

## FUTURE DEFENCE DEMOGRAPHICS: AN UNCERTAIN PROSPECT

Long gone are the days when a drunken night at the tavern could result in an exciting new career in the Royal Navy. Nor is there any indication that we are likely to require a defence force comparable to that of the two World Wars when Australia raised a force of 416,000 from a population of five million and 20 years later a force of nearly one million from a population of 7 million.

Nor is it likely that the Australian Government could consider conscripting its citizens into the military without there being a significant and discernable direct threat to Australia itself. The ADF, therefore, is almost certainly to remain an entirely volunteer force.

The challenge we face is to determine what we want our defence force to do and how we will be able to attract and retain sufficient suitable people. Because without adequate numbers, the ADF cannot function and our government will not be able to use effectively its military element of power.

Defence does not, in my opinion, have a particularly sound track record of identifying the types of force structure it requires to satisfy future needs. In fairness no does this particularly well. Determining the size and shape of a future defence force is complex and uncertain. What the government wants from its defence force, and how it will use it, is dependant on numerous factors that are extremely unpredictable.

Indeed, looking back over the last 100 years, Australia's national defence strategy has undergone a number of radical changes.

For the first 45 years, until the fall of Singapore, it had an imperial design where decisions taken in Whitehall or by the British Chiefs' of Staff Committee undoubtedly influenced our thinking. Through this process we took part in two world wars.

Sometime after World War II, we adopted a strategy of forward defence. Here we sought to engage future enemies off shore, usually in coalition with a powerful ally such as the United Kingdom or increasingly the United States. This would see us engaged in the Korean War, the Malayan Emergency, Confrontation with Indonesia and, of course, the Vietnam War.

The end of the Vietnam War resulted, almost by national consensus, in a determination not to become involved again in any foreign military adventure where the national security of Australia was not directly threatened. Instead we would design and commit forces only for the defence of Australia.

Initially this would be based on a concept of continental defence where we actually fought our future enemies on our homeland. Over time this would change to a form of maritime defence where we sought to defeat our would-be invaders in the sea-air gap to our north. This would result in defence expenditure leaning heavily towards capital investment in air and naval platforms. Our doctrine would move away, in Army's terms, from counter-revolutionary warfare to conventional war, the concepts for mobilisation would give way to that of a force in being and there would be considerable emphasis on training in all parts of northern Australia.

Throughout the 90s, however, many started to question this approach. In that decade, leading up to the deployment to East Timor, Defence either readied forces for overseas deployment, or actually deployed, on about 25 occasions. In almost all cases army units, sometimes supported by air and naval transport elements, largely did this. And yet, throughout that decade, the Army had reduced its strength by about a third.

The repeated judgement by many of those responsible for strategic formulation, particularly in the civil bureaucracy, was that forces designed for the maritime aspects of Defence of Australia could be adapted to meet lesser conflicts such as peacekeeping and peace enforcement. Unfortunately forces designed for the Defence of Australia had the capacity to threaten to use heavy firepower, or to actually use it, and not much in between. The reality, however, was that the types of forces required – largely for peacekeeping and other low intensity operations – were labour intensive ground forces requiring limited firepower.

The government began to reconsider the wider use of its military element of power towards the late 90s and many inadequacies were exposed by our deployment to East Timor. Had there been a stiffer opposition, or the need to deploy sizeable forces for a longer period, Defence would have been hard pressed to do so. Indeed, the previous decade's strategy of constantly downsizing, where this issue above all else dominated much of our time and consideration, now began to reap its true rewards.

Today Defence is in an ambiguous position where an attack on our mainland remains our greatest concern but is also recognised as our least likely immediate threat. Nor have we evoked an expeditionary policy despite deployments to Afghanistan and the Middle East. And to widen the spectrum for the use of military force, we have sought to prop up a failing South Pacific nation and of course become involved in the global phenomenon of Islamist extremism.

And all this relates to a current situation. Attempting to extrapolate this to the future is a major challenge.

Over the next two or three decades, we will see the continuing rise of China and India as economic powers, competition in northeast Asia between Japan, China and the United States, a decline or reinvigoration of US global influence, the spread of weapons of mass destruction, increased competition for scarcer power resources, the possibility of global climate change, a continuation of global Islamist extremism, a continuing decline in the ability of a number of nations to sustain themselves, to say nothing of an increase in international crime, arms marketing and the illegal movement of people. Of course some or none of these may happen and I may well have missed a significant outcome. But this gives you some idea of what policy makers face when they attempt to design a defence force for the future.

It is not unreasonable, therefore, to see future strategy as a serious exercise in risk management as it is impossible to guard against all contingencies even assuming that we could afford to do so.

Nor are our policy makers helped by the fact that many capabilities take a generation to acquire. And once deployed, governments either design their strategies around

their existing capabilities or adapt these capabilities that may remain in service for up to 50 years.

There is another way of approaching this issue and that relates purely to affordability. While some may deny this, I have no doubt that it is the major determinant in force structure and not concern for a threat or any other factor. Indeed, a Defence document, *Report of the Strategic Workforce Planning Review 2003*, states unequivocally: “*For purposes or workforce planning, more money for personnel is mostly an unrealistic option.*” It goes on to state: “*Workforce planning in Defence is concerned with achieving the affordable number of people having the requisite competencies to deliver capability outputs required by Government.*”

While the electorate generally, I think, retains a steady appetite for national security, competing demands such as health, education and infrastructure cannot be ignored. Security also is becoming more diverse in this age of terrorism as law enforcement, border protection and the general safety of our infrastructure and national facilities are seen as integral parts of our defence. As these are expensive and often unforecast issues, there will undoubtedly be a tightening of financial belts and defence may well be part of that process. At the very least defence assets may be used or resources allocated against other security outputs.

I suspect this is the lot of an aspiring middle power. Equally, though, our political masters and policy makers need to be aware that as the affordability of our defence capabilities falls, then too our acceptance of risk must rise. Said another way, there may well be a larger number of contingencies to which our government would be unable to respond or our troops could be placed at greater risk.

To complete this issue of affordability, we need both an estimate of future defence costs and the Commonwealth’s ability to pay. And finally, we need to understand whether the electorate is prepared to continue to pay an affordable and acceptable 2% of GDP or an uncomfortable 5% that may well be required to sustain our modest present level of capability.

This now brings me to the issue of people.

In addition to the use of military forces, based to a certain extent on the threats we may face to our national security, and the affordability of these forces, a major factor in determining our ability to operate effectively is that of attracting and retaining sufficient people who are suitable for service in our defence force.

It is hard to isolate long-term trends in defence recruitment and retention. Available data is skewed by ever-changing external factors. For example, while it is clear that the ADF had difficulty maintaining its numbers in the late 1990s, Defence was in the process of undergoing an unpopular restructure and there was frequent bad publicity about the nature of military life.

On the other hand, the more recent period of high profile and very successful military operations produced better results. Indeed, enquires to join the ADF in the year 2000, following our successful deployment to East Timor, jumped from 73,000 in the

previous year to 123,000. The fact that we were unable to capitalise on this significant jump in interest was largely one of affordability.

It is therefore difficult to identify an underlying trend independently of these factors. To complicate matters further, the conventional wisdom that recruitment and retention run counter to the prevailing economic conditions has not been reflected in recent results.

Australia's future demographics and emerging societal changes cannot be separated and are analysed in some detail in a recently published Defence report titled *Defence Personnel Environment Scan 2020*.

This report concludes that an analysis of both these factors suggests the ADF will find it increasingly difficult to maintain its presently projected strength of about 54,000 fulltime servicemen and women.

In some ways this is a surprising conclusion. After all the ADF makes only a modest demand on the Australian population. This involves less than 0.07% of those aged 17 to 45 with the annual recruitment figure of somewhere between 6,000 and 12,000 appearing to be a fraction of the 2.5 million in the same age group.

Our population, of course, will age significantly over the next 50 years as the rate of population growth slows. So how many people will be available for military service by mid-century? The answer, I think, depends on a number of assumptions about future rates of fertility, mortality and immigration.

These issues cannot be accurately determined. The Australian Bureau of Statistics identifies three alternative population projections based on a credible range of assumptions. Its central projection, which makes similar projections to those of the Treasury's 2002 Intergenerational Report, is that the number of people in the prime recruitment age bracket of 17 to 25 years will remain steady to about 2050. But at best this is a qualified assessment.

The Bureau's pessimistic assessment, for instance, projects the number to fall by 17 percent while its optimistic prediction sees a growth of 20 percent.

The results are similar for the 26-45 age group. This is the age group that the ADF must retain if it is to have a suitable level of experience in its senior NCO and middle ranking officer numbers. Here, the Bureau predicts a rise of between 4 to 5 percent with an optimistic forecast of a growth of 21% and a pessimistic fall of 13 %.

Therefore, for the ages relevant to the ADF, the central projection is the pool will remain largely unchanged although changes to the underlying assumptions could result in a change 20 % either way.

But raw population projections are only part of the picture. We also need to determine how many people in the employment age are likely to be available and willing to work.

The total participation rate – the percentage of 15 to 64 year olds either working or looking for work – has grown slowly over the past 20 years from around 69% to 74%. This figure is projected to rise slowly to about 75% mid-century. For people between 20 and 44, the projection is also for a slight increase, so that by 2050 their participation will be between 80% and 90% depending on age.

But this is not the whole story.

There have been two important trends in the composition of the workforce in recent decades.

Firstly, participation has shifted from males to females. For example, since 1980, the proportion of men aged 25 to 34 in the workforce has fallen from 96% to 92%, while the corresponding number of women has grown from 54% to 70%. The Treasury report assumes this trend will continue in the coming decades with participation rates in the age groups relevant to the ADF growing by 2% to 4% for females and falling by 1% to 2% for males.

Secondly, the proportion of people working part-time has grown. In the past decade the percentage of males working part-time grew from 10% to 15% and the percentage of females from 43% to 46% with only 22% wanting to work more hours. There are probably several reasons for this attitude. Older workers may be smoothing the transition to retirement, people are more actively balancing work and family life and there is a greater participation in education.

The last factor is particularly important to the ADF. Between 1992 and 2002, the proportion of 15 to 19 year olds in education rose from 73% to 77% while the proportion of 20 to 24 year olds rose from 27% to 37%. If these trends continue there will be fewer young people available for full-time service but there may be more for part-time service.

So far we have looked at the absolute numbers of people who may be available for full-time service. But it is also important to look at the likely future competition for workers. For instance, with an aging population, would there be an increasing demand for services to this age group? A reasonable conclusion is that the slowing growth in the labour-age population can only lead to a shortage of labour and that this can only make recruitment and retention more difficult.

Another factor is that of changing employment and lifestyle expectations. In recent years, much has been written about the so-called generations X and Y. These emerging generations are often said to have shorter attention spans, less commitment to employers, reduced tenure in jobs and a desire for diverse multiple careers. Technology, the Internet, globalisation and continuous change are increasingly shaping their attitudes. At the same time employment has moved to greater use of casual labour, increased outsourcing of non-core services and more family friendly employment practices.

But how will this affect Defence? Again, there is no certainty that societal developments can be projected into the future. The developments I have just described arose during a time of strong economic growth and falling unemployment.

If economic conditions were to be less favourable, then people might place a higher value on long-term stability. What is more certain is that the nature of work is changing and, that just as it did in the past, it will continue to do so in the future.

A reasonable, but pessimistic, conclusion is that motivation and fitness for military service among young people are likely to decline. It should also be recognised that military service requires a level of commitment uncommon in most aspects of civilian life.

Turning now to some internal developments within the ADF, some key trends are as follows:

- Every year since the early 1980s, apart from 1991 when we experienced a major recession, more people have left the services than have been enlisted. In part this was the result of the down sizing of the Defence Forces that saw numbers decline from a post-Vietnam War peak of 73,185 in 1983 to 50,785 in 2000. Such downsizing was partly the result of a deliberate policy of commercialisation, outsourcing and increased labour productivity. But in the year 1999 –2000, there were 4,309 enlistments compared to 6,007 separations and many of those leaving were highly skilled, resulting in serious shortages in such critical areas as pilots, aeronautical engineers, submariners, information technology related trades and avionics technicians.
- The decision to leave the ADF is likely to be caused by a number of factors, perhaps with one factor becoming the catalyst. The reason advanced by most people in their exit surveys is to make a career change while still young enough to do so. To a certain extent this is influenced by concerns that employers are less keen to employ people over 40 years of age. The next most significant factors are cited as a lack of job satisfaction and little reward for overtime.
- Family considerations are also important. The main issues are those supporting a partner's career and the education of teenage children. Some 66% of ADF partners/spouses are employed and many require geographic stability to foster a productive career. Many ADF members are also likely to reject a posting, or to serve unaccompanied, if their children are at a critical stage in their education, notably Year 10 or above.

The ADF will need to be responsive to the issues I have just highlighted and to a changing labour market. Work has started on many of these issues. Much has been spent in recent times to improve the attractiveness of military service to potential recruits and serving members alike.

Defence has enlisted private sector recruiting and advertising experience. Enlistments of trained personnel from abroad and more family-friendly initiatives have helped. But more needs to be done.

Nor is the ADF representative of gender and ethnicity. Although 73% of positions are open to both males and females, women make up just 13% of the permanent ADF. Over the past decade, this figure has grown by just half a percent. Equally telling is the fact that just one woman is among the 100-plus star-rank officers in the ADF.

The ethnic make-up of the ADF is not representative of modern Australia. While 16% of our population speak a language other than English at home, the same is true for only 5% of the ADF. Furthermore, while 17% of Australians were born outside Australia and the UK, only 7% of the ADF can make that claim.

I have spoken largely about the permanent members of the ADF, comprising the Army, Navy and Air Force whose current strength is around 50,000 and which is projected to rise to about 54,000.

The second component of Defence is the Reserve element. Numbering about 20,000, with 90% in the Army, the Reserves have experienced a significant reduction in numbers between 1995 and 2000. Army reservists have supplemented regular units with individuals in recent years, particularly for overseas deployments.

The Reserves have a generally older age structure than the permanent force and one that is progressively aging. This is especially so in the Navy and Air Force which consist largely of ex-service members.

The third component is that of the Public Service. Unlike their uniformed counterparts, they are recruited laterally from the ADF and other parts of the Australian Public Service. In 2000, they comprised 17,635, representing 15.6% of the Public Service.

Defence needs to look more closely at its image. A 2000 Defence study reports mixed messages with an array of confused, positive and negative images. While there are many positive statements of the skill and service of deployed members, too often news reflects cases of assaults, harassment and other negative issues. The report states: “*We have not come across a brand disaster of this intensity that had been allowed to run for so long.*”

People form the core of any defence force. As the 2000 Defence White Paper, *Defence 2000: Our Future Defence Force* notes: “*The strength of Australia’s military forces has always been the quality of its people*”. The White Paper devotes a full chapter to personnel and makes these observations:

*Recruiting and retaining sufficient numbers of people with the right qualities and levels of experience will be one of the most significant challenges in building the ADF in the twenty-first century.*

*Retaining the right people is also difficult. The problem is compounded by the fact that many of those leaving are doing so at the very time in their career when they have the most to contribute.*

Based on previous experience, Defence will struggle to achieve even the modest numbers likely to be required. It will do this against a background of an aging population, the likelihood of a declining full-time workforce and increasing competition for high-technology skills. Defence will need to make changes in line with the identified societal, workplace, lifestyle, globalisation and technological trends if it is to attract and retain the required workforce. While many commanders

and those in the human resource management centres recognise this, many of these issues have been identified before.

As the 2000 White Paper stated: *“There is a broad view that the Defence organization is not giving sufficient attention to personnel issues.”*

Perhaps part of this criticism is because the strategic environment has changed. From the end of the Vietnam War to the early 1990s, demands on the ADF for operations were low. Indeed, the ADF was essentially a training force rather than an operational force. This resulted in a full complement of platforms – essentially ships and aircraft – but undermanned units, a high ratio of officers and a Reserve designed as an expansion base.

Political and media interest tended to focus on the hardware where taxpayers’ dollars were most visibly spent. Interest in people tended to concentrate on pay and conditions with periodic reviews to improve efficiency.

The ADF is now required to deploy and sustain greater numbers on operations, usually concurrently, and in increasingly diverse areas. The ADF is transforming from a training, expansion model to an operational one, requiring short-notice deployments that may need to be sustained over extended periods.

All this requires workforce planners to have a greater influence. In capability development terms, they have played a secondary role only and were usually tasked to find solutions to bolster equipment-driven decisions. While there is some recognition of this need, I suspect that workforce planners are still too often marginalised.

Finally, let me say something briefly about evolving technology and the future nature of war. While it is difficult to be definitive about how these issues will affect the human nature of defence, there is little doubt that they will and profoundly at that.

By 2020 budget pressures and hopefully improved upgrade techniques will have resulted in the retention and acquisition of some major platforms although the total numbers will probably have declined. We should, for instance, see a new fighter aircraft, air warfare destroyers, early warning aircraft and so on.

But new and improved technologies, with direct military application, will also emerge. This list is by no means definitive but is indicative of what we can expect:

- Biotechnology and genetics. We can expect to see considerable developments in these areas in the coming decades and not just in the area of reproductive cloning. Biological weapons that could target human, plant and animal life could pose significant challenges.
- Robotics. This could affect the way we monitor, detect and destroy mines and explosive devices and the way we confront chemical, biological and nuclear contamination.
- Artificial intelligence and miniaturisation.
- Exploiting space to improve communications and intelligence gathering.

Now what about the future of war?

War, I believe, will remain chaotic and unpredictable. As always it will be dominated by human interaction. Asymmetric threats, such as those posed by Islamist terrorists, will increase. Distinctions between military and non-military agencies will become increasingly blurred. The intensity of operations will continue to rise as communications improve, information management processes evolve, more and more sensors are deployed and night becomes as clear as day.

Nor will technology simplify war. It will both an enabler and a disabler. It will not replace the human element but may enlarge its capacity on the battlefield. It will not make war bloodless nor prevent collateral damage. Counter measures and counter-counter measures will evolve.

The human element of future war will require a mix of high technology, frequently interacting with labour intensive forces. Personal skills and attitudes of courage, endurance, determination and skill will need to be supplemented by education and training.

Finally, we will continue to be constrained and influenced by political and national will, by perceptions of our geo-strategic circumstances, the clarity and persuasiveness of our military strategies, resources, extant capabilities and resistance to change.

In conclusion, the ADF has struggled to meet its personnel requirements. Demographic trends suggest this struggle will be made even more difficult in the future. The ADF will need to change many of its conditions of service and personnel management policies without lowering its standards. Finally, without a steady increase in expenditure, the ADF will not be able to retain even its current modest set of capabilities.