



Hydraulic System

HS31

Emergency Transfer

Hydraulic System

HS31

Hydraulic Pressure

Hydraulic System

MA913

Main Actuators



DISCOVER how aerospace and defense leaders are using AR to empower their workforce with improved skills and efficiency, ensure safety and compliance, and drive digital transformation.

SUPERCHARGING Aerospace and Defense with Augmented Reality

Optimizing Efficiency, Safety & Compliance: AR for Aerospace and Defense Manufacturing



A&D is a highly competitive, complex, and regulated industry.

And while companies compete to provide increasingly complex and customized products, the aging workforce is proving difficult to replenish. Industrial AR is an invaluable new solution for FA&D workforces: offering efficiency, agility, compliance and safety gains—while reducing costs.

AR applications offer a continuum of support for manufacturing workers across all experience levels. AR-based onboarding and training can accelerate ramping-up new workers, while improving their retention and competency. AR-enhanced guidance and work instruction can assist newer and seasoned workers—with immersive guidance for even the most specific and customized tasks. In the event that unforeseen challenges arise, remote assistance and collaboration can enable tenured workers to assist their less experienced colleagues—regardless of their physical proximity.

AR's impact on manufacturing:

- Decreased equipment downtime
- Reduced cost of defects, rework and scrap
- Optimized machine set-up, changeover, and maintenance processes
- Reduced assembly and operator errors
- Streamlined inspections
- Improved compliance processes
- Increased worker safety
- Reduced time and cost of onboarding

Improving Quality and Profitability: AR for Aerospace and Defense Service



As competition escalates in aerospace and defense, a service-led focus on customer satisfaction and new revenue streams is helping companies differentiate and drive growth. True service-led transformation can be a challenging strategy to execute and places a premium on experience. Skilled career experts are aging out of service markets. Conversely, underskilled workers can have a detrimental effect on service outcomes and customer satisfaction. Industrial augmented reality is proving to be instrumental in improving technician proficiency—and in ensuring service efforts are successful.

Similar to manufacturing use cases, AR supports service workers throughout their skills development process. AR-based onboarding and training can speed ramp-up time for new or redeployed service techs, while ensuring that once in the field, they are equipped to handle the task at hand. AR-enhanced guidance and work instruction helps ensure that service visits have faster, more successful resolutions. Easy access to live remote assistance is invaluable for rapid trouble-shooting of complex or unexpected problems, allowing companies to use their valued experts more effectively—by providing real-time remote assistance to more junior technicians.

AR's impact on service:

- Improved overall service quality and profitability
- Increased first-time fix rates
- Reduced travel costs
- Decreased mean time to repair
- Improved uptime and meet SLAs
- On-demand problem solving
- Increased worker safety
- Superior customer satisfaction scores

Enhancing Learning Outcomes: AR for Aerospace and Defense Training



The lack of an able workforce in A&D has intensified the need for companies to quickly onboard and upskill new or seasonal workers.

There's an urgent need to transfer the skills and knowledge of experts to the new generation of workers, but poor training methodology and complexities across assets, workflows, and facilities make ramping up new workers challenging.

AR delivers tremendous value for training use cases with visual, highly-

engaging training experiences that have been proven to improve comprehension, retention, safety and time to worker productivity with fewer errors. AR allows for real-time, on-the-job training and upskilling for new or unfamiliar tasks. Interactive in-context 3D instructions and expert guided procedures provide industrial workforces with critical domain knowledge.

AR's impact on training:

- Faster ramp-up time for new or seasonal workers
- Reduced training and adoption times for new skills
- Improved safety and compliance
- Lower overall training costs
- More flexible, agile workforce
- Increased job satisfaction
- More effective recruitment of "digital natives"

Differentiating Product Demonstrations: AR for A&D Sales and Marketing



With fierce competition in the A&D market, the ability to differentiate products and the buying experience can pay serious dividends. Expectations are shifting—today’s customers are no longer satisfied by physical product brochures, cumbersome demonstrations, and painfully slow sales cycles. Industrial AR enables manufacturers to stay several steps ahead of the competition, while also reducing avoidable sales and marketing costs.

As full-scale digital renditions of physical parts and equipment, AR-based product demonstrations make unique features

and product innovations easier to visualize and understand. AR-driven demonstrations cost less because they can be culled from anywhere—including at trade shows, in factories, or in meeting rooms—without any shipping or transportation required. Creative uses of AR can also provide manufacturers with enticing interactive experiences that delight brand enthusiasts.

AR’s impact on sales and marketing:

Increased revenue and year-over-year business growth

- Faster sales cycles with fewer reconfigurations
- Less need for printed collateral and physical materials
- Reduced shipping costs
- Stronger brand reputation

PUTTING IT ALL TOGETHER: Driving Digital Transformation with AR



When correctly implemented, industrial AR can have a transformative effect for A&D companies.

Specifically, AR has proven to improve processes and outcomes through a more effective, technical workforce. Digital transformation initiatives that include industrial AR can lead to increases in productivity, reduced waste, and safety and compliance improvements. Leading FA&D companies are turning AR investments into real-world gains. With adoption easier than ever, the time to get started is now.

Contact SAAB RDS for more information about the full portfolio of industrial AR products we can provide. We will work on you on a needs assessment to design the best strategy for your team.