

Complete Turn-Key

AVIONICS SOLUTIONS

DENMARK-HQ | NORWAY | SWEDEN | LATVIA | CZECH REPUBLIC | AUSTRIA | BAHRAIN | INDIA | MALAYSIA



THE SA GROUP OVERVIEW

The SA Group consists of 14 divisions located in Europe, the Middle East, India and Southeast Asia. The headquarters, which was established in 1978, is located in Billund, Denmark.

All products and services are based on relevant approvals from EASA, FAA and several local authorities.



- > EASA Part-145
- > EASA Part-147
- > BCAA Part-145

- EASA Part-21J
- > FAA Part-145
- > GAR Part-145

- EASA Part-21G
- > TCCA Part-145
- > DOT RIN N083



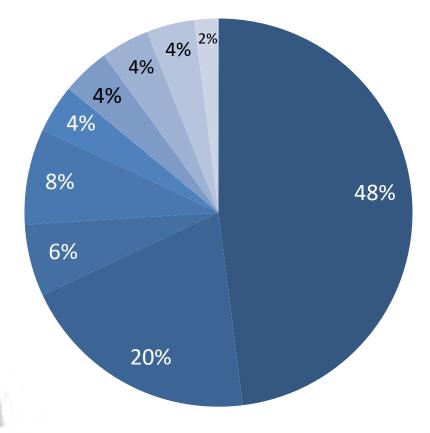
THE SA GROUP WORKFORCE

Approximately 150 employees in The SA Group

Workforce by function

Technical	(48%)
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- Design/Engineers (20%)
- Administration (6%)
- Sales Civil (8%)
- Sales Defense (4%)
- Finance/Accounting (4%)
- Logistics (4%)
- Training (4%)
- Quality Assurance (2%)





THE SA GROUP

THE SA GROUP IS REPRESENTED IN 9 COUNTRIES, ON 14 LOCATIONS MORE THAN 40 YEARS OF EXPERIENCE WITH AVIONICS SOLUTIONS MRO CAPABILITY FOR MORE THAN 16.000 PART NUMBERS MORE THAN 3.000 INSTALLATIONS PERFORMED MORE THAN 1.000 CERTIFICATION PACKAGES AND STC'S DEVELOPED WORK PERFORMED ON MORE THAN 250 DIFFERENT AIRCRAFT TYPES MORE THAN 3.000 INSTALLATION KITS & LRU'S MANUFACTURED TRAINING PROVIDED FOR MORE THAN 2.000 AVIATION PROFESSIONALS





OVERALL EXPERIENCE

•	A/C types modified	> 250
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•	A/C types	maintained in	avionics field	> 250
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•	Avionics installations	performed & certified	> 5.000
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• Avionics maintenance tasks on A/C, man-hours > 50.000

• Avionics installation & certification, man-hours > 400.000

• Avionics & Instrument maintenance, man-hours > 500.000



BUSINESS AREAS OF THE SA GROUP

Mission

We are providing complete turn-key solutions within avionics, electronics, training and interiors, for the international aviation and defense community. We focus on the niches where we can make a difference, and we always strive to deliver solutions rather than products. We build on partnerships expanding our capabilities and international presence, and we invest in the development of our company and employees, in order to continue to deliver value-adding solutions to our customers worldwide.

Vision

The SA Group is to become the best solution provider within the international aviation community, within the niches we operate. Preferred by partners, preferred by customers and preferred by employees.

Worldwide Service and Support

Our service and support is carried out from our 14 SA divisions in Europe, the Middle East, India and South East Asia. The service centers are manned by well-trained staff and recognized by manufacturers. All services are based on their recommended procedures, test equipment, tools and documentation.



















LOGISTICS & PARTS SERVICES

- Own logistics center ensures quick and effecient shipping
- Equipment exchange and rental services
- Maintenance and Certification documentation library

- Widespread purchasing network
- Partnership agreements and close cooperation with leading avionics manufacturers, ex.:















































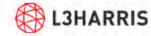






































MAINTENANCE - MRO SERVICES

- EASA Part 145 Maintenance Organization Approval
- Avionics component maintenance (MRO)
- Instrument component maintenance (MRO)
- Electrical component maintenance (MRO)
- Aircraft system maintenance
- Field service teams for world wide "on-Site" support
- 24/7 AOG technical support

- Support for more than 16.000 equipment P/Ns
- Testing with OEM certified test equipment
- Line, Intermediate and Depot Maintenance
- Repair/Overhaul
- Exchange/Rental
- Logistics support











SOLUTION STIKE FIGHTER F-35 SUSTAINMENT PROJECT







AVIONIC MRO & SUSTAINMENT SERVICES

- ATE advanced technology testing
- Airborne Radar System component level repair and re-certification
- Flight Management Computer repair and re-certification
- Integrated Navigation Computer maintenance service
- GPS receiver maintenance service













MRO Services on Oxygen Cylinders and Regulators

- Wide scope of MRO-sustainment services for O2 systems
- Oxygen valve and regulator maintenance
- Hydrostatic test of oxygen cylinders

- Oxygen Refilling-lab and station to MIL-PRF-27210 requirements
- Clean-room ISO 7 / Class 10 000
- US DOT & EASA certified







We have a modern battery shop, where we perform deep cycling, repair and overhaul of aircraft batteries.

- Battery maintenance
- Wide scope of Ni-cd and sealed acid batteries
- Capacity to run diagnostics of 4 batteries simultaneously
- Short TAT and great capacity
- Cost effective and flexible







- Stock and supply of a wide range of galley rotables, expendables, and consumeables
- Certification of galley equipment solutions
- Installation of galley equipment
- Cost-effective and flexible repair solutions











Design of aircraft avionics modifications (EASA P21J, AQAP, FAA)

- Concept, pre-investigation, cockpit lay-out, cable routings
- Engineering, interface, technical, operational & human factor assessments

Documentation of aircraft avionics modifications (EASA P21J & Others)

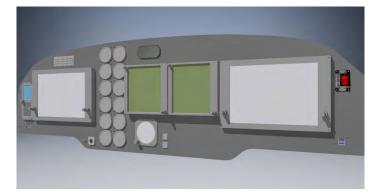
- Technical orders with wiring and structural drawings
- Flight Manual & Operating supplements
- Ground & flight test procedures

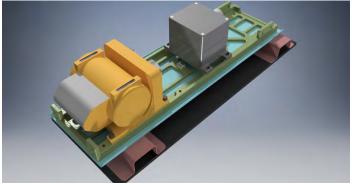
Certification of aircraft avionics modifications (EASA P21J & Others)

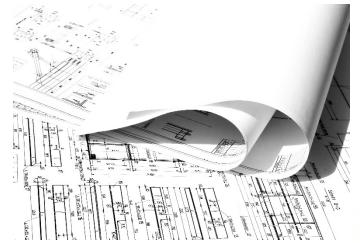
- Certification programs, compliance records, load analyses, weightbalance calculations, EMI assessment and required reporting to involved customer and authority
- SA currently have more than a 1000 EASA certified modifications

SA Part-21J approval covers all electrical and structural modifications as well as interior upgrades.

All documentation available in Auto-CAD format











PRODUCT DEVELOPMENT

- Development of intelligent and cost-effective customized avionics and aircraft electronics devices and concepts.
- The customized products are designed to meet a certain demand or niche within the field of electronics, primarily aimed at the aviation industry.
- Also development programs for land mobile and maritime applications.







UAV Collision Avoidance, Tracking & ID (CATI) System









Electronic Flight Bag (EFB) Solution: Tablets (Windows or iOS), DIC-600, CWAP, Tablet Control panel with or without WiFi, CDSS, CCSS and ERC-400





FUTURE-PROOF EFB SOLUTION

- Intelligent future-proof infrastructure
- Light weight solutions to lower operational costs
- Ruggedized windows based tablets for a wide range of features in a harsh environment
- Currently certified for B737, B757, A320, A330/340, RJ-series, Q400, MD-83, EMB-170

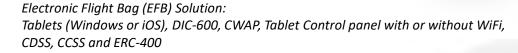
















UAV-ID – DATA-LINK & MANAGEMENT SYSTEMS

Collision Avoidance, Tracking & ID System for Drones

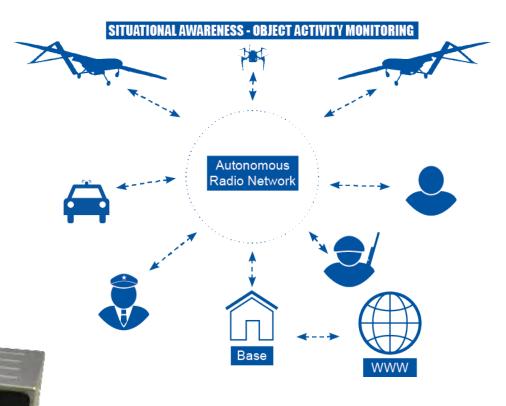
SA develops and manufactures transponders for UAVs with High Power and Low Power Data-Link Systems.

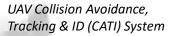
The High Power version is mainly for fixed installations with less size, weight and power restrictions.

The Low Power version is intended for applications where size, weight and power consumption is highly important. SA provide transponders with a weight of less than 50 grams.

The transponders can exchange information as well as broadcasting to all available units.

All communication is encrypted, and performed on a single narrowband frequency.







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PRODUCTION SERVICES

- EASA Part-21G Production Organization Approval.
- Delivering complete kits with or without STC. Prepared for installation either by SA, third party or customer, as agreed. All kits are provided with an EASA Form-1.
- All production is performed according to approved data, delivered by either Scandinavian Avionics Design or 3rd party certification organizations, holding the EASA Part-21 J Design Organization Approval.

 For kit manufacturing we use our in-house laser wire marking machine with wire loom high voltage testing capability. We also produce various mechanical and structural parts for our installation kits, ex.: tablet holders and constant friction mounts for EFB applications, antenna doublers, racks and shelves for various upgrade applications.











CSD COMPENTENCE CENTER

Cabin Safety Design – Aircraft interior & exterior modifications and changes

- LOPA
- Livery changes
- Cargo conversions
- Placard design
- Customized cabin layouts
- ...and much more









- Cleaning, restoration, refurbishment and modifications to any flying cabin in both the civilian and military domain.
- In perfect symmetry with the rest of our capabilities within The SA Group we are EASA Part-145 / -21J / -21G approved and provide complete aircraft nose to tail programs. Therefore, in short - we support your needs from initial design to execution and finalization.









Interior Refurbishments

New Carpetry

Seat Upholstery

Side panel and sealing refurbishments

Veneer work on galley and cabinets

EASA Part

-145 / -21J / -21G



Cabin Care

Maintenance & Renovation

Cabin Crew Courses

Cleaning of aircraft interior



Products

Cleaning kits for VIP aircraft

Customized beds and accessories for VIP aircraft sleeping conversions

Customized pillows, blankets, towels etc.

Bags and pouches for bed linnens etc.

Non EASA Part -145 / -21J / -21G Non EASA Part -145 / -21J / -21G





TRAINING SERVICES



AEROTEAM Training Solutions – Part of The SA Group

- Provides complete turn-key training solutions, including competence control and customized training programs for the aviation industry as a whole.
- Training courses available for pilots, cabin crew, technicians, mechanics and other personnel working within the aviation industry.
- Provides basically any technical or operational training course to MRO's,
 AOC holders, airports and airforces around the globe.
- All training courses can be performed at any of the SA Group facilities, or at the customer's facilities if more convenient.
- Inventor of the MAYDAY Training Tool concept
- EASA Part-147 approved









CONSULTANCY SERVICES

The SA Group offers consultancy services for any type of avionics and electronics requirements in any type of constellation.

Military and Government Consultancy Services includes:

- Market intelligence
- Operational Requirements
- Project management
- Bid Preparation
- Industrial Co-operation
- System Procurement
- Field Trials
- Project Marketing
- Offset Support







Material acquisitions can for the army include:

- Replacement purchases of armored personnel carriers
- Fire support systems, including artillery pieces - Engineering equipment, including materiel to roadside bombs, engineering machinery
- and camp equipment for international operations Radio and communications equipment, including data radios and communications equipment with very long range and the materials needed for network communication
- Dark combat material and observation and sensor equipment
- The soldier's equipment, including weapons and personal protection equipment

For the Navy he purchased a new inspection vessel of Knud Rasmussen class and materielanskaffelserne will moreover be reviewed could include:

- Demining Equipment - Sonar equipment for IVER HUITFELDT class (frigates)
- Smaller vessels and ships, including tugs and mobile lægtvandstartøjel - Communication Equipment

For the Air Force he purchased shipborne helicopters and materielanskaffelserne will moreover be reviewed could include:

- Radar and Control Systems
- Communication and Identification Systems

Joint armed equipment acquisitions will initially include could include:

- Genafskaffelse of wheeled vehicles for defense
- Equipment for special operations forces

For the Home Guard can materielanskaffelserne include could include:

- Vehicles and equipment to support monitoring and marine environmental efforts
- Remaining material that supports the Home Guard's current and future tasks.

- Radio and communications equipment, incl. data radios and communications equipment with very long range and the materials needed for network communication
- **Communications Equipment**
- Radar and Control Systems
- **Communication and Identification Systems**





- More than 3000 avionics installations performed on more than 250 aircraft types in 43 years
- High quality installations with high quality materials and fast turn-around-time
- Ground and flight testing

- From minor modifications to majors and complete turn-key upgrades
- Field service teams of experienced and skilled technical staff for world wide on-site installations

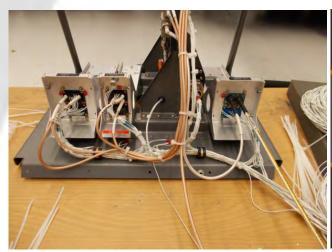








C130 & C604 - COMPLETE AVIONICS UPGRADE

























MILITARY HELICOPTER PROJECTS











BOEING 737 MODE-S UPGRADE









A320 SATCOM UPGRADE





• Similar installation performed on Boeing 757

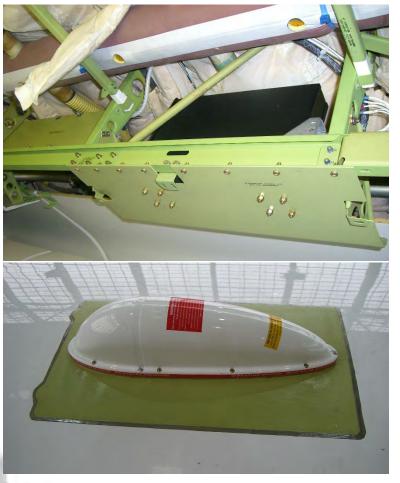




VVIP B757 SATCOM

- Voice
- Fax
- Data
- Cabin WiFi







VVIP B757 IFE





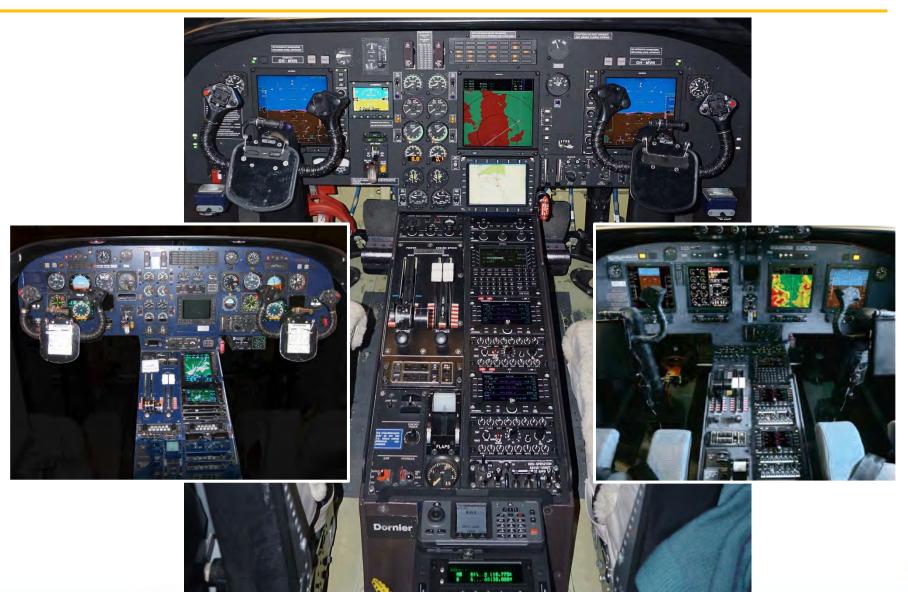
ATP EFIS UPGRADE







DO228 EFIS & COMPLETE AVIONICS UPGRADE





CESSNA 550 COMPLETE EFIS UPGRADE

- Design
- Integration
- Installation
- Documentation
- Certification
- Testing





NVG MODIFICATIONS

• SA76



• Bell 412



Transall C160







AS332 S-PUMA DEPLOYABLE ELT UPGRADE











EC120B COMPLETE AVIONICS EFIS & AUTOPILOT UPGRADE







Design, installation and certification of complete Avionics, Autopilot and Flight Director systems.



• AS365 Dauphin





AS332









MI-172 HIGH-SPEED SATCOM UPGRADE











SAR SPECIAL MISSION UPGRADES

FLIR – Bell 206







SLAR – King Air 200









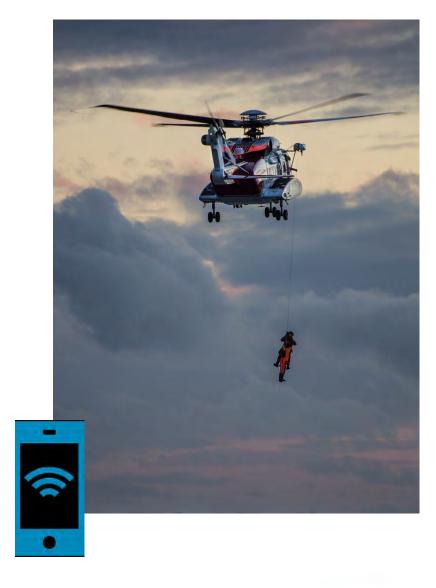


SAR SPECIAL MISSION UPGRADES

Lifeseeker - The Airborne Cell Phone Locator System.

- Locates people using their cell phones as beacons
- No action required by the missing person
- Network coverage as well as no signal areas
- Acts as a communication relay
- The cell phone is the most populated beacon in the world









KING AIR 350 SAR SPECIAL MISSION UPGRADE







- Side Looking Radar (SLAR)
- FLIR camera system
- SATCOM system (AVIATOR 300)
- Maritime Patrol & Surveillance System
- Drop tube system



TETRA SURVEILLANCE & AMBULANCE PROJECTS

Supply of TETRA solutions for a large number of different helicopter applications per operational and governmental requirements including:

- Supply of radio terminals and associated equipment and antenna systems
- Equipment installation and integration
- EASA certification, testing and technical support

Presently combination of government and commercial operations:

- 4 x AW139
- 12 x Sea King
- 1 x EC135 T2+
- 10 x EC135 P2+
- 1 x BK117C-2
- 2 x B214
- 1 x AS350













AVIONICS INSTALLATION ON UAV









HQ OF THE SA GROUP

- Scandinavian Avionics A/S
- Scandinavian Avionics Design ApS

- Scandinavian Avionics Production A/S
- AEROTEAM Training Solutions ApS













SCANDINAVIAN AVIONICS NORWAY

Oslo, Norway













SCANDINAVIAN AVIONICS BROMMA AB

Bromma, Sweden







CLASSIC TRIM AIRCRAFT INTERIORS

Munkebo & Billlund, Denmark







CSD COMPETENCE CENTER

Sieghartskirchen, Austria







SAZ AEROSPACE S.R.O.

Kunovice, Czech Republic

Certification & Engineering Support











SCANDINAVIAN AVIONICS MALAYSIA

Malaysia









SA AIR WORKS INDIA

Gurgaon, India





SALES SUPPORT OFFICES

- SA Technologies AB, Aakersberga, Sweden (EFB Programme)
- Scandinavian Avionics MEA, Bahrain
- Scandinavian Avionics CIS, Riga







BUSINESS AWARDS

Scandinavian Avionics has proudly received different prestigious awards and titles from various suppliers and organizations.



2020 Top Dealer International Award

Every year Universal
Avionics announce two out
of several hundred in its
Authorized Dealer
Network who have
achieved outstanding sales
performance for the year.
Scandinavian Avionics
receives with this
achievement its seventh
Top Dealer International
Award in 10 years.



2019 King Elite Channel Partner

As BendixKing approved Sales, Service and Repair Center for more than 40 years, Scandinavian Avionics are truely honored to receive both the King Elite Channel Partner 2019 and the Global Partner of the Year Award of 2021 from BendixKing.



2021 Global Partner

of the Year

2020 Garmin Platinum Award

Scandinavian Avionics are proud to be recognized by Garmin, for the highest level of sales performance, technical expertise and customer service. This Platinum Award for Elite Performance is the 6th in history and places Scandinavian Avionics in the top tier of Garmin Aviation Dealers Worldwide. Scandinavian Avionics has provided sales, maintenance, certification, installation and support of Garmin aviation products for more than 25 years.







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THANK YOU

