



## **Ships, Submarines and the Australian Made Defence Campaign**

Mr Chris Burns CSC spoke to the RUSI of South Australia at the Keswick Barracks in Adelaide on 4<sup>th</sup> May 2015

*The Royal United Services Institute of South Australia hosted this presentation by Mr Chris Burns, the Chief Executive Officer of the SA Defence Teaming Centre. This presentation followed on the heels of the most successful Submarine Summit conducted by RUSI Australia with the support of RUSI of SA.*



*(Photo: RUSI-SA)*

Thank you for inviting me back and giving me the opportunity to have a chat with you today about ships, submarines and the Australian Made Defence Campaign.

From the outset, I want to compliment the RUSI of SA for its execution of an outstanding Submarine Summit here in Adelaide at the end of March this year. In particular I must compliment the efforts of your President AVM Brent Espeland, Vice President Dr John Bruni and Council member WCDR Mark Ryan.

The summit was John and Mark's brainchild, they saw a need and against all odds, their tenacity

prevailed and they delivered an amazing event. I freely admit that, initially, I was sceptical and advised against conducting the event. However, when I realised the commitment and tenacity that was being invested into the event I was a strong supporter.

I, and many others could not foresee the commitment of these gentlemen and their capacity to deliver such a world-class event. I would like to also highlight that the event could not have been so successful if not for the tremendous support of all the volunteers from the RUSI – SA who rallied to support their council and deliver such a great conference.

A key outcome of the conference was the realisation that we needed one unified voice that advocated on behalf of Australia's defence industry. It was this that inspired us to establish the Australian Made Defence Campaign. We'll chat more about this later.

As Australia commemorates the ANZAC centenary, our thoughts are with all who have served their country in many wars. Not just on the battlefields, but at home in the factories and fields.

While there is much written about the brave exploits of our warriors during the Boer War and World War One, we really tended to rely on the Mother Land for supplies and arms. So there is little history of South Australian industry support for those brave warriors.

It's not until World War Two that we get to learn of the tremendous support Australian industry provided to our deployed forces.

Interestingly, it was the evacuation of troops from Dunkirk in May 1940 that signalled the start of another rescue – that of South Australian industry.

For when the 330,000 plus soldiers were shipped from the French shores in an operation dubbed the 'Miracle of Dunkirk', the British Army was forced to leave behind a mountain of equipment including ships, aircraft, vehicles, guns and supplies.

The monetary loss was huge and it quickly became clear that Australia's days of relying on the Mother Land to supply its defence requirements were numbered.

Only a week after the evacuation ended, the Department of Munitions was established in Australia and just as quickly, South Australia's then Premier, Sir Thomas Playford, was on a plane to Melbourne to present a case to the Federal Government.

As the Premier proposed, South Australia was far enough away from potential enemy attack to make it the perfect location as the centre of Australia's war time manufacturing.

The Government agreed and its decision to build the nation's largest munitions factory in South Australia heralded unprecedented industrial growth in the State, which continued well beyond the war years.

With so many men away serving, it was out of necessity that a majority of the employees were women.

Civilian companies were also doing their bit for the war effort. Throughout Adelaide's western suburbs factories of all sizes were expanded and re-tooled to take on extra work. Many were involved in one of the Federal Government's most ambitious programs – manufacturing large numbers of the Beaufort torpedo bombers.

As each Beaufort comprised in excess of 38,000 parts, there was plenty of work to keep smaller factories in Adelaide busy. However, due to the

secrecy of war, some were unaware they were ever involved in the bomber project.

General Motors was one of the largest contributors, with its three plants at Woodville, Beverley and Birkenhead making parts for the Beaufort and later Beaufighter aircraft, as well as a variety of trucks, jeeps and ambulances, in addition to aerial bombs, torpedoes, anti-aircraft guns, light machine guns and anti-tank guns. The company also produced items such as tents and stretchers and can lay claim to developing and manufacturing the steel jerrycan – the original design which remains in use today.

The war saw an influx of workers to the town and it gained a reputation as a manufacturing centre in its own right.

When the war ended, the industrial boom continued. With an enhanced physical infrastructure and excellent skills set now available, South Australia was well placed to attract new companies, particularly in the defence industry.

Undoubtedly, Adelaide's role in the Beaufort bomber program led to the development of a vibrant aerospace industry that continues to contribute to South Australia's economy and meet the needs of national and international customers.

Entering the time warp again we hop off next in February 1982 as the Australian government announces its decision to acquire HMS Invincible from the United Kingdom for the princely sum of 175 million pounds.

Invincible was to be named HMAS Australia and replace the aircraft carrier HMAS Melbourne which had served the nation so well in the Vietnam War. You will remember that in Vietnam we were not able to get parts and ammunition for our anti-armour weapons because another country did not support our involvement in the war.

In April 1982 the Argentinians invaded the Falklands and three days later HMS Invincible sailed as the Flagship of the British Naval Task Force bound for the South Atlantic.

As a consequence of the Falklands War experience, in July 1983 the British Ministry of

Defence announced that it had withdrawn its offer to sell Invincible and Australia was left with a capability gap that was not recovered and saw the end of the fleet air arm.

As a consequence of the deployment of British Oberon submarines in support of the Falklands War and their subsequent decommissioning from the Royal Navy, the supply of spares and support for Australia's fleet of Oberons became problematic.

And so, for the second time, the conscious decision was made by the Australian government that it could not rely on other nations to supply and maintain its critical maritime defence assets. We embarked on the simultaneous construction of the Collins submarine, Anzac frigates and Huon Minehunters.

Over the next decade we created a national shipbuilding industry that employed at least 15,000 people directly and another 15,000+ indirectly over a ten year period.

True to the Australian 'tall poppy' syndrome, we were the greatest critics of our own achievements. Soon there was reporting of the Collins as noisy 'dud subs', significantly over budget and late in delivery.

So let's just set the record straight in relation to the Collins submarine. In the interest of brevity I will limit myself to ten:

1. The vast majority of the problems encountered with the Collins submarine have been identified as directly attributable to how the Government negotiated the contract and its failure to secure access to intellectual property.
2. The Government failed to ensure it had a mature design when it commenced building the submarines and then continually modified the design throughout the build.
3. This led to the noise issues that directly related to the water flow over the Kockums designed hull shape and propeller. Resolving the issue was compounded by the Government's failure to adequately negotiate access to the intellectual property for the submarines.
4. The combat systems presented many

challenges as in the late 80s and early 90s when the submarines were first being built, both the technology and the way we were developing it was uncharted territory.

5. These systems involved software and advanced technology that simply was not around. Remember, laptops weren't even available at the time and smart phones didn't exist until the mid-2000s.
6. In a world where technology was rapidly evolving, we were trying to predict and cater for the needs of the future. With help from the US (who also had numerous problems with their own combat systems around this time) the combat system challenges were overcome, giving the Collins' a highly capable system that allows the submarines to challenge even the US.
7. All these problems with the Collins were again mostly due to the Australian Government's inexperience with both purchasing and building such a large scale project, and again we learnt from these mistakes: the maintenance and rebuilding of the Collins submarines in Australia are now meeting international standards.
8. By 2006, \$5 billion had been spent to build the Collins submarines; after taking inflation into account, the project had run \$40 million (less than 1%) over contract.
9. The first Collins submarine was commissioned in 1996, the sixth in 2003 – that's almost one a year. So the delivery schedule exceeded international standards.
10. The Collins submarine is globally recognised as one of the most capable conventional submarines in the world.

After decades of learning and achievement, Australians should be proud that we now possess the capacity and capability to build and rebuild internationally acclaimed, leading edge submarines.

Sadly, in the absence of any strategic vision, the workforces associated with the build of the Collins submarines, Anzac Frigates and Huon Minehunters all but dissipated at the end of their build programs in the absence of any follow-on shipbuilding projects.

A significant nation building opportunity was lost.

With no strategic plan for shipbuilding in Australia we lost a capability that had cost hundreds of millions of Australian taxpayers' dollars to create.

What is little recognised are the consequences of not having had a strategic plan for shipbuilding in Australia? The lack of such a national shipbuilding plan has given rise to some amazingly poor decisions over the last three decades. Once again, in the interest of brevity I will limit myself to ten:

1. If we had a national shipbuilding plan in the early 90's, we probably would not have had to spend \$60 million taxpayers' dollars buying two over 20 year old mothballed US Navy amphibious ships to fill an amphibious capability gap, Purchased in 1994, they finally entered operational service in 2000 after requiring \$400 million in repairs and modifications and only saw 10 years of service.
2. If we had a national shipbuilding plan in the late 90's, we definitely would not have spent \$40M taxpayers' dollars to purpose build six new landing craft for the refurbished US amphibious ships Manoora and Kanimbla. When the Landing craft were completed in 2003, they did not pass their sea trials and had to be scrapped before they entered service because 'the dimensions and weight of the watercraft meant they were unsuitable to be launched from these ships and not of operational value'.
3. If we had a national shipbuilding plan in the late 2000's the current Government would not have been compelled to go down the Competitive Evaluation Process for our future submarine fleet.  
  
If previous governments had a plan for submarine building in Australia they may have made decisions that would not have seen us in the current situation where it seems we are ignoring the lessons of history and considering sending \$50bn Australian taxpayers' dollars offshore to have our future submarines built overseas and ignoring the lessons of history.
4. If we had a national shipbuilding plan in the early 2010's we would not have had to spend \$100 million taxpayers' dollars acquiring a mothballed British Navy ship to

fill the capability gap created by the early retirement of the refurbished US Navy amphibious ships.

That ship broke down within 12 months of being commissioned in the Australian Navy. It was then out of service for 12 months and costing over a million dollars to repair.

5. If we had a national shipbuilding plan in the early 2010's the government might have not been inclined to acquire 12 vessels (5 Tugs, 4 Lighters, 2 Submarine Support Vessels and an Aviation Support Ship) manufactured in Vietnam in the last four years under an interesting lease-back arrangement with an undisclosed cost.
6. If we had a national shipbuilding plan in the early 2010's the government might have not been inclined to give over \$200 million taxpayers' dollars to a Singaporean shipyard to conduct a 'mid-life extension' to a 20 year old replenishment ship that will be taken out of service within ten years.
7. If we had a national shipbuilding plan in the early 2010's the government might not have had to spend millions leasing a Spanish Navy ship to fill a Defence capability gap for a resupply vessel.
8. If we had a national shipbuilding plan in the early 2010's the government might not have had to spend over \$130m acquiring a Romanian ship to cover an offshore support vessel capability gap until the Landing Helicopter Docks are brought into service.
9. If we had a national shipbuilding plan in the early 2010's the government might not have initiated a tender process for a replacement icebreaker that excluded Australian shipbuilders and limited it to two overseas shipbuilders. One of those tenderers is the current incumbent operator who recently withdrew from the tender due to the unusual nature of the tender process.
10. If we had a national shipbuilding plan last year the Government might not have initiated a bizarre tender process for replacement underway replenishment ships that specifically excludes Australian

shipbuilders and limits the tender to a Spanish or South Korean option.

And so we get to today. In less than twenty days the first Australian built Hobart Class Air Warfare Destroyer will be launched at Port Adelaide. I was at the shipyard on Friday and have visited it many times during the build program.

Now I'm an old Army 'tanky' so it takes a lot to impress me. But I can tell you, every time I have visited Techport and seen what they are doing with building Air Warfare Destroyers and rebuilding our Collins submarines I am in awe.

It is not until you physically see the complexity of what goes into those vessels that you appreciate how good we are at ship and submarine building.

But sadly, the Australian 'tall poppy' syndrome has kicked-in on this project as well with references to it being troubled, massively over budget, running grossly late and suffering from poor productivity.

So let's just quickly debunk the myths on this one and limit it to ten:

1. The project was troubled at the outset due to poor acquisition practices that saw the Commonwealth engage a shipbuilder who had never exported its designs.
2. The project was troubled at the outset due to the Commonwealth only acquiring two dimensional design level drawings, declining the slightly more expensive three dimensional computerized production drawings that were available.
3. The project was troubled at the outset due to the Commonwealth forming an alliance to oversee the delivery of the project that did not include the ship designer.
4. The integrity of the Alliance formed to deliver the project is compromised by the fact that one of its three members is the customer, represented by the Defence Materiel Organisation.
5. While accurate figures are not available, the worst speculation we have seen in the media to date is that the project might be up to \$670m dollars over budget. In an \$8.5bn that makes it less than 8%.
6. The best we can interpret from the media is

that the project may be up to 21 months late. We need to recall that the Government of the day in 2012 imposed a 12 month delay in the project in a vain attempt to arrest the so-called 'Valley of Death'. The majority of the remaining delay is directly attributable the poor acquisition process I have already outlined.

7. Productivity was challenged from the outset. You will recall this was a new design ship due to the modifications introduced by Australia into the Spanish design.
8. You will also recall the ships are being built on a Greenfield shipyard where construction of the infrastructure did not commence until the build contract had been awarded to ASC.
9. You will also recall that a new workforce had to be created and trained to build the new ships in the new shipyard. That workforce started with a very limited knowledge of how the Spanish built their ships.
10. And finally, last year the Government commissioned a study by Professor Don Winter and Doctor John White. It then used that report to very publically denigrate and decry the productivity of our nation's shipbuilders. Yet to this day they have flatly refused to release the report to the public or allow it to be subjected to any scrutiny.

And so, that brings us to the Australian Made Defence campaign. A number of years ago I wrote an editorial for our magazine lamenting the decline of our shipbuilding industry if there was no follow-on work prior to the completion of the construction of our new Air Warfare Destroyers and Landing Helicopter Docks. Part of my lament was that there was very limited public knowledge or commentary on the issue. Indeed, it was my perception was that any discussion of the topic was actively discouraged by the Government of the day.

To highlight my concern with the lack of public discourse on the potential workforce losses, I made the analogy with a poem some will recognise as close to my heart. In writing about the Battle of Balaclava during the Crimean War, Alfred Lord Tennyson crafted the famous narrative poem the Charge of the Light Brigade.

In particular I quoted the following stanza from the poem to reflect on the situation faced by our nation's shipbuilders: *"Theirs not to make reply, theirs not to reason why, theirs but to do and die, into the Valley of Death, rode the six hundred"*.

And so the term 'Valley of Death' entered vernacular of Australian shipbuilding to describe the peaks and troughs in Defence contracting.

We found that the more we lobbied successive governments to redress the looming national disaster, the more we were accused of being 'South Australians whinging for make-work jobs'.

We also learned that outside South Australia there was not an understanding of the issues confronting the industry in the general community.

*Australian Made Defence* is about informing all Australians that we have the indigenous industrial capacity to build and maintain many of Australia's Defence capabilities to international standards while being globally competitive in terms of value for money.

The campaign will initially focus on the need to build our future ship and submarine fleets in Australia in order to maximise the benefits to our nation.

The campaign will highlight that we must stop thinking of maritime projects in myopic isolation. A sustainable Australian shipbuilding industry must be based on our whole-of-nation requirements. This includes the Navy's surface and submarine fleets plus, for example, ships like Border Protection patrol boats, Icebreakers and research vessels

Our national leadership must stop using defence projects as political capital and take a bipartisan approach to developing a national, whole-of-government shipbuilding vision. The future submarines and frigates are projects of national

significance that must be considered in the context of a long-term strategy and plan for shipbuilding in Australia. They represent the future of complex engineering and advanced manufacturing in our nation. This is truly an intergenerational issue.

The campaign will tell the story of the importance of sustaining a national defence industry capability in order to maximise our security, sovereignty and economy.

The campaign will also highlight the need for a long term, 30 year, bipartisan strategy for shipbuilding as opposed to the 30 month 'thought bubbles' between elections that our defence industry has had to survive over the last decade. We can only have a sustainable Australian shipbuilding industry if the Government develops a long-term 30 year strategic plan for shipbuilding in Australia based on continuous build programs and a sensible way of purchasing. A national shipbuilding plan must be the result of consultation with the public, industry, the States and relevant government departments. It must also have bipartisan and cross-bench support.

The Australian Made Defence campaign (see <http://australianmadedefence.com.au>) centres on a website to demonstrate that Australia's defence industry is accomplished and highly capable of developing, building and maintaining many of Australia's Defence capabilities.

So if you believe what we are doing is right, we encourage you to join us by going to [australianmadedefence.com.au](http://australianmadedefence.com.au) and registering online. We're keen for you to share the website and campaign details with your friends and colleagues either by word-of-mouth or through social media.

Thank you for inviting me back to have another chat. I hope you've enjoyed and will sign-up to our Australian Made Defence Campaign.



**Biography:** Mr Chris Burns CSC leads the Defence Teaming Centre (DTC) which is the peak defence industry body in South Australia. The DTC represents and advocates on behalf of 250 companies employing in excess of 17,000 people in SA's defence industry. As the South Australian chapter of AIDN the DTC aims to be a pre-eminent defence industry forum, focused on collaboration and teaming industry that are actually or potentially involved in supplying Defence capabilities and/or are influenced by Defence business policies or purchasing decisions.