SIA Conference – 9 November 2011

Speech by Steve Ludlam, ASC Managing Director and Chief Executive Officer

Topic: The Future Submarine as a Nation-Building Activity.

Thank you for the invitation to speak at this significant gathering today.

I would like to acknowledge the role of the Submarine Institute of Australia as an important voice in the national debate about the future of Australia's front line naval capability, particularly as the Commonwealth continues transforming key elements of the Royal Australian Navy in an ambitious and exciting investment program.

Today, I want to discuss one element of that Defence program in a broader context.

Specifically, I want to focus on the role that building the next generation of submarines can play in the life of this nation.

To me, this argument is an important element in the debate that seems to have been disregarded by the commentators, discarded in favour of arguments that focus on the best cut price deal for submarines bought off the shelf.

The voices more prominent in this public debate seem to be telling us in Australia that we are not capable of such projects, that we lack the skills to achieve a massive engineering feat and that such engineering requirements are seemingly too complex for the defence industry.

Many of the people in this room today know this is not true.

You, in the room, understand the challenges and complexities of a project such as Sea 1000 or as it is more commonly known, Future Submarine.

You also understand that this is one project that can inevitably shape the future of thousands of Australians looking to training, employment and an exciting and challenging career many years from now.

I firmly believe a strong argument can be made for an indigenous naval shipbuilding capacity that:

- Employs many, many Australians in every State and Territory;
- Delivers wealth from the Pilbara to Port Kembla to yards around Australia and ultimately to Adelaide; and
- Enables the Commonwealth to make an informed decision when it comes to considering the future capability of Australia's naval fleet.

I will make that argument today but, before I do, let me tell you about some of the lessons learned from Collins and the Air Warfare Destroyers.

I have the great privilege to lead over 1,900 employees at ASC, a company owned by the Commonwealth that built - and currently sustains - the Royal Australian Navy's fleet of six Collins Class submarines.

ASC is also the lead shipbuilder for the construction of three Hobart Class air warfare destroyers. BAE Systems in Williamstown and Forgacs in Newcastle are significant shipyards also contributing to the project.

We at ASC are a major manufacturer and the largest employer of apprentices in South Australia. We work in the most modern naval construction facility in Australia.

Many of you will be aware of our operations at ASC, here in Adelaide, but you may not be aware that we also have a submarine repair and maintenance facility at Henderson in Western Australia.

You might have also seen recent ASC advertisements in the local newspaper seeking new employees.

This recruitment drive is part of a campaign that has already seen nearly 400 new employees appointed at our three sites between January and September this year.

Another 200 employees will be recruited over the next eight months as our AWD construction program ramps up.

I take pride in working with a team of dedicated employees who are building three warships and maintaining six Collins Class submarines that will give our customer an ultimate capability at sea.

Many of these people have now worked on both the Collins program and the AWD program and have a deeper understanding of their craft because of this experience.

The first major lesson is also a fact we in Australia have a hard cardre of experienced, dedicated and professional people. This team is proving on a daily basis that building Naval ships and submarines and subsequently maintaining them can be done.

It is done with pride, hard work and sometimes mistakes. We work on a daily basis with some of the most complex machines man has ever made and we get some first class results. So the first lesson learnt is that Australia has provided a Naval shipbuilder and maintenance industry. It includes BAE Systems, Forgacs and Austal as major players all with dedicated staff and good capability.

Let me build on this lesson and look to the future.

We must consider the pool of talented people in the community, in Australian trade schools, universities, primary schools and high schools, and ask ourselves: “How can we transform a percentage of these people into valued, long term employees?” “How do we increase the size of our capability and sustain it well into the future?”

Now with the Royal Australian Navy moving through a period of renewal there are other questions which are dominating the national agenda, particularly through the defence and mainstream media.

Chief among them is the proposition that Australia should discount any plans to develop the indigenous shipbuilding industry because tasks such as building the next generation of submarines can be done for a third of the price overseas.

Set aside the fact that these cheaper submarines simply lack the capabilities required of a nation with Australia’s geographic location.

Or that those models bought off the shelf are all small coastal submarines that carry a crew half the size of Collins and hold half the capacity.

I would say there are bigger questions about the future of shipbuilding in Australia that are actually harder to answer. They might include the following:

> Does Australia need an industry which adds value to the wealth of the economy and builds on our nation's skill base?
>
> **Or**
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> Should Australia continue to fall back on natural resources, a finite resource that is subject to the vagaries of commodity price cycles?

My career has given me some experiences and they help me to understand just how powerful a vibrant shipbuilding industry can be to the life of a nation.....

- It encourages investment;
- It encourages innovation;
- It stimulates job growth;
- It brings wealth to the community; and
- It provides independent defence of the nation.

Let me look inside ASC once more. Two years ago we had poor relationships with the Navy and DMO, our efficiency was low and we had limited plans to improve. Our engagement with the supply chain was limited and overall our effectiveness was limited.

In these two years we have set in place a number of significant improvements revised and raised our game to set some good standards and set some demanding goals that we are well on the way to achieving. We are but one business. Hence the lessons learned.

Every part of our Australian shipbuilding and maintaining capability needs to improve, we need to understand our customer's requirements, we need to be able to compete with the best around the world, we need to compete within Australia and we need reliable solutions.

We all need improvement programs and we need to achieve ‘exemplary performance’ – a phrase I use to mean everything with pace and urgency, everything done with the most efficient and effectiveness and everything done correctly.

We, the industry leaders, need to lead, work with one another in a collegiate sense and form an Enterprise. An Enterprise that works together to deliver great outcomes for the Navy.

One final reflection in ASC. We built six Collins Class submarines to an offshore design using offshore equipment or equipment designed offshore for the large part.

These submarines have been very successful but have had a number of reliability issues. Most notoriously, the Propulsion Systems - but there have been other areas also. We have maintained availability by replacing parts with spares and most recently have undertaken some limited R&D to prepare solutions for the main motor and the generators.

So the third lesson to learn is whenever you buy something be fully prepared to maintain it, completely understand the design and be prepared for unknown faults occurring.

Set up R&D programs, don’t make them expensive and be inquisitive about everything that happens. Get to the root of everything and then be innovative in your improvements. Most importantly federate the whole of Australian talent.

Many may say that I have a vested interest in advocating an indigenous shipbuilding capability. Well in itself it is a lesson learned. Our AWD program has given us the opportunity to exercise skills not exercised for some years. Some mistakes have occurred and we have learned from them. We know how to build them and we are on the path to further production improvements.

If I had my ASC hat on, let me take it off and draw on my career experiences.

We in Australia cannot afford to let this opportunity pass.

Australia has the partnerships, skills, the raw materials and the expertise to build on its existing shipbuilding capacity.

Compare this to the state of the shipbuilding industry nearly three decades ago when the Commonwealth contemplated the construction of six Collins Class vessels. This is a project of massive national significance and an incredibly complex task.

From 1987 to 2003, a period of 16 years, a submarine build yard was established, six Collins Class submarines were built and in the water.

I would suggest that one of the biggest weaknesses of the Collins program was that the submarines were built from a very cold start.

It follows, then, that the Commonwealth – and for that matter ASC – did not have the deeper understanding of the challenges, of the intricacies of the design that we should have had before construction progressed to the sixth and final boat.

As I have outlined, lessons have been learnt, and in summary – lessons on reliability of diesels, motors and generators, lessons that speak of equipment acquisitions that should have been more inquisitive about the equipment, lessons that tell us we should undertake research and development in order to predict the potential for latent product defects or unknown faults arising. Lessons that tell us leadership is vital, an Enterprise is necessary and exemplary performance is a must. Lessons that tell us how to move forward re-learn skills and strengthen our capability. In the end we must be fit to ensure the Navy can fight and win.

… and of course no-one should deny that the Collins project was an impressive national achievement.

Just as impressive is the way that Australian industry has built a Collins and is coming together to build the three air warfare destroyers.

This is a project that is built around an alliance of Commonwealth interests and the private sector. It is also a project that is:

- Consuming millions of tonnes of iron ore from the West Australian Pilbara;

- Consuming thousands of tonnes of steel from Port Kembla steelworks in NSW;
- Requiring thousands of man hours in block construction in three States;
- Requiring thousands of man hours during the fabrication of accommodation modules in Tasmania; and
- Transforming near dormant industries in to thriving employment hubs that are expanding to drive job growth and secure new construction contracts.

So this debate is much more complex than “do we” or “don’t we”.

It is a discussion that must incorporate the fact that projects such as the AWD program touch people in every State and Territory across Australia.

It must discuss these benefits against an argument for never undertaking these projects and leaving them to governments or industry in other countries.

AND it must.....

Take into account that Australia needs more than a resources boom to deliver jobs, innovation and income.

I would suggest that this debate needs to be informed by other discussions underway in Australia.

These include:

- Building a skills base to service growing sectors of the economy;
- The education of our young people; and
- The application of income from the resources sector to projects that are in the nation’s best interests.

It cannot – and should not – be driven by a short sighted attitude of finding the next best or most convenient option available.

The Collins program is inextricably linked to the Future Submarine project.

Indeed, both are intertwined and its makes absolute sense to see each as part of a continuum.

It is well known that an evolved version of the locally built Collins Class submarine is among those models to be considered for Future Submarine.

Some would argue that the performance of the Collins boats casts a shadow over this candidate.

Indeed, they would argue that a candidate with this pedigree deserves only to be disqualified.

Collins has its issues, nobody would deny that.

But shouldn't the difficulties encountered early in the Collins program bolster an argument in favour of building on our indigenous shipbuilding capacity.

Shouldn't the history of Collins, and the work undertaken on the program to this day, be viewed as building a body of knowledge on what is needed for future generations of submarines.

And shouldn't the work undertaken to sustain Collins over the next 20 years be considered the intellectual scaffolding that enables the RAN to make a decision on Sea 1000.

Major complex projects talk about de-risking or mitigating risks. The work in Collins over the last 20 years has set an experience level that must be considered as mitigation for the Future Submarines.

In much the same way, I see the AWD program as contributing so much to the economy but also to this same body of knowledge.

You have already heard about the capability Australia needs in the next generation of submarines.

They will involve a costly, and a massive technical challenge unlike any other project considered before in the defence sector.

The argument to buy from overseas is based on the fact that there are submarines manufactured around the world that might come close to handling Australian conditions.

But these can be discounted for a variety of reasons.

The French, Spanish and German models all seem to be good submarines but all have a dive displacement of around 2,000 tonnes – less than two-thirds of the Collins Class.

All four submarine classes, the export version that is, are considered small coastal submarines that carry fewer weapons and have less growth potential than is ideal.

In addition, they have half the crew size and capacity of a vessel such as one of the Collins fleet. And they are not intended to go long distances.

It is worth noting here that the Royal Australian Navy is the only navy in the world operating conventional - not nuclear - submarines which is required to routinely travel across oceans as part of its defence requirements.

My overall view is that Australia is more than capable of building a replacement for the Collins Class.

At ASC, we are establishing a capability and credibility of an indigenous model in advance of the Future Submarine project.

In 2007, ASC established a self funded team focused on design aspects of SEA 1000.

Deep Blue Tech currently has a staff capacity of 30 which we hope to double by the end of the financial year. It is tasked with establishing the tools and methods needed to understand submarine design. Already some of its findings are critical to the considerations of the SEA 1000 project.

Although I have a strong belief that Australia should choose an indigenous design to replace Collins. This team (DBT) stands ready to be a lead part in whatever Defence decides will be the Future Submarines. It

is prepared to compete for this opportunity and is prepared to be exemplary in its work.

To date, we have entered into more than 30 non-disclosure agreements with providers around the world so we will be prepared to work with designers as needed when a decision is made.

Those agreements are important in building the relationships and understanding what will be the key to a successful future submarine construction program. We are following a lesson learnt from the past.

But perhaps the most important step must be taken here at home.

I've said this before and I will repeat it today: This is a time to stand up for an indigenous shipbuilding capability.

It is a time to stand beside the key players in Australian defence industry and affirm that Australians have the expertise, skill set, international relationships and capacity to build the next generation of submarines on their own soil.

Thank you for your time today.