Defence Issues Paper 2014

FAR NORTH QUEENSLAND:

A STRATEGIC & COST-EFFECTIVE SOLUTION FOR THE ADF

Prepared by Advance Cairns with the support of:
Regional Development Australia Far North Queensland & Torres Strait (RDA FNQ&TS)
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It is clear that trade with Southeast Asia and PNG is increasing and that our natural resources such as food, water, minerals and energy are becoming increasingly important national assets. The nation’s shipping lanes provide a vital connection to the global markets where our resources are in high demand. The effects of climate change and extreme weather events will increasingly impact Northern Australia and Pacific Island Nations. In this time the demands on the Australian Defence Force will likely increase. Far North Queensland presents as a realistic, cost-effective and strategic solution with a strong ADF presence in this region.

**Why is Far North Queensland a strategic location?**

Far North Queensland is the closest service hub to most of Southeast Asia and has significant seaport and airport infrastructure. The region has strong commercial linkages with South East Asia, Northern Pacific, PNG and surrounding Pacific Island Nations, which has enabled Defence to engage in capacity-building and training exercises. Cairns is Australia’s closest seaport to the Manus Island Asylum Seeker Detention Centre. Our region currently oversees critical border patrol activities as well
as intense shipping traffic, especially through the Torres Strait trade routes. In terms of national assets, Far North Queensland is strategically located as the Northern gateway to Australia’s water and energy resources, and critical food supplier for the nation. This makes Far North Queensland a very self-sufficient region and an ideal strategic location for Defence assets.

This region is one of the fastest growing regions in Australia and has consistently grown faster than Queensland Government population projections. The population of the region is currently more than 246,000, with a forecast of 372,000 by 2031. Significant investment has occurred in the region’s sea and airports, transport, health, education, sporting and cultural infrastructure and facilities and more upgrades are planned for the future.

**What cost efficiencies can Far North Queensland offer?**

Far North Queensland can offer Defence a highly cost-advantageous environment to do business. Cairns has an existing, highly-awarded Navy base for efficiency and productivity with significant potential for expansion. With increasing competition for port facilities from the resource sector boom, Cairns is one of only a few ports that can offer Defence significant expansion opportunities and welcomes this type of investment.

This region has the largest marine service sector in Northern Australia that currently services existing Navy vessels from HMAS Cairns, Darwin and the Pacific Islands. This sector has over 4,500 personnel employed in the sector, across 270 organisations, and includes three major slipways with capacity to service vessels up to 100m in length and 3,000 tonnes. The services provided from this region are cost advantageous
compared to other Australian ship repair centres. Defence can save time and money whilst reducing risk because of the efficiency of the slipways, the compact marine district and the expert workforce on-hand to ensure there are no ‘learning-curve’ costs to the client. This provides a compelling case to build on these strengths to create a centre of excellence in servicing particular classes of navy vessels.

The region also has a significant aviation support and service industry with over 2,300 employed in this sector including specialist areas such as avionics and composite materials.

Recruitment and retention of personnel is a key issue and this region boasts one of the highest retention rates of ADF personnel due to the cost of living and lifestyle. The region is also the largest employer of Indigenous Australians of any ADF region.

**A tropical future for the ADF**

About 40% of the world’s population lives within the tropical zone, and by 2060, 60% of the human population will be in the tropics, owing to high birth rates and migration. Far North Queensland has actively positioned itself as Australia’s leading tropical region and has internationally acclaimed expertise in tropical health, tropical infrastructure design, and tropical science including adaption of heavy industry machinery for use in tropical climates. This region boasts world class marine and aviation training colleges as well as language centres, a TAFE and two Universities. Far North Queensland also offers world-leading disaster management for tropical environments that is sought across the tropical world, especially in Southeast Asia and the Pacific.

This region also has a number of existing facilities suitable for Defence training exercises and established relationships with landholders that allow the ADF and its strategic partners to train and condition their personnel for operations in tropical regions.
Tropical expertise is essential and Far North Queensland is leading research and teaching in this field. The Defence Force will need to be adept in tropical environments, considering the majority of the world’s population will live in this region; a region that has traditionally been amongst the poorest and the least developed in the world.

**Introduction**

This submission to the Defence White Paper development is drawn from and builds on our submission to the Defence Posture Review in 2011 (Far North Queensland: a strategic & cost-effective solution for ADF Force 2030, Advance Cairns and others 16 Sep 11).

The Far North Queensland Region, with Cairns as the main urban centre, is home to significant Defence infrastructure including HMAS Cairns, the 51st Battalion, RAAF Scherger, Thursday Island Joint Defence Force and the Wangetti, Cowley Beach, Tully and Atherton Ranges training facilities. Defence enjoys an outstanding level of community support and there is potential for major expansion across the region.

The region boasts well-established and cost-advantageous marine & aviation industries as well as highly specialized Defence support services.

The Defence sector is also supported by a highly skilled workforce as well as world-class teaching and research facilities. This could benefit the ADF with expertise and infrastructure that exists within the region. Cairns is strategically located in the Asia Pacific region with a range lifestyle advantages, and through the Cairns International Airport is accessible to all major cities within Australia, as well as
internationally to Auckland, Tokyo, Hong Kong, Guam, Port Moresby and to Singapore, via Darwin.

Advance Cairns submission is supported by:
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- Cairns Regional Council
- Ports North
- Cairns Chamber of Commerce
- Chamber of Commerce and Industry Queensland
- Queensland Government

**Generating & Sustaining Capability**

**Growing Population & Significant Infrastructure Investment**

Far North Queensland is one of the fastest growing regions in Australia and has consistently grown faster than Queensland Government population projections. Despite the financial and extreme weather impacts, Far North Queensland continues to grow by nearly 3% annually.

To meet the needs of population growth, the region has already invested in major infrastructure developments including the $36.6M in Cairns Port and $266M in Cairns Airport, and both currently utilized by the ADF. Furthermore, the region has also invested in public infrastructure including The Mount Peter master-planned community (40000 people/18500 dwelling estate 15km south of Cairns, Cairns Base Hospital Redevelopment $456M, and James Cook University Cairns Institute $25M).

**Industry**

Far North Queensland has a diverse and resilient economic base. Contrary to common belief, only 20% of the region’s economy is based on tourism whereas 80% is based on other industries including Defence and associated services. Through the Tropical North Queensland Regional Economic Plan, 20 year strategies are in place to
strengthen priority industries such as marine, aviation, tropical expertise, education & training, ICT and mining services (http://www.advancecairns.com/economic-development).

**Marine Industry**

**Ports**

The Far North Queensland region has 10 ports with significant assets in Cairns, Weipa and Mourilyan. The Port of Cairns is the most northern port on the eastern seaboard and is an important base of operation for the Australian Navy. It is an attractive destination and has strong history of successfully hosting a number of important Australian and international Naval visits.

The existing HMAS Cairns is a significant element in the Port of Cairns and Ports North supports, and has identified further expansion opportunities in Cairns and the region.

The existing HMAS Cairns has undergone a major development program that included the expansions of its land footprint by 6 hectares and an increase in its berthing capacity through an access agreement with the adjacent Sugar berth.

The Port of Cairns planning has identified a number of expansion options that would allow Defence to undertake further significant expansion to its berthing and operational capacity in the region.

These expansion options include expansion of deep water berths both northward and southward, additional outer berths associated with a relocated swing basin, development of a new large vessel berth in Smith’s Creek enabling new dedicated Defence berths adjacent to the existing Base. The Port of Cairns has also identified significant locations for major future Base expansions at alternative locations within Trinity Inlet. These options demonstrate that the Port of Cairns can readily cater for any expanded Navy presence into the future.

It is also worth noting that Cairns Port operations are not currently impacted by resource sector activities and therefore competition within the inlet is substantially less compared to other East Coast locations.
While the Port of Cairns and HMAS Cairns will remain the primary Navy focus in North Queensland, there are opportunities for expansion of both berths and land facilities in all of the Far North Queensland Ports including Weipa, Mourilyan and Thursday Island.

Located on the north-west coast of Cape York Peninsula, the Port of Weipa’s main activities are the export of bauxite (aluminium ore) from the Rio Tinto Alcan (RTA) mine and general cargo. The Port of Weipa has existing well maintained deep navigation channels and wharf infrastructure that could support Defence vessels and personnel activities. Weipa is also the preferred location for government services of the Western Cape area. The Port of Mourilyan remains an ideal location as an explosives Port.

**Ship Repair & Maintenance**

Cairns has the largest range of marine industry support activities across Northern Australia. At the heart of the sector are the slipways/shipyards with three major facilities—Tropical Reef up to 3,000 tonnes capacity, Cairns Slipway up to 1,200 tonnes capacity, and Norship Marine up to 400 tonnes capacity. The region’s slipways are supported by a wide ranging agglomeration of smaller firms and contractors involved in repairs and maintenance work including engineering, electrics and electronics, sonar, air conditioning, refrigeration, hydraulics, blasting and painting, marine surveyors, marine safety equipment and naval architects. Statistically, there are more than 4500 employed in the region’s marine industry including 1300 in repair and maintenance across 270 firms. The presence of Defence contractors DMS Maritime & BAE are an integral part of the region’s marine industry.

The services provided from this region are cost advantageous compared to other Australian ship repair centres. Defence can save time and money whilst reducing risk because of the efficiency of the slipways, the compact marine district and the expert
workforce on-hand to ensure there are no ‘learning-curve’ costs to the client. This provides a compelling case to build on these strengths to create a centre of excellence in servicing particular classes of navy vessels.

Far North Queensland has a long and successful history supporting the Pacific Class Patrol Boats program. These boats are currently repaired and maintained at facilities in Cairns through a contract with DMS Maritime (in partnership with Norship marine) and the Great Barrier Reef International Marine College is ideally positioned to support the associated training for this program. The region has also provided emergency repair services to the US Navy during their visits in the Port of Cairns and our industry has gained valuable experience from this international exposure.

The competitive strength of the Cairns region’s marine services sector lies in the scale of the region’s local fleet compared with surrounding regions, the investment that has taken place in essential infrastructure of slipways and travel lifts, the long-term experience of the sector’s management, the high level of training and skills of its workforce, the location and compact efficiency of the sector in the immediate Cairns seaport area and Cairns’ strategic location in relation to the South West Pacific.

**Priority Industry Capabilities**
The Far North Queensland region meets Defence needs in Priority Industry Capabilities for Ship dry docking facilities and common user facilities as well as Strategic Industry Capabilities in Naval shipbuilding – warship repair, maintenance, upgrade, rebuild and overhaul capabilities. The shipbuilding capability has great potential to be built-up into a more significant part of the sector.

**Aviation Industry**

**Airports**
There are 370 airstrips across Far North Queensland, ranging from international standard commercial airports to regional landing strips.

The Cairns International Airport is the only large international-domestic-general aviation airport in regional Australia and is a hub for activity in the Asia Pacific region. It has a sophisticated Instrument Landing System and services airlines including Air New Zealand, Air Niugini, Cathay Pacific, Continental, Jetstar, QantasLink, and United Airlines.

There are also a number of other registered aerodromes with Instrument Approach Systems in the region including Mareeba, Innisfail and Cooktown which see regular traffic, both commercial and private. These strips are tarred and have instrument approach procedures making them ideal for training purposes. Weipa also has a tarred strip and instrument approach procedures. It is about 30 miles from RAAF Base Scherger.

Other tarred and registered aerodromes frequently used across the Far North Queensland region are Chillagoe, Horn Island, Pormpuraaw, Coen, Aurukun, Mornington Island, Bamaga, Lockhart River and Normanton.

**Aviation Repair & Maintenance**

The region has a growing aviation sector focused on Maintenance, Repair and Overhaul (MRO) which is unified under the Australasian Aviation Group Cairns. Current developments in aerospace composites will further expand industry capability. There are over 2300 employed across 86 businesses. Hawker Pacific, Hinterland, Cobham, West Wing, Hevilift and Australian Avionics are key industry operators in the region and contribute significantly to the ongoing growth of the sector.

The Far North Queensland region meets Defence needs in Strategic Industry Capabilities for composite and exotic material; elements of national infrastructure - supply and storage of aviation fuel; and repair, maintenance and upgrading of aircraft (including helicopters).
Education & Training

The region’s industry and skills needs are supported by a number of high quality education and training facilities including:

- The Great Barrier Reef International Marine College, completed in 2011, is a world-class purpose-built training facility and the best equipped marine training centre in the southern hemisphere. Comprising of a Full Mission Bridge Simulator, Emergency Response Simulator and an immersion pool, as well as the required facilities for Helicopter Underwater Escape Training, the College caters for more than 4000 local, national and international students annually (www.qbrimc.com.au).

- Cairns Aviation Skills Centre is located at Cairns International Airport and is now the leading aviation technical training centre in the Asia Pacific region. Cairns Aviation Skills Centre is a purpose-built aviation training centre of excellence offering internationally recognised aircraft maintenance qualifications (www.aviationaustralia.aero).

- James Cook University is home to approximately 4,000 students and is ranked in the top 5% of the world’s tertiary institutions for research (www.jcu.edu.au).

- TAFE Queensland North delivers quality-assured programs to more than 15,000 domestic, international and commercial clients annually, with almost 200 programs in a range of vocational areas (www.tafenorth.edu.au).
Cairns has numerous world-class research institutions that have highly skilled GIS experts that reside in the region. Technical skills in environmental science, marine science, geography, topography, cartography and meteorology are all available in Far North Queensland, all of which have been tailored to the tropical environment.

**Recruitment & Retention efficiencies through liveability and lifestyle**

Cairns high living standards and a quality of life coupled with affordability makes the region a desirable place to live. No other place in Australia offers such a mix of sophisticated city life combined with the untouched natural wonders of the rainforest and reef. Cairns is a cosmopolitan city and Defence friendly. Our region is renowned for its relaxed outdoor living and is developing a profile as a playground for adventure sports enthusiasts.

Cairns provides a variety of employment opportunities for spouses and also boasts excellent education, health, sports and cultural facilities it can contribute to an attractive lifestyle package for Defence personnel.

Evidence of Far North Queensland’s successful recruitment and retention efficiencies through liveability and lifestyle can be seen through our growing mining Fly In – Fly Out workforce. Cairns Airport currently enables more than 2300 FIFO workers to transit weekly to resource projects in Western, Central Queensland and PNG. For the FIFO sector, Cairns is viewed as a desirable place to live and this is helping resource companies attract and retain personnel.

**Skilled Workforce**

**Indigenous Program**

The 51st Battalion Far North Queensland Regiment has become the largest employer of Indigenous Australians of any Defence Force unit of any Service. The 51st Battalion managed a highly successful pilot project under the Defence Indigenous Development Program which produced exceptional outcomes for both the ADF and
the Indigenous participants. This program has been granted funding to continue until 2016. This is of extreme value to the region as it provide pathways to ‘Closing the Gap’ for our Indigenous population.

**Reserve concentration**

As the proportion of non full-time Defence personnel is expected to increase, bases like Cairns can offer access to human resources from nearby communities for hybrid employment arrangements and reserve capacity. The numbers of highly skilled people in the marine, aviation, construction and mining sectors area resource the ADF can access and benefit from utilising.

Far North Queensland understands major bases require these human resources to be successful. Significant bases certainly need the ‘hard’ assets but without the accompanying ‘soft’ assets it cannot be functional. Our region has these ‘soft’ assets.

**Peacetime security**

Far North Queensland’s most obvious Defence role is in domestic security, border protection search and rescue, emergency response and disaster recovery.

HMAS Cairns performs a vital peacetime security role making the Hydrographic Survey Vessels (HSV), the Survey Motor Launches (SML), and the ‘Armidale’ Class Patrol Boats critical resources for this region. Illegal foreign fishing is a problem for the region given our close proximity to a number of countries with subsistence communities.

Border Protection Command conducts surveillance missions along the region’s coast using Customs and Border Protection and Royal Australian Navy (RAN) Patrol Boats as well as 51st Battalion patrols to conduct land based Intelligence, Surveillance and Reconnaissance. There is an illegal foreign fishing boat destruction facility at Skardon River, just north of Weipa.
Similarly, the 51st Battalion is the ‘eyes & ears’ of the north with permanent full-time Company Headquarters located in Cairns, Weipa, Thursday Island and Mount Isa. Further unmanned facilities are located in 15 communities in the Cape, Gulf or Torres Straits regions. The 51st Battalion in partnership with HMAS Cairns operates the highly successful Defence Indigenous Development Program from these bases. There is a significant opportunity for Defence to invest in infrastructure to support this program since it has been granted six years of budget provisions after a successful one year pilot. The importance of Indigenous participation in Force 2030 is implicit in the Defence White Paper 2009 and Far North Queensland has the foundations upon which this human capacity could be built.

In addition, RAAF Base Scherger assists in peacetime activities by hosting, on average, one major exercise per year.

There is an opportunity for Defence to engage in even more capacity building and training exercises with both PNG and Pacific Island Nations using Cairns as a servicing hub. Cairns has a high proportion of Pacific Islanders and PNG nationals in the population which has helped us to build good city-to-city relations. This human capital creates a welcoming and supportive community base for visiting training forces, ultimately providing Defence with better education outcomes.

**Humanitarian & Disaster Relief**

Far North Queensland is ideally located for humanitarian and disaster relief assets. In terms of the Navy, Cairns is a safe location for these assets because although prone to tropical cyclones, advanced warning systems provide up to 48 hours notice of severe weather events. This provides the Navy with sufficient time to relocate assets to the Torres Strait or other areas that will be out of the impacted zone.
The benefit of this strategy is that the Navy can therefore return to the region and assist with recovery quicker than vessels that may be based in other ports on the east coast.

To support the timely response to regional humanitarian issues, we advocate for the home porting of HMAS Choules in Cairns. An amphibious landing ship HMAS Choules, is a vital cog in the national maritime plan and would normally be on standby for natural or humanitarian disasters such as cyclones and tsunamis. It has been recently tasked to support the rebuilding of the Manus Island Detention Centre.

Such tasking requires early response to humanitarian need, and the home porting in Cairns would provide a more timely response to Government initiated international support to disaster relief operations in Northern Australia and our neighbourhood.

As an amphibious landing ship, HMAS Choules works closely with the Army’s 3rd Brigade, based in Townsville, where the core of the future amphibious force is located. Proximity would provide greater opportunities for interoperability as this capability further develops, at reduced cost.

HMAS Cairns and the Cairns maritime precinct can provide the necessary logistic, administrative and mechanical support required for the vessel (except for major slipping requirements). Multinational, national and local service providers have existing support arrangements with the ADF in Cairns. Early discussions with support providers indicates that any particular technical capability could be organically provided, or be supplemented by existing arrangements.

It is believed that there would be minor capital works required to support the home porting of HMAS Choules in Cairns.

The benefits to the local community would be significant, and would strengthen the local economy. Cairns is well known for its liveability (The world’s most liveable tropical city), with a wide range of education and employment opportunities for Defence families.

In terms of the Army, some assets north of Ingham would be strategic as history has shown that when the roads are cut, Defence is unable to travel north into the affected
areas. In particular, category 5 cyclone rated warehousing and logistics support are most critical to the immediate recovery efforts.

With climate change greatly impacting the tropical world, the frequency and intensity of natural disasters is expected to rise. Cairns is one of the top five cities at risk in Australia and therefore the strategic placement of disaster relief assets is critical for the region. Although Far North Queensland has significant disaster management expertise and experience in challenging tropical conditions, Defence infrastructure is essential for both survival and recovery.

The benefit to Defence from exposure to tropical disaster relief scenarios in Far North Queensland is that Southeast Asia and Pacific Island Nations are also tropical countries where Australian tropical disaster management team’s experience will be highly valued. Managing a recovery effort in the tropics is notably different to other climatic regions and ADF tropical expertise from Far North Queensland will minimize risk and reduce the costs of recovery efforts both domestically and internationally.

**Regional Engagement**

Far North Queensland is very proud of its regional engagement with Southeast Asia and Pacific Island Nations. Our region already shares tropical expertise with these countries and also engages in education & training programs. We have ongoing Navy exercises with Singapore, Malaysia and PNG as well as hosting transfers from the UK.

The Army is further developing opportunities between PNG and the 51st Battalion in addition to the military training in Vanuatu that occurs annually and has since 1998. This is funded under the Defence Cooperation Program and Far North Queensland would be keen to grow these opportunities for regional engagement and participation.

**Conclusion**

**Strategic Location**

Cairns is a strategic location because of its close proximity to PNG & Manus Island (474 nautical miles), Guam (2472 nautical miles), and Pacific Island Nations such as
Solomon Islands (1024 nautical miles) and Fiji (1890 nautical miles). Far North Queensland is also the custodian and protector of the shipping lanes that track the upper East Coast and converge through the Torres Strait. These shipping lanes are of vital importance to the Australian economy as they enable energy and mineral assets to be traded internationally.

Far North Queensland’s proximity to PNG and Pacific Island Nations enable us to be a first response in case of emergency deployment. More specifically, Cairns is Australia’s closest airport & seaport to many Pacific Island Nations, Guam & PNG.

**Capability**

Cairns is the largest airport & seaport between Darwin & Townsville and offers complimentary capabilities to these larger bases thus providing alternatives in case of deployment. Cairns has highly developed aviation & marine repair and maintenance capabilities in our local industry and has invested significantly in marine and aviation infrastructure that would be available to Defence and assist operations in the wider region if necessary.

This coupled with the region’s food and water security makes Cairns a highly self-reliant base that would have the capacity to support Defence needs.

**Future Defence Development Opportunities**

Understanding the strategic view of the Defence White Paper, the following opportunities would provide the ADF with cost-benefits and efficiencies. Economic business cases for ADF assets moving to Far North Queensland include;
- Develop Cairns as a Centre of Excellence for Minor War Vessels, to include fleet repair & maintenance, training & education.
- Home porting HMAS Choules in Cairns to provide for improved response to regional humanitarian issues, and as capability development support for the Army’s 3rd Brigade amphibious operations role.
- Expansion of Defence Indigenous Development Program enabling greater numbers to be recruited, trained and employed by ADF.
- Co-location of the Army Malaria Institute from Enoggera Barracks in Brisbane with the Australian Institute of Tropical Health and Medicine at James Cook University campus in Cairns. With the main areas of research for the Institute including prevention and treatment of vector borne disease, it is a natural fit to share in the world leading research conducted at James Cook University.

- Develop a co-located Centre of Excellence in Disaster Management building on the existing Woree Emergency Management Centre (not an ADF asset) or in the adjacent school for Military use during a major domestic natural disaster event.

- Consider the future relocation of Hydrographic Survey Unit to HMAS Cairns (currently in Wollongong) – including ADF personnel and associated civilian personnel (mainly cartographers & meteorologists) to amalgamate Defence’s hydrographic functions.

The region’s well established facilities and capabilities provide a solid foundation for future growth. Efficiency of current operations, combined with a culture of excellence and continuous improvement demonstrate the confidence our region can provide to future Defence development.