

ATSA Defence Services Capability Overview

1 Introduction

This document provides an overview of the capabilities and experience of ATSA Defence Services (ATSA).

2 Company Profile

ATSA Defence Services, providing excellence in support for the world's most advanced electronic systems. Based in Newcastle, ATSA is a dynamic company that combines innovation and expertise - delivering integrated support solutions for technological applications.

Our core competencies and areas of expertise encompass the full life cycle of electronic systems - from initial development through to production, and finally support and training.

More than just a maintenance provider, at ATSA we have developed strong partnerships with Original Equipment Manufacturers, such as the Swedish defence company Saab Underwater Systems, providing quality systems engineering products to our clients.

3 Quality

ATSA maintains a Quality Management System (QMS) which is independently audited and certified. We are committed to continued maintenance and improvement of the QMS to meet developing business needs and customer requirements.

At ATSA, we emphasize quality through all of our departments from initial inquiry, through sales, production, delivery, to after sales service. Because ATSA believes that every customer has the right to expect the highest level of quality in all aspects of our business association.

Subsequently, we are committed to a process of continuous improvement. Suggestions, comments and ideas from customers and ATSA employees are always welcome and invariably add to this process.

Accreditation is maintained to meet the requirements of AS/NZS ISO 9001. This Quality Policy has been issued by the Management of ATSA to emphasize, to both our customers and employees, that our company is firmly committed to ensuring that Quality goals are fully realised.

4 Key Products & Services

4.1 Project Management

ATSA Defence Services is recognised as a Registered Project Management Organisation by the Australian Institute for Project Management. Our experienced staff are formally trained in project management techniques and we have the experience and capability to address your complex project management needs.

Project management techniques underpin all activities at ATSA and we apply these techniques as required for internal and external projects. Project management ensures that we deliver our projects on time to all customers

Examples of projects:

- Fleet Information Systems Support Organisation

Through KAZ Group Pty Ltd ATSA provided project management services in support of the Collins Class LAN project. This project sought to install a LAN capability in the Royal Australian Navy COLLINS Class submarine. The LAN was to provide ship's staff with faster and better communication with their families when at sea. ATSA supported management of all aspects of the installation project including liaison with the submarine design authority, ASC Limited.

- RPDE Expeditionary MCM Trials

In May 2007 ATSA supported SAAB Underwater Systems in conducting highly successful

Expeditionary Mine Counter Measures (MCM) trials for the Rapid Prototyping, Development and Evaluation (RPDE) Program at Jervis Bay. These trials required transport of two complex Unmanned Underwater Vehicles from Sweden to Australia, shakedown trials in Port Stephens and final demonstrations at Jervis Bay. The complex logistics for deployment of the large Saab team and equipment were successfully managed by ATSA. All trials were successfully completed on time and to budget.

- FFG In Service Support

In early 2008 ATSA supported Kellog Brown & Root (KBR) and Rolls Royce in preparation of a submission for Integrated Materiel Support (IMS) for the RAN FFG frigates. ATSA consultants drafted major elements of the submission including the Engineering Support Management Plan and the Verification and Validation Plan. Detailed work plans and schedules were also developed to support the submission. Review of the submission was completed together with the full team to ensure a complete, consistent and high quality deliverable.

4.2 Service Experience

ATSA's experience as a service provider is demonstrated through our work on the following systems:

- Double Eagle Mk 2 Mine Disposal System
- Super Barricade Electronic Counter Measures (Chaff Launcher)
- Trainable Stabilised CCTV
- Fixed CCTV
- Main Engine Control & Monitoring System
- Wind Speed & Direction Sensors

Our service capability is backed by engineering skills that enable us to fault find, modify and address obsolescence in complex electro-mechanical systems. Our capabilities include:

- Electrical & Electronics Engineering
 - PCB design in Protel
 - Data communications (Ethernet, RS232, RS485, CANBus)
 - Video
 - Fibre optic termination, installation & test
 - High power Switched Mode Power Supplies
- Mechanical Engineering & Fabrication
 - 3D design in Solid Works
 - Stainless Steel, aluminium and engineering plastics manufacture
 - Software Engineering
 - Embedded systems software development & test

On-site and workshop service is provided by a fully-trained technical team backed by technical management and engineering support

- Workshop service to OEM specifications
- On-site breakdown service
- Inventory management
- Configuration Management

4.3 Manufacturing

ATSA is your ideal partner for low-volume high-quality manufacture of electronic, electrical and electro-mechanical systems. Our engineers and technicians work regularly with many elements of



these technologies. This technical experience is back by our project management capability and existing supplier network to provide a ready capability for on time delivery of systems and equipment. Our capability supports the full lifecycle of manufacturing including

- Review and adaption of existing drawing packages
- Upgrade and modification to address obsolescence or customer unique requirements
- Production planning, material selection and sourcing, kitting and production design
- Manufacture, integration and test
- Objective Quality Evidence (OQE), delivery documentation and maintenance manuals

4.4 Facilities

The world's most advanced Unmanned Underwater Vehicles (UUV) and electronic systems require testing facilities that are second to none. At ATSA, we are able to offer this through our commitment to innovation and excellence.

Our 250,000 litre testing tank allows us to safely perform full-functional testing and provides total manoeuvrability of the Double Eagle Mk II ROV in all states and modes. With a depth of 5 metres and a diameter of 8 metres, our testing tank is dedicated purely to servicing operations, ensuring that your equipment is back in service within the shortest possible time.

Not only does ATSA host this unique testing tank, we also have a humidity controlled workshop complete with a reference set of Double Eagle Mk II shipboard equipment. We keep this equipment carefully maintained to support in-depth fault finding, engineering development and configuration management activities.

So no matter what type of testing, training or development needs to be done, the ATSA facilities and our professional team can deliver.

Our workshop incorporates the following features:

- 1-tonne travelling crane
- Vacuum chamber
- Humidity control
- Hydrostatic pressure testing to 50 BAR
- Advanced Media Blasting & painting facility
- Moisture levels in our workshop are controlled by a Munters HCU 1000 Humidity Control Unit

4.5 Training

ATSA's Double Eagle Mk II System Technical Course has become an invaluable resource to the Royal Australian Navy. Commencing in 2001, ATSA has worked cooperatively with HMAS Waterhen's Mine Warfare Faculty to develop the course, which offers hands-on experience with the Double Eagle system. The course is delivered through a combination of theory and practical training sessions.

- RAN Maintainer Training
 - Remotely Operated Vehicle Engineering
 - Pressure hulls
 - Buoyancy & fairing design
 - Ruggedised connectors
 - Safe design for harsh environments

5 Research & Development

Our commitment to Research and Development (R&D) provides innovation that drives the company forward.

ATSA invests in R&D, particularly ocean engineering and associated technologies, to ensure we are known as an essential contributor to Australia's ocean engineering capability, especially in the field of underwater vehicles and systems.

Our rationale is that the worlds' oceans remain largely unexplored: 71% of the surface of the globe is water, 80% of all life is found beneath the surface and almost a third of all oil comes from offshore fields. Underwater technology creates the tools to manage and utilize ocean resources.

We sponsor PhD students at the ANU and the University of Newcastle. We support 4th year engineering students at the University of Newcastle who have completed the following projects: Seafox Remotely Operated Vehicle (ROV) and Autonomous Underwater Vehicle (AUV).

Subsequently, we employ graduates from the University of Newcastle embarking on exciting research and development. We aim to leverage partnerships with industry, government research organisations, and universities, to deliver the best solution technology can offer, and the expertise to take that solution from theoretical to practical.

The Booz Allen Hamilton Global Innovation 1000 Report shows that the top 1,000 corporate R&D spenders invest 4.2% of their revenue on R&D. This average has been relatively stable over the last five years studied. ATSA aims to meet or exceed this average and our investment for past years is shown in the table below.

Year	Investment as a percentage of revenue
2006	Draft issue for internal review & comment.
2007	7.75%
2008	14.8%
2009	13.5%

6 Contact Details

Contact: Darren Burrowes, Engineering Director

Location: 21 Huntingdale Drive, Thornton NSW 2322

Mail: PO Box 22, Thornton NSW 2322

Phone: 02 4964 3500

Fax: 02 4964 3555

Email: info@atsa.com.au

Internet: www.atsa.com.au