The Future for Aerospace Forces

John Blackburn

The Defence White Paper 2013 is the latest in a long series of Australian Government Defence White Papers outlining defence policy, projected defence funding, structural reform proposals and expected savings plans, but lacking a budget sufficient to implement the plan. The impact of the decisions taken in the Defence White Paper 2013 for aerospace forces is at first glance positive, but in reality damaging. The government has committed billions of dollars to the Super Hornet acquisition to address an undefined transition risk at the end of this decade, while deferring the purchase of the full Joint Strike Fighter (JSF) capability promised in the 2009 Defence White Paper to around 2030. As a result of operating a mixed fleet of Super Hornets and JSFs in the mid to late 2020s, Australia will have many fewer than the ‘100’ JSFs originally planned for, and will therefore have a reduced fifth generation fighter capability to address an uncertain future security environment. The mixed fleet will also result in increased operating overhead costs that will compound existing concerns regarding budget pressures and associated force capability risks. Australia’s security depends on having realistic goals matched by achievable funding commitments. Merely aspiring to be a middle power will not make it so. If one accepts that the strategic risk analysis contained in the 2009 Defence White Paper was valid for Australia’s role as a middle power, then the ADF should be resourced accordingly. If not, then government must recalibrate its aspirations, accept that Australia’s future is not as a middle power in the region, and redesign strategy, concepts and force structure accordingly.

Defence White Paper 2013 Aerospace Decisions

The 2013 Defence White Paper provides an increased focus on Defence space capabilities and unmanned aircraft, without making any significant funding commitments in these areas. It did however make three significant decisions related to air combat capabilities:

Firstly, it stated that the Government remains committed to acquiring the fifth-generation F-35A Joint Strike Fighter (JSF) aircraft, with three operational squadrons planned to enter service beginning around 2020 to replace the F/A-18A/B Hornet aircraft.

Secondly, it announced that a decision on replacing the Super Hornets with additional Joint Strike Fighters will be made closer to the withdrawal of the Super Hornets, which is not expected until around 2030.

Thirdly, the Government announced the decision to acquire 12 new-build EA-18G Growler electronic attack aircraft, instead of converting 12 of Australia’s existing F/A-18F Super Hornet aircraft into the Growler configuration.

At first glance the announcement of the Growler acquisition can be viewed as a welcome increase in aerospace capability. However, in reality, the capability increase are not 12 Growlers but 12 Super Hornets, as the kits and wiring for the Growlers had already been announced and approved, and were to be fitted to 12 of the existing 24 Super Hornet fleet. Hence the real announcement was the acquisition of an additional 12 Super Hornet, but at the cost of the deferral of a fourth JSF Squadron until 2030.

The government’s decision on delaying the withdrawal of the Super Hornets from service until around 2030 is significant, in that it changes the intent of the Super Hornet fleet from a transition capability to one of a long-term capability. This commits the Royal Australian Air Force (RAAF) to operate two fast jet aircraft fleets throughout the 2020 decade. This will incur significant cost overheads and will likely mean that our fifth generation fighter capability in the mid 2020s will be significantly less than that envisaged in the 2009 Defence White Paper. This is not good news if the reader accepts that the 2009 White Paper capability decisions regarding the need for around 100 JSFs were based on a thorough analysis of future strategic risks that we may face. Having been the Deputy Chief of the Air Force from 2006 to mid-2008, the author’s view is that the Department’s classified analysis and advice on this matter was sound.

The 2013 White Paper capability decisions should also be read within the broader context of the 2013-14 Budget. With the budget papers being as opaque as usual, we have come to rely on the excellent analysis in the Australian Strategic Policy Institute’s The Cost of Defence brief. The ASPI brief notes that after four years of cuts, defence spending is on the rise again. Whilst some newspapers reported that defence spending was up by an extra $5.4b between 2013 and 2016, Mark Thomson noted that this growth is occurring from a low base, and in absolute terms funding remains well below what was promised when the 2009 White Paper was released. Thomson concludes that there is a ‘Groundhog Day’ feel about this year’s budget and the broader plans for the ADF. As has been the case in the past, there is a gap between means and ends.

The ASPI brief also notes that the increase in the budget for the forward estimates has been achieved by bringing forward $3bn from future planned expenditure, and it appears that a further $10bn has been removed from the outer years with as yet an unknown impact on the Defence Capability Plan (DCP.). The brief also highlights that in the 48 months between the release of the 2009 and 2013 Defence White Papers, around $20 billion of promised funding was lost as the government sought to reduce spending in order to

---

4 Ibid., p. 122.
achieve a surplus. The shortfall between promised (2009) and now (2013) planned budget is in the vicinity of $30 billion for the period 2009 to 2022.\(^5\)

Compounding this shortfall is the need to absorb the new capabilities decided in the 2013 White Paper within the existing budget. The ASPI Budget brief indicates that the Growler acquisition cost will be $2.774bn and the associated Net Personnel and Operating Cost (NPOC) over 17 years will amount to a further $3.143bn. It would appear however that only $200m of new funds has been provided for the Growler acquisition.\(^6\)

**Defence White Paper 2013 Aerospace Benefits and Risks**

Hence, despite the overall shortfall in funding, the plans for the Australian Defence Force (ADF) remain as ambitious as ever, and in some cases have grown. What was unstated, but is widely discussed around Canberra, is that Defence had in fact strongly advised that the purchase of additional Super Hornets should not be pursued. Sadly, there has been little media commentary or public debate regarding this multi-billion dollar purchase, which will have significant implications for both near-term Defence equipment acquisition and long-term impacts on both future Defence capability and affordability.

What does Australia get as a risk mitigator or benefit from the announced purchase of 12 Growlers? As previously noted, the capability differential resulting from the 2013 White Paper is not 12 Growlers but 12 Super Hornets. For billions of dollars in acquisition and NPOC costs we will have around 8 additional Super Hornets on line to fly as a result of this decision, once maintenance and serviceability overheads are considered. What difference would the additional eight Super Hornets make with respect to a capability gap? In reality very little as an adjunct to the remainder of the ADF overall, and at an unknown cost for the remainder of the force which will be impacted by the absorption of much of the acquisition and sustainment costs from within an already taxed budget.

What are the down sides to this decision? They are major in terms of future capability, budget impacts and long term affordability.

Little public analysis of the strengths and weaknesses of the Super Hornet has been published—Australia originally purchased a bridging capability that will now form a long term fleet, and which will likely comprise 50% of the long-term fighter force. Perhaps the Super Hornet should have been examined in as much depth as was and is the case with the JSF? Despite the excellent capability that the Super Hornets offer today and in the near-term, they will be outclassed by fifth generation threats by the mid to late

---

\(^5\) Ibid., p. 123.  
\(^6\) Ibid., p. 31.
2020s. That is why our allies and regional air forces are acquiring fifth generation capabilities such as the JSF. In effect, Australia is acquiring some of the last aircraft off the production line just before it closes.

As a result of operating a mixed fleet of Super Hornets and JSFs, the RAAF will have many fewer than the ‘100’ JSFs originally planned for, and will therefore have a reduced fifth generation fighter capability in the mid to late 2020s, barring future decisions to invest further in the capability. Operating a mixed fleet of Super Hornets and JSF as a long-term model will be more costly than operating a single fighter aircraft type. The cost overheads of running two operating, training, engineering and logistics systems do not make sense given our current Defence budget pressures, and the projected cost growth in equipment, costs, logistics and personnel costs. Australia is too small a country for its defence force to operate in this way in the future.

Defence is therefore in the interesting situation where the risk of a partial, short-term, transition capability gap in the fighter force was not considered to be acceptable by government, yet we have lived with a significant gap in other capabilities, e.g. our submarines, for the past decade. Whilst acknowledging that Australia had a risk of a partial gap in its air combat capability during the transition from the original Hornets to the JSF, the threats the country faces in the near term are relatively benign, in terms of those threats that would require a high level of fighter capability. The issue government should place emphasis on are the medium to long-term threats, where uncertainties regarding the future regional security circumstances demands that Australia can take appropriate risk mitigation measures. The decision to acquire additional Super Hornets today, at the expense of future JSF fleet numbers represents a significant capability risk, considering the medium to long-term threats we could face—at least based on the Department of Defence analysis that justified the 100 JSFs specified in the 2009 White Paper.

The lack of significant budget supplementation for the Growler acquisition and NPOC costs means that billions of dollars worth of other programmed equipment purchases will need to be delayed, with significant capability impacts that are yet to be quantified. So, for a capability gap mitigation of 8 aircraft on line, the government will delay or cancel a range of capabilities in the Army, Navy and Air Force that have already been defined as a high priority?

It would appear that the government has committed billions of dollars to an “announceable” Super Hornet acquisition to address an undefined transition risk at the end of this decade, whilst deferring the purchase of the full JSF capability promised in the 2009 Defence White Paper. Given the forecast Defence budget pressures, and the wider concerns regarding the future of

---

7 Commonwealth of Australia, Defending Australia in the Asia-Pacific Century, para 9.60.
the Australian economy, it seems implausible that in addition to the 36 Super Hornet / Growler fleet, Australia will be able to afford the three operational squadrons planned to enter service beginning around 2020—even especially since these would need to be supported by an additional training/conversion unit.

Given the government’s funding track record since the 2009 White Paper it is difficult to place any credibility in the 2013 White Paper plans. The Defence Minister said he would not accept an air combat capability gap. Unfortunately, the 2013 White Paper does set us up for a real air combat capability gap in the 2020s.

**Defence White Paper 2013: What It Did Not Do**

The defence funding record since the 1987 White Paper indicates that government commitments to defence funding were rarely sustained. The capability impacts of these funding shortfalls were significant, particularly when the defence policy goals remained largely unchanged. Project cancellations were a very rare response to funding shortfalls; rather projects were ‘slipped’ because of ‘insufficient justification’, with compounding effects on subsequent defence budgets. Budget pressures also resulted in platforms being acquired without a full suite of operational equipments, on the assumption that advanced systems could be retrofitted once the threat level (and thus funding) grew—an approach referred to as ‘fitted for but not with.’

These types of measures have accommodated funding shortfalls, but at a capability impact that was rarely visible to the public, at least until it became evident that forces could not be deployed because of capability deficiencies. The public and political condemnation of Defence in these circumstances failed to recognise the underlying historical and political cause of the deficiencies, preferring to attribute such failures to ‘Defence incompetence.’

Australia’s acquisition of aerospace capabilities in recent years is at first glance impressive: C-17s, Wedgetail airborne early warning and control aircraft, KC-30s tankers, Super Hornets, Growlers and C-27s. The tag line “fitted for but not with” seems to have changed with an excellent inventory of platforms and fitted equipments. However, for those who remember what happened in the 1990s, after the promised 1987 White Paper funding did not materialise, the warning signs are ominous.

In a similar fashion to the 2009 White Paper, the 1987 White Paper had outlined an ambitious capability development program and forecast real growth in the defence budget of 3 per cent per year. However, when faced with subsequent defence expenditure cuts in 1990, the then Defence Minister Ray stated that:
Defence policy which required real growth over the coming decade would be a badly flawed policy for Australia as there is simply no way that a set percentage can be guaranteed.\(^8\)

The Defence Efficiency Review (DER) of 1996 was an attempt by government to cut substantial waste in support areas and address perceived imbalances between support and combat force components. The DER was considered by many as being conducted and implemented with considerable haste that resulted in the loss of many essential support functions with a negative impact on the ADF in subsequent years.

There appears to be a similar funding prognosis in 2013. The 2009 White Paper postulated two sources of financial resources for new priorities: a government commitment to increased funding for the long term, and a requirement for Defence to make significant savings—around $20bn over a decade—within the authorized budget. It is evident that the failure of the Strategic Reform Program to achieve the savings budgeted in the 2009 White Paper, combined with the underfunding of the 2009 White Paper plans, places Defence in a similar position to that of the late 1990s. The government’s ambitions once again far exceed its willingness to fund them.

Funding pressures are usually accommodated by cutting the less visible support functions, and through the latest business efficiency fads such as ‘centralised services.’ Sadly, the operational impact of such changes is rarely analysed thoroughly and the result has, in the past, been the loss of real operational capability that is not evident until forces are deployed. With the extensive menu of aerospace platforms that have been acquired in recent years, the RAAF is certainly well equipped in the near term. However, it now faces the risk of now being “fitted with but not for” if the less visible but essential supporting capabilities are once again hollowed out. Without funding supplementation the realisation of this risk is a high probability.

The 2013 White Paper does not appear to have recognised the lessons identified in Australia’s recent defence history. It maintains a capability aspiration for the ADF that has long since been negated by funding cuts. It has complicated the problem by making short-term focussed capability decisions that will compound the defence budget pressures, and will diminish Australia’s ability to address the security threats it may face in the 2020-2030 decade. The aerospace capability risks are having a diminished air combat capability in the 2020s, and having an extensive set of platforms but not the essential supporting capabilities necessary to raise, train and sustain them as a result of growing budget pressures.

What Next?

In broad terms, the risks associated with the implementation of any Defence White Paper include the:

- provision of promised funding by government;
- achievement of ambitious savings program goals;
- accuracy of cost projections which determined the quanta of budget growth and cost savings goals; and
- ability of the Department of Defence and defence industry to deliver at the rate and scale required by the DCP.

None of these risks are new. The question that needs to be answered is what can be done differently in the future to prevent the repeated failure in policy implementation as we have witnessed with the 2009 White Paper, and pre-empt the risks arising from 2013 White Paper? In the event of reduced funding levels, how can we ensure that the situation is recognised and acted upon rapidly?

A future government should address the funding shortfall, or adjust the defence policy and capability goals to match the available funding levels in a timely fashion, rather than allow a hollow force structure to develop to the point where hasty, reactive and often poorly coordinated force structure reviews and reform programs are implemented with resulting damage to the ADF’s future warfighting capability. Analysis in hindsight is a luxury, however, and when reviewing past experience, one could conclude that the changes in funding levels or circumstances were occurring at a pace which was below the “public perception” level of the time, and were thus not afforded adequate attention or priority. In other words, the changes viewed in isolation did not appear sufficiently significant at the time to lead to corrective action, although they tend to do so when they are evaluated a number of years later.

The key judgment that will need to be made by future governments will be what compounding shortfalls or delays can be accommodated before a significant change in policy, plans or funding levels is required. What is clear is that in the case of the implementation of the 2009 White Paper, the significant fall in funding ($20bn over four years) should have triggered a significant reconsideration of the original goals. This did not happen in the 2013 White Paper; the fiction of the 2009 goals has been maintained despite the reality of reduced budgets. It was an opportunity lost.

Unrealistic goals translate into a stressed and unbalanced ADF; an unsound investment in national security. In the case of aerospace capabilities,
deficiencies cannot be remediated rapidly, regardless of the level of funding applied. Consistent, realistic and affordable policies are paramount if effective capabilities are to be fielded and sustained.

It is critically important that past defence policy implementation failures are not repeated. Hopefully a future government will learn the lessons from our history and address them in the next Defence White Paper. Most important for a future government will be the willingness to have realistic goals matched by achievable funding commitments. Merely aspiring to be a middle power will not make it so.

If one accepts, as the author does, that the strategic risk analysis contained in the 2009 White Paper was valid for Australia’s role as a middle power, then the ADF should be resourced accordingly. However, if government is not prepared to resource the forces to that level, then it must recalibrate its aspirations, accept that Australia’s future is not as a middle power in the region, and redesign strategy, concepts and force structure accordingly. This White Paper does neither.

If Australia’s future is as a minor regional power, government will need to re-examine the country’s alliances, goals and commitments. A more realistic view of Australia is essential to achieve the best outcomes possible in a future, complex, regional environment. The fact that these outcomes may not align with Australia’s current perception of itself as a middle power is unfortunately the nature of life.

AVM John Blackburn AO retired from the Royal Australian Air Force in 2008 as the Deputy Chief of the Air Force, following a career as an F/A-18 fighter pilot, test pilot and strategic planner. He is now a consultant in the fields of Defence and National Security. He is the Deputy Chairman of the Kokoda Foundation Board, the Deputy Chairman of the Williams Foundation Board and a Director of the Australian Strategic Policy Institute Council. jb@jb-cs.com.