A Wilkinson

24 December 2015

Foreign Affairs, Defence and Trade Committee
Joint Strike Fighter Inquiry
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Chairman and Committee Members,

## PLANNED ACQUISITION OF THE F-35 JOINT STRIKE FIGHTER

My submission to this Inquiry will be brief and seeks answers to three basic questions concerning the capability of the F-35 in the strike role. The aircraft may be a very complex fighter but I would argue that the F-35 is not, and never has been, a strike aircraft. This is because:

- the unrefuelled range is very short;
- the performance is very limited cruise is slow by contemporary combat aircraft standards and supersonic flight requires afterburner with huge fuel flows; and
- the small size of the aircraft's weapons bay necessarily limits the number of weapons it can carry.

I have asked these questions many times to no avail – the response has invariably been that "you cannot begin to understand because the information is classified". The aircraft may be full of classified electronic equipment but the unclassified fact remains that it cannot fly unrefuelled from Sydney to Darwin, it struggles to reach Mach 1.6 with a huge fuel burn at full power and its small size compared with effective strike aircraft speaks for itself. And I haven't even mentioned the shortcomings of its reliance on a single engine operating across Australia's vast deserts and surrounding seas.

Some argue that the limited range is overcome by aerial refuelling. This may be true for peacetime ferry flights but it is a different ball game in combat. An unarmed tanker must stay out of harm's way and the fighter must always plan for a possible unsuccessful refuel by always retaining sufficient fuel to return safely. And, of course, if the F-35 has to use its after burner, for whatever reason, its fuel flow increases dramatically with a

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corresponding decrease in range and possible fuel exhaustion before it can reach a safe airfield. If the weapons are carried externally then the range also reduces markedly.

As a RAAF navigator on Canberra and F-111 aircraft I was familiar with planning strike operations in aircraft with an unrefuelled combat radius of more than 1,000 nm. We had that important capability for more than 60 years but lost it when the F-111 was eventually retired. I have always understood that long-range strike aircraft are an important deterrent factor in Australia's defence and, until someone can reasonably answer my three basic questions, I would argue that Defence capability planners have lost the plot.

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