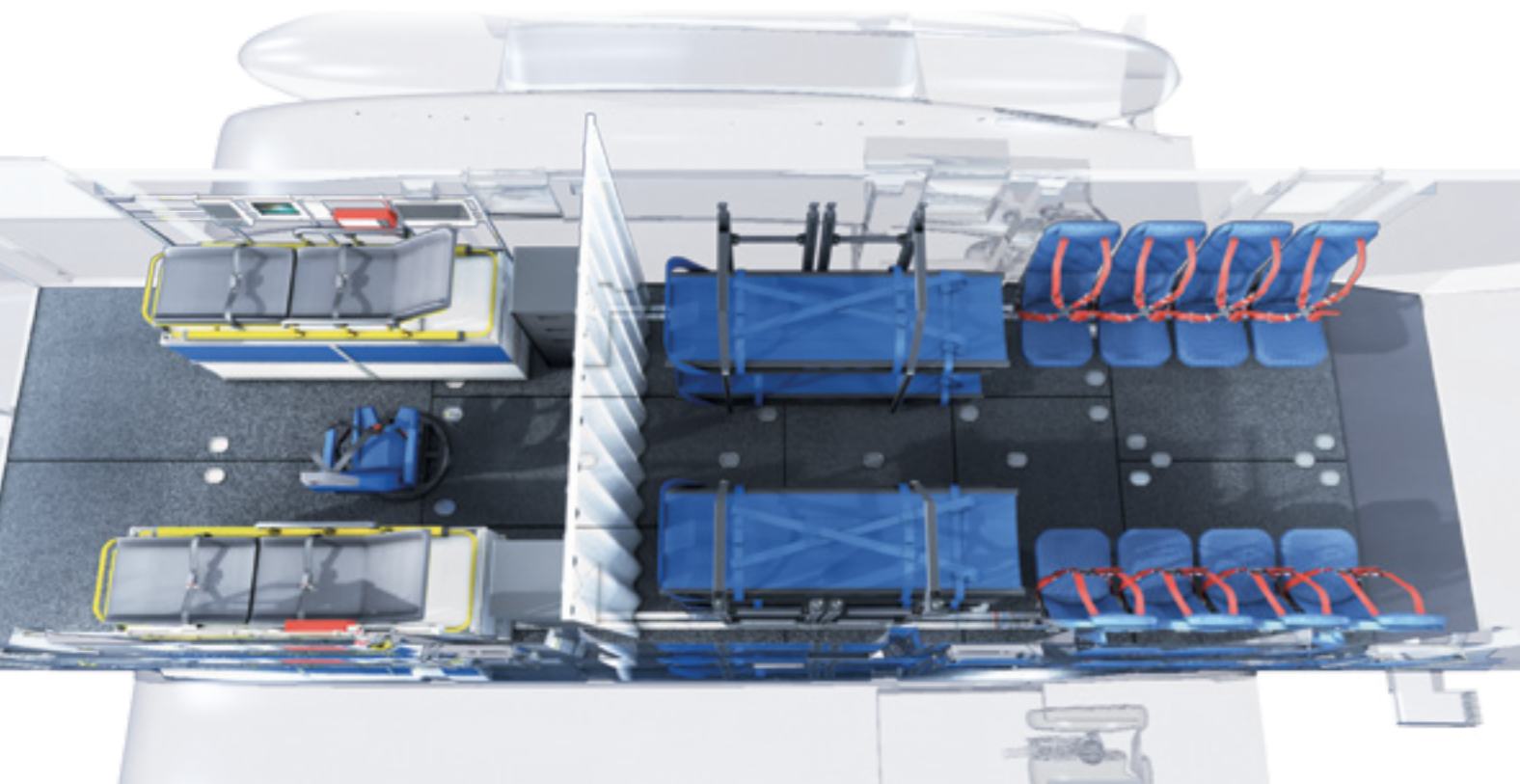




AS FLEXIBLE AND DIVERSE AS TODAY AND TOMORROW'S DEMANDS

At a time when multi-national applications are constantly giving rise to new mission challenges and reaction times are becoming shorter and shorter, AUTOFLUG supports you with modular cabin solutions. For example, the state-of-the-art transport aircraft, the Airbus A400M, flies across the globe with our innovative textile safety

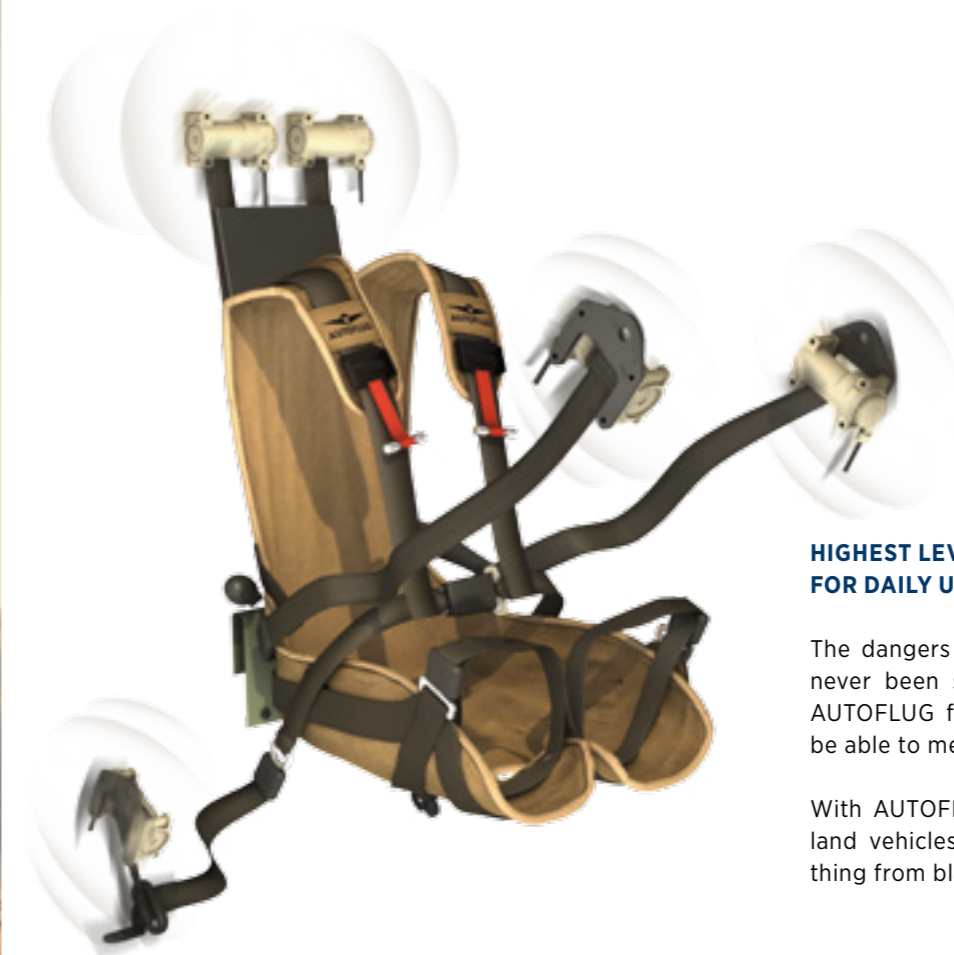
seats and, thanks to clever interface technology, it can also be equipped for medical use and various other missions. The AUTOFLUG airFLEX series allows cabins in various transport aircraft and helicopters to be equipped with a wide range of applications. Transporter machine crews can quickly switch between different applications with the AUTOFLUG airFAST pallet solution – from a transport aircraft to a flying hospital in less than 2 hours.



CABIN SOLUTIONS FOR TRANSPORT AIRCRAFT AND HELICOPTERS



CABIN SOLUTIONS - OCCUPANT PROTECTION FOR ARMORED WHEELED AND TRACKED VEHICLES

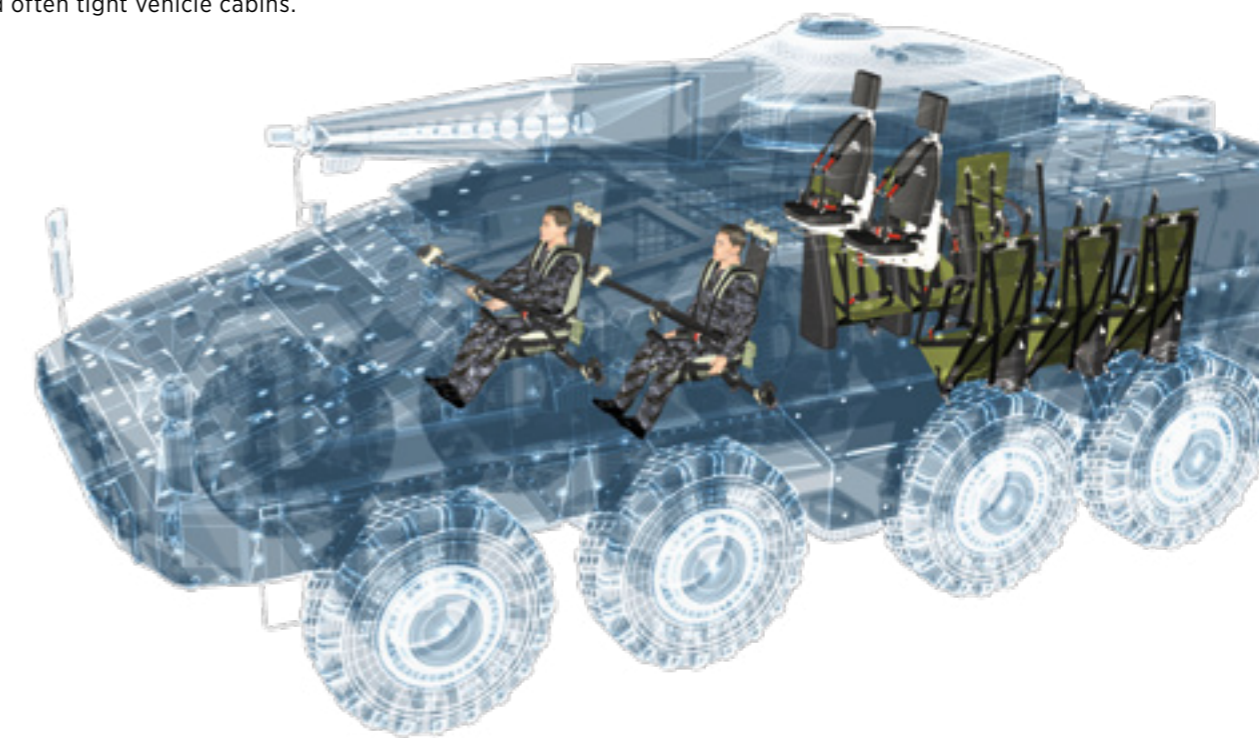


HIGHEST LEVEL OF PROTECTION IN EVERY SITUATION FOR DAILY USE

The dangers that face the crews of land vehicles have never been so diverse as they are today. That's why AUTOFLUG follows operational scenarios worldwide to be able to meet the demands of tomorrow, today.

With AUTOFLUG OVERMATCH passengers of armoured land vehicles receive extensive protection from everything from blasts to accidents.

The safety seats and other cabin fixtures use a unique textile damping system which isolates the vehicle structure using textile components. This makes our products lightweight and robust, ensuring high flexibility in narrow and often tight vehicle cabins.





**VERSATILE IDEAS AND SOLUTIONS
ESSENTIAL FOR SURVIVAL**

Protecting people and making rescue possible – that is the fundamental goal of the entire company. This is reflected in all services and products in the rescue and safety sector. Products range from individual components such as personal protective

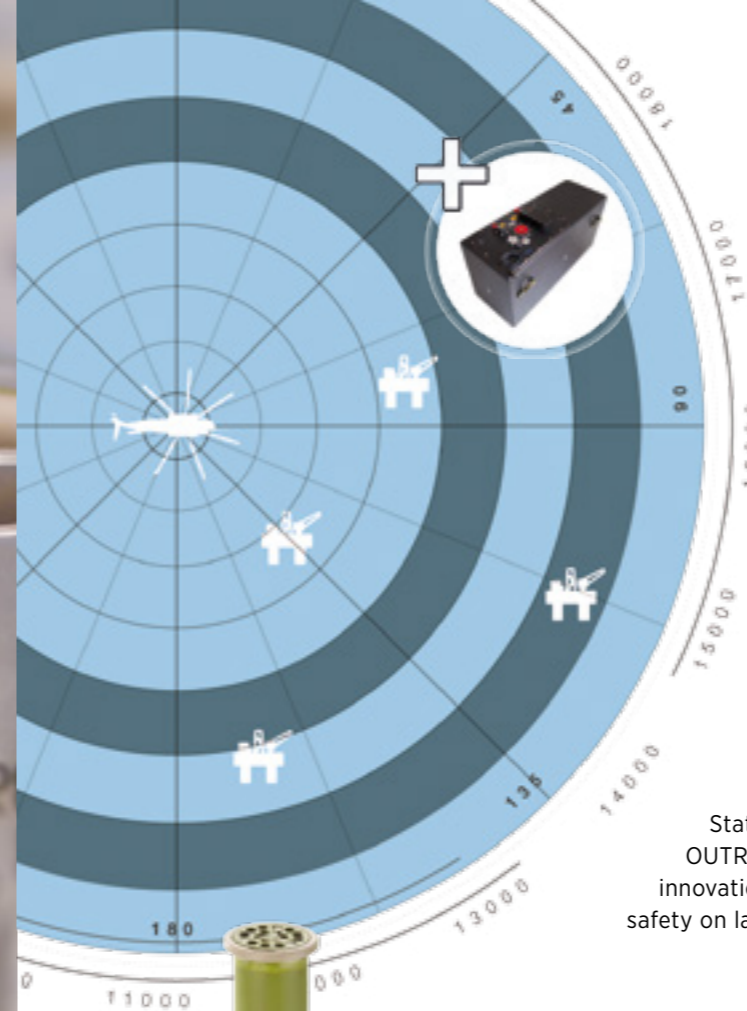
equipment and complex protective overalls such as the AUTOFLUG PROSUIT HERMETIC to various parachute systems for rescue and recovery but also including brake parachutes for safe landing of jets. An extensive portfolio that requires the highest level of precision and reliability in all areas because you can't cut corners when it comes to human lives.



**RESCUE & SAFETY -
COMPREHENSIVE PROTECTION
FOR THE SAFETY OF PEOPLE
AND EQUIPMENT**



**MEASUREMENT & CONTROL -
RECOGNIZED SYSTEM EXPERTISE
IN FUEL MEASURING
TECHNOLOGY**

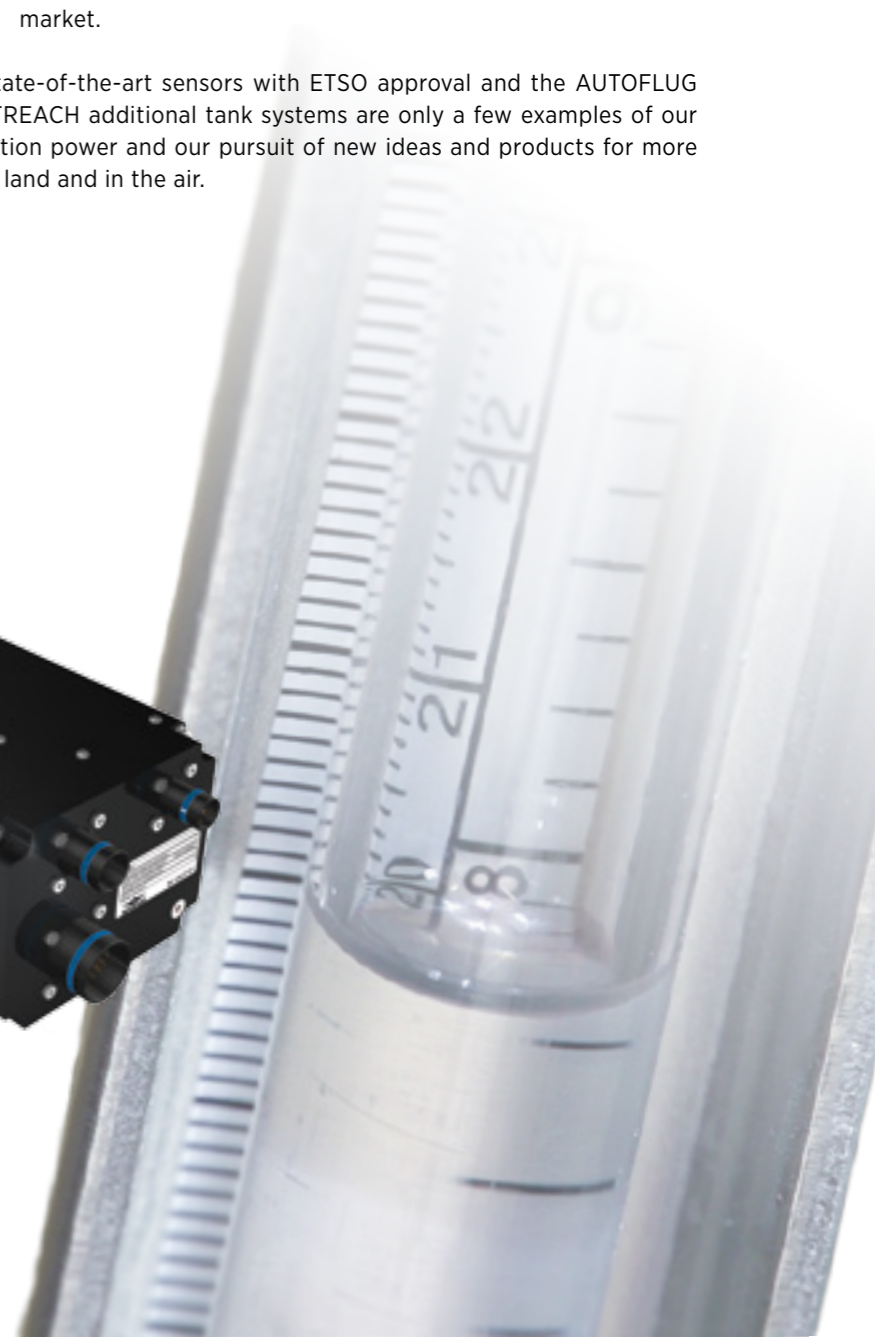
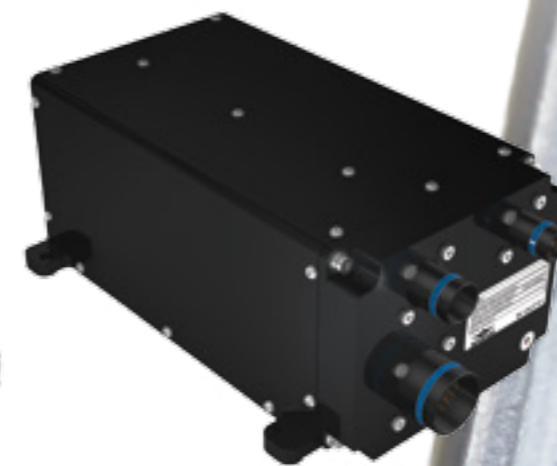


PRECISION AND SAFETY AT THE HIGHEST LEVEL

A system that can never fail and that must be able to function without repair in the hardest conditions. Misinformation or an incorrect calculation in a plane's fuel system poses an inevitable risk to human life.

It is only down to our extensive experience in this area that we are able to proudly boast today: AUTOFLUG solutions are some of the world's most secure systems and components for fuel measurement and control technology. We have proven this time and time again on the international market.

State-of-the-art sensors with ETSO approval and the AUTOFLUG OUTREACH additional tank systems are only a few examples of our innovation power and our pursuit of new ideas and products for more safety on land and in the air.





A THEME THAT HAS A LONG WAY TO GO

To make our products and related systems as versatile as possible, we think about later service concepts even in the first idea stages – Design-to-Maintenance – an active process here at AUTOFLUG. We also provide customised solutions to ensure the smooth integration of service features into customer procedures whilst still considering various operation scenarios.

Our service concepts are just as versatile as our products. We are working on concepts for performance-based logistics, an idea which is still rare in core sectors today. But this is exactly what we are all about: being a driving force and providing innovative yet calculated approaches that require minimal maintenance and which can be implemented extremely efficiently.

We offer services ranging from training for the optimal handling of all products to the prevention of obsolescence, as well as services in the classic MRO sector. We are also highly qualified to deal with development programs or research projects with partners and other institutes assigned to us – our development department is a competent solutions partner for any questions about rescue and safety and much more.



**SERVICE & ENGINEERING -
LIFECYCLE SERVICES FOR
MAXIMUM SYSTEM AVAILABILITY**

THE AUTOFLUG MILESTONES



1919 - Flight pioneer Gerhard Sedlmayr founds his "Spezialhaus für das Automobil und Flugwesen, AUTOFLUG" [Specialist institution for automobiles and aviation] in Berlin's Johannisthal.

1958 - Headquarters is moved to Rellingen in Schleswig-Holstein.



1958 - AUTOFLUG takes over the repair and maintenance of Martin-Baker ejector seats in Germany as well as the licensing of components and subsystems.

1989 - Development and production of safety seats for helicopters begins.



1992 - Development of fuel measurement and control systems begins.

2006 - Development of modular fixture concepts for airplane cabins begins.

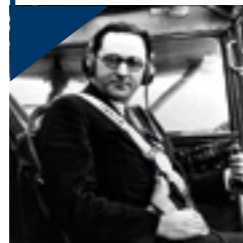


2009 - Mass production of safety seat system for the A400M transporter plane programme begins.

2019

1919

1928 - Collaboration with IRVIN begins, as part of which AUTOFLUG becomes the leading manufacturer of rescue parachutes in Germany.



1955 - Reconstruction work in Hamburg by Dr. Gerhard Sedlmayr, the son of the founder.



1968 - Collaboration between AUTOFLUG and Martin-Baker on the retrofitting of all STARFIGHTER F-104 G for the German army with Martin-Baker type MkGQ7A ejector seats. Around 900 STARFIGHTERS were retrofitted within a few months.

2014 - Testing and qualification of the newly developed, mine-protects safety seats for the PUMA armoured personnel carrier.



2017 - Development of the first AUTOFLUG airFAST SEAT range for use in the AIRBUS A400M military transporter.

2018 - First series of seats for equipping civil helicopters with AUTOFLUG FLYWEIGHT safety seats.

2019 - AUTOFLUG 100 year anniversary

You'll find a more comprehensive version at: www.autoflug.de



Luftwaffe



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WHO LIVE TO SAVE**





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