

In depth

Spring 2009



Welcome home: ASC's shipbuilding employees move in

Building and maintaining Australia's frontline naval defence capabilities



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State-of-the-art testing facility	4
AWD block sub-contracts awarded	5
Open for business: shipyard administration building	6
New leadership in the west	8
More to ASC staff than you think	9
Moving toward greater efficiency	11
Master class	12

Managing Director's Report



ASC has entered a new era in recent months and a number of changes have occurred.

The comprehensive organisational restructure that took place at the end of the last financial year will position the company for long term growth and stability.

It was certainly regrettable to lose a number of employees as part of the restructure and I thank all those affected for their contribution to the company.

However, the new organisational structure, particularly the centralisation of our Collins Class submarine maintenance operations, appears to be functioning well as we continue on our path towards improving efficiency and effectiveness.

Such change is never easy and I thank all ASC employees, our suppliers

and of course our customer for their positive response to our restructure.

We have also welcomed our new Chairman, Vice Admiral Chris Ritchie AO RANR and farewelled our former Chairman, John Prescott AC. On behalf of the company I thank John for his commitment and strong leadership and wish him well in his future endeavours.

As a former Chief of Navy Vice Admiral Chris Ritchie brings to the chairmanship an understanding of our customer's requirements; an important attribute in this new era.

Amidst all these changes the company also achieved a significant milestone in its role as shipbuilder for the Air Warfare Destroyer (AWD) Program.

More than 250 employees moved into our new administration building at our upgraded Osborne shipyard, the first building to be completed and occupied.

Our \$100 million shipyard upgrade is due for completion in late 2009 and remains on budget and schedule.

Procurement of key items and equipment required to build the ships continue to be finalised; most notably the awarding of subcontracts for the construction the AWD hull blocks.

Recruitment activities are also continuing, particularly for our production workforce and importantly, processes for training and development are being established to ensure our people are equipped with the skills required for the complex and challenging task of building three AWDs.

These developments mean exciting times are ahead for ASC and its AWD Alliance partners.

ASC is continuing its search for a new Managing Director and Chief Executive Officer. This is an important appointment for the company, and you will be kept informed of developments as they occur.

Graeme Bulmer



Vice Admiral Chris Ritchie AO RANR, ASC's new Chairman.

ASC welcomes new Chairman

Vice Admiral Chris Ritchie AO RANR assumed the role of Chairman of ASC's board on 1 July.

Vice Admiral Ritchie has served on the company's board since August 2007 and has had a distinguished naval career including a term as Chief of Navy. He brings a broad range of experience and capability to the role, including a deep understanding of customer's requirements.

Vice Admiral Ritchie says he is honoured to be asked to lead the company in what promises to be an important period.

"Our involvement in the AWD Program is going well, with our shipyard upgrade almost complete and AWD construction work due to begin later this year.

"We are taking the necessary steps to improve our Collins Class submarine maintenance program and we are engaging positively with the Commonwealth regarding the Future Submarine project," Vice Admiral Ritchie said.

The new Chairman also paid tribute to ASC's former Chairman of nine years, John Prescott AC, and thanked him for his work in positioning the company for long-term growth.

"Mr Prescott made a significant contribution to important stages of ASC's development, in particular its expansion through diversification in submarine activities and surface ship construction," Vice Admiral Ritchie said.



Lereto David Moseki, Melvyn Len Van Wyk, Jack Hahn, Stuart Whiley, Tom Hahn, and Jorge Nogueira.

Collins Class benefits from SME support

Adelaide-based company AEM Consolidated has shown that local small and medium enterprises (SMEs) can provide crucial support to ASC in maintaining the Collins Class submarines.

When the port generator of Collins Class submarine HMAS *Farncomb* malfunctioned recently, it was essential for ASC to undertake repairs in a way that would provide minimal disruption to the schedule or the crew.

Working with the Commonwealth, ASC engaged local subcontractor AEM Consolidated (formerly Adelaide Electric Motors) who then worked closely with ASC's Production, Design and Engineering and Subcontracts departments to successfully carry out the repairs.

ASC's Chief Operating Officer – Collins Class Submarines Stuart Whiley said that using local suppliers is an important lesson for ASC and other large defence contractors.

"Often we look for support from the original equipment manufacturers but AEM have shown that skills are available locally and can lead to timely and value-for-money solutions," Mr Whiley said.

ASC presented AEM's Managing Director Jack Hahn and his team with a certificate of appreciation in recognition of their effort.

State-of-the-art testing facility

ASC's new on-site Non-Destructive Testing (NDT) laboratory will help the company maintain the Collins Class submarine more efficiently.

The laboratory will enable ASC to conduct tests on the welds and materials used on the submarines using ultrasonic, radiographic, magnetic particle, dye penetrant, eddy current, chemical spot tests, metallographic and optical methods.

Importantly the new NDT laboratory houses all these capabilities in the one facility, allowing for more efficient operation.

Quality Control Laboratory Superintendent Jim Scott said the work ASC carries out now is different to what the company did during the build phase of the Collins Class submarines.

"Maintaining submarines is very different to building them and the tests required are different also.

"ASC is now working with ageing boats and our test methods allow us to work with our Design and Engineering department to come up with solutions to emerging problems leading to a more effective and efficient service for our customer," Mr Scott said.

Also central to the operation of the NDT facility is the emphasis on safety.

For example, the radiography section of the facility that is used to identify defects has been classed as a fully enclosed site. This means that all radiography is contained within the building using a concrete bunker.

ASC's NDT laboratory has received accreditation from the National Association of Testing Authorities (NATA) and also has an Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) licence for the storage and use of controlled substances and apparatus.



Nick Ferguson, Technical Officer NDT looks through a microscope in ASC's metallography room.

AWD block sub-contracts awarded

ASC, on behalf of the Air Warfare Destroyer (AWD) Alliance, has entered into a contract with New South Wales-based Forgacs Group and Victorian-based BAE Systems Australia Defence to build 70 per cent of the blocks that will make up the three Hobart Class air warfare destroyers.

Each of the 6250-tonne AWDs consists of 29 blocks – 21 blocks for each ship will be built by Forgacs and BAE Systems and the remaining eight (or 30 per cent) will be constructed by ASC at its shipyard in Osborne, South Australia.

AWD Alliance and ASC Shipbuilding Chief Executive Officer John Gallacher said the awarding of these contracts is a major milestone for the \$8 billion AWD Program.

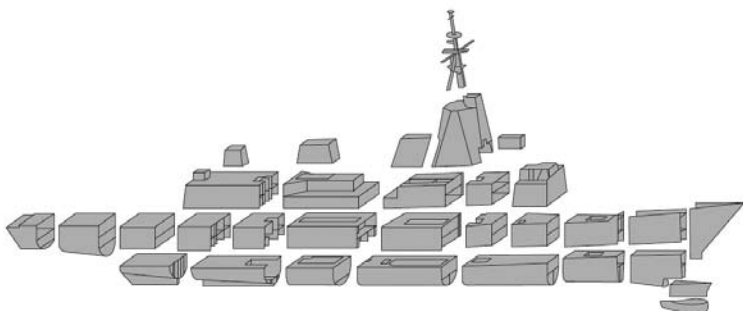
“It means the program has moved into the ‘production readiness’ phase of the program and is on schedule to begin ‘cutting steel’ later this year.

“The block work will create about 450 direct jobs and many more through subcontractors and suppliers, which is good for the program and good for Australia,” Mr Gallacher said.

The subcontracted blocks will be transported to ASC’s Osborne shipyard where the AWDs will be built using a modular construction method. Each hull block will be joined together to form a completed ship.

3,000 tonnes of steel for each ship will be supplied by Australian company BlueScope Steel.

Fabrication of the first ship is expected to begin later this year with final deliveries of blocks for the third ship expected in late 2014.



An example of the crane that will be used by ASC to assemble the AWDs in its Osborne shipyard. Photo courtesy of Manitowoc Crane Group Australia.

Australia’s biggest crane to be installed in ASC’s shipyard

A crane with a capacity of more than 900 tonnes will soon find its home at ASC’s shipyard in Osborne, South Australia.

The crane will be used to move and assemble the blocks for the air warfare destroyers (AWDs).

Valued at approximately \$14 million, the crane weighs more than 500 tonnes with a 100 metre long boom.

A number of smaller cranes will be required to assemble the M21000 when it arrives at ASC in December 2010.

Twelve of these cranes are in operation globally, with only four in the Asia-Pacific region.

Tasmanian company to supply accommodation products for AWDs

Tasmanian-based company Taylor Bros Slipway and Engineering has won a contract worth more than \$25 million to supply a range of accommodation products for the Hobart Class air warfare destroyers (AWDs).

Taylor Bros will supply cabin and sanitary modules, on-board furniture and galley, pantry and scullery equipment.

The contract will create 20 new jobs at Taylor Bros and the accommodation items will be delivered to ASC and block subcontractors BAE Systems and Forgacs for outfit and consolidation into the hull modules that make up the AWDs.



Open for business: Shipyard administration building

More than 250 ASC staff moved into the new administration building at ASC's Osborne shipyard in June.

The three-storey building is the first in the shipyard to be completed and occupied.

AWD Alliance and ASC Shipbuilding Chief Executive Officer John Gallacher attributed the successful move to several years of careful planning and construction management.

"The facilities management team led by Robert Lemonius, General Manager – ASC Shipbuilding and Joe Comeau, Facilities and Support Services Manager were outstanding in overseeing the construction of the building and subsequent move.

"The trouble-free and well-organised move is a credit to all involved," Mr Gallacher said.

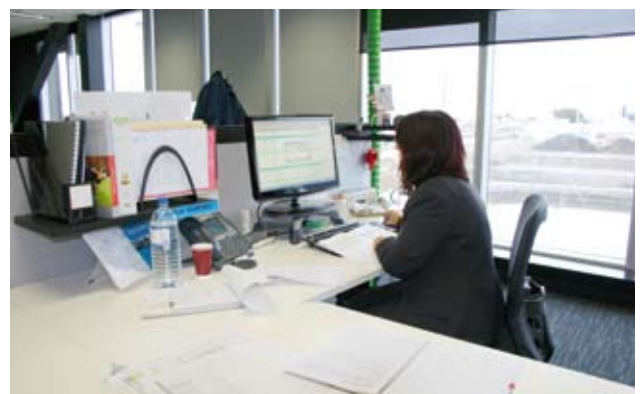
ASC staff were treated to a 'welcome home' barbeque to commemorate the move and to thank them for their patience and contribution.

Staff will move in to other buildings in the shipyard upon its completion later this year and those based at the AWD Systems Centre at Felixstow will relocate to the new Systems Centre site at Osborne in 2010.

ASC's upgrade of its shipyard is continuing on schedule and on budget.



Ship Managers Steve Marsh and Peter Whyte catch up over a coffee in one of the break-out areas.



Scheduler Amelia Raimondo working at her desk overlooking the shipyard.

At a glance

- ASC's shipyard administration building was designed by architects Hassell who were sub-contracted by the shipyard managing contractor Hansen Yuncken.
- The 4600m², three-storey building has a predominantly open-plan layout and other features including:
 - A breakout/kitchen area on each floor;
 - Five utility bays for printing;
 - Up to 13 meeting rooms, some of which can be opened up to create larger spaces; and
 - A small cafeteria on the ground floor.
- The administration building has a number of 'green' features including:
 - Economy cycle air-conditioning;
 - Waterless urinals;
 - East-west orientation; and
 - Solar hot water system.
- The foyer on the ground floor displays a 1:81 scale model of the Hobart Class air warfare destroyer.

The 'morse code' wall in the foyer of the administration building reads "Welcome to ASC – Building and maintaining Australia's frontline naval defence capabilities."



New leadership in the west

As part of ASC's recent restructure Craig Vandeeper is now General Manager – Western Australian Operations.

Craig replaces Mike Poynter who returned to South Australia to head up the Design and Engineering department for the Collins Class submarines.

During Mike's time at ASC West he and his team achieved a great deal, including the \$35 million upgrade of ASC's facilities which officially opened in April 2008.

Craig has been with ASC since 2003, most recently as General Manager – Quality and Assurance, and is enjoying his new role.

"ASC West has a fantastic team who are committed to delivering the best possible maintenance service to our customer.

"We expect to undertake our first submarine maintenance docking using the new floating dock at the Australian Marine Complex (AMC) in 2010 and I'm looking forward to working with the team to achieve this milestone," Mr Vandeeper said.

Craig Vandeeper, General Manager – Western Australian Operations.

Floating dock update

The West Australian Government's floating dock at the Australian Marine Complex is nearing completion.

The floating dock will be used by ASC's team in Western Australia to undertake maintenance activities for the Collins Class submarines.

This picture shows the floating dock in relation to ASC's maintenance facility and the self propelled motorised transporters (SPMT) that will move the submarines from the floating dock to the maintenance hall.



More to ASC staff than you think

Four ASC staff are drawing attention for their work as part of a new South Australian Government campaign in part aimed at boosting students' knowledge of careers available in the defence industry.

Specialist Signatures Engineer Ben Kidd, Engineering Tradesperson James Deal and Designer (Mechanical) Theo Zachos are three of the 25 Career Ambassadors involved in the 'There's More To It' campaign, which began in May. Project Engineer James Wilson's story is also featured on the campaign's website.

Under the campaign, high school-aged students are being encouraged to realise that 'there's more to it than you think' – more to their interests, more to careers in the defence industry, more to studying science and maths, and so on.

Ben, James and Theo have been recruited to inform students that there's more to their interests than they think, and in following their passions, they can end up in a rewarding job, being paid to do what they love.

Part of the campaign's strategy is to offer exclusive workplace visits to see firsthand there is more to the defence industry than they currently think. ASC is supporting this concept by offering a prize during the month of September, giving one lucky student the opportunity to see a Collins Class submarine up close and personal.

To find out more, visit: www.theresmoresoit.com.au



Make the move

ASC, as part of the Air Warfare Destroyer (AWD) Alliance, has joined with the South Australian Government in the *Make the Move* campaign to promote the career and lifestyle opportunities that Adelaide has to offer.

Darren Munro made the move from Sydney to Adelaide to join ASC as Assistant Design Manager in the \$8 billion AWD Program.

"The AWD Program is the most complex defence project undertaken in Australia and it's an honour to be a part of it.

"You can take your pick of things to do from the hills, the beaches or just strolling down Rundle Street in the city. My career-life balance in Adelaide is more than I could have asked for," Darren said.

With recruitment ramping up for tradespeople, technical officers, engineers and planning and supply chain specialists there could be a job at ASC for you.

For more information visit www.asc.com.au



Darren Munro, Assistant Design Manager

Defence and Industry Exhibition



ASC's stand at the 2009 Defence and Industry exhibition.

ASC had a strong presence at July's Defence and Industry Exhibition held in Adelaide.

The exhibition represented a perfect opportunity for ASC to communicate with its customer and suppliers, including key small and medium enterprises (SMEs).

Defence and Industry is organised by Defence Materiel Organisation (DMO) and brings together the Department of Defence and its contractors to discuss the way forward for Australia's defence industry.

ASC's exhibition stand represented both the Collins Class submarines and Hobart Class Air Warfare destroyers, with detailed two-metre models of each.

The concurrent conference featured key note addresses from South Australian Premier Mike Rann, Defence Minister John Faulkner, Minister for Defence Personnel, Materiel and Science Greg Combet and other defence and industry leaders.

New Electric Boat Site Manager

ASC welcomes Ed O'Donnell to the position of Electric Boat (EB) Site Manager, replacing Andy Lightner who returned to the United States on 3 July.

Ed has 33 years experience in submarine system design, engineering and life cycle support and has held various positions at EB since joining the company in 1976.

"The Collins Class submarines are widely regarded as being the best conventional submarines in the world so I'm looking forward to working with ASC and to share my knowledge and experience," Mr O'Donnell said.

ASC engaged American submarine builder EB as our capability partner in 2002 in an effort to assist ASC in becoming the submarine 'designer' for the Collins Class submarines.

ASC's Engineering and Design Manager – Collins Class Submarines Mike Poynter says that the two companies have forged a valuable partnership.

"Electric Boat has assisted us in the transition from a builder of submarines to a provider of design enhancements, engineering, upgrade and maintenance services," Mr Poynter said.



Ed O'Donnell, Electric Boat Site Manager.

Moving toward greater efficiency

Following the recent organisational restructure, ASC has been working with its customer Defence Materiel Organisation (DMO) to improve efficiencies in its Collins Class submarine maintenance operations.

Several opportunities to improve have been identified across several areas in the Collins Class Submarines Business Unit (CCSM BU).

ASC's Chief Operating Officer – Collins Class Submarines Stuart Whiley says that ASC welcomes opportunities to improve and has already implemented a number of projects.

"ASC's WorkSmart Team is responsible for managing the efficiency projects and highlighting initiatives, while specific departments are responsible for delivering changes in their respective areas," Mr Whiley said.

A series of Rapid Improvement Events (RIEs) are planned for key areas and they are expected to produce significant improvements.

Importantly, the gains in efficiency will be monitored and discussed at the highest levels of Defence and Government.

ASC has also launched a business plan for the CCSM BU, *The Way Forward: A Team Effort*.

Communicated to staff through ASC's intranet, the plan is another crucial step to ensure staff understand the direction of the company and the actions underway to deliver outcomes for the customer.

The Way Forward: A Team Effort identifies teamwork as the key to the company's success and urges employees to work as team to get the job done and meet the challenges ahead.

"The business plan is a living document and will be regularly updated to ensure we stay on track and staff are informed.

"So far I have been very encouraged by how staff have embraced the changes and I am sure that they will continue to move forward with a sense of urgency and purpose," Mr Whiley said.

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Master of Engineering, Military Systems Integration: Professor Stephan Cook, Director, Defence and Systems Institute; Dr Alistair Campbell, Program Director for MSI; Jim Burnside, ASC and joint Dux of course; Professor Doug Larden, Chairman MSI Steering Committee; Tim Welburn, BAE Systems and joint Dux of course; Associate Professor David Cropley, Deputy Director, Defence and Systems Institute; and Jock Thornton, Master's Course Coordinator.

Master class

Four ASC employees have become the first to complete masters degrees specifically designed for the defence industry.

Program Manager Collins Class Submarines Jim Burnside and Lead Systems Engineer Paul Pearce graduated from the new Master of Engineering, Military Systems Integration (MSI) from the University of South Australia along with 12 other students from Saab Systems and BAE Systems.

ASC, Saab and BAE joined with the university in 2006 to develop the degree with the goal of increasing the high-end engineering capability in Australia's defence industry.

Graduate and joint Dux of the course Jim Burnside said that he found the incorporation of material from the defence environment to be extremely relevant to the challenges being faced by the industry.

"In addition to providing sound theoretical underpinnings in systems engineering and program management, the degree also provided the opportunity for students to apply their knowledge in the context of a realistic project," Mr Burnside said.

Senior Mechanical System Engineers Vince Grande and John McLaughlin have also achieved a 'first' for ASC by completing the Master of Marine Engineering (MME) from the University of Adelaide.

Co-developed by ASC and the University of Adelaide, the Master of Marine Engineering fills an important void in engineering education for specialist application on ships and submarines.

Vince and John both completed the submarine major but other students also have the option of specialising in surface ship engineering.

"The Master of Marine Engineering has fast-tracked my career in the defence industry and given me invaluable inside knowledge that would normally take years to acquire," Mr McLaughlin said.

Both degrees have been possible through funding from Defence Materiel Organisation's Skilling Australia's Defence Industry (SADI) Program.