Rheinland Air Service

First European ATR Approved MRO Partner

Approved and Dependable MRO Services
Facts & Figures — MRO Services — Approval Certificates
Choose the MRO Partner You Can Trust – The First European ATR Approved MRO Partner

Your business depends on having aircraft reliably ready for dispatch. That is why you should choose a Maintenance, Repair and Overhaul (MRO) partner you can completely depend on.

Rheinland Air Service (RAS) has earned the trust of the aviation industry for over 40 years. We have gained a reputation for on-time German precision maintenance service for many leading regional and commercial airlines. The first ATR approved Network Partner in Europe, we also offer the convenience of an additional MRO facility in Africa.

Large new hangars at both RAS facilities further increase our capacity for rapid, reliable MRO. You can count on us for prompt, exceptional service with personal attention to all your MRO needs. We offer broad MRO capabilities, plus fast turnarounds to help maximize your in-air revenue.

Choose the MRO partner you can fully trust. Choose MRO – Made in Germany. Choose RAS.
Main Facility

Our main facility is conveniently located at Düsseldorf-Mönchengladbach Airport (EDLN, MGL) in Germany. Our customers appreciate its central European location, its 35,000m² apron, and storage parking availability.

Get Dependable, Full-Service German MRO

You can depend on RAS for precise German servicing of all your MRO needs. With our recently-added second hangar, our 8,500m² facility has plenty of space for full-service MRO, specialized repair shops, and our extremely well-stocked parts warehouse. Our two large, floor-heated hangars accommodate up to 12 ATR 42/72 aircraft.

We have 220 highly-skilled and experienced technicians ready to provide you with our industry-leading "Made in Germany" MRO services.
Comprehensive German Quality MRO Experience

RAS - Your Complete MRO Solution

With our experience servicing over 80 ATR aircraft each year, we have the broad knowledge to be your complete, reliable MRO solution. RAS can provide you with expert base or line maintenance. Although specializing in the ATR 42/72, mixed fleet operators appreciate that we are also authorized for most other major aircraft. You can rely on RAS for German precision on everything from A checks to 36,000 cycle checks.

RAS is a trusted leader in aircraft maintenance, avionics, conversions, modifications, and structural work. We also buy and "part-out" surplus ATR aircraft. Ask us about our fixed-term maintenance programs – we can design a flexible program to meet your unique needs.
RAS Provides Base Maintenance

Our large base maintenance facility is staffed with qualified and experienced German technicians. Trust RAS for all types of Maintenance Planning Document (MPD) checks on your ATR aircraft.

We can provide you with prompt, reliable turnarounds in all situations, such as all routine maintenance A–D checks. With made in Germany precision, we can also take care of all your complex repairs and overhauls.

- All ATR MPD checks
- 36,000 cycle checks
- 33,000 cycle wing modifications
- 27,000 cycle door modifications
- Component repairs and overhauls
- Composites
- Avionics and modifications, including MPC modifications
Structural Repair Services

ATR Heavy Maintenance Capabilities: RAS Performs Structural Repairs

RAS has the facilities and capabilities to perform a wide variety of expert structural repairs on your aircraft. Count on RAS for repairs to doors and hatches, access panels and fairings, leading edges, flaps and slats, and much more. We also have the rare ATR approval to repair or overhaul flight controls.

- All types of ATR structural repairs
- ATR doors and hatches
- ATR access panels and fairings
- ATR composite repairs
- ATR de-icer boot replacements
- Leading edges
- Flaps and slats
- ATR-approved flight control repairs and overhauls
- Complex metal construction structures
- Primary and secondary structures
Component Repair and Overhaul Services

Our certified component shops provide you with fast, German quality support for aircraft component maintenance, repair, or modifications. RAS is one of only three companies worldwide certified by ATR for the repair and overhaul of flight controls, such as landing flaps.

- Flight controls for regional aircraft
- ATR de-icer boot replacements
- ATR composite repairs
- ATR doors and hatches
- ATR access panels and fairings
- ATR structures
- Leading edges
- Flaps and slats
- Composite components
- Complex metal component structures
- Primary and secondary structures
Composite Repair

RAS technicians regularly perform skilled composite repairs. With years of training and hands-on experience, we have developed broad expertise in aircraft composites. Carefully applying techniques such as bonding, laminating and scarfing, RAS effects high-quality, long-lasting composite repairs.

We can patch, refinish and repair your aircraft — so it looks and performs like new.
RAS has the facilities and technicians to conveniently provide many specialized services, such as:

**Titanium and Inconel Welding**
Complex vacuum welding repairs of titanium firewalls, air in-and-outlets, assemblies, and all other ATR components made from titanium or Inconel superalloys.

**Propeller Blade Repairs**
Fiberglass and foam repairs, erosion coat refurbishment, friction reduction strip replacement, heater lead replacement, and minor repairs in accordance with the Component Maintenance Manual (CMM).

**Cabin Conversions**
Complete major and minor cabin conversion capabilities. Our new cabin shop offers Layout of Passengers Accommodation (LOPA) changes, RAS/VIP conversions, multirole cabin conversions, interior reconfigurations to increase the number of seats on ATR 42/72 aircraft, and so on. We specialize in full cabin, cockpit, cargo area, and toilet module refurbishment packages. Three packages include complete interior repainting, refoiling, new carpeting, as well as renewed or reworked seat covers and cushions. Thanks to our ATR part-out service we have a generous inventory of different model seats, galleys, cabin divider walls, and all types of overhead bins, plus sidewall or ceiling panels.
RAS Introduces Aircraft Protection Cover Kits

Protect your aircraft with style and ease. Our new in-house shop offers custom designed covers that help protect your expensive aircraft parts from the elements. Easily installed and removed, our long-lasting covers provide maximum UV and weather protection, yet store quickly and compactly. A perfect fit, and a smart choice.
Avionics: Design • Installation • Modification • Maintenance

An EASA-approved Part 21 Design organization for avionics and electronics solutions, RAS has long been a leader in developing and installing customized avionics. RAS is accredited to authorize minor aircraft changes and supervise the approval process. Avionics services include hardware and software updates and upgrades; flight-deck modifications; and systems training.

RAS is a dealer for Rockwell Collins, Honeywell, and Garmin, and is authorized to install MPC modifications, EGPRS, HF, and TCAS systems for the ATR 42/72. Count on us for avionics sales, service—and customization.
RAS Buys and Disassembles ATR Aircraft

Over the past couple of years, RAS has bought and carefully disassembled 16 ATR airplanes to harvest their parts. This specialized service provides RAS customers with a wealth of rare, hard-to-find, yet affordable spare parts for ATR aircraft. In addition to Line Replaceable Units (LRUs) and serialized components, we even have plenty of cabin parts and interiors in stock. All parts are thoroughly tested, then refurbished and recertified as required. Quickly search www.atr-parts.com to find the parts you need.

Parting-out also provides our customers with a worthwhile disposal option for their retired aircraft. Contact us about your surplus ATR aircraft.
Our Large Warehouse Stock Speeds Your Repairs

To speed your repairs, we maintain a generous on-site warehouse with $15 million USD in spare parts. In addition to our inventory of new and used aircraft parts, your MRO turnaround benefits from our:

- Direct access to major OEMs and spare parts manufacturers
- Short distance from the ATR central parts storage facility
- Central location within the major freight hub airports
- ATR part-out service for rare, hard-to-find parts
We support you - wherever you go!

We Support You – Wherever You Go!

Get back in the air quickly. Our Aircraft on Ground (AOG) Service guarantees our customers professional 24/7 on-site support.

RAS Also Offers Line Maintenance

RAS can provide line maintenance to your individual requirements. We will establish fully-equipped line stations wherever your airplanes are located. You can then rely on us to handle all your service requirements, such as defect repairs, transit checks, and pre-flight inspections.

Ancona, Ankara, Bangkok, Bern, Cagliari, Eindhoven, Geneva, Istanbul, Lampedusa, Metz, Moscow, Nuremberg, Olbia, Palermo, Rallye Paris-Dakar, Santiago de Compostela, Siegerland, Stuttgart and Zurich – these are just some of the locations where our professional line maintenance has gained renown for its reliability. Currently we operate line stations at the airports at Maastricht, Pantellaria and Düsseldorf-Weeze.
Windhoek, Namibia Location Provides Geographic Convenience

Our established subsidiary, Aviation Centre at Eros Airport in Windhoek, provides a convenient alternate MRO destination for regional carriers. African airlines can replace expensive long ferry flights to Europe with a short local stop. To further welcome new customers to the facility, an additional large hangar was added, along with approvals from Botswana and South Africa. Soon our African base will also become your Sub-Saharan destination for professional Embraer ERJ 135/145 MRO services.

RAS’ certified African facility has broad MRO capabilities. Our technical staff includes A & C and B & D mechanics and engineers. With our highly-qualified team, our fully state-of-the-art aircraft maintenance hangars and a well-stocked warehouse, we can provide short turn-around times and guaranteed deadlines. Aircraft maintenance, retrofit, modification, and structural work are all included in our expertise.
Certified, Capable, Dependable

Authorized precision MRO across Europe and Africa, including our newest approvals from Botswana and South Africa.

Get reliable German-quality MRO, wherever you need it.

<table>
<thead>
<tr>
<th>Certificates</th>
<th>Issuing Authority</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>EASA Part-145</td>
<td>Luftfahrt-Bundesamt</td>
<td>Europe</td>
</tr>
<tr>
<td>EASA Part-145</td>
<td>European Aviation Safety Agency</td>
<td>Europe</td>
</tr>
<tr>
<td>EASA Part-145</td>
<td>Luftfahrt-Bundesamt</td>
<td>Europe</td>
</tr>
<tr>
<td>FAA Repair Station</td>
<td>United States of America</td>
<td>USA</td>
</tr>
</tbody>
</table>

**Flight Control Approval**

<table>
<thead>
<tr>
<th>Certificates</th>
<th>Issuing Authority</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCCA AMO 145</td>
<td>Office of Transport Canada</td>
<td>Canada</td>
</tr>
<tr>
<td>Guernsey AMO 145</td>
<td>Office of the Director of Civil Aviation</td>
<td>Guernsey</td>
</tr>
<tr>
<td>San Marino AMO 145</td>
<td>Republic of San Marino</td>
<td>San Marino</td>
</tr>
<tr>
<td>BHDCA Part-145</td>
<td>Government of Namibia</td>
<td>Namibia</td>
</tr>
<tr>
<td>Botswana AMO 145</td>
<td>Civil Aviation Authority of Botswana</td>
<td>Botswana</td>
</tr>
<tr>
<td>Namibia AMO 145</td>
<td>Republic of Namibia</td>
<td>Namibia</td>
</tr>
</tbody>
</table>
Rheinland Air Service GmbH

Flughafenstraße 31
D-41066 Mönchengladbach
GERMANY

T: +49 2161 9948-100
F: +49 2161 9948-155

E: atr@ras.de
www.ras.de / www.atr-parts.com

EASA Part 145 Approval DE.145.0048