31 March 2006

Dr Kathleen Dermody Committee Secretary Senate Foreign Affairs, Defence & Trade Committee Department of the Senate Parliament House CANBERRA ACT 2600



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Dear Madam Secretary

# Inquiry Into The Scope And Opportunities For Naval Shipbuilding In Australia

### Introduction

We take great pleasure in providing this written submission to the Senate Foreign Affairs, Defence and Trade References Committee. We believe the Committee's terms of reference are focused on the right issues, at the right time. The actions that may eventually flow from the Committee's inquiry have the potential to affect and improve the lives and economic health of thousands of Australian workers.

# Our Experience in Australia's Shipbuilding Industry

Tenix Defence Pty Ltd is an Australian-owned company with a long and successful history in constructing naval vessels. We got our start in Australia's naval shipbuilding industry under difficult circumstances; and, with enthusiasm and tenacity, we eventually succeeded. Our Founder and Chairman, Mr. Carlo Salteri AC, described the early days of our shipbuilding experience in his written Introduction to a book recently prepared by Tenix as a memento of appreciation for our customers and subcontractors. His words are quoted below:

"When we first put up our hands to be considered for the ANZAC Ship Project, we were regarded with a degree of cynicism and scepticism. It was scarcely surprising.

We bought the Williamstown Naval Dockyard from the Government in 1987, taking on \$400 million worth of debt when interest rates were running at twenty percent. We had bought a shipyard with a record of industrial disputes and low productivity. And we had never even built a rowing boat, let alone ten super sophisticated modern naval frigates.

The only work available at Williamstown in those days was to finish the FFG frigates, HMAS Melbourne and HMAS Newcastle. After that, we had nothing. So we desperately needed to win the ANZAC contract.

We did have some things going in our favour. We had a fabrication facility that did a thousand tonnes a week, so we knew how to fabricate. We had built power stations and oilrigs, so we knew how to bring things together. We had skilled people, including our new team in Williamstown building the FFGs. We had strong project management skills, which we knew would be of paramount importance in a project of this size and complexity. And we had faith.

The ANZAC Ship Project was built on faith.

We had faith in ourselves, and in the faith that some people – especially people in the Government and the Navy – had in our Company. We won their trust and support by running the Project so that it met international best practice in terms of quality, price and adherence to schedule.

Over the following years we turned Williamstown into a modern, efficient and world competitive naval ship construction facility, and our management of the Project earned us international recognition and respect, as well as a number of prestigious engineering and quality awards.

I now thank all the members of the ANZAC Ship Project team: those who work, and have worked, in Tenix, our wonderful friends in the Australian and New Zealand Governments and Navies and, of course, our subcontractors, who always supported us and always came up with the goods."

Although the ANZAC Ship Project was for many years the cornerstone of our Marine Division, we have in recent times diversified our product offerings and now operate in three lines of business within the marine sector. This provides us with greater breadth and depth of capability; which better enables us to weather the ups and downs of the industry.

The largest part of our Marine Division's business is grouped around activities involving Shipbuilding, Conversion and Repair. Current projects include construction of the ANZAC class frigates – eight for the Defence Materiel Organisation and two for the New Zealand Ministry of Defence; construction of seven ships for the Royal New Zealand Navy as part of program known as PROJECT PROTECTOR; conversion of a civilian tanker previously known as the DELOS into an underway-refuelling ship soon to be known as HMAS SIRIUS; plus docking, repair and maintenance of naval and commercial vessels.

Our second line of business is integration of shipboard combat systems. Our largest current project involves an Anti-Ship Missile Defence system for the ANZAC ships. This project is being undertaken as part of our ANZAC Ship Alliance contract with Saab Systems and the Defence Materiel Organisation. We are pleased to advise the Committee that this Alliance team was selected by *Australian Defence Magazine* at an awards ceremony earlier this month in Canberra to receive the "Essington Lewis" prize for being the Defence Project Team of the Year.

Our third area of specialisation is System Operations & Maritime Logistics, in which we provide technical services to adjacent industries such as offshore drilling, mining and rail transportation. For instance, we now install, test and maintain radio communication systems on offshore drilling platforms in Western Australia.

We currently have three principal sites associated with shipbuilding – two in Australia and one in New Zealand. In the east, we operate out of Williamstown, Victoria; and in the west, our facilities are in Henderson, Western Australia. In New Zealand, we have facilities on the north island near Whangarei. Additionally, we conduct naval repairs and maintenance in Sydney, and are currently teamed there with Forgacs to compete for an upcoming repair effort. We have smaller operations in Darwin and Fiji; and until last December we also had an office in Manila related to a fleet of fast patrol boats we built in Western Australia for the Philippines Coast Guard. More recently, we opened an office in Dubai to explore various business opportunities in that region, including shipbuilding.

During fiscal year 2006, our Marine Division will employ slightly less than 1,000 people across the sites listed above. Our workforce is smaller than during the peak days of the ANZAC Ship Project, which is nearing completion; but if we are fortunate enough to be selected for the CANBERRA class LHD Program our workforce will grow substantially. Additionally, our base of subcontractors throughout Australia will also experience strong growth.

Tenix Defence is proud to be Australia's largest locally owned defence company, and is especially proud to have played a role in the development of this nation's naval capabilities. We believe shipbuilding is an integral component of Australia's strength as a maritime nation.

## Comments on the Committee's Terms of Reference

Few nations, apart from the United States, procure enough large naval vessels per year on a consistent basis to sustain their domestic shipbuilding industry. As a result, nearly every naval shipbuilder, no matter where they are located, must be capable of competing and winning on the global stage in order to endure and prosper.

Our strategy at Tenix is based on positioning ourselves to compete and win against international shipbuilders, here and abroad. The success of that strategy was recognised recently at a ceremony hosted by the Hon Mark Vaile, MP, Deputy Prime Minister and Minister for Trade, when Tenix was selected along with several other Australian companies such as Macquarie Bank to receive a "Trailblazer Award" signifying our outstanding success in international markets.

- In the late 1980s we competed successfully against one of Europe's best shipbuilders to win the ANZAC Ship Project.
- In the late 1990s we competed successfully to construct a fleet of patrol boats for the Philippines Coast Guard.
- In 2004 we competed against several very large companies from Asia and Europe to win PROJECT PROTECTOR, a program that involves building a fleet of seven ships for the Royal New Zealand Navy.
- We currently have bids lodged for shipbuilding projects in Singapore, the United Arab Emirates and the island nation of Trinidad & Tobago. Others are being considered.

To facilitate our strategy of competing globally we have formed strong working relationships with international companies such as Lockheed Martin (US), Northrop Grumman (US), BecTech (US), Aker Marine (Canada), Fincantieri (Italy), Blohm+Voss (Germany), Merwede Shipyard (The Netherlands) and Navantia (Spain). We are also considering opportunities with a company from China. These informal – and sometimes formal – partnerships not only allow us to team more effectively and deliver more capable solutions, they also provide us with a broad range of opportunities to benchmark our performance continuously against some of the world's leading defence companies.

The one immutable fact of life in our industry is that no matter where we compete, and no matter how large or small the project, we always find ourselves going up against strong overseas players. Therefore, we know with absolute certainty that to succeed we must be able to match or beat international shipyards on cost, schedule, quality and innovation.

Competing successfully on the global stage means playing and winning on a field that is not always level, and is often characterised by strong competitors who benefit from Government ownership, financial subsidies and protective legislation designed to favour the home team.

- Many shipbuilders in Europe who specialise in large naval vessels are Government-owned and derive
  considerable financial advantage from that ownership. Although the European Economic Union has
  implemented measures to prevent subsidies for commercial vessels, no similar prohibition exists for
  naval shipbuilding projects.
- In mainland Asia, especially in Japan and South Korea, decades of Government investment have created mega-yards that now control almost all the world's market share for construction of large Liquefied Natural Gas (LNG) tankers.
- In the United States legislation known as the Jones Act requires that ships purchased by the U.S. Department of Defence be built in U.S. shipyards.

And yet, despite the high barriers to entry and the rigours of competition, Australian shipbuilders are winning against global competition. Tenix Defence, Austal Ships, and Riviera Yachts are but a few of

the ship and boat builders from Australia who compete effectively and often win against international competition, even while playing on a field that often favours the other team.

Quite often, when shipbuilding contracts are awarded for international projects, the foreign Government does not publish the price of the winning bid. Therefore it is difficult for us to estimate how we compare solely in terms of cost with our international counterparts. However, when we competed for the ANZAC class frigates, the Commonwealth later advised that our winning price was approximately four per cent higher than the bid offered by Blom+Voss. This difference in price did not include escalation due to currency exchange variations over the life of the project, which was borne by the Commonwealth, not by Tenix.

It is difficult to precisely estimate the economic value to Australia achieved by constructing the ANZAC class frigates here rather than in Europe; but in 1999, Tasman Consultants were commissioned by the Australian Industry Group's Defence Council to examine the impact of major Defence projects on the Australian economy. After some consideration it was decided that the analysis would use the ANZAC Ship Project as its case study.

The net view of the Tasman study relative to the ANZAC Ship Project was that its high level of Australian industry involvement made a substantial contribution to the Australian economy. By constructing the frigates in Australia instead of purchasing similar vessels from overseas, Tasman concluded that Australia is:

- Generating between \$200 million and \$500 million in additional annual GDP. Over the fifteen year construction phase, this means GDP will grow by at least \$3 billion.
- Generating between \$147 million and \$300 million in additional, annual consumption. Over the fifteen year construction phase, this means consumption in Australia will grow by at least \$2.2 billion.
- Generating around 7,850 full time equivalent jobs.

The Tasman report also concluded that Subcontractors and Small-to-Medium Enterprises who participated in the ANZAC Ship Project have:

- Become more innovative through their own research and development, and access to foreign technology.
- Improved their business practices, leading to a culture of continuous improvement.
- Increased their export opportunities.
- Acquired new defence capabilities enabling them to play a greater role in Australia's national security.

With regard to the comparative economic productivity of the Australian shipbuilding industrial base, Tenix recently participated in an international benchmarking survey sponsored by the U.S. Department of Defence acting in conjunction with First Marine International, a consulting company from London. The benchmarking effort lasted three days and was very thorough. Every aspect of our operation was compared to shipyards in the US, Europe and Asia. When it was over, we learned that there are parts of our operation equal to world's best practice; and there are other areas where we need to improve. The benefit of our benchmarking experience, however, is that we now have a detailed roadmap for lifting all of our processes, procedures and capabilities to world's best practice – and this effort can largely be accomplished through training and process improvement, not through huge amounts of investment. However, the true benchmark for assessing the economic productivity of the Australian shipbuilding industrial base is that Australian ship and boat builders are competing and winning all around the world against international competition.

The competitiveness of Australian shipbuilders is also greatly enhanced by ongoing activities sponsored by several of the State Governments. For instance Queensland, South Australia and Western Australia are each sponsoring marine infrastructure projects that will help level the playing field, giving Australian shipbuilders affordable access to new, modern facilities, piers, cranes and heavy equipment. The Australian Marine Complex and its Common User Facility (AMC-CUF), in Western Australia is already in operation, with funded plans for additional expansion. We have been using the AMC CUF in Henderson for nearly a year to complete projects such as conversion of the DELOS into HMAS SIRIUS, and to perform major naval repairs on ships homeported at Fleet Base West. Likewise, the Osborne Precinct in South Australia will soon start taking shape. And, recently, a Common User Facility oriented toward steel-fabrication and module construction was announced in Brisbane.

There are people who argue that Defence incurs less risk of schedule slippage if major naval vessels are constructed offshore rather than by Australia's shipbuilders. But the facts do not support that claim. Over the past twenty years the track record in Australia has actually been quite good.

- Two OLIVER HAZARD PERRY class guided missile frigates were constructed by Tenix at our Williamstown dockyard, and both were delivered on time and within budget.
- Nine ANZAC class frigates have been delivered by Tenix on or ahead of schedule; and the tenth
  is sitting at our pier in Williamstown today, fully tested and almost ready for delivery even
  though Defence is not required to accept it until June.
- Austal's performance on the ARMIDALE class patrol boats has also been commendable.
- Six HUON class minehunters were delivered on or nearly on time by ADI.
- Two LEEUWIN class hydrographic ships were delivered on or nearly on time by NQEA.
- The only major shipbuilding project in Australia to encounter significant cost and schedule issues in the last twenty years was the COLLINS class submarine program, and the public record there clearly indicates that many of the problems on that program were caused by overseas subcontractors, not by ASC.

By contrast the record for timely delivery of naval vessels constructed by major shipyards in the United States and Europe is less enviable.

- The U.S. Government Accountability Office (GAO) published a report for the U.S. Congress in February 2005, titled "Improved Management Practices Could Help Minimize Cost Growth in Navy Shipbuilding Programs". That GAO Report highlights issues of cost and schedule growth in America's shipbuilding programs, including the ARLEIGH BURKE class destroyers, the NIMITZ class aircraft carriers, the SAN ANTONIO class amphibious ships, and the VIRGINIA class submarines.
- In the U.K., according to data in *Janes Fighting Ships 2003-2004*, the Future Aircraft Carrier program has experienced major delays and cost overruns. Similar cost and schedule blow-outs have occurred on the Type 45 guided missile destroyer program and the BAY class dock landing ship program.
- In France, according to data in *Janes Fighting Ships 2003-2004*, the results have been mixed. Timely deliveries on some programs have been offset by major delays on the CHARLES DE GAULLE Aircraft Carrier Program and the LAFAYETTE Class Guided Missile Frigate Program.

As a consequence, we find it incongruous that there are people who argue for Australia's next generation of Amphibious Ships (the CANBERRA class LHD) to be constructed offshore, and that as Australian shipbuilders we should instead position ourselves to perform a few integration tasks at the end plus provide Through-Life-Support for the ships after they are constructed elsewhere. The people who argue

against constructing the LHDs in Australia claim that this nation's shortage of skilled labour is too severe. They say that shipbuilding has become a commodity-like industry, where the only differentiator is price, and that constructing the LHDs offshore is simply the logical outcome in a free market economy where work flows to the lowest cost provider. That rhetoric is hollow. It does not consider the long-term strategic and economic benefits that a maritime nation such as ours derives from possessing a robust naval shipbuilding industry. Nor does it account for the thousands of workers and hundreds of small-to-medium enterprises whose livelihood comes from building ships. Nor does it balance the economic advantage that many international shipbuilders derive from subsidies, Government-ownership and protective legislation. Nor does it consider the synergy between the skills needed for ship construction and the skills needed for infrastructure projects, offshore drilling, mining, and other heavy industries.

Large shipbuilding efforts such as the ANZAC Ship Project, the Air Warfare Destroyer program and soon the CANBERRA class LHD program provide a nation-wide economic stimulus for training and developing an experienced workforce of skilled trades, all of whom can at some time in the future play a meaningful role in the development of Australia's resource sector, infrastructure projects and manufacturing industries.

#### Recommendations

Australia is a maritime nation, and is strategically aligned with two of the world's other major maritime powers, the United States and Great Britain. The Committee might inquire as to whether Australia's naval shipbuilding industry is viewed by the Federal Government as a strategic capability.

If so, then the Committee might also consider how best to articulate an industrial policy for promoting the growth and competitive standing of its naval shipbuilding industry. Such a policy should consider the broad range of economic, educational, security and workforce related advantages that accrue from having a robust shipbuilding capability. The policy should weigh those advantages against possibly paying a slightly higher premium to acquire large naval vessels built at home rather than abroad in order to maintain a strategic industry and to have our Navy's ships constructed in a configuration that can be more affordably sustained by Australian suppliers and repair yards throughout a ship's 20-30 year lifecycle. The Committee might also inquire as to how much of that up-front premium is simply an offset to the financial advantages derived by international companies from subsidies, parent government ownership and protective legislation.

Repair and Maintenance (R&M) of naval vessels is a critical industrial capability that Australia must preserve. Our experience is that it is difficult to manage workforce issues in this very important part of our business because of the geographic sequence in which Defence awards R&M contracts. For most of the last year, our facility in Henderson operated at a high tempo of activity due to the large volume of R&M contracts awarded for ships home-ported at Fleet Base West. As a consequence, we were able to recruit and retain a highly skilled workforce in Henderson to perform naval repairs. However, for the next twelve months, nearly all R&M contracts planned by Defence will be for ships home-ported at Fleet Base East. This means we will have skilled R&M workers in Western Australia next year but little or no work for them; and concurrently we will have to scramble to assemble an R&M workforce for the Sydney region. A year later the flow of R&M will likely shift from the Sydney region back to Henderson again. We clearly understand that Defence has many factors to consider when scheduling R&M contracts and that achieving geographic balance is not easy; but the Committee might inquire as to whether there are ways to level the R&M workload between East and West.

The Committee might inquire into whether the current shortage of skilled workers in Western Australia is likely to persist. One commonly held view is that the current shortage is largely attributable to activities in the resource sector, especially in the construction of new mines and so forth. Over the next five years or so much of that activity will complete, and although there may still be a shortage of workers in Western Australia, the magnitude of the shortage may shrink considerably. Likewise, many skilled workers – particularly older members of the trades, who have family responsibilities – are often more inclined to seek out jobs that offer permanence, stability and a balanced quality of life rather than simply following the highest wage. Long duration projects such as construction of major naval vessels are ideally suited for those workers.

There is no fundamental reason why Australia cannot have a strong, healthy naval shipbuilding industry, capable of competing and winning on the global stage. However, there are two overarching conditions extant in Australia that adversely affect our shipbuilding industrial base, and make it more difficult for Australian shipbuilders to compete internationally. The Committee might inquire into these differences and seek innovative ideas for long-term solutions.

- Firstly, there is a <u>solvable</u> shortage of skilled labour that if rectified could significantly improve our industry's cost competitiveness in the international marketplace. The shortage is modest and manageable. Australia generally has good, highly productive workers in the skilled trades, but the demand for them exceeds supply driven largely by the booming resource sector, particularly in Western Australia. Existing Government policy provides for skilled immigration in certain circumstances. It is worthwhile considering the need for higher priority to candidates with proven skills applicable to industries such as oil drilling, mining, shipbuilding and steel fabrication. In most cases, the basic skills are similar and transferable between these adjacent industries. The potential immigrants are available now; and if allowed to immigrate under controlled conditions they could easily offset the shortage needed for the AWD and LHD programs. It is worth noting that the number of additional workers needed nationwide to support the major shipbuilding programs is measured in hundreds, not thousands. Surely Australia, with one of the world's strongest economies, can manage a labour shortage of this scale.
- Secondly, Australia still suffers the tyranny of distance. Major shipbuilding projects require national industrial solutions. Shipyards and steel fabricators in nearly every State need to play a role on projects such as AWD and the LHD program. The industrial capacity exists, without question, for Australia to undertake construction of large naval vessels on a competitive basis, but there is an urgent requirement for the Federal and State Governments to seek out and implement innovative means for transporting large steel modules constructed in one region so that they can undergo final assembly in another region. For example, modules fabricated in Brisbane, Newcastle or Melbourne for the AWD or LHD programs may need to be transported efficiently and economically to Osborne or Henderson for final consolidation. The Committee might want to inquire into ways for Government State and Federal to partner with industry for solutions to this challenge. A logical first step would be to investigate options for using heavy sealift ships.

## **Summary**

In closing, we again thank the Committee for this opportunity to participate in such an important inquiry. Australia's shipbuilding industry is strategic. No maritime nation can long endure without a strong capability in shipbuilding. Australia, more than most nations, benefits even more substantially from having a robust shipbuilding industry because of the ripple effect that our industry provides to the resource sector, infrastructure projects and manufacturing by channelling significant investment into training and development of a long-term skilled workforce. We look forward to receiving the Committee's eventual findings.

We clearly believe Australia's shipbuilding industry is capable of constructing large naval vessels, on time and on budget. As part of our response to the forthcoming Request for Tender for the CANBERRA class LHD program, Tenix will put forward a Workforce Engagement Strategy and Plan to address skills shortages for construction and consolidation of those vessels in Australia. Our approach will also avoid any risk of impacting the AWD construction program.

Regards,

David E. Miller

Executive General Manager

Tenix Defence – Marine Division