

13 The role of the Australian Defence Force in northern Australia's development

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Fig. 1. Fort Dundas, the first European settlement in today's Northern Territory, from the point near Port Cockburn, below Melville & Bathurst Islands, Australia.
(National Library of Australia Collection)

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1 KEY POINTS

1. A large defence presence in northern Australia has informed Australia's defence policy for the last 40 years and is critical to Australia's defence strategy for the future.
2. Defence-direct spending currently comprises 8 per cent of the Northern Territory's GDP; its flow-on effects are likely to comprise a further 8 per cent.
3. Current trajectories for defence spending are likely to see these figures double in the next decade, making defence the largest single sector in the northern Australia economy.
4. Defence is northern Australia's second largest employer of Indigenous people; Defence is executing plans to further increase Indigenous employment.
5. Defence manages ca 1 per cent of northern Australia's land area, to a very high standard of environmental stewardship; the conservation value of the Defence estate is above average, and generally very high.
6. Defence, for reasons of national security as well as established culture, marches to its own drum to a significant extent. Appreciating Defence's direction and trajectory will help to consider and undertake development opportunities for northern Australia that exploit Defence's considerable momentum in the north.

1.1 INTRODUCTION

The Australian Defence Force (ADF) is one of the major investors, landholders and employers in northern Australia, and, historically, defence concerns have been a major motivator for development of the north. The influence of defence on public policy in the north is often more pervasive than explicit and should not be underestimated. While this influence is strictly beyond this report's 'watery' terms of reference, it would be remiss to ignore such a major player in the region. Here we highlight some of the development impacts of, and on, the ADF in the north.

1.2 THE HISTORY OF DEFENCE IN THE NORTH

Northern Australia has figured in our defence thinking since the early days of white settlement. The first European settlement in today's Northern Territory (NT), Fort Dundas, was established on Melville Island in 1824, with a view to enhancing and protecting British trade. It met with considerable difficulties, including disease, malnutrition and mutual antipathy with Indigenous folk, and was abandoned five years later (1).

This was succeeded by Fort Wellington in Raffles Bay (1827-29) which suffered from many of the same problems and was abandoned in less than three years. Almost ten years later, a third attempt was made to garrison the north, this time via Fort Victoria at Port Essington (1838-1849), 300 km north of today's Darwin on the Cobourg Peninsula. The advantages offered by the attempt to control the shipping route to China could not overcome the problems caused by a severe cyclone (1839) and malaria outbreaks, and it was abandoned in 1849. Fort Victoria is now better remembered for having hosted the expeditions of the HMS Beagle (1839) and Ludwig Leichardt (1845) than for its contribution to the colonial economy.



Fig. 2. The ruins of Fort Victoria (Image, Tourism NT)

Larrakeyah Barracks (1934–present) was Australia’s first major commitment to national defence in the north and was instrumental in transforming Darwin from an “isolated and outlandish outpost” (2) to an important centre. By the time the Pacific War began in late 1941, there were more than 10,000 service personnel in the Darwin environs, roughly twice the usual civilian population.

The best known, and most material and psychologically important role of northern Australia in our defence, was the bombing of Darwin. The February 1942 Japanese raids on Darwin killed at least 243 people, wounded more than 300 and resulted in the loss of important military and civil shipping, planes and infrastructure (3). Darwin was raided a further 62 times – virtually weekly until bombing ceased in November 1943. A greater tonnage of bombs was dropped on Darwin than on Pearl Harbour. In addition to Darwin, the coast of northern Australia was raided another 32 times, with Broome the site of most severe casualty (ca 70 deaths). Raids extended from Exmouth Gulf in the west to Townsville in the east (4).

The material damage wrought by these raids was significantly compounded by their psychological impact – Australia was no longer inviolate. ‘Southerners’ who were isolated from the physical impacts of hostilities were not culturally immune. The role of the north in our defence subsequently exercised the minds of successive Australian governments.

Importantly, this comprehension did not arise simply from a ‘scare’ in our past, but from an ongoing and ever-developing realisation of the critical role of the north in Australia’s defence and geo-political strategy and tactics.

1.3 THE STRATEGIC IMPORTANCE OF THE NORTH

For almost 30 years this comprehension was realised not by garrisoning of the north but mainly via Australia’s ‘forward defence’ strategy, under which Australian forces would be deployed primarily offshore to our north rather than in Australia. Operations in South-east Asia, in partnership with US, UK or UN coalitions, were designed to simultaneously bind us to defensive partnerships and prevent conflicts reaching Australia’s shores (5).

The Australian Defence Review of 1972 prompted a shift in defence strategy from partnership-based forward defence to self-reliance for defence of Australian territory (6). This was reflected in the 1976 Defence White Paper, in which significant emphasis was given to the need to defend the “air-sea gap” between Australia and the most likely sources of hostility (7). This basic strategy, “to ensure the defence of Australia and its direct approaches” also informed the 2000 Defence White Paper (8). Despite changes in our strategic environment – asymmetrical defence threats, such as those posed by terrorism, illegal immigration and breaches of quarantine now loom larger than state to state conflict – the dominance of a northern-oriented defence posture remains.

The 2009 Defence White Paper reiterates that “our most basic strategic interest remains the defence of Australia against direct armed attack...this means that we have a fundamental interest in controlling the air and sea approaches to our continent... [and it is through] our northern approaches [that] any hostile forces would have to operate in order to sustainably project force against Australia.” (9).

Further, “northern Australia...will always command a significant place in our military contingency planning” to contribute to the stability of security in the South Pacific and East Timor, to contribute to military contingencies in the Asia Pacific region, and to offer humanitarian assistance and disaster relief domestically and in our immediate neighbourhood. The ADF is typically engaged in new operations to our immediate north once, on average, every year (Fig. 3).

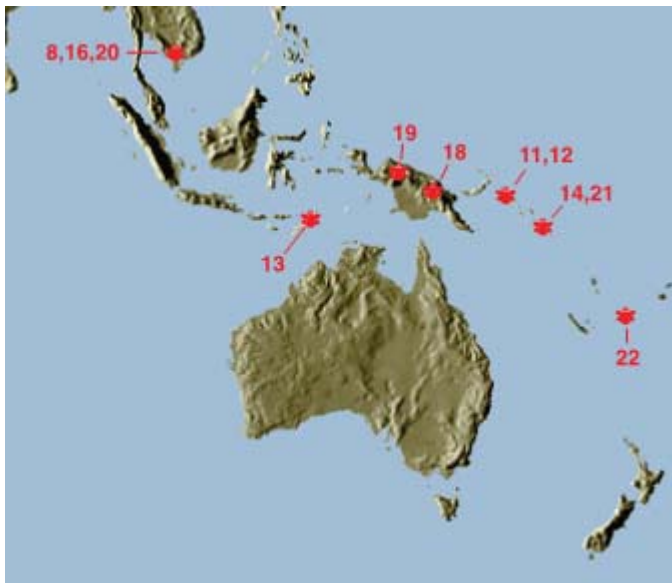


Fig. 3. Australian Defence Force involvement in overseas humanitarian relief, evacuations, peace-keeping and peace-enforcement operations 1990-2000. (Excerpted from (10)).

The vastly more populated and economically significant southern half of Australia is not an attractive target for hostilities. Its relative remoteness and the vastness of the oceans flanking the nation’s west, south and east provide a natural protection that the north does not have (11).

Clearly, appreciation of the strategic importance of the north in Australia’s defence is not a passing fad. For almost 70 years it has dominated our defence culture and for almost 40 years it has materially informed the defence policy of successive governments of all political persuasions.

1.4 THE GEOGRAPHY OF DEFENCE IN THE NORTH

To understand how defence has in the past and could in future impact on development in northern Australia, it is necessary to understand its geographic footprint and outlook.

Based on current or foreseeable trajectories, Cape York is unlikely to host significant military development. Its eastern flank is protected by the virtually unnavigable Great Barrier Reef and its western approaches are similarly problematic for significant naval craft. Furthermore, Cape York would be easy to defend in the event of a hostile lodgement. While poor infrastructure (the absence of all-weather roads and railways) would impede the projection of terrestrial power north of the Cairns-Normanton line, the long, narrow and generally flat topography would favour defence. As a

consequence, it does not make an attractive site for hostility and is more important as a forward base for Australian operations than as a site for major hostility (11). This explains why it hosts the bare air base RAAF Scherger, near Weipa, rather than a populated facility.

The western and central Kimberley does not require significant military forces for defence: their difficult terrain is sufficient. Similarly, Darwin's eastern approach and Katherine's northern approach are particularly well protected by rugged terrain, frequent flooding and poor roads. This lack of development also protects against river-borne invasion: penetration of rivers may allow a hostile force to penetrate inland but provides no reliable access to supporting infrastructure (11).

Consequently, the Darwin-Katherine axis is the vital keystone in Australia's defence. Darwin is the only base from which we can seek to control the seas (South China, Arafura) to our north. It can provide a base for counter-strike to hostile forces and it can provide strategic depth to allies in the north in the event of hostilities in their territories. On the other hand, Darwin's deep water port and access to infrastructure and airfields can support lodgement and subsequent extension of hostile forces.

Katherine is critical because it is the point at which western, southern and eastern terrestrial approaches to Darwin converge. Its bridges are critical to crossing the Katherine River and it provides a base for the defence of Darwin. Should Darwin be attacked, Katherine becomes critical for each of the opposing forces (11). The critical importance of the Darwin-Katherine axis for protection and peace time passive projection has informed Australia's defence strategy since the 1970s, most actively since the late 1980s when larger scale garrisoning of the north began in earnest. This has occurred via the expansion of RAAF Darwin and the formation of HMAS Coonawarra (Darwin, 1975), RAAF Tindal (Katherine) as an operational air base (1989) and Robertson Barracks (Palmerston, 1995).

Garrisoning of the north within the strategic corridor will remain a crucial component of Australia's defence strategy for the foreseeable future, and is therefore likely to witness further development in line with Australia's projections for increased military spending (9).

1.5 THE DEFENCE FORCE FOOTPRINT IN THE NORTH TODAY

The Australian Defence Force exerts a significant footprint in northern Australia through employment, economic development and infrastructure, through its land holdings and through its commitment to civilian assistance.

1.5.1 Employment

Defence is a major source of direct and indirect employment for Indigenous and non-Indigenous people of the north.

As at June 2008, defence personnel and their dependants in northern Australia numbered >13,100. They comprised 6 per cent of the population of the NT and defence personnel contributed 5 per cent of the NT workforce (NASC). RAAF Tindal, for example, provides >630 direct and *ca* 190 indirect jobs in Katherine, adding *ca* \$20m to the local economy (12).

Defence has been the biggest single employer of Indigenous Australians (13) and remains their second biggest employer in the NT, after the NT public service (14). Indigenous enlistments of *ca* 1,200 appear to have been maintained from 2000-2008 (13) (15), and the defence forces seek to

increase this via their Indigenous Recruitment Strategy (16). Approximately 450 Indigenous are attached to the Regional Force Surveillance Units (RFSUs) 'NORFORCE' and the 51st Far North Queensland Regiment, which comprise *ca* 40 per cent of defence's total Indigenous participation. The RFSUs commenced in 1981 and appear to have remained an attractive employment option because there is a good match of job requirements with Indigenous skills and they provide for flexible and adaptive part time work (150-200 days per year) (15).

Partners of Defence force employees are important contributors to the skilled workforce of northern Australia. 56 per cent of partners who do not work for Defence have full time work, 48 per cent have formal qualifications, and 22 per cent are undertaking some form of study (14).

Australia's defence industries employ almost 15,000 people, and it is estimated that the north supports *ca* 3 per cent of these, or <500 people (17).

Skills development is both required for and supported by Defence in the north. Despite the fact that the proportion of northern Australians with post-secondary qualifications is comparable with the rest of Australia, there remain challenges in attracting, retaining and managing a workforce suitable for Defence support. The NT Government has noted that there is no systematic mapping of skills needs and gaps for defence.

1.5.2 Economic development

Whether or not defence expenditure continues the 11 per cent pa growth that it has shown since 1995 (14) it will remain a major contributor to the economic development of the North, through direct and indirect defence expenditure.

Defence contributes significantly to the economic development of the north not only through the direct employment of *ca* 5 per cent of the workforce, but through expenditure on infrastructure and recurrent expenditure on goods and services. Its importance to the Territory's economy is recognised explicitly via the dedicated Ministry of Defence Support and the Defence Support Division of the Department of Business and Employment.

In the Northern Territory, where the north's defence expenditure is concentrated, recurrent defence expenditure exceeds \$1 billion, or 8.1% of NT gross state product. Approximately \$480 million is spent on defence personnel wages and *ca* \$540 million on operational items such as ammunition, transport, catering and office supplies, cleaning, etc. An additional \$200 million is spent by Defence on NT-based industry via contracts related to infrastructure (12). While Defence contracts are not the major proportion of most business' turnover, they are important in providing a reliable and consistent demand that provides a critical foundation for small to medium businesses (18).

Economic modelling has shown that the total contribution of a defence base to a regional economy is typically about twice that of the base's direct contribution (19). This is a much larger 'multiplier' than occurs for other forms of development because defence bases are usually labour intensive and most of the labour lives and spends money in the region – economic 'leakage' is small. Secondly, the linkages between bases and regional economies tend to be strong because the resources required for daily operations are typically locally-sourced.

The ADF's facilities are widely used by the forces of our defence partners, which injects further income into regional economies. Bradshaw Field Training Area frequently fields visits and exercises,

and Darwin is Australia's busiest naval port, hosting *ca* 60 major fleet visits each year for both naval exercises and to provide rest and relaxation.

The NT Government has plans for increasing the contribution made to Defence by the Territory's people and businesses. They focus on providing equipment life-support (maintenance, repair and upgrades), but include defence-related manufacturing and assembly, integration and testing of defence platforms (12). The NT Government hopes to promote these activities by fostering clustering of skills in close proximity to defence establishments, using facilities such as the Defence Support Hub to be based adjacent to Robertson Barracks (17). This matches the Federal Government's directive that Defence cluster its bases with industry (20). Further, the NT Government hopes that Defence reciprocates by locating System Program Offices (SPOs) in the NT, rather than in Canberra or Melbourne; it recognises that devolved SPOs are more likely to use local industry.

1.5.3 Infrastructure

Establishing clearer links between military and civilian infrastructure needs and benefits will help to create significantly greater efficiency in infrastructure planning, investment and use. This, in turn, is likely to increase the volume and value of infrastructure in northern Australia.

Defence has a critical interest in the development of regional infrastructure (21), both shared with the civilian population and for its exclusive use. It is important to note that Defence sees itself as a user rather than a co-developer of civilian infrastructure and, as such, sees deficiencies in infrastructure as a reason to avoid a region rather than a motivation to enhance it. However, the location of Defence facilities in a region naturally leads to improved infrastructure.

For example, Defence Housing Australia manages *ca* 2,300 dwellings in the NT alone, more than half of which are 'off-base'. Many of the off-base developments are associated with the creation of new suburbs such as Lyons and Muirhead in Darwin, in which Defence typically owns about half the dwellings (14).

As of 2008, several hundred million dollars of 'on-base' developments for exclusive military use were planned for the NT (14), with the Federal Government budgeting \$29 m for expenditure in northern Australia in 08-09 (22) and *ca* \$160m in 09-10 (23).

The interaction between civil and military infrastructure is necessarily great. Despite the garrisoning of the north outlined above, there still exists a gap between the most likely location of hostile threat (the Darwin-Katherine axis) and the location of military force required to oppose it (*ca* 90% of which is not in that axis). To support our forces in the event of hostile contingency, the military must deliver large tonnes rapidly over long distances and for long periods, and flexibility in routing and re-routing forces is required for rapid defence deployment (24). Furthermore, the small size of Australia's military staffing and infrastructure means that effective deployment of force requires a high level of civil-military cooperation. This is not confined to the physical use of hard infrastructure, such as roads, pipelines, railroads, ports and ship repair facilities. It also includes access to soft infrastructure, such as the local knowledge required to comprehend regional infrastructure and landscapes, identify trafficable land routes (see section 1.7 REGIONAL POPULATION AND DEFENCE OF THE NORTH) and to identify and locate threats.

The interaction between civil and military infrastructure is frequently difficult to define because when ownership and use are separated there are no clear responsibilities for planning, investment, deployment or reporting. This separation has, historically, led to poor coordination of civil and

military infrastructure. (25) provides several examples of inefficient investment in civil and military infrastructure caused by a lack of coordination (e.g. redundancy unintentionally built in to ship repair facilities in Darwin; and missed leveraging opportunities in the design and construction of the Alice Springs-Darwin natural gas pipeline). It's suggested that coordination could be enhanced if civil developments were submitted to Defence for assessment of their military impacts in much the same way as they are already assessed for environmental impact. Conversely, it's suggested that, subject to security constraints, Defence development plans should be canvassed with civil authorities.

It appears that some degree of coordination occurred via the institution of the National Support Division of Defence (1997), charged with providing Defence input into national infrastructure initiatives (21). This was subsequently subsumed by the Defence Material Organisation and it is not clear whether that role has continued.

The siloing of budgets that naturally occurs in bureaucracies militates against coordinated civilian-defence infrastructure planning, even where the benefit is clear and large. For example, the Defence budget did not contribute to the construction of the Darwin rail link despite its significant defence benefit and use. The impact of this phenomenon extends beyond the obvious: according to (25) funds spent on the railway could provide many times their cash value to the military through their capacity to increase the efficiency with which force is deployed. This efficiency gain, purchased using civilian funds, has been used to enhance defence spending power. This transfer may not in itself be a major problem. However, the inability to transparently identify and account for it in advance, by obscuring the links between purchaser and beneficiary, is likely to retard or prevent development where there are multiple (i.e. civilian and military) beneficiaries.

1.5.4 Land holdings

The Department of Defence manages over 17,900 km² of northern Australia, the importance of which is not diminished by the fact that this is about 1 per cent of the region's area.

The majority of this areal footprint is contributed by the Bradshaw Field Training area, an area of some 8,700 km² bounded by the Victoria and Fitzmaurice Rivers and the Bonaparte Gulf, *ca* 600 km southwest of Darwin. This land was, until 1995, part of one of the NT's largest cattle stations. It is now managed by the ADF, which has added significant infrastructure (i.e. over 300 km of unsealed roads and two 1,550m airstrips) (26).

Yampi Sound Training Area consists of *ca* 5,600 km², 130 km northwest of Derby by road. Formerly comprising Kimbolton and Oobagooma Stations, it was acquired by Defence in 1978 for use as a training area (27), for which it has received little use (28) largely owing to the fact that it is difficult to access and is unsuitable for mechanised operations (29). Its poor fit with military exercise needs apparently led to the purchase of Bradshaw Field Training Area (29). This limited use, combined with an almost total lack of Defence infrastructure and the removal of introduced animals, has helped to make Yampi Sound Training Area a place of extremely high natural heritage value (27). Situated at the confluence of three distinct bioregions, Yampi displays an unusual richness of faunal associations and vegetation communities, amongst them a number of threatened or endangered species and species confined to small refugial habitats (27).

The Delamere Air Weapons Range is an area of *ca* 2,100 km² *ca* 600 km south of Darwin. It is one of the world's only weapons ranges available for use of all types of conventional weapons. It is therefore used by Australia and a wide range of its defence partners (30).

The Mount Bunday Training Area (*ca* 1,100 km²) is *ca* 120 km southeast of Darwin. It was commercially grazed until the mid 1980s, was acquired by the Commonwealth in 1988 and was made available for training in 1992. It is used primarily by the 2nd Cavalry Regiment (armoured vehicles) and NORFORCE troops (31).

Operational establishments of the ADF in northern Australia include RAAF Curtin, Darwin Tindal, and Scherger, Robertson and Larrakeyah Barracks, and HMAS Coonawarra.

Defence manages its holdings according to an Environmental Management System that conforms to International Standards Organisation requirements (ISO 14001: 2004) (32). It seeks to uphold high standards of environmental management not only to meet regulatory requirements, but simply because environmental maintenance and enhancement will provide it with continued access to the superior environments that it needs to ensure high quality training.

Amongst extensive land managers, Defence is unusually well resourced to understand its environment (33) and threatened species (34) to develop and implement management plans and monitor and evaluate their performance (35). As a consequence, more is understood about the environmental impacts of Defence than almost any other single land manager. The indications are that those impacts are relatively benign and well-managed.

Examination of northern Australia training activities shows that their local-scale impact on flora, fauna, soils and water quality is minor; they use <5 per cent of the training area and “directly represent minimal risk to overall environment management goals” (36). Provided they are recognised, the observed local impacts of reduced groundcover (mainly weed invasion and erosion) can be managed to prevent their indirect impact at larger scales. The large-scale impacts, even of tank traffic, appear to be minor and are certainly not comparable with those of grazing.

The environmental management interests of Defence extend beyond simply limiting the impacts of their activities, to ensuring that environment-related threats such as dengue fever are controlled and that heritage sites on Defence land are preserved and afforded appropriate public access (35).

There is every indication that the Defence estate is managed to a very high standard of environmental stewardship, and probably sets a benchmark for the region. Nevertheless, further details of the negative impacts of Defence can be found in section 1.10 below.

1.6 CIVILIAN ASSISTANCE

Defence operations have changed markedly in character over the last 10 years. While the role of Defence has never simply been to meet hostile threats, it has never before more explicitly engaged with broader national objectives, domestically or internationally.

The Force’s adoption of the operational philosophy of Adaptive Campaigning (37) has seen a marked shift away from the traditional role of militarily defeating opposing and disruptive forces towards providing a military contribution to a whole of government approach to resolving problems and conflicts (38). This requires and enables the Forces to engage much more closely with communities – not simply to ‘win hearts and minds’ but to create the social capital required for the (re)establishment of civil society and to enhance the success of future societies (39). This is now central to the goals and function of Defence, particularly the Army (37).

As a consequence, the Army has never before been more ready or able to use non-combat operations to engage with and assist civilian society, domestically or internationally. Indeed, domestic operations provide a valuable recruiting and training ground for Defence, from which domestic participants derive considerable benefit. These benefits fall into several categories.

The ADF routinely supports the civilian community by loaning equipment, expertise and manpower (40). For example, Army medical units were performing eye surgery amongst Indigenous communities in 1981, long before Fred Hollows gave the cause publicity (39). The best known example of 'routine' (non-emergency) civilian assistance in northern Australia is the ATSIC Army Community Assistance Program (AACAP). Since 1996 AACAP has used Defence resources to improve the primary and environmental health and living standards of remote Indigenous communities, especially those that require Defence's unique range of services (41). To this end, each project comprises construction, health and training components. Construction typically develops environmental health infrastructure such as housing, water, sewerage and electrical services. It also improves access to primary health services by constructing or upgrading roads or airfields. Health activity focuses on enhancing existing community medical, dental and veterinary programs. Training aims to provide the community with skills such as construction and building maintenance, vehicle and small engine maintenance, welding, concreting and cooking (42). Since 1997, more than \$55 million has been provided for the project by the Department of Families, and Housing, Community Services and Indigenous Affairs (41), and this has been used to support 15 communities in northern Australia (Fig. 4) (43).

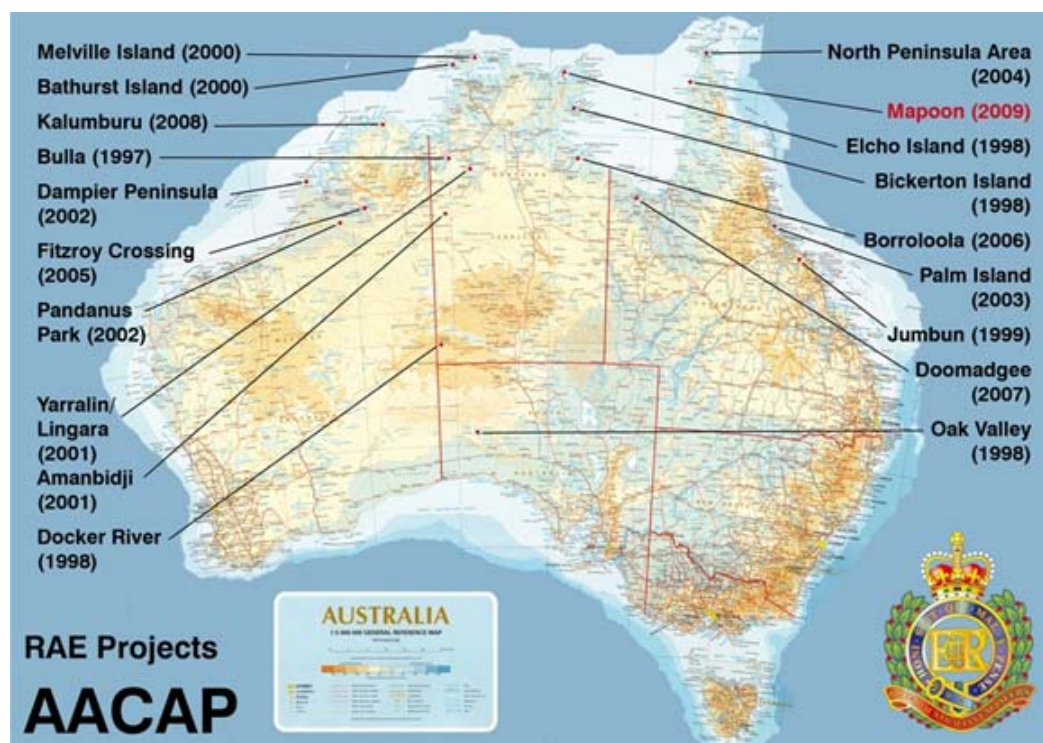


Fig. 4. Participation in AACAP projects in remote Indigenous communities, 1997-2009 (43).

Funding for the initiative has been secured until 2009 and is likely to be ongoing (44).

The ADF plays a significant role in disaster relief operations. While each jurisdiction notes that Defence is primarily for defence, and is to be used for civilian relief only in exceptional circumstances (45) (46) (47), history shows that exceptional circumstances occur with exceptional frequency. Over the last 5 years, Defence has contributed materially to an annual average of over 700 civilian community assistance requests, of which more than 20 have involved emergency assistance and

more than 10 have involved search and rescue services (Department of Defence Annual Reports, 2004-2008). While figures for northern Australia are not available, the prevalence of floods, cyclones and the contributing factor of remoteness suggest that the contribution of Defence to civilian communities in northern Australia is large.

At no time has this been more apparent than in 1974 when, in response to Cyclone Tracy, Defence conducted the largest relief operation in Australia's history, evacuating ca 35,000 people in ca 1 week and providing supplies for the 10,000 remaining citizens and relief workers (48).

Defence can also play an important role in public health, and has been called upon to provide mass inoculations against infectious diseases, because it can react more quickly at a larger scale than civilian medical agencies (40). This may be important in northern Australia due to its proximity to potential disease routes and sources and the remoteness of many of its communities from established medical facilities.

Australia has no coast guard and relies on Defence to protect its territorial waters and coastal approaches. This assists the civilian population largely by preserving its access to stock and the freedom to operate within its fishing grounds. Both of these threaten the North's ca \$1.5b pa fishing industry through competition for fish (up to several hundred illegal fishing vessels are apprehended each year (49), and many more evade detection (40)) and the apparently growing risk of piracy (40).

Northern Australia's remoteness from supporting infrastructure, proximity to our northern neighbours and exposure to extreme events such as cyclones and floods makes it more reliant than the rest of Australia on the civilian community assistance provided by Defence.

1.7 REGIONAL POPULATION AND DEFENCE OF THE NORTH

Contrary to popular belief, we do not need population scattered across Australia to defend ourselves against an invading force. The inhospitable landscape and scarce infrastructure provides effective defence of much of the north without human intervention and, in any case, dispersed resources cannot be concentrated when and where they are required - making them both ineffective and vulnerable.

The benefits of population in our defence are rather less direct. Population helps to prevent the North's apparent assets being seen as vulnerabilities. It also helps to protect against the much more likely (than invasion) threat of harassment which, if at all probable, is most likely to be perpetrated by small groups sallying from our northern neighbours (11). Local 'eyes and ears' are useful for providing intelligence of these activities and to support security initiatives related to customs, biosecurity and immigration breaches. The North's scarcity of all-weather roads makes local knowledge of trafficable routes invaluable, especially in the wet (October-February), during which many lowland tracks become boggy and uplands often transmit impassable torrents (24).

Clearly a civilian population is also required to supply the skills and labour that support our defence forces during peace and defence contingencies (outlined in Section 1.5.1 *Employment*, above).

1.8 WHAT ARE THE LIKELY DEVELOPMENT TRAJECTORIES FOR DEFENCE IN NORTHERN AUSTRALIA?

The importance of Defence in the development of the North is likely to increase with time as a result of the combined effects of increased supply and demand.

Supply of Defence in the North is likely to increase as a result of the increased Defence spending proposed in the 2009 Defence White Paper, and the re-affirmation of the centrality of northern Australia in our national defence strategy: “we need to maintain a strong capability to project military power from mounting and forward operating bases in northern Australia...and a capacity for surveillance of our northern approaches” (9). These statements are not accompanied by specifics, beyond outlines for improvement to Darwin’s naval infrastructure (9). Whether or not this means that the current trajectory of defence expenditure in the north (11 per cent p.a. increase since 1995) (14) is maintained or is to plateau is not explicit, but given the general increase predicted for defence expenditure it would be reasonable to assume continued growth.

The NT Government believes that growth will continue at its present rate for the foreseeable future (17). If this were to occur, defence would not only grow in itself, but its share of the northern Australian economy would increase significantly. Over a 10-year period the present 11 per cent pa growth in Defence spending in NT compounds to a 2.8-fold increase in investment. By contrast, the average rate of growth for northern Australia over the same period (*ca* 4 per cent) provides a 1.5-fold increase in investment. Projecting these rates of growth would see defence comprising 15 per cent of Territory GDP in a decade, roughly double its present contribution. This would materially increase the employment, economic development, infrastructure and possibly land holding contributions of Defence, outlined above.

These figures are based on direct and current defence expenditure. As outlined in section 1.5.2 *Economic development* (above), it is conceivable that Defence-related spending could comprise up to twice this (30 per cent) of the Territory economy by 2020.

Demand for Defence in the North is not likely to increase as a result of major hostile threats. It is likely to increase as a result of the accumulation of a series of minor challenges, such as people smuggling, illegal fishing, drug trade, pandemic disease outbreaks and quarantine breaches (9).

Climate change is a useful lens through which to examine some of the more likely challenges that will increase the demand for Defence in the North, both external and domestic.

By 2030, external pressures caused by climate change are likely to lead to ‘climate refugees’ seeking entry to Australia via its northern borders. This poses potential problems for national security but also for biosecurity hazards such as human and animal diseases, the introduction of which may directly affect the North’s population.

Sea level rises will drastically increase the likelihood of flooding in places such as Bangkok, the Mekong Delta and western and eastern Java, and flooding is likely to increase in most of the Philippines (50). Bangladesh has most of its 150 million people living on its low-lying coastline and is particularly vulnerable to sea level rise (48). Changes in sea temperature are already causing a southern migration of equatorial fish stocks, increasing the impact of over-fishing and the likelihood of incursions into Australia’s northern waters.

Droughts will impact northwest Viet Nam, southern Thailand and Sabah (Malaysia), increasing pressure on high density populations and making migration more attractive for many communities. In addition, climate change is predicted to act more broadly as a threat multiplier for instability in our region, intensifying conflict between states and inducing migration (48).

Domestic pressures exerted by climate change may rise due to an increase in the number and intensity of tropical cyclones and storm surges, more extreme rainfall events leading to flooding, and altered fire regimes leading to more intense bushfires (51). As outlined above, the North already draws significantly on Defence in times of natural disaster, and this requirement is likely to increase in future, making regionally located defence forces attractive.

1.9 LIKELY POSITIVE OR INTENDED CONSEQUENCES OF INCREASED DEFENCE DEVELOPMENT IN NORTHERN AUSTRALIA

As outlined above, if current growth trajectories for regional and defence economies continue, the contribution of Defence to the economy of the NT – the jurisdiction in northern Australia with the greatest exposure to Defence – will approximately double. This would clearly increase both the number and range of employment opportunities available in the North, in both the Defence-direct and defence support sectors. “Defence will seek to maximise spending in local defence industry” and will “adopt procurement and industry strategies to grow local industry capacity and competitiveness” (9). Major growth is possible, particularly in the service and trade sectors being targeted by the NT Department of Defence Support (see section 1.5.2 *Economic development*, above).

It should be noted that a doubling of Defence spending in a region is unlikely to result in a doubling of defence-related employment. This occurs for many reasons, one of which is that the like-for-like cost of defence equipment (e.g. the cost of a submarine, or destroyer) increases by *ca* 7 per cent pa, in real dollars (5). This results in equipment consuming a growing proportion of the defence budget, and only a small part of this added cost is embodied in regional employment.

Many new Defence-direct employment opportunities are being directed towards Indigenous people. Defence has embarked upon a vigorous campaign of Indigenous engagement and recruitment, outlined in its Indigenous Recruitment Strategy (16) and supported by the Defence Reconciliation Plan (52). The strategy is based on three themes that aim to increase recruitment and retention: changing perceptions of Defence; providing specialised pathways to ADF service; and providing ongoing support to Indigenous members. A wide range of pathways to the ADF have been opened, including the Defence Indigenous Development Program (53), Defence Indigenous Cadetship Project (54), Defence Science Indigenous Scholarship (55) and Defence Indigenous Pre-recruitment Course (56).

Defence is clear in its view that it is primarily a user rather than a supplier of civilian infrastructure (21). Its infrastructure decisions “are typically not influenced by the potential for development of a region, and it should be regarded as a user and a follower rather than a provider/administrator of regional development.” Notwithstanding that reality, a Defence presence encourages regional infrastructure investment in: the provision and distribution of fuel; communications and Information Technology services; ports, harbours, roads and railways; health care facilities; access to major water and electricity utilities; and food supplies.

Other benefits associated with an enlarged Defence presence include cultural contributions such as those to sporting teams and other community groups, and closer proximity to assistance services in the events of a disaster.

As outlined in section 1.5.4 *Land holdings (above)*, Defence has an excellent record of environmental management and is usually a more benign influence on the biodiversity and resource status of a landscape (e.g. water quality, soil erosion) than competing land uses.

1.10 LIKELY NEGATIVE OR UNINTENDED CONSEQUENCES OF INCREASED DEFENCE DEVELOPMENT IN NORTHERN AUSTRALIA

The impact of increased Defence development in northern Australia is likely to be felt at two disjunct levels: those occurring during 'normal' operations and those occurring during 'special events' such as exercises, the latter of which can involve the convergence of up to 30,000 personnel and associated equipment (57).

During normal operations the local and material negative consequences of increased military development are primarily noise associated with vehicle movements (21) and impaired public access to land and water bodies. A 'diffuse' and global negative consequence of increased military presence is its large contribution to greenhouse gas emissions; Defence uses almost 4 million GJ of energy, or *ca* 54 per cent of the Commonwealth's total (35).

Defence tends to relocate its people with some regularity, somewhat reducing their capacity to engage with the broader civilian community. Increases in Defence personnel can therefore change the social dynamic of regional towns and cities.

Climate change may reduce the suitability of training areas for Defence purposes, whether this occurs through degradation or via the opposing force - that they become islands of biodiversity refuge (such as Yampi). Either eventuality may render existing training areas unsuitable for Defence, resulting in the acquisition of new training areas in more suitable regions – with the accompanying local consequences.

During exercises, the potential negative consequences of Defence presence escalates dramatically, because of both the scale and largely foreign (e.g. US, Singapore) nature of activity. 'Military personnel and their equipment pose a high quarantine risk to Australia due to the environment in which they train and operate' (58), and as a consequence AQIS imposes strict guidelines that ensure (the often offshore, pre-arrival) inspection of all military equipment and the personal effects of all military personnel (59). They also enforce the benign management of waste (60).

Defence operates on a 'no footprint' policy for exercises, which involves strict before and after monitoring of environmental conditions, the enforcement of detailed environmental incident management protocols and the rehabilitation of all disturbed sites. These protocols are extensively detailed for each major exercise, such as Talisman Saber 2009, (61) and include management for noise, fire, weeds, contamination of land and water, disturbance of flora and fauna and even the low probability of aircraft crashes.

It is important to note that, despite contrary public perceptions, the footprint of high explosives in Defence training areas is very small, typically around 0.03 per cent of a training area (62), or equivalent to <3 ha in Bradshaw Field Training Area, for example. Depleted uranium and other 'toxic' weapons cannot be used in Australia.

The participation of the United States Defence Forces in exercises and other visits can involve the presence of nuclear powered vessels, which apparently pose very low specific risk. The impacts of negative public perceptions of nuclear vessels and other Defence activities on factors such as tourism are not known (62).

1.11 WHAT PRINCIPLES, PRACTICES OR POLICIES CAN BE APPLIED TO PROMOTE THE POSITIVE CONSEQUENCES ARISING FROM DEVELOPMENT OF DEFENCE IN NORTHERN AUSTRALIA?

Public awareness of the role of Defence in the development of the North is not commensurate with its impact. While the NT Government is clearly aware of the benefits of actively engaging with defence-related industries, and has created a Ministry devoted to exploring and exploiting them (Ministry of Defence Support; see Section 1.5.2 *Economic development*, above), the supply of private enterprise activity appears to lag demand. Promoting awareness of the large presence, business needs and growth prospects of Defence in northern Australia may help to stimulate private investment.

The NT Government has identified a range of policies and practices designed to raise mutual awareness of Defence needs and industry opportunities. These are detailed in their Defence Support Industry Development Strategy (18), and include workforce development, building business capability, linking industry to opportunity, profiling and promoting industry capability, developing strategic infrastructure, establishing strategic partnerships and increasing research and development investment. The success of these measures will become apparent, or not, in the future; the strategy is in its infancy.

Questions of Indigenous employment often revolve around the apparent need to create, value and invest in demand for Indigenous skills. The Defence force appears to be in the unusual position of already satisfying these criteria; indeed, it has an unmet demand for Indigenous recruits and a raft of initiatives designed to encourage increased Indigenous employment. More fully recognising this opportunity could have a wide range of benefits for Indigenous people.

Defence is exceptionally keen to act as a 'good citizen' in the community and, in many areas, is a leading practitioner of corporate good practice. It is in most instances held to account for its actions according to the normal regulations governing civilian society (e.g. see pages 17 & 18 of the Talisman Saber 2009 Environmental Report for >40 Acts for which they demonstrate environmental compliance) (61). As a consequence it is likely that Defence will often actively seek to promote the positive consequences arising from their development footprint.

1.12 WHAT PRINCIPLES, PRACTICES OR POLICIES CAN BE APPLIED TO DISCOURAGE THE NEGATIVE CONSEQUENCES ARISING FROM DEVELOPMENT OF DEFENCE IN NORTHERN AUSTRALIA?

There is significant scrutiny and regulation of, and accountability for, Defence activity. Regular reviews of their public impact ensure that many of the negative consequences are understood and management deficiencies are identified. For example, the finding that there was 'scope for significant improvement' in Defence's environmental management led to the development of their now-comprehensive Environmental Policy (63), that is used to help reduce the number of 'harmful' activities undertaken and to reduce the risk/impact of those that cannot be avoided. Given the extensive 'civilian' regulatory frameworks with which Defence must already comply, it is difficult to see significant scope for additional Defence-specific principles, policies or practices that discourage the negative consequences of their activity. Many of these are understood and appear to be managed adequately.

1.13 ARE THERE ANY CRITICAL KNOWLEDGE GAPS THAT MAY IMPEDE THE OPTIMUM APPLICATION OF THE PRINCIPLES, POLICIES OR PRACTICES OUTLINED ABOVE?

None have been identified that relate to the terms of reference of this review.

1.14 SUMMARY

Defence activities do not seem to closely match the 'watery' terms of reference of this review, but they have been included here because it is not possible to adequately discuss the development of the North whilst ignoring them.

Defence is, and will seemingly forever remain, a critical part of Northern Australia due to its strategic, economic, social and environmental importance. This importance is growing; in economic terms Defence has, for over a decade, grown at almost three times the rate of the general economy of the Northern Territory. Its capacity to directly and indirectly create development opportunities and pressures will only increase.

Defence, for reasons of national security as well as established culture, marches to its own drum to a significant extent. Appreciating its direction and trajectory will help to consider and undertake development opportunities for northern Australia that exploit its considerable momentum.

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