

**Report** by the Comptroller and Auditor General

### **Ministry of Defence**

# Investigation into military flying training

## Summary

#### **Key findings**

Meeting the Ministry of Defence's (the Department's) aircrew requirements

**10** The Department does not currently have the aircrew it needs. The Department does not have accessible historical data on the students completing the entire three-phase training process. However, using aircrew shortfalls as a proxy shows it has experienced significant personnel gaps for several years. For example, as at April 2019, the Royal Air Force (RAF) – the front-line command requiring the most aircrew – was 331 personnel (18%) below its pilot requirement (paragraph 1.3).

11 In the six years to 2018-19, the Department experienced an average 45% (125 student) shortfall in aircrew completing their Phase 2 training each year. Students must complete Phase 2 training before progressing to the Phase 3 operational training. In its worst year (2018-19), 49 students completed Phase 2, an 86% shortfall against the Department's current aircrew requirements. In its best year (2015-16), 182 students completed Phase 2, a 21% shortfall (paragraph 1.8 and Figure 3).<sup>4</sup>

12 Students completing Phase 2 training filled 94% (910) out of 965 Phase 3 operational training places between 2015-16 and 2018-19. To complete their training and be ready for service, students learn to fly front-line aircraft, such as Typhoon fast jet or Apache helicopter, during their Phase 3 training run by front-line commands. If the Department meets its stated requirement for 424 students completing Phase 2 training in 2022-23, it will need to increase its Phase 3 training capacity so students can complete their flying training (paragraph 1.9).

**13** In the past two years, students have taken longer to complete training than expected. Centrally, the Department does not collect data from across frontline commands on the time students take to complete their three-phase training. Data from the RAF show that as at July 2019 training of its fast-jet pilots took an average of 7.1 years, compared with the Department's optimum time of 3.9 years. The Department told us that while waiting to take up courses students fill other roles, such as in air traffic control, where they help deliver services and develop their personal effectiveness. The data also show that 145 RAF students were due to start their Phase 2 training, having waited an estimated average of 90 weeks, compared with an expected position of 26 students waiting 12 weeks.<sup>5</sup> The Department plans to have an appropriate number of students awaiting the next stage of training to ensure that courses do not have gaps.

4 Phase 2 currently consists of aircrew being trained through the Military Flying Training System (the MFTS), but also through other training routes.

5 We were unable to provide full assurance over the data.

It recognises this is not currently the case and is seeking to correct this situation. It recognises that extended waiting times can reduce the amount of time aircrew are available on the front line during their career. In 2018-19, fewer than 10 students left the Armed Forces before completing their flying training (paragraphs 1.10 to 1.13 and Figures 4 and 5).

#### Performance of the MFTS

14 The Department and Ascent now have in place most of the training components needed for the MFTS to operate fully by April 2020. Ascent and the Department have:

- brought into service 102 aircraft of seven different types;
- provided around 20 flight simulators and other training devices;
- built or refurbished new aircraft hangars and training facilities; and
- designed and certified 36 courses out of a planned total of 67.

Advanced jet and rear crew training has been provided since 2012, with the remaining training – for helicopter and fixed-wing students – now 94% ready and expected to be fully introduced from December 2019.<sup>6</sup> The MFTS will then provide training as designed to meet the Strategic Defence and Security Review 2010 requirement from April 2020. This represents only a further three-month slippage on top of the six-year delay we reported on in 2015. The Department considers this a good outcome considering the past position of the programme. The first students to be trained entirely via the MFTS courses are expected to graduate in September 2019 (paragraphs 1.15, 2.4 and Figures 8 and 9).

**15** As at 31 March 2019, Ascent had received £514 million from the Department for introducing the MFTS and starting to deliver courses. As well as some debt repayments, this sum includes £145 million (30%) relating to fixed payments for designing the system, managing training courses and maintaining courseware. It also includes £245 million (52%) for ensuring the training components, such as the aircraft and simulators, were available for courses. Historical delays introducing the MFTS meant Ascent did not initially receive £15 million where training components were not in place. The Department was eventually liable for paying Ascent £10 million of this sum given it had failed to fulfill its responsibilities or remained contractually liable to make payments. As training components have been introduced, Ascent has delivered an increased number of courses (paragraph 1.16 and Figure 6).

<sup>6</sup> The fixed-wing package includes elementary flying and multi-engine training, which have been fully introduced, and basic jet training, which the Department and Ascent expect to be ready for training use from November 2019.

16 As at 31 March 2019, 44 out of the 369 planned MFTS courses had been cancelled due to one or other party failing to fulfil its responsibilities. Neither the Department nor Ascent could easily provide a full list of delayed courses with underlying reasons, in part because the different roles and responsibilities make it difficult to determine the causes. Of the 44 cancelled courses, 28 related to the Department not fulfilling responsibilities such as not providing sufficient air traffic controllers or because runways were being refurbished. Other reasons have included:

- **insufficient qualified instructors provided by the Department:** For each training type, the Department has agreed to provide a proportion of the required instructors. This includes 75% of helicopter instructors and all live-flying, fast-jet instructors. However, there are currently military instructor shortfalls which the Department and Ascent are working to resolve; and
- availability of aircraft provided by Ascent and the Department: Ascent and its subcontractors provide all aircraft apart from the Hawk T2, which the Department provides through BAE Systems. Apart from helicopters, aircraft availability has been poor across the system. For example, between April and July 2019, Ascent did not provide the elementary flying, rear crew and multi-engine aircraft required. The Department provided an average of 12 advanced jet aircraft per day, against a required 18 per day.

In addition, the Department chose not to provide students for 10 of the planned 369 courses (paragraphs 2.12 to 2.20 and Figures 10 to 12).

#### Looking ahead

**17** The Department does not yet have approved plans for every training package needed to deliver its current Phase 2 aircrew training requirements. Ascent has been contracted to provide, through the MFTS, the Strategic Defence and Security Review 2010 aircrew requirements. These requirements subsequently increased following the 2015 Review. Therefore, the MFTS was designed to provide 76 fewer trained aircrew than the Department's 2018-19 requirement. Since the 2015 Review, the Department has been considering and testing its options, developing business cases and putting additional commercial arrangements in place. For example, in July 2019, it agreed to expand the MFTS helicopter training by the end of 2019. As such, the Department expects to start incrementally increasing the number of trained students from 2020, with a fully expanded system from 2023 (paragraphs 1.18 and 3.6).

**18** To increase the number of trained aircrew, the Department uses other providers outside the MFTS. In 2019-20, it expects to train 125 aircrew in other ways, such as through civilian training providers, at a cost of £15 million. Students following these routes need to complete additional military training, which the Department recognises may cost more than if those students completed the MFTS training (paragraphs 3.4 and 3.5, and Figure 13).

**19** The Department has not yet fully addressed the recommendations in our **2015 report to ensure it maximises the potential benefits of the MFTS.** Our 2015 report recommended that the Department should improve both the MFTS commercial arrangements and performance information across the training process. In June 2019, the Department and Ascent formalised joint transformation projects to improve commercial incentives and performance data. In particular:

- Commercial incentives. Ascent and the Department are discussing revised commercial terms to incentivise increases in the number of students completing training, reductions in training times and decreases in costs. Ascent continues to be paid primarily for service availability, with a small proportion of payments £7.4 million (1.4%) as at March 2019 for completing courses (paragraphs 3.7 to 3.13).
- Whole-process performance information. Our 2015 report recommended that the Department establish a baseline to measure, monitor and evaluate performance across all three phases of the training process. Although compromised by a lack of historical information, it has assessed Phase 2 training times. However, the central team does not yet collate data to assess the time taken across the full process. In addition, it does not yet have data to assess the cost to train aircrew or data on how many students complete their full training (paragraphs 3.14 to 3.17).