

Written evidence submitted by Cdr N D MacCartan-Ward DSC AFC

Subject: **Defence Industrial Policy: Procurement and Prosperity Inquiry.**

My References: NDMW/SDSR 2020 /02,
NDMW/SDSR 2020 /01.

Date: 01 April 2020.

This Submission is supported by:

Captain Colin Hamilton
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Is the current Defence Industrial Policy effective? Is a new Defence Industrial Strategy required?

Your Inquiry Terms of Reference and Discussion Points.

“The defence industry is integral to our economic health as a country. Our country has a long history of a robust defence industry that delivers economic value whilst also serving as an essential resource and providing indispensable protection to its citizens.”

“Our industrial policy must fly the flag for defence. This inquiry will investigate how to ensure that the UK defence industry continues to be recognised across the world as a competitive and innovative global player.”

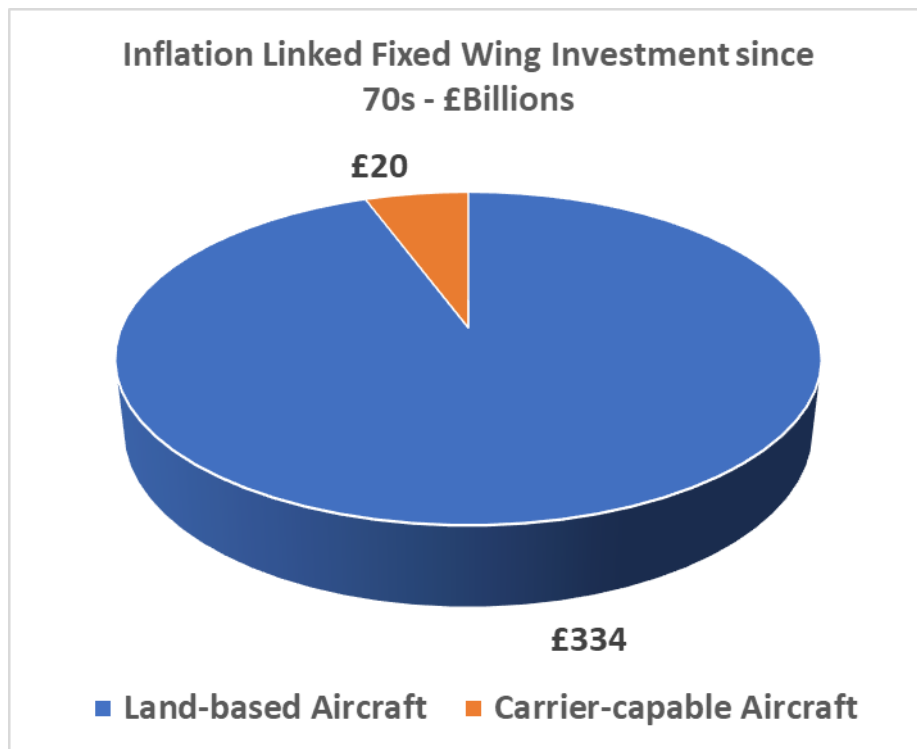
General Comment.

1. This new Inquiry does not appear to address the root cause for the “Black Hole” in our Defence Procurement Budget but, instead, refers quite wrongly to the “defence industry delivering economic value” and “providing indispensable protection to its citizens”.
2. If we wish to ensure that our defence industry is recognised across the world as a competitive and an innovative global player (which is not the case at present), our industry needs to be able to provide weapon systems and weapons that:
 - a. are competitive in price;
 - b. function properly as required and specified by the end-customer – deficiencies being made good at the Contractor’s expense;
 - c. can be firmly justified and verified in the context of demonstrable operational effectiveness against the perceived threats facing our global interests and those of foreign prospective customers.
3. Recent decades have demonstrated the clear inability of our industrial base to provide the taxpayer with value for money and fully functional weapon systems.

4. With regard to the “indispensable protection for our citizens”, some of the major weapon systems that have been procured over recent decades have not been fully functional, have required major rectification/modification at the customer’s expense (not the Contractor’s) and have been unable to provide the necessary protection for our global interests and even for our Island Base.
5. A vital exception to this malaise has been our Nuclear Deterrent. According to ex-First Sea Lord, Admiral Lord Alan West, in the Daily Mail of 13 November 2019, and since the collapse of the Soviet Union, Britain’s military planners have had absolute proof of the effectiveness of our nuclear shield. Declassified plans for a Soviet strike against Western Europe showed the Kremlin was willing to use so-called ‘tactical nuclear bombing’ against Germany, Holland and Belgium. According to the Supreme Allied Commander Europe, the only land-based tactical air resources available to him after 12 hours of such Soviet aggression would have been a small number of Ground Attack Harriers operating from unprepared dispersed sites.
6. And Lord West notes that the USSR was not prepared to fire nuclear missiles at France or Britain — because we had the power to strike back. Hence the massive conventional maritime Soviet offensive that was to be unleashed around the North Cape. There could be no more vivid illustration of how important it is for the UK to keep Trident and its replacement.
7. Concerning the inability of some weapon systems to provide adequate protection for our global interests, I would draw your attention to my Memorandum to your Committee proposing “The Need for Justification of the Armed Services and their Weapon Systems.”

Memorandum NDMW/SDSR 2020 /01 - Justification of Armed Forces, dated 19 January 2020.

8. That Memorandum evaluated British military investment in
 - a. Land-based non-carrier-capable fixed wing combat aircraft and
 - b. Carrier-capable fixed wing combat aircraftsince the 1966/7 Carrier Decision.
9. It summarised the original agreed costs, the inflation/modification-linked costs and then briefly addressed the operational return/combat success realised for each aircraft group.



10. In doing so it revealed a disturbing imbalance of investment between land-based and carrier-capable fighter aircraft. Of major import, that investment disparity does not reflect established UK Strategic Policy which is now centred upon Strike Carrier utility and deterrence value.
11. It suggested that the lack of combat success and of deployed combat utility by land-based fighter aircraft, as iterated at Annex B to this earlier Memorandum, provides little justification for this imbalance and that associated costs have been a prime causative factor in the generation of the “Black Hole” in Defence spending. Effective deployment of these over-priced assets to combat theatres overseas has required time-consuming pre-positioning and the utilisation of major air-bridge logistic/combat support, the program costings of which are included in Tables 1 and 2 at Annex A.
12. It concluded that:
- a. The major investment in non-carrier-capable land-based fixed wing aircraft has not been justified by combat theatre achievement or by global utility.
 - b. Such investment has prevented adequate, threat-related expenditure on more flexible weapons platforms in support of Strategic Maritime Policy

including warships, submarines, carrier-capable aircraft and Strike Carrier platforms.

13. It recommended that Ministers

- a. should review and justify (or otherwise) urgently the continuing major investment in land-based non-carrier-capable aircraft (see paragraph 14 below) and
- b. should maintain a robust maritime capability centred on our Strike Carriers that has served us so effectively in terms of cost, deterrence and combat since the start of World War II.

14. For example, the disturbing continued investment in the Typhoon Program deserves immediate scrutiny, as demonstrated by the following:

“Typhoon was procured in collaboration with European partners to provide air defence of the United Kingdom against the Soviet air threat during the Cold War. That threat is now non-existent and the current Russian air threat against the United Kingdom base is considered unlikely to materialise. However, if it does, the Typhoon with an unrefuelled combat radius of action of just 750 nm will be unable to defend the UK Base (its *raison d’être*) against the modern Russian air threat. Each Russian long-range bomber can launch up to 16 supersonic, conventionally or nuclear armed ground attack cruise missiles¹ at a range of 1300 nm from their targets. UK does not have nearly enough Air Refuelling resources to extend the combat range of the Typhoon on a 24/7 on-task basis and at sufficient strength to deter or oppose this threat. Only carrier air power coupled with Type 45 Daring Destroyer missiles have this capability.

Typhoon is a land-based fighter aircraft initially designed for single role capability and is entirely unsuitable for conversion to carrier deck operations. Hence its utility in the context of our national maritime defensive strategy and task force operational capability offshore is minimal.

Despite this, Ministers have been persuaded that major modifications should be carried out to give the aircraft an air-to-ground capability. All Typhoon aircraft require and have to undergo expensive modification (many without a matching increase in the aircraft’s global utility) and only 30 or so are

¹ The Kh-101, 102 and Kh-555.

available for or capable of front-line 'multi-role' combat operations² at any one time. As a result, tens of £ Billions worth of aircraft are sitting unserviceable and non-operational in hangars. (Similar figures to those experienced by the Tornado Program.)

In the context of fiscal constraint and operational logic, this ongoing Typhoon modification program must be considered an unnecessary waste of National Defence Budget funding. This is particularly so in the light of the Royal Air Force desire to procure Joint Strike Fighter aircraft to replace the limited capability of the Tornado GR4. The new aircraft will be true multi-role and will provide all the air to ground capability required – provided that it is carrier-capable, i.e. the F-35B Lightning II – not the F-35A.”

Discussion: Is the current Defence Industrial Policy effective? Is a new Defence Industrial Strategy required?

15. The effectiveness of UK's current Defence Industrial Policy must be balanced and verified against the cost and combat effectiveness of our combined Armed Forces in terms of UK Island Defence, Global reach and the Strategic Projection of our Political and Military Power. The pathetic size of the Naval Service compared with UK's extraordinary investment in globally limited land-based military aircraft bears overwhelming witness to misguided current Policy.
16. Operational and cost effectiveness in the front line must be a fundamental factor in deciding any new Policy and Strategy. As given by the MoD and reported by the BBC News defence correspondent, Cyprus-based RAF aircraft have delivered 4,409 bombs and missiles over Syria and Iraq causing the deaths of 3,964 Jihadis. Main weapons delivered have been the Paveway Bomb (> £25,000 each), Hellfire Missiles from Drones (> £50,000 each) and Brimstone Missiles (approx. £175,000 each). By averaging out these costs one can reasonably suggest that the weapons cost for the death of each terrorist has been about £80,000 – a total of over £315 million. The full bill for “Operation Shader” including flight hours, fuel, logistics, pre-positioning and combat support has probably well-exceeded £4 Billion – equating to over £1,000,000 for each Jihadi killed.

² Things are no better in Germany. A colleague there has pointed out that of the 60 or so Typhoon aircraft in service, only four have been available for front-line combat operations at any one time.

17. This cannot be considered value for money.
18. A new Defence Industrial Strategy is therefore required. If our Defence Contractors are to become competitive in the global marketplace and if our Armed Services and taxpayers are to receive value for money in weapon system platforms and weapons procurement, effectiveness and availability, radical change is required.
19. These changes need to include the following:
 - a. All Military Staff Requirements for new or improved weapon systems whether sea-borne or land-based need to be fully justified in terms of demonstrable cost, deterrence value and combat effectiveness against perceived strategic and tactical threats.
 - b. All such Requirements need to be open to competitive tender both within our Island Nation and with our Allied partners.
 - c. The Ministry of Defence contractual infrastructure must be radically changed so that:
 - i. Contractors bidding for weapon system contracts are strictly bound to produce weapon systems that fully satisfy the Staff Requirement for the same;
 - ii. Deficiencies in the required effectiveness and/or operability of the end-product must be corrected at the Contractor's expense.
 - iii. Penalty Clauses must be used to ensure the honesty and integrity of formal bids by Contractors particularly with regard to sub-paras i and ii, above.
 - d. Cost-plus Contracts have resulted in the exponential rise in Project Costs and Defence Budget Deficits, especially for Tornado and Typhoon, and must be a thing of the past.

1 April 2020