



Ministry
of Defence

JAMES CARTLIDGE MP
MINISTER OF STATE FOR DEFENCE PROCUREMENT



MSU/4/8/1/2/is

20 June 2023

Dear Tobias,

I am writing to follow up on my oral evidence session on 17 May in support of your 'Aviation Procurement' Inquiry, where I agreed to provide further information on a number of issues. I was also grateful for your additional questions, received on 25 May, which I also address here.

Boxer Production Chain – Visser BV (Q306)

2. The Ministry of Defence (MOD) became aware of Chinese interest in Visser BV when the issue was brought to the attention of the programme team in February 2023 by OCCAR, the organisation that manages the contract on behalf of the UK and BOXER nations. Visser BV were contracted by Krauss-Maffei Wegmann (KMW), a parent company of the ARTEC consortium that holds the BOXER prime contract.

3. Visser BV are contracted to provide various sub-systems for the 65 BOXER UK ambulance vehicles, including racks and drawers with power supplies for medical equipment. Visser BV does not provide the UK ambulance as a complete vehicle.

4. The MOD has confirmed that Visser BV have been audited according to ABDO 2019 (General Security Requirements for Defence contracts). Only data relevant to providing the items Visser BV is contracted for has been shared with the company, and I can assure the Committee that all necessary security processes have been followed.

Air Mobility 'Tasklines' (Q350)

5. Figures for the average number of Globemaster C-17, Hercules C-130J and Atlas A400M aircraft available and as a proportion of each fleet are detailed in the table below:

Rt Hon Tobias Ellwood MP
Chair
House of Commons Defence Committee
House of Commons
London
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Date	C-17		C-130J		A400M	
	Available	% of fleet	Available	% of fleet	Available	% of fleet
1 October 2022	7	88	9	64	14	70
1 November 2022	7	88	9	64	13	65
1 December 2022	7	88	10	71	14	70
1 January 2023	7	88	10	64	15	72
1 February 2023	6	75	8	57	14	70
1 March 2023	7	88	8	57	16	75
1 April 2023	7	88	7	50	13	65

6. Percentage figures for the C130-J fleet have been calculated using Forward Fleet against the overall Departmental Fleet, which includes those aircraft undergoing disposal or centre wing replacement at Marshall Aerospace, which accounts for the drop in percentage terms from January 2023.

Crowsnest (Q370)

7. All 30 Merlin Mk2 helicopters will be modified to accept the Crowsnest role kit and are available to the front-line command who will decide on quantities deployed, based on operational need at the time.

Provision of Hawk aircraft within UKMFTS (Q433)

8. When industry was invited to bid for the UK Military Flying Training System contract in 2003, four consortia developed proposals. These proposals included the financing, acquisition and operation of new aircraft. Of the four consortia only one (which included BAES) selected the BAES manufactured Hawk T2 as the fast jet trainer.

9. The purchase of Hawk T2 was directed by the then Defence Secretary in July 2003. Procurement and support of the fast jet solution was therefore removed from the scope of the UKMFTS competition and became a MOD Government Furnished Equipment (GFE) obligation. BAES were awarded the associated contracts for manufacture of 28 Hawk T2 and for support to the airframe until 2020 (engine support was initially included but was later contracted separately through Rolls-Royce). BAES subsequently withdrew from the UKMFTS competition citing conflict of interest, with Ascent ultimately being awarded the contract.

10. As part of the negotiations for support of Hawk T2 (and the Hawk T1 aircraft used by the Red Arrows) beyond 2020, the MOD explored the options for contracting with alternative suppliers to BAES (including Ascent). This analysis concluded that while the outsourcing of Hawk T2 support was viable, a follow-on contract with BAES offered a better overall solution, when considering the proven track record of Hawk performance improvements that had been achieved under the previous contract, combined with substantial financial efficiencies that could be achieved by merging a range of support arrangements into a single contract for both 'the Reds' Hawk T1 and the T2 aircraft.

11. Letting the new Hawk In-Service Support Solutions for engines and airframes via Rolls-Royce and BAES respectively from 2020 enabled twelve earlier contracts to be subsumed into just two replacement contracts. This ensured delivery of the support services needed in a cost-effective and efficient manner, with the efficiencies generated from the airframe contract being made available for platform improvements and through-life safety, reliability, capability and obsolescence management measures.

12. The Hawk In-Service Support Contract with BAES also includes incentives linked to student output. The requirement for Hawk T2 hours to support the Ascent-led UKMFTS flying programme is assessed annually as part of the Flying Training Plan, which is developed in consultation with DE&S and the RAF and reflects the single Services' demand for *ab initio* students, trainee flying instructors and refresher training to populate the front line.

13. Day-to-day fast jet pilot training is coordinated by representatives from the RAF, BAES, Rolls-Royce, Ascent and DE&S who are co-located at RAF Valley and constantly refine the plan in response to friction factors such as weather, student performance and aircraft availability. This joint approach further mitigates the risk of having Hawk T2 outside of the MFTS contract.

H135 Helicopters (Q441-451)

14. The H135 aircraft were procured for a specific operational requirement that has recently been reviewed and adjusted. In light of this, Defence is reviewing the most appropriate next steps for the H135 aircraft, including repurposing for other roles within Defence than that for which they were procured. The five aircraft are in secure storage and are being maintained to preserve air worthiness and future choice for Defence. Options for the H135 aircraft and will be presented to the Investment Approval Committee and Ministers before decisions are made.

15. The Approved Budget Limit for purchasing and operating the H135 aircraft was £122M. Known project costs as of today are approximately £41 million, of which the aircraft procurement amounts to £34.6 million and the remaining amount to support costs.

Post-session questions: Aircrew training and the Military Flying Training System

16. The Aircrew Pipeline Steering Group (APSG) is a 3*-chaired decision-making body that oversees the state and health of the full flying training pipeline. It meets every 2 months. Chaired by the RAF's Air and Space Commander (Air Marshal Harv Smyth), its purpose is to oversee and direct MOD's aircrew training pipeline to ensure MOD's requirements are met. Flying training has also been introduced as a routine agenda item for the Air Executive Committee and will be reviewed annually at the Air Force Main Board.

17. Overseas pilot training: over the next three years, 15 RAF pilots will be trained on the Euro-NATO Joint Jet Pilot Training programme in the USA. This is in addition to six RAF pilots who are currently being trained as part of the previously funded agreement. The course duration is 18 months which includes both basic and advanced flying training, at a cost per trainee of around £2 million.

18. The International Flight Training School (IFTS) in Italy provides world-leading 5th Generation Fighter Pilot training, and funding has been agreed for 12 training slots over 3 years (4 per year). The first course of two trainees begins in July 2023, with two further trainees beginning in October 2023. There will be two more courses with four RAF trainees per course in FY24/25 and FY25/26. The course duration is anticipated to be 9 months. This is for advanced fast jet flying training following completion of the basic elements of fast jet flying training provided as part of UK MFTS. Graduates following successful completion of IFTS training will move directly to Front Line Operational Conversion Units with no extra training required. The cost per trainee is circa £2.2 million.

19. To meet future Combat Air Force requirements, there is a need to increase capacity in the fast jet training pipeline. Fast Jet training delivered by partner nations and as part of the Euro-NATO Joint Jet Pilot Training programme enables a direct route to Front Line Operational Conversion Units. However, RAF ENJJPT trainees are being provided with a condensed Hawk T2 simulator only course at RAF Valley to ensure the same output standard as UK MFTS.

20. During this financial year, up to six UK pilots will also begin to undertake Fast Jet training within the RAF/Qatar Emiri Air Force Joint Squadron (11 Sqn QEAF, based at RAF Leeming) who use the Hawk 167 rather than the Hawk T2 variant.

21. While overseas training provides an important mitigation in response to unforeseen issues with Hawk T2 availability, it is worth noting that the RAF regularly sends trainee pilots abroad as an opportunity for students to broaden their training and development, as well as helping to strengthen relations with foreign partners, and this also happened routinely before the Hawk engine issues arose. We continue to scope further opportunities to work with our partners over the next three years while the Hawk T2 engine recovery plan takes effect. The Department will not be seeking to recoup costs from industry for this training, and there are no contractual obligations on industry partners (BAE Systems, Rolls-Royce or Safran) that require them to pay for the technical problems that have been encountered with the Adour 951 engines, or costs incurred because of the reduction in Hawk T2 availability.

22. International Defence Training (IDT): IDT makes an important contribution to the government's Defence Engagement agenda, strengthening relationships with key allies and partners, while also contributing to UK prosperity. Using irreducible spare capacity within elements of UK MFTS, and through Government-to-Government arrangements, over the last year (May 2022 to May 2023), the following training has been provided:

- Rotary wing training for 15 German and four Irish pilots at RAF Shawbury;
- Four Australian pilots began training at the Military Aviation Ground School, and;
- Thirteen Qatari pilots undertook pre-employment and flying training within UK MFTS. This was prior to the setup of 11 Sqn QEAF, the RAF Qatar Emiri Air force Joint Squadron at RAF Leeming which is where Qatari pilot training now takes place.

Uncrewed Aerial Systems (UAS)

23. Through its operation of Predator and then Reaper, the RAF has been at the frontline of UAS operations for nearly two decades, delivering national and coalition operational advantage. This has allowed the RAF to identify lessons and develop a deep understanding of when, where, and how to combine UAS and Combat Air for operational effect. Whilst the operational requirement for Reaper (current) and Protector (planned) UAS capability remains essential, the MOD recognises we must advance UAS concepts and we are developing an Autonomous Collaborative Platform (ACP) strategy, which we aim to complete by this summer.

24. Early operational analysis shows that ACP will increase the mass and survivability of our forces, and offer opportunities to saturate and overwhelm adversaries' situational awareness. In the short term, our focus is on low-cost expendable ACP. In the medium term, we are looking at higher end attritable and survivable ACP. The strategy also recognises the importance of remaining in lockstep with our allies. The RAF is now a signatory to a 5-Eyes Human-Machine-Teaming agreement, to ensure that we develop a common language, and that we begin with an interoperable and integrated framework with our closest allies.

Typhoon availability and future F35 numbers

25. The UK has funded plans to increase the F35 fleet to 74 aircraft. We retain the option to increase the total to 138 and will make decisions on further purchases beyond the 74 we have committed to around the middle of the decade. We will base these decisions on assessments around the future operating environment, the capabilities of likely adversaries, how we are planning to evolve the way we fight, and the number of aircraft required to maintain planned force elements throughout the life of the Queen Elizabeth Carriers. Additional factors include the development of the Global Combat Air Programme, how our crewed aircraft might operate with additive capabilities and uncrewed platforms, and how all of these might be connected digitally.

26. As of 6 June 2023, 100 Typhoon aircraft were in the Forward Fleet and a further 37 aircraft were in the Sustainment Fleet (including ten aircraft in long-term storage).

RAF Recruitment

27. The Non-Statutory Inquiry (NSI) into historical RAF recruitment policy and practices has now concluded and will be published in due course. I would reiterate the point made by the previous Chief of the Air Staff during his evidence session in February: that the RAF accepts it made mistakes in the past, but is determined to use the NSI to learn lessons and ensure those mistakes are never repeated; I am confident it has done so already, and will continue to do so.

28. I trust this information is useful, and look forward to the committee's report in due course.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'J. Cartlidge', written in a cursive style.

JAMES CARTLIDGE MP