

Engineering the project Sea 4000 AWDs

■ Trevor J Thomas/CANBERRA

ASC Pty Ltd and its controlled entities have reported the achievement of a consolidated after tax profit for the year ended 30 June 2005 of \$16.2 million (cf \$16.1m in 2003/04), calculated on total revenue of \$229.3m (cf \$255.9m previously). Directors have declared a fully-franked final dividend to the Commonwealth of Australia of \$7.2m (payable at a date to be determined), which comes on top of an interim fully-franked dividend of \$2.5m, paid on 18 April 2005.

Total dividend payments for the reporting financial year, therefore, represent a distribution to the 100% shareholder of \$9.7m (cf \$5m in 2003/04) on a total equity base of \$119.4m (8.1% ROI), whilst the value of the business itself increased by a whopping 70% (or a \$49.2m increase) from the previous year's figure of \$70.2m. All this occurred in a year when ASC was substantively occupied in bidding for major new naval construction projects, whilst benefiting from inflows of \$214.6m in payments or receivables from the RAN/Commonwealth.

Having now capitalised upon the strong financial recovery secured over 2003/04, the annual report for 2004/05 shows ASC very well positioned to take on new business challenges. For example, the company is debt free, operates without a bank overdraft or other bank loans, and has \$105m in short- and longer-term deposits which (at average weighted interest rates between 5.66% and 5.8%), is yielding the company a clean \$5.5m in interest that - because the cash is not currently required to support operations - moves straight to ASC's bottom line.

The continuing good financial news comes on the back of a year where ASC officials say the company not only closed the original



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Key Points

- **Having recovered and reformed for sustainability** Australian capability to support and enhance the 'Collins'-class submarines through life, the Federal Government is now pondering the best time to capitalise on its investment in ASC Pty Ltd.
- **Formerly known as the Australian Submarine Corporation**, the new ASC Pty Ltd has turned in its third successive year of improved financial performance, whilst similarly increasing the timeliness and quality of its support to the RAN.
- **Now successful in its quest for selection** as preferred air warfare destroyer shipbuilder, ASC will shortly undertake a major expansion of its facilities at Osbourne, bolstered by \$140m being provided by the SA State Government.
- **The ASC is also expanding its presence** in Western Australia, contributing \$5m to a \$90m WA Government package to secure access for 'Collins' upgrades to be undertaken at the Australian Marine Complex (AMC), at Henderson.

six-boat 'Collins'-class submarine construction contract (C218269), but also moved into its first substantive period where most submarine maintenance was carried out under the company's 15-year (plus two five-year options) submarine 'through-life support' (TLS) contract, which was signed with the Department of Defence in December 2003.

The year under review also saw the first full-cycle docking (FCD) of a 'Collins'-class boat (HMAS 'Farncomb'), whilst several maintenance periods were undertaken on the underwater fleet in South Australia, Western Australia and overseas ports. Notwithstanding the relatively high levels of emergent work identified during some of these activi-

ties, ASC says it continued to ensure substantial compliance (over 80%) to the Navy's submarine schedule was maintained, with its WA operation achieving 11 consecutive maintenance activities on time - meaning it will also earn significant incentive payments.

All future submarine maintenance work, however, has now transitioned to the aforementioned TLS contract, which includes a change in the criteria for paying incentives shifting from schedule achievement to 'available sea days'.

This latter measure is more consistent with the Royal Australian Navy's (RAN) current approach to the specification of requirements, as well as the reporting of maritime outputs to

the Federal Government via documents supporting annual defence appropriations drawn up under Federal Budget processes.

Perhaps the highlight of the year for ASC - described by company MD, Greg Tunny, as "a company changing event" - was the 31 May 2005 selection of ASC (and its collaborators - Bath Iron Works and Sinclair Knight Merz), as the preferred shipbuilder for the Navy's \$6 billion Sea 4000 project, which aims to build in Australia three air warfare destroyers developed from either the US Navy's DDG-51 'Arleigh Burke'-class, or the Spanish Navy's F100 'Alvaro de Bazan'-class.

To the extent a reading of the ASC's past three years' financial accounts might suggest the destroyer outcome has been engineered, the company alternatively argues its success in achieving selection as the AWD preferred shipbuilder was the outcome of a carefully designed and executed strategy. At a similar point this time last year, the ASC was seriously crafting up a bid for the RAN's new amphibious ships (Joint Project 2048), just in case the Sea 4000 quest was unsuccessful.

Company chairman, John Prescott, explains this quite clearly in the 2004/05 annual report, when he lists the key elements of the company's AWD success: achieving cultural change from an adversarial contractor to a committed service delivery partner; organically growing ASC's high-end skills; focusing on customer outputs; transitioning to a submarine 'designer'; stabilising the company's underlying submarine maintenance business; and establishing alliances with world-leading capability partners. Prescott further comments, "achieving our strategy was only possible due to the sustained contribution of ASC's management and staff."

With underlying projected revenues of around \$2 billion (ie: circa \$130m pa over the next 15 years) from 'Collins' submarine TLS and related training contracts - and now prospectively up to \$3 billion to directly accrue (net of sub-contractor payments) to ASC

over the next decade as a result of its AWD construction and ship integration activities - management attention (aside from Sea 4000 program execution) will need to track in 2006 the procedures and processes by which the Government will go about achieving its often stated intention of moving ASC back into private sector hands.

Having consistently turned to advice from Melbourne-based Carnegie, Wylie & Company for a strategy to yield maximum financial and national economic benefits from its on-going investment in new naval construction, the Government is looking forward to the completion of a new scoping study in the next few months which is expected to outline a way forward on the ASC sale.

Now in control of the Senate following the 2004-election outcome, the Howard Government will be relatively unconstrained in progressing a major Government asset privatisation program over the next two years, for not only the ASC, but a raft of other national icons including Telstra and Medibank Private.

For ASC, in particular, the optimum time to go to market depends very much on how successful the Government and the Defence Materiel Organisation (DMO) keep to schedule in concluding the AWD design down-select (along with how well suited the chosen design is to local construction), as well as deftness and timeliness in ASC negotiating a suitable shipbuilding contract given ASC Shipbuilding's EBA for its production workforce has only been agreed through to 14 December 2007.

As a result of previous Government decisions, the ASC is to be positioned to undertake AWD construction as part of a new twist of Defence procurement policy - a multi-party AWD Alliance. The resulting risk-sharing contracting template will be a first for the Federal Government (and in parts, will attract some controversy) as each of the major players - Defence/DMO, ASC Shipbuilder, Raytheon Australia and Gibbs & Cox - butt against each other in settling their respec-

tive commercial and intellectual property baselines and stand points.

To these intents and purposes, the Government announced 8 December 2005 that an Alliance Principals' Council - independently chaired by the former Navy chief, Vice Admiral Chris Ritchie - had been established, expressly to build strong team partnerships between the key AWD program partners. Accordingly, the Principals' Council will have two years to 'shape the course of the AWD program' in the run up to the project being considered for 'second pass' approval by the Government in mid-2007.

Individuals appointed to the new Principals' Council include: John Prescott - ASC Chairman; Dan Smith - Executive Vice President of Raytheon Integrated Defense Systems; LtGen David Hurley - Chief of the Capability Development Group; and Dr Stephen Gumley - CEO of the DMO. In terms of reporting hierarchy, the new Council will sit above the Alliance Project Board, and say officials "is designed to build strong team relationships between the project's alliance partners."

Sitting outside the AWD Alliance is US-based Lockheed Martin, mandated last August as the core 'Aegis' combat system supplier, and the US Navy, which was leveraged into project Sea 4000 via a 'Statement of Principles on Surface Warfare' signed by the Australian and United States governments on 27 February 2004.

Derivatives of the 'Aegis' radar and associated weapon system

construct are currently in-service on 76 destroyers, cruisers (principally the US Navy) and frigates around the globe, with plans underway to install the system on 25-40 additional US and international warships. Final production of the core system hardware will, nevertheless, have concluded well before the first Australian destroyer steams into Sydney heads, currently set for 4 October 2013.

Accepting this reality, the Government confirmed 9 December its approval for the expenditure of an initial \$1b to purchase three 'Aegis' weapon systems from the US Navy, to ultimately form part of the full Baseline 7/Phase 1 'Aegis' combat system (first certified in September last year on the USS 'Pinckney'), and proposed to be installed on the RAN's three ships.

Former Defence Minister Hill acknowledged that early placement of the order would allow Lockheed Martin "to continue manufacturing the systems for Australia without halting its production line, (thus) bringing about greater efficiency and achieving considerable savings."

For its part, anticipating the likely sale of the company to private interests - perhaps within the first 12 months from AWD construction contract signature (anticipated by October 2007) - is not holding the ASC back.

The company forecast in its 2004/05 annual report a wide range of activities for the current financial year in order to secure its transition from 'the design, engineering, upgrading and maintenance of six submarines for the

RAN', to a major regional player in technologically-advanced naval surface ship construction - all as a multi-project company.

Specifically, ASC reports it is growing the depth and diversity of its Design and Engineering group towards a target of 260 personnel, strengthened by its achievement of submarine 'designer' status for the 'Collins'-class fleet.

Foreign accents around the Osbourne (Adelaide) site have been further broadened due to a recruitment program from Sweden and the UK, thus helping to accelerate maturity within the team, whilst also supporting major submarine design enhancements and ongoing maintenance activities across the fleet.

ASC is further said to be continuing to benefit from design and engineering support provided by long-time capability partner - Electric Boat (a division of General Dynamics) - along with a strategic agreement concluded with the Defence Science and Technology Organisation (DSTO) which is focused on a cooperative program to build specialist areas of submarine design, including structural analysis, noise and vibration signature movements and sensor integration.

Electric Boat's benchmarking system (used for US nuclear submarine programs) has subsequently been used to assess the ASC for submarine 'designer' status accreditation, and is also being used to continually measure its growth in maturity and capability as a precursor to achieving the necessary strength, in the coming years, to be able to deliver the next generation replacement for the existing 'Collins' submarine fleet (see *Insert box page 25*).

Of course, the 2005/06 financial year brings new challenges in successfully gearing up for the AWD project, the most immediate being planning integration of the engineering organisation to accommodate both the new shipbuilding project and submarine TLS support objectives, along with developing the AWD construction site (adjacent to the existing ASC submarine facility)

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ROAD TO RECOVERY: ASC Group - Five Year Financials

Corporate Performance Measure	Financial Year 2000/01 (\$m)	Financial Year 2001/02 (\$m)	Financial Year 2002/03 (\$m)	Financial Year 2003/04 (\$m)	Financial Year 2004/05 (\$m)
Revenue from Rendering of Services	195.4	141.8	148.4	243.6	217.0
Other Revenues from Ordinary Activities	5.7	4.5	10.3	12.3	12.3
Total Revenue	201.1	146.3	158.7	255.9	229.3
Operating Profit before Tax	12.4	1.7	8.9	23.6	20.6
Operating Profit after Tax	7.1	0.1	5.9	16.1	16.2
Total Assets	206.7	196.7	236.7	243.5	293.9
Total Shareholder Equity	53.1	53.2	59.1	70.2	119.4
Total Fully-franked Dividend Declared	-	-	-	5.0	9.7
Return on Equity	-	-	-	7.1%	8.1%

under a \$140m development and skills training plan sponsored by the South Australian government.

The Federal Government granted approval 5 September for the SA Government to start preliminary site works at Osbourne (which will also host the AWD Systems Design Centre), including land and environmental studies for a Common User Facility (CUF) to support destroyer construction.

Principal initial facility activities began with surveys of the area prior to construction of the CUF beginning later this year. A topographical survey is being done to determine relative site levels and boundaries, with a land based geological survey evaluating foundation requirements, whilst a Port River bed geological survey will determine river-bed dredging requirements.

Under a December 2004 agreement brokered between former WA Premier Gallop and SA Premier Rann, the two states agreed to develop a more cooperative approach in regard to undertaking naval shipbuilding programs, and more generally, supporting the Royal Australian Navy. Dr Gallop similarly confirmed 5 September the Western Australian Government would fund \$81m (of a \$90m two-year package) to upgrade the Australian Marine Complex (AMC) at Henderson, south of Perth.

With substantive Joint Project 2048 work in mind - along with substantive numbers of AWD modules said to be secured via the Memorandum of Understanding with South Australia - the upgrade package will see the installation of additional common use infrastructure, including: a \$35m floating dock (tenders were called this month); a rail transfer system to launch and retrieve large ships; and an extension and upgrade of existing wharves to support ships alongside.

Of the \$90m to be spent, the ASC will contribute \$5m towards the rail transfer system (in order to bring ashore 'Collins'-class submarines for servicing), whilst the Royal Australian Navy is providing \$4m towards permanent wharf services. ADBR

Profile: BATH IRON WORKS Calm behind the AWD storm

Engaged in early-2004 to undertake a capability assessment and planning study to identify ASC's strengths and weaknesses to undertake AWD design & construction activities, Bath (Maine)-based and General Dynamics subsidiary, Bath Iron Works, is often cited as the 'quiet achiever' behind much of the recent success of the ASC's own commercial renewal.

■ Trevor J Thomas/BATH

Since the 1950s, Bath Iron Works (BIW) has served as the lead shipyard for ten surface ship classes entering service with the US Navy - said to be more classes of ships by a single firm than any other US shipyard.

Located on a river frontage site adjacent to a town of the same name - with a network of fabrication houses adjacent to the final construction yard - BIW is currently coming to the end of a program as lead designer and builder of the DDG-51 'Arleigh Burke'-class of guided missile destroyers. US-based Gibbs & Cox is currently developing a derivative design of this ship in its role as preferred ship designer for the RAN's project Sea 4000.

Access to BIW's accumulated database of premier standards and procedures culminating in the DDG-51 intellectual property base, is widely credited as having provided valuable planning information to ASC for inclusion in the bid that led to its selection as preferred AWD shipbuilder.

BIW has subsequently entered into a strategic partnership with ASC for the provision of project

management support for the AWD program and other future shipbuilding activities.

The US Navy awarded BIW 5 January a US\$64m contract to sustain Lead Yard Services for the DDG 51 'Arleigh Burke'-class 'Aegis' destroyer, and FFG 7 'Perry'-class frigate programs.

Under the contract, BIW will provide expert design, planning and material support services for the maintenance and modernisation of ships of the respective classes remaining in US Navy service. The work will be performed in Bath, and is expected to be completed by 30 September 2010.

As lead shipbuilder for the DDG 51 Class, BIW has since 1991 supplied substantive program management, engineering and design support for DDG 51 ships.

So far it has delivered 25 'Arleigh Burke'-class destroyers to the US Navy. Six additional ships are currently under construction in Bath, and three more are under contract for delivery by 2010.

In the run up to that date, the facility will transition to the US Navy's new DD(X) destroyer program. US Defense Acquisition Board (DAB) approval was given last November for DD(X) 'Mile-

stone B' authority, meaning the USN can now move forward with an initial destroyer build.

On this basis, BIW (along with Northrop Grumman/Ingalls in Pascagoula, Mississippi) will each enter into a systems development and demonstration (SDD) phase, which includes detailed design and construction, as well as low rate initial production (LRIP) of at least two ships.

While each of the shipyards will adopt during LRIP a novel dual-lead ship build strategy, the DAB approval also appears to give the Navy requested authority to move ahead with a down-select to a single contractor in the 2009 timeframe.

Funds to begin building the first DD(X) destroyers will be requested in Fiscal Year 2007 (FY07), when the US Defense budget is submitted to Congress in February. The US Navy hopes to build between five and eight of the new technology vessels, and has estimated the cost of the lead ships at US\$3.3b each.

The US Navy commissioned 14 November its 46th of (62) DDG-51s, the USS 'Bainbridge' (DDG 96). The BIW-built and 9,200-ton 'Bainbridge' has an overall length of 509.5 feet, a waterline beam of 59 ft, and a navigational draft of 33 ft. Four gas turbine engines will power the ship to speeds in excess of 30 knots.

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