RUMOUR CONTROL
Super Hornet, Growler, JSF and Raptor

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The Commonwealth has decided to go ahead with the purchase of 24 F/A-18F Super Hornet Block II fighters.

After studying Part A of the Air Combat Capability Options Review which he commissioned earlier this year, Minister for Defence Joel Fitzgibbon stated 17 March that the Super Hornet is the only aircraft able to fill an air power 'capability gap' created by the previous Australian government's 'poor planning processes and politically-driven responses'.

The sting in the tail of his announcement was that the RAAF should also examine a possible purchase of the EA-18G Growler, the Electronic Attack version of the Super Hornet which Boeing is now building for the US Navy. The case for or against a Growler purchase will be studied in Part B of the Review which is due for completion at the end of April; this will also examine the question of whether or not the Growler, like the F-22A Raptor, is available for export to Australia.

The Super Hornets were ordered by former defence minister Dr Brendan Nelson in March 2007 under a US Foreign Military Sales (FMS) deal with the US Navy. They will provide a 'bridging' strike and air combat capability between the retirement of the RAAF's F-111s in 2010 and the arrival of its first squadron of F-35A Joint Strike Fighters in 2015.

Under current plans the RAAF plans to buy up to 100 F-35As; these will replace both the F-111 and the RAAF's current F/A-18A/B 'classic' Hornets, which are due to retire between 2015 and 2018. The Super Hornets will be retired around 2020, once the RAAF's F-35A fleet is complete.

After studying Part A of the Air Combat Capability Review by First Assistant Secretary Policy Development, Neil Orme, last month, Fitzgibbon said, "The former Government's decision to leave Australia's air defences in the hands of the Joint Strike Fighter project was a flawed leap of faith in scheduling terms and, combined with the quick decision to retire the F-111 early, allowed an air combat capability gap to emerge."

However, Fitzgibbon's decision to go ahead with the Super Hornet purchase likely reflects the advice on which Nelson based his original decision to buy the aircraft. Nelson's decision was taken very quickly in late-2006 when he became concerned about the possibility of a serious delay in deliveries of the F-35A, and also in associated air power programs such as the RAAF's tanker, stand-off missile and airborne early warning projects.

Those concerns have not been allayed by the passage of time; and extending the lives of the F-111s isn't really an option for the RAAF, either, because many of the engineering and software support facilities required to sustain the aircraft have been run down too far in preparation for its retirement and the arrival of the Super Hornet. Reviving a full-blooded F-111 support and engineering capability would cost about $2.3 billion, it has been confirmed to Rumour Control.

Furthermore, the advice both Ministers have received from DSTO is identical: the risks and costs associated with operating the F-111 rise sharply after 2010, and especially after 2012, when the life of several safety-critical items expires.

Therefore, the possibility of a significant delay in the JSF program, and the burden this would place on the RAAF's upgraded 'classic' Hornets, posed a risk that Australia might lose a vital air combat capability edge within the region.

Notwithstanding the instruction by former defence minister Robert Hill that the RAAF should not plan on the basis that it will get an 'interim' fighter, this is exactly what Nelson determined should happen. The timetable for introduction of the so-called 'bridging fighter' was dictated by the timing of the F-111's retirement.

But this timetable, along with the fact the 'bridging' fighter was an 'interim' solution and not a determinant of the RAAFs long-term air combat capability, meant the RAAF didn't want to over-invest in it. It needed maximum capability with minimum disruption and an Initial Operational Capability (IOC) of 2010.

There were very few contenders that satisfied these conditions, and Rumour Control understands that Boeing took its chance when the opportunity arose to provide briefings on the Super Hornet to both the National Security Committee (NSC) of Federal Cabinet and the influential Secretaries Committee on National Security (SCONS), consisting of the heads of the major departments most closely involved in national security: Defence, Foreign Affairs, Treasury, and Prime Minister & Cabinet.

"The timetable the former Government put on the acquisition of an interim fighter left Defence planners with no choice but to recommend the Super Hornet," summarised Fitzgibbon.

However, Part A of Orme's Review provided Fitzgibbon with the opportunity to contradict persistent Australian critics of the Super Hornet who contend that it is incapable of matching emerging threats in the region, especially Russian-supplied Su-27 and -30 and MiG-29 fighters. "The Super Hornet is an excellent aircraft capable of meeting any known threat in the region and is the only aircraft which can meet the small delivery window created by the former Government's poor planning processes," he said.

By implication, the F-35A, which with Block 3 avionics is widely acknowledged (even by Boeing executives) to be superior to the Super Hornet Block 2, will provide an even stronger capability to the RAAF when it eventually comes into service. Exactly how

much better is still the subject of fierce debate, fuelled by an understandable reticence on the part of Lockheed Martin, the JSF Joint Program Office in Washington and the RAAF to give away too much information about its ultimate capabilities.

In Part B of his Review Orme will examine Australia's air combat capability needs out to 2045, and the relative capabilities of current and projected fourth and fifth generation combat aircraft such as the F-35A and its potential adversaries. This will provide Fitzgibbon with an informed basis on which to confirm (or not) the choice of the F-35A as the replacement for Australia's F-111s and Hornets. It will also examine the arguments for and against acquiring the F-22A Raptor as well as the possible purchase of a small force of Growlers.

While this is all prudent planning by an incoming government grappling with the biggest-ever defence purchase ever planned for Australia, there is an important political sub-text also.

Australia's public air power debate has been driven to a considerable extent by strident advocates of two particular courses of action: the retention of the F-111 until at least 2020; and the purchase of the F-22A. These same advocates are also strident (verging on hysterical) critics of the Super Hornet Block 2 and the F-35A.

The new Defence White Paper, due out at the end of this year, must address the air power issues raised both by non-partisan experts and single-issue advocates and settle the debate once and for all so that the White Paper cannot be undermined by lobby groups who call its integrity into question.

For this reason, Fitzgibbon needed to draw a line under the F-111 and establish whether or not the F-22A is available to Australia, and if so under what conditions and at what price; and then whether or not it is in fact an appropriate aircraft for Australia.

Fitzgbbon has succeeded brilliantly in shifting the debate over the future of the F-111 beyond the parameters set by its hardcore advocates: any decision to retire the F-111 based on arguments over its capability and cost-effectiveness would be met by flat denial and debilitating public criticism of the government and the RAAF and their decision-making processes. Fitzgibbon has managed to remove the F-111 from the air power debate without leaving the government's judgement open to apparent criticism.

Regarding the other components of RAAF air power, in effect Fitzgibbon needs to review the decision-making processes of his predecessor, Robert Hill and Brendan Nelson, to ensure these had the necessary integrity. If they did – that is, if the then-current assessment of Australia's threat environment was accurate and realistic, if the F-35A was judged honestly to be superior to its rivals in the roles it had to fill, and if its projected cost was estimated accurately and judged to represent the best value for money - then the choice of the F-35A was and remains correct and defensible.

Whether or not the F-22A was seriously considered as a part of the RAAF force mix at that time is hard to say; US law then and now forbids the export of the F-22A and as long as this remains the case Australia can't assume it will be available. However, if Australia doesn't formally request the F-22A there is no reason for the US administration and Congress to consider changing the law. And if Australia doesn't ask the question, advocates of the F-22A and critics of the government's air power planning alike will be able to accuse Fitzgibbon and Prime Minister Kevin Rudd of failing in their duty to obtain the best equipment for Australia's war fighters.

For this reason, among others, Fitzgibbon asked his US counterpart, Secretary of Defense Robert Gates, to facilitate export release of the F-22A during the latter's visit to Canberra 23 February. Gates is not in a position to offer the F-22A himself; this will require a change in the law which is extremely unlikely to occur before the US Presidential election in November this year, and may not be granted priority by the new administration in 2009.

Accepting, as everyone does, that the F-22A is the best air superiority fighter in the world by a massive margin, there are a number of important questions here for Australia: first of all, do the threats and contingencies which the ADF may realistically have to face demand this capability?

That is an issue for the Defence White Paper to determine. While the White Paper will probably call for air combat capabilities sufficient to meet a high level threat, by the time it is published it will probably not be known to anybody in Australia (and nor to the current US administration, or its successor) whether or not the F-22A will be available to Australia.

Will the government want a White Paper that acknowledges a potentially serious threat to national security but cannot point to a solution that doesn't require a change of law in the USA?

This is unlikely, and therefore Part B of Neil Orme's Review is vital: if it determines that a RAAF air combat capability based on the F-35A (supported by KC-30B tankers, stand-off missiles, new command and control system and Wedgetail early warning aircraft) is sufficient for Australia's needs, then the F-22A becomes irrelevant.

However, if Orme determines that this is not the case, then the White Paper must acknowledge it and set out a policy that seeks the capabilities Australia needs – the F-22A, or some other alternative, if such a thing exists.

Based on the known current and future capabilities of the F-35 and those of likely threat aircraft (predominantly, though not exclusively, the Su-27/30 and MiG-29 families and their missiles, which Orme's Review will examine) it seems unlikely at present that Australia's circumstances will require the immediate acquisition of the F-22A. If this had seemed likely to be the case it would have become apparent several years ago; Australia would undoubtedly have approached the US Government during the early part of this

century, and Defence's air power stance would reflect the heightened threat perceptions of the RAAF.

There is another complicating factor for Australian defence planners: the increasing pressure on Australia's defence budget, which makes the logistics savings from having a single fleet of fast jets all the more attractive. The additional (and as yet unquantified) costs associated with acquiring the F-22A and maintaining a mixed fleet of fighters (F-22A, F-35A and F/A-18F, perhaps) is only justifiable if the F-35A isn't good enough, or is barely good enough. That's a qualitative judgement which will be based initially on data from Orme's Review.

Ten or twenty years from now everything might change: there may have been some 'game-changing' event or technological leap which forces the ADF to revisit its air power planning. By that time it's fairly certain that the F-22A production line will be closed; if Australia doesn't buy F-22As soon, it may never get the chance to do so. Is that sufficient reason for buying some today? Again, this is a judgement that will be informed by Orme's Review.

Meanwhile, the timing of an Australian F-35A purchase has come under scrutiny. Air power analyst Andrew Davies of the Australian Strategic Policy Institute (ASPI) in Canberra told Rumour Control that Australia is one of the JSF partner countries with the most urgent requirement for the new aircraft. But he pointed out the US Government Accountability Office (GAO) report on the JSF program – Joint Strike Fighter: Impact of Recent Decisions on Program Risks – which was published 11 March warns of further significant budget and schedule slippage.

While the US Air Force, Pentagon and JSF Joint Program Office all contest the GAO's conclusions, there does remain a risk of both cost and schedule over-runs. Australia cannot afford a lengthy delay in the JSF program, and if this happens there is a danger that circumstances could force the RAAF into ordering and fielding the JSF before it is sufficiently mature.

Sticking with the Super Hornet program relieves some of that pressure, Davies believes, and gives the Australian government time to watch the JSF program and then place an order with a degree of assurance about its schedule, capability and cost.

Further significant slippage in the JSF program could also provide a window of opportunity for Boeing Integrated Defense Systems to offer the RAAF more Super Hornets. And depending on the outcome of the Air Combat Capability Review, and its assessment of the threats facing Australia, this could transform the RAAF's fast jet fleet planning, Davies added.

At present the RAAF plans to operate an all-JSF fleet of up to 100 aircraft from about 2020; but significant delays in the JSF program could see the current order for 24 Super Hornets extended, and even doubled, Davies says; that's without a purchase of EA-18G

Growlers. This could result in the RAAF operating a mixed fleet of F-35As and Super Hornets well beyond 2020, notwithstanding the logistics advantages of a single type fleet.

Purchasing a small force of EA-18G 'Growler' electronic attack aircraft would add a significant increment to Australia's strike capabilities. For more than 20 years the US Air Force and Navy have routinely employed the Growler's predecessors, the EA-6B Prowler and EF-111A Raven to jam and suppress enemy air defences during strike missions in Libya, Panama, Iraq, Afghanistan and the Balkans, contributing to both mission success and the safety of the strike aircraft themselves. The Growler will replace the ageing Prowler; the EF-111A retired 10 years ago.

So far the only other air forces to have fielded such aircraft are the Luftwaffe and Italian Air Force, which operate the German-developed ECR variant of the Tornado. Other UK and European NATO strike aircraft also frequently carry jamming and counter-measures pods and missiles such as the MBDA ALARM for self-protection and to provide force protection for strike packages. During coalition operations, allies of the US regularly enjoy the protection of the Prowler, which is now one of the most heavily tasked tactical air assets in the US inventory.

Deliveries of the Growler to the US Navy have just begun, with Initial Operational Capability (IOC) due in 2009; it is not currently available to export customers, and if Australia acquires Growlers this will be the first time the US government has allowed the export of such an aircraft. The EA-6B Prowler and EF-111A Raven were never exported.

If Orme's Review endorses the need for Growlers, it's not clear how many the RAAF might need, nor how they would be used (will the F-35A require jamming support, for instance?). The smallest supportable fleet of Growlers may be 6 or 8 aircraft, and these could probably be supported by Boeing and the US Navy under the same arrangements currently being negotiated for the RAAF's Super Hornets.

According to a senior Canberra source, "Defence has had broad discussions with the US Government regarding the capabilities of the EA-18G Growlers. No decision has been made on acquiring such aircraft - the option to purchase EA-18G aircraft will be considered under the second stage of the Air Combat Capability Review."

Defence minister Joel Fitzgibbon has been a vocal critic of the decisions made by his predecessors – or, rather, of the processes (or apparent lack of process) behind them.

It's undeniable that the Super Hornet purchase overturned a key planning assumption: only weeks before Nelson announced the purchase in December 2006, the Chief of Air Force, Air Marshal Geoff Shepherd, told an Australian parliamentary committee that no 'interim' or 'bridging' fighter was needed.

But that was the guidance he and his predecessor had been given, based on the original air power transition plan from the retirement of the F-111 to the arrival of the F-35A. This envisaged a force of upgraded Hornets armed with JASSM standoff missiles and

supported by the new Vigilare air defence command and control system, Wedgetail airborne early warning & control aircraft and KC-30B tankers, all of which would be fully operational by 2009.

All of these projects encountered problems and delays – there was an emerging risk (and this was clear to both the RAAF and Nelson) that the F-111s would retire before a robust capability was in place to replace them. Hence Nelson's decision to acquire the Super Hornets, which Fitzgibbon has tacitly endorsed, albeit on his own terms.

Meanwhile the RAAF doggedly stuck to the guidance that no interim fighter would be acquired; however, when confronted with Nelson's decision to acquire the Super Hornets the reaction from Air Force headquarters was reportedly: "If we'd known the government was willing to spend the money without us having to sacrifice other capabilities, we'd have asked for them ages ago."

Australia's major difficulty with the F-35A has been the urgency of the RAAF's need: more than any other JSF partner nation (except perhaps the UK), Australia is extremely vulnerable to delays in the JSF program. Defence's planning has reflected this, and Nelson's original decision to acquire the Super Hornet reflects a prudent, pro-active approach to a problem on which Australia can apply relatively little leverage. His handling of the issue, however, left him open to criticism from commentators and from his successor.

The inflexible schedule imposed on the ADF by the need to retire the F-111, and Australia's vulnerability to delays in the JSF program, has caused extreme discomfort in Canberra. This in turn has been compounded by a strident debate over air power capabilities which has proved more of a distraction rather than a substantial contribution to Australia's national security. Australia has had little room to move and the decision to acquire Super Hornets appears to have been the only one any Australian government could have made.

The Air Combat Capability Options Review is an opportunity for the new government to claim ownership of these issues on its own terms and control the debate before preparing the new Defence White Paper. Defence minister Joel Fitzgibbon has exploited it brilliantly.

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